Appendix D

Biological Resources Technical Reports

Appendix D-1

Biological Resources Assessment Report

Biological Resources Assessment Report

For the Sandpiper Golf Club Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CCA	California Coastal Act
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CLUP	Coastal Land Use Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
FP	Fully Protected
MBTA	Migratory Bird Treaty Act
MCV	Manual of California Vegetation
NCL	Natural Community List
NMFS	National Marine Fisheries Service
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
TNW	Traditional Navigable Water
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

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1 Introduction

Dudek has prepared this Biological Resources Assessment Report (Report) for Sandpiper Golf Trust LLC and Ty Warner Hotels & Resorts in support of the Sandpiper Golf Club Project (Project). The purposes of the report are to provide methods and results of biological surveys, describe the biological resources on the Project site, address potential impacts from development of the Project, and provide recommendations to avoid, minimize, or mitigate any potential impacts. The impact analysis and recommended measures are based on potentially occurring resources and applicable federal, state, and local regulations. In addition to describing methods and results of surveys Dudek has conducted, the Report incorporates findings of previous surveys conducted on the Project site. Due to discrepancies in the delineation of Environmentally Sensitive Habitat Areas (ESHA) between the City of Goleta and Dudek's on the ground mapping and assessment of ESHA, Dudek has also prepared an ESHA memorandum (memo) that provides substantial evidence pursuant to City of Goleta Conservation Element Policies CE 1.3 and CE 1.5 to support the Project requested map modifications to the City General Plan/Coastal Land Use Plan (CLUP) Figure 4-1, Special-Status Species and Environmentally Sensitive Habitat Areas (Dudek 2023).

1.1 Site Location and Surrounding Area

The Sandpiper Golf Club, Assessor's Parcel Number 079-210-059, is situated within the far western portion of the City of Goleta in Santa Barbara County, California, along the bluffs adjacent to the Pacific Ocean and 2.5 miles south of the Los Padres National Forest and Santa Ynez Mountains (Figure 1, Project Location). It is located at 7925 Hollister Avenue (Figure 2, Project Site); the site entrance and existing parking lot are in the northern portion of the site, immediately west of the intersection of Hollister Avenue and Cathedral Oaks Road. Residential development and open space associated with Ellwood Mesa are to the east, and Ellwood Mesa and University of California, Santa Barbara open spaces and Coal Oil Point Reserve together form a corridor of undeveloped land extending eastward more than 1.5 miles to the boundary of Isla Vista. Immediately north of Hollister Avenue are residential development, some open space associated with Devereux Creek, and a narrow strip of eucalyptus woodland within and adjacent to the Union Pacific Railroad (UPRR) corridor. U.S. Highway 101 parallels the UPRR immediately to the north, between 0.05 and 0.2 miles from the Project site. A mixture of residential development and agricultural lands (rangeland and cultivated lands) extend approximately 0.7 mile north from the highway, and undeveloped ranchland dominates the landscape farther northward, to the boundary of Los Padres National Forest, approximately 32.5 miles north of the site. To the west of the Project site, on the south side of U.S. Highway 101, is an existing Beacon West Energy Group facility, Bell Canyon Creek, then the Ritz-Carlton, Bacara, Santa Barbara Resort, 0.4 mile west of the Project site. Lands farther to the west are mostly undeveloped. The Pacific Ocean is immediately west and south of the Project site.

1.2 Project Description

The Project involves a redesign and rerouting of the existing 18-hole golf course including a new comfort station, demolition and replacement of the existing clubhouse with a new clubhouse and restaurant building, and renovations and enhancements to the existing historic Barnsdall Gas Station. The new clubhouse would replace the existing 9,305-square-foot, 27-foot-high clubhouse and golf cart storage facility, which were built in the 1970s and have not been significantly updated since construction. The redevelopment Project would bring the golf course up to date to continue serving the community.

1.2.1 Clubhouse

The club house design is inspired by the natural landscape and site condition of the grassy rolling hills of the course, the bluff, and the ocean. The intent is to create a building that is directly related to its spectacular setting, honoring the contours of the land and blending the architecture, landscape, and transparency of the sky in the composition.

The new clubhouse will consist of an above-ground 16,019 SF 2-story building and a 21,160 SF subterranean basement for cart storage and other services. This building will include a pro-shop and golf retail merchandise spaces, a new restaurant, cocktail bar, restrooms, as well as golf cart storage and maintenance areas and golf back-of-house facilities. The first floor is dedicated to golf operations and accessory uses to accommodate golfers on the course. It will consist of a lobby, pro-shop, grab and go café, kitchens, gallery, offices, golf simulator rooms and a guest lounge. The second floor is designed primarily for food and beverage services. It will include a new restaurant and kitchen, a cocktail bar, restrooms, conference room and a waiting lounge. The basement level is dedicated to receiving materials and supplies and supporting golf operations. It will be comprised of golf cart storage, various spaces used for golf cart maintenance and mechanical spaces. In addition, the basement contains employee support spaces such a break rooms, storage, lockers and shower. Only 842 SF of the proposed basement is habitable space. A detail of uses and square footage, by building and floor can be found in the accompanying architectural plans.

Height Adjustment. The majority of the clubhouse will be below the 25-foot height limit; however, as is the case with the existing clubhouse, a component of the structure will exceed the height limit. In order to further the design approach and architectural concept, a height modification to allow a portion of the clubhouse structure to reach 29'-0" is requested from the City of Goleta.

Exterior Lighting. Exterior lighting utilizing downward directed fixtures is proposed around the clubhouse structures. These and the proposed path lighting as shown on the landscape plans (Earthform Design 2023) are proposed to provide safety and security for guests and course personnel entering or exiting the property before dawn or after dusk.

Wastewater. The Clubhouse is currently served by a private septic system. The applicant has proposed to connect to the Goleta West Sanitary District (GWSD) sewer system as shown on the accompanying civil drawings. The existing private septic system will be abandoned in accordance with Santa Barbara County Environmental Health Services (EHS) requirements.

1.2.2 Barnsdall Gas Station and Rio Grande Cafe

The original historic Barnsdall Gas Station will be restored and adaptively reused as a quick stop café, the Rio Grande Coffee shop, enabling golfers, passersby and community members to grab a cup of coffee and a snack before heading off to the course or perhaps biking down Hollister Avenue. Golfers can access via a golf cart path from the 1st green to a pickup window. Golfers can call in their orders while they tee off, and pick them up after they finish their first hole.

Additionally, the Barnsdall surrounding spaces have been designed to include ample bicycle parking to attract those cycling along Hollister Avenue and will include electric bicycle charging stations designed to look like antique gas station pumps. The proposed renovations include a remodel to the existing interior space of the 349 SF gas station to serve as an adjunct to the adjacent 695 SF café. A total of 14 indoor seats will be provided at the café (6 seats) and Barnsdall (8 seats). Additional outdoor seating will be available both at the café and also under a proposed

727 SF wooden trellis. Proposed exterior lighting on the structures will utilize downward directed fixtures. on the structures. Pathway lighting will be used to provide safety and security.

Photovoltaic cells and battery storage are proposed on the café structure. Exact details on the specifics remain to be determined.

Vehicles heading eastbound on Hollister may access the coffee shop via a parking lot that will support 14 vehicles, including an accessible space and electric vehicle charging. Bicyclists will be able to access to coffee shop from Hollister through a dedicated bicycle entrance.

There are no existing private or public wastewater facilities available at Barnsdall. The café is proposed to be connected to the existing Goleta West Sanitary District sewer system located within Hollister as shown on the civil drawings. A new lateral and water meter are proposed to connect within Hollister Avenue.

1.2.3 Comfort Station

The existing 290 square-foot comfort station will be replaced by a new station consisting of two (2) structures located adjacent to the 6th green. The new comfort station will consist of a 121 square men's and women's restroom and an adjacent 208 square refreshment and storage building with a counter area for light snacks as well as video monitors and informal seating for tracking tournament play. The total floor area of the proposed structures is 329 square feet. The restrooms are proposed to be connected to the existing Goleta West Sanitary District sewer system via force main as shown on the civil drawings. The existing private septic system will be abandoned in accordance with County EHS procedures.

1.2.4 Maintenance Yard

The existing maintenance buildings, trailers and sheds are accessed directly from Hollister Avenue, east of the Barnsdall gas station. The facilities will be repaired, upgraded and modernized. The proposed disposition of existing facilities is described in Table 1.

Table 1. Maintenance Yard Existing Facilities

Structure	Square Footage	Proposed Disposition
Main Maintenance Facility	4,000	Demolish
Temporary storage trailer	315	Remove
Temporary office trailer	215	Remove
Agrichemical Storage	625	Demolish
Staff Restrooms	400	Demolish
Pole Barn/Storage	2,000	Renovate
Total Existing	*7,025 + 530 square feet temp*	
Fuel Station	370 SF500 gallons gas and diesel	Remain

In place of the demolished and removed structures, the applicant proposed to construct a new 7,776 SF maintenance facility which will serve the purposes of the removed buildings. The facility will include offices, restrooms, lockers and small equipment storage in the BOH structure and vehicle and equipment storage in a new building designed for that purpose. Photovoltaics and battery storage are proposed as shown on the site plans. Exact quantities and power output are still to be determined.

Additional unenclosed structures include:

- Fenced and roofed trash and recycling area
- Roofed materials storage (e.g., sand, soil) and fertilizer station (2,531 SF).
- Roofed cart wash and blow (956 SF)
- Pump equipment on a concrete slab

Structures in the maintenance yard will utilize downward-directed security and path lighting as shown in the accompanying plans.

The existing refueling station has been permitted and will remain in its current location. Agrichemical storage and application is permitted through the California Department of Pesticide Regulation via the Qualified Applicators Certificate held by the golf course agronomist, Tennessee McBroom. These uses are discussed in more detail within the Hazardous Materials section of this document.

The maintenance building is currently connected to Goleta West Sanitary District under permit. It is the only portion of the course currently connected to the public sewer system. The proposed structures will continue to utilize this connection.

1.2.5 Golf Course Redesign

The new routing plan will reorient the golf course to be more consistent with the natural topography of the site, and to showcase the dramatic ocean views. New cart paths are proposed at the tees and greens only, thereby reducing the amount of concrete cart paths from 154,829 square feet to 92,346 square feet. The removal of more than an acre of concrete hardscape is an example of the applicant's approach to an improved sustainable environment.

The redesign minimizes cut into native soils and overall ground disturbance. The design also includes new drought tolerant turf, state of the art irrigation system and sand-capping of the turf areas of the golf course, which will promote substantially improved water quality and drainage. The existing 125 acres of irrigated turf will be substantially reduced to just 62 acres in the proposed plan, which will reduce the water footprint for recycled water by about one-half, with a corresponding reduction in the need for nutrients and agrichemicals, a further benefit to the environment.

West of hole #4, an existing Arizona-style concrete crossing and a 10-12" culvert is currently used for golf cart access on the course and to permit water flow. The crossing and associated concrete cart paths go through Devereux Creek and associated ESHA. Policy CE-2.5 of the City of Goleta General Plan requires that a project maintain or restore riparian areas to their natural condition where such opportunities exist. Accordingly, the project proposes to remove this crossing and culvert and the cart path within the ESHA. The proposed plan reduces the impervious hardscape in the ESHA and, rather than a culvert and concrete in the creek, a free-standing wooden

bridge with abutments outside the top of bank will traverse Devereux in this area. The creek will be restored to a natural condition and flow in this area.

1.2.6 Landscaping, Trees, and Fencing

The proposed planting palette will supplement the existing vegetation and includes an additional variety of native plants and shrubs that are compatible with the climate along the coast. On the east side of the course, adjacent to existing monarch butterfly (*Danaus plexippus*) habitat, the palette will include plant species designed to provide foraging resources for butterflies and are consistent with the palette proposed by the City of Goleta in larger groves farther to the east within the Sperling Preserve.

Course routing avoids existing specimen trees and minimizes overall removal. In total, 39 non-native trees will be removed, and an additional 12 non-native trees will be significantly impacted by development or grading. Trees removed are generally in these groups 1) 25 trees located within the proposed parking areas at the clubhouse and maintenance yard. 3) 14 trees that are within the course of play. No native trees will be removed.

In place of these trees, the landscape plan proposes to plant 135 trees, resulting in a net increase of 98 trees. The proposed trees consist of 44 box Monterey cypress and 91 box New Zealand Christmas trees (a coastal evergreen). New trees will be planted in a variety of locations, as shown on the accompanying landscape plans. In particular, 104 trees are proposed within new formal parking areas. Additional trees are proposed along the west perimeter of the course to provide additional visual screening of the Venoco facility, near the Hollister intersection, to soften views and at strategic locations within the course.

Gates and Fencing. A 36”-42” high split rail fence is proposed to be located along the northern property boundary to demarcate the property and provide security, without obstructing views. Existing and proposed fence used around the maintenance facility generally consists of 6’ high chain-link fence for security and a 6’ high sliding gate. No new formal gates are proposed on the perimeter of the course. A chain will be drawn across parking areas at the clubhouse and café to limit unauthorized entry when the course is closed.

1.2.7 Parking

Sandpiper is currently supported by a 124-space parking lot adjacent to the clubhouse. Additionally, there are 5 (unused) spaces at Barnsdall Gas Station as well as informal parking in the maintenance yard for 10 vehicles.

The City of Goleta Municipal Code does not have a specific parking requirement for recreational uses. The code states that parking for recreational uses shall be “determined by the review authority.” However, in support of the application, Associated Transportation Engineers (ATE) has used industry standard methodology to calculate that the proposed parking lots will be sufficient to serve the proposed uses of the golf course, restaurant, and cafe as well as the majority events that have been historically held and will continue to be held at the course.

The project proposes redesigned parking areas to support the course and associated uses. The proposed parking areas consist of 141 spaces adjacent to the clubhouse, 14 spaces at the Rio Grande Café and 10 spaces at the maintenance yard for a proposed total of 165 spaces. Parking includes EV charging and ADA spaces as required by code.

The proposed 165 spaces will be sufficient to accommodate operations on the project site. For the few events that cannot be accommodated by onsite parking, shuttling (e.g., from local hotels) will need to be arranged by the event sponsor to bring guests to and from the course.

1.2.8 Grading

Over the 192.93-acre property, approximately 86,500 cubic yards of cut and 56,000 cubic yards of fill are proposed. After compaction and shrinking, the remaining soil will be distributed around the graded areas to suit the golf course design. As a result, cut and fill is expected to be balanced with no net import or export.

Once the course grading is completed, a subsurface drainage profile including a 6" sand cap is proposed for the 62 acres of irrigated turf to improve drainage and water quality. The sand cap will consist of approximately 60,000 tons of sand distributed on the turfed golf areas. This import will require approximately 2,500 truck trips over the course of construction, based on an estimated 24 tons per truckload. Trucks for the sand capping will arrive and depart from Hollister Avenue using the freeway on/off ramps on Calle Real, north of Highway 101.

Cut and fill slopes will vary at select areas around the course. The maximum fill slope is 27' at the Clubhouse where it transitions to the event lawn to the southwest. The maximum cut slope is 11' (located on the golf course). Retaining walls will be limited except adjacent to the proposed basement, where a 15' retaining wall will allow for delivery access under the Clubhouse.

1.2.9 Public Improvements

The golf course maintains a long frontage along Hollister Avenue. The proposed renovations include improvements to area roadways and Project entrances, such as relocation of the main entrance to be aligned with Cathedral Oaks Road, as well as landscape enhancements on both sides of Hollister Avenue. The following list of improvements in the right of way (ROW) is proposed:

- Relocate main entry easterly, to align with Hollister/Cathedral Oaks intersection.
  - Restripe as necessary
  - Construct pedestrian shelter (safe area) on NE corner
  - Extend ramp on NW corner
  - Plant landscaping at NW corner of intersection as shown on accompanying plans
  - Construct 16' one-way driveway cut for main entry
- Maintain 24' wide entry as main exit and alternate entry
- Reshape median and add left hand turn lane for (N) 24' wide entry to overflow parking and service entry.
- Underground overhead utility lines into joint power and communications trench along Hollister Avenue to improve public views.
- Construct decomposed granite path per City standards to serve as a public trail along the south side of Hollister Avenue
- Accompanying landscaping for public trail
- Construct curb and gutter along Hollister Avenue, per City standards

- Relocate bus stop and pocket ~200' easterly across from the proposed new fire station.
- Rio Grande Coffee (i.e., Barnsdall Gas Station) Improvements
  - Construct 10' wide bike entry with bollard
  - Construct meandering concrete sidewalk easterly to property boundary per City standards
  - Construct 24' wide two-way driveway cut for parking lot
- Paint new crosswalk at west side of intersection of Las Armas Road and Hollister Avenue to provide for improved public access to the Sperling Preserve.
- Stripe left hand turn lane for maintenance yard and formalize existing entry.

The full scope of the improvements can be seen in the accompanying plans, including public ROW improvement plans in the civil plans from Stantec.

The Metropolitan Transportation District (MTD) was contacted to assess the relocation of the bus station. Hillary Blackerby, Planning and Marketing Manager for MTD, confirmed that the proposed layout is acceptable for MTD purposes in an October 31, 2022 e-mail to the applicant and City of Goleta.

A realignment is proposed for the Hollister Avenue ROW. The ROW in this area is highly variable and extremely wide, likely dating back to times when the route operated as a state highway2. The ROW at the intersection of Hollister and Cathedral Oaks is exceptionally wide because it accounted for the geometry of the former access road to Bacara which was realigned for work on the highway overpass.

The proposed realignment would result in a more logical and orderly configuration of the ROW, requiring a property exchange between the City and applicant. The existing and proposed ROW is shown on the accompanying civil plans.

1.2.10 Coastal Access

To address City of Goleta General Plan Policies OS 1.6 and OS 1.7 regarding lateral accessways and coastal access overall, the Project proposes the following plan to enhance coastal access:

1. Dedicate a lateral access easement or offer to dedicate along the beach landward from the mean high tideline (MHTL) and the coastal bluff.
2. Offer to contribute to the City of Goleta's Capital Improvement Plan for the Sperling Preserve, particularly to improve Access Point F **or** to assist in constructing public restrooms or passive recreation facilities at the public parking lot.
3. Construct sidewalk east from the Barnsdall Gas Station to connect with existing sidewalk at the northeast property boundary.
4. Permit and stripe a crosswalk across Hollister Avenue to provide connectivity to the coast for residences on the north side of Hollister.
5. Construct a trail to City of Goleta specifications (e.g., Class IV) along the Hollister ROW westerly to the proposed overflow lot near the clubhouse. This trail has broad and clear views of the Pacific Ocean along the majority of the path and is in the location of the Anza Trail segment identified in the City of Goleta Open Space Element..

1.3 Operations

1.3.1 Operating Hours

The golf course operating hours are approximately Monday to Sunday 6:30 a.m. to 8:30 p.m. Golf play typically begins in the morning and ceases at dusk, with the exact times varying throughout the year. Morning tee times are occasionally delayed on account of cold temperatures/frost. The clubhouse and restaurant may remain open until 10:00 pm. Special events vary by the type of event and time of year but most also conclude by 10 p.m. Golf course maintenance activities occur throughout the week, including weekends. Crews typically arrive before dawn to commence preparations.

1.3.2 Golf Play

Sandpiper currently supports an average of 35,368 rounds of golf per year. Going forward, the course expects to reduce golf rounds to approximately 32,000 by incrementally increasing the time between tee-offs, which will improve the golfer experience by minimizing delays and backups.

1.3.3 Special Events

Currently, the Sandpiper Golf Course hosts more than 40 special events of various type and size per year, including wedding receptions, corporate events, and charity events. Events host 40-500 guests, depending on the type of event.

Following the proposed golf course improvements, the special events will remain unchanged as compared to existing, but will take advantage of the upgraded facilities, dedicated event lawn spaces, and additional available parking. Parking for the vast majority of special events will be provided on-site within the existing parking lot, as previously described. For annual events that cannot be fully accommodated by onsite parking, a shuttle will be used to bring guests to and from the course to an offsite location (e.g., nearby hotels).

Hosting PGA or LPGA events or other major tournaments, while feasible following the renovations, is not specifically contemplated in the current project proposal. If any are contemplated in the future, a separate application would be submitted well in advance of the proposed event to address any special requirements related to, for example, traffic and parking.

1.3.4 Employees

Currently, the club employs 35 full time equivalent (FTEs) staff within the clubhouse, restaurant, and maintenance areas. The proposed project is expected to employ an additional 21 FTEs. Employee parking is available at the clubhouse and the maintenance areas. In addition to ample bicycle parking, carpooling is encouraged and the clubhouse is located conveniently adjacent to an existing MTD bus stop.

1.3.5 Waste and Recycling

Fenced and roofed waste and recycling facilities will be provided within enclosed areas, meeting City of Goleta standards. The facilities are shown on the proposed plans at three (3) locations: the clubhouse area, Barnsdall, and the maintenance facility. These locations will provide adequate maneuvering space for trash and recycling vehicles.

A Solid Waste Management Plan to help reduce food waste generation will be prepared and submitted following the entitlement phase. During demolition and construction activities, the contractor and applicant will work with Marborg to achieve recyclable standards and minimize waste sent to landfills.

2 Regulatory Setting

This section outlines the federal, state, and local regulations pertinent to the biological resources of the Project site and immediate vicinity. Some of the biological resources that could be affected by the proposed Project are regulated by resource agencies, which often overlap in jurisdiction. This section identifies and discusses the various programs regulating sensitive habitats, state- and/or federally listed threatened or endangered plants and wildlife, and jurisdictional aquatic/hydrological features, such as drainages, streambeds, riparian habitat, and wetlands.

2.1 Sensitive Vegetation Communities

For the purpose of this Report, sensitive vegetation communities and habitats include:

- Alliances on the California Department of Fish and Wildlife (CDFW) California Natural Community List with a state rarity rank of S1, S2, or S3 (CDFW 2025a);
  - S1: Critically Imperiled – At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
  - S2: Imperiled – At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
  - S3: Vulnerable – At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- Vegetation communities or habitats listed in the California Natural Diversity Database (CNDDB) (CDFW 2025b); or
- Habitats considered locally sensitive under policies of the City of Goleta General Plan/Local Coastal Land Use Plan (CLUP) (City of Goleta 2006).

2.2 Special-Status Plant and Wildlife Species Defined

For the purpose of this Report, special-status plant species and wildlife species are those:

- Designated as either rare, threatened, or endangered by U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), or CDFW, and protected under either the federal Endangered Species Act (ESA) (16 USC 1531 et seq.) or the California Endangered Species Act (CESA) (California Fish and Game Code, Section 2050 et seq.), or meet the CEQA definition for endangered, rare, or threatened (14 CCR 15380[b],[d]);

Additional special-status wildlife species in this Report include those that are:

- California Species of Special Concern (SSC), as designated by CDFW (2025c);
- Vertebrate species that are fully protected (FP) species, as described in Fish and Game Code; or
- Those considered special-status species under the General Plan/CLUP.

Additional special-status plant species include those that are:

- Candidate species being considered or proposed for listing under the federal ESA or CESA; or
- Of expressed concern to resource/regulatory agencies or local jurisdictions. This includes plants included on the CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2025d) as well as species with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4 in the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2025a). Plants included on the CNPS Inventory are classified as follows:
  - CRPR 1A: plants presumed extirpated in California and either rare or extinct elsewhere;
  - CRPR 1B: plants rare, threatened, or endangered in California and elsewhere;
  - CRPR 2A: plants presumed extirpated in California but common elsewhere;
  - CRPR 2B: plants rare, threatened, or endangered in California but more common elsewhere
  - CRPR 3: plants about which we need more information – a review list; and
  - CRPR 4: plants of limited distribution – a watch list.

2.3 Endangered Species Acts

Various plant and wildlife species receive protections due to being listed as threatened or endangered under federal and state statutes.

2.3.1 Federal Endangered Species Act

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the USFWS and the National Oceanic and Atmospheric Administration NMFS. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. Under the provisions of Section 9(a)(1)(B) of the ESA (16 USC 1531 et seq.), it is unlawful to "take" any listed species.

In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or wildlife species, the property owner and agency are required to consult with USFWS or NMFS. Take permits are obtained either through a Biological Opinion, when the action being permitted involves another federal agency as described in Section 7 of the ESA, or a Habitat Conservation Plan, under Section 10 of the ESA.

2.3.2 California Endangered Species Act

CDFW administers the CESA (California Fish and Game Code), which prohibits the "take" of plant and animal species designated by the Fish and Game Commission as endangered or threatened in the State of California. Protections are also accorded "candidate" species, which include plant and animal species that are formally being considered for listing as endangered or threatened. Section 2081 of the California Fish and Game Code provides for the application of an incidental take permit for take of species protected under CESA that occurs incidentally during otherwise lawful activities.

2.3.3 California Coastal Act

The California Coastal Act (CCA; 1976, rev 2025) provides protection to sensitive habitats and wetlands (see 2.5.4) within the defined coastal zone. Several relevant sections of the CCA are provided below.

Section 30107.5 of the California Coastal Act defines Environmentally sensitive [habitat] area (ESHA) as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

Under Article 5 Land Resources, Section 30240 of the CCA, provides protections for ESHA:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30250

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Section 30231

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

2.4 Migratory Bird Protections

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource (16 USC 703–712). The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects over 800 species of birds, which are listed in the Code of Federal Regulations (50 CFR 10.13). The MBTA prohibits the "take" of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, take is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so.

Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey; or to take, possess, or destroy any nest or eggs of such birds. "Birds of prey" refer to species in the orders Falconiformes and Strigiformes [now also including the order Accipitriformes]. Active nests of all other native

birds are similarly protected under Sections 3503 and 3513 of the California Fish and Game Code. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW. This statute does not provide for the issuance of an incidental take permit.

2.5 Jurisdictional Aquatic Resources

Three primary agencies regulate activities within streams, wetlands, and riparian areas throughout California: the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA), the CDFW regulates activities under Sections 1600–1616 of the California Fish and Game Code, and the Regional Water Quality Control Boards (RWQCBs) regulates activities under the Porter-Cologne Water Quality Control Act and Section 401 of the CWA. In addition, the California Coastal Commission (CCC) regulates wetlands and riparian habitat in the coastal zone. The City of Goleta General Plan/CLUP includes protection policies for creeks, riparian areas, and wetlands (City of Goleta 2006). The following discussion provides information on each agency's regulatory program. In addition, Section IV, Appendix G (Environmental Checklist Form), of the California Environmental Quality Act (CEQA) Statutes and Guidelines requires an evaluation of impacts to "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."

2.5.1 U.S. Army Corps of Engineers

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes "waters of the United States" (provided in 33 CFR Section 328.3(a)) has changed multiple times over the past few decades starting with the *United States v. Riverside Bayview Homes, Inc*. court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule, NWPR), and 2021 (*Pasqua Tribe et al v. United States Environmental Protection Agency* resulting in remand and vacatur of the NWPR and a return to "the pre-2015 regulatory regime") have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the agencies announced the final Revised Definition of "Waters of the United States" rule (Rule) (88 CFR 3004–3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the 2020 Navigable Waters Protection Rule. The Rule also considers various subsequent court decisions including two notable Supreme Court decisions.

There were two key changes that the Rule incorporated. First, the Rule reinstated the "Significant Nexus" test. The "Significant Nexus" test referred to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372-69450). The "Significant Nexus" test attempts to establish a scientific connection between smaller water bodies, such as ephemeral or intermittent tributaries, and larger, more traditional navigable waters such as rivers. Second, the Rule adopted the "Relatively Permanent Standard" test. To

meet the "Relatively Permanent Standard" water bodies must be relatively permanent, standing, or continuously flowing and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in *Sackett* v. *EPA*., in which it rejected the EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States' (i.e., a relatively permanent body of water connected to traditional interstate navigable waters) and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins.

On August 29, 2023, the EPA and USACE announced the final rule amending the 2023 definition of "waters of the United States", conforming with the *Sackett* v. *EPA* decision. Some of the key changes include removing the significant nexus test from consideration when identifying tributaries and other waters as federally protected and revising the adjacency test when identifying federally jurisdictional wetlands. Under the EPA's new "waters of the United States" definition, a "waters of the United States" is a relatively permanent, standing, or continuously flowing body of water that has an apparent surface connection to a "traditionally navigable water" to fall within federal purview. The new rule applies to wetlands and streams throughout the U.S. Although the Sackett opinion did not specifically reference streams, the EPA's new rule extends the "continuous surface connection" standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

2.5.2 California Department of Fish and Wildlife

Under California Fish and Game Code Sections 1600–1616, CDFW has authority to regulate work that will substantially divert or obstruct the natural flow, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake. CDFW also has authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement (LSAA) and is applicable to all federal and nonfederal projects.

2.5.3 Regional Water Quality Control Boards

Pursuant to Section 401 of the federal CWA, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260[a]), pursuant to provisions of the Porter-Cologne Water Quality Control Act. Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e] and Public Code Section 71200) which differs from the CWA definition of Waters of the U.S. by its inclusion of groundwater and waters outside of the ordinary high-water mark in its jurisdiction. In addition, the Central Coast RWQCB (Region 3 – Monterey to Santa Barbara counties) regularly includes riparian habitat within its jurisdiction and is often coterminus with the CDFW jurisdiction. Before USACE will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the local RWQCB. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) under the Porter-Cologne Water Quality Control Act.

2.5.4 California Coastal Commission

Under the California Coastal Act (CCA), the CCC, in partnership with local governments, regulates impacts to wetlands in the "coastal zone" and requires a coastal development permit for almost all development within this zone. The coastal zone generally extends approximately 1,000 yards inland from the mean high tide line. In less developed areas, it can extend up to 5 miles inland from the mean high tide line, but can also be considerably less than 1,000 yards inland in developed areas.

Section 30121 of the CCA defines wetlands as *"lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, swamps, mudflats, and fens."*

In contrast to USACE, which uses a three-parameter definition to delineate wetlands, CCC essentially uses the Cowardin et al. (1979) method of wetlands classification, which defines wetland boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) when hydrology is present. For instance, in areas of plants that are facultative (FAC), but hydrology is absent, the habitat is considered upland.

Wetland habitat may also be defined as an Environmentally Sensitive [Habitat] Area (ESHA). Per Section 30107.5 of the California Coastal Act, ESHA is defined as: *Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

2.5.5 City of Goleta

The CCA directs each city or county within the coastal zone to prepare a Local Coastal Program (LCP) for CCC certification. Once the LCP is certified by CCC, the local government assumes coastal development permit authority for most development within the coastal zone.

The City of Goleta (City) General Plan/CLUP includes a coastal land use plan but not a certified LCP (City of Goleta 2006). Therefore, the CCC has jurisdictional authority in the plan area. The General Plan/CLUP defines wetland boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (City of Goleta 2006),

consistent with the CCC. Appendix A, Local Policies, includes aquatic resource related policies relevant to the Project including:

- Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy [GP/CP]
  - Policy CE 1.2: Designation of Environmentally Sensitive Habitat Areas
- Policy CE 2: Protection of Creeks and Riparian Areas [GP/CP]
  - Policy CE 2.1: Designation of Protected Creeks
  - Policy CE 2.2: Streamside Protection Areas
  - Policy CE 2.3: Allowable Uses and Activities in Streamside Protection Areas
  - Policy CE 2.5: Maintenance of Creeks as Natural Drainage Systems
  - Policy CE 2.6: Restoration of Degraded Creeks
- Policy CE 3: Protection of Wetlands [GP/CP]
  - Policy CE 3.1: Definition of Wetlands
  - Policy CE 3.2: Designation of Wetland ESHAs
  - Policy CE 3.3: Site-Specific Wetland Delineations
  - Policy CE 3.4: Protection of Wetlands in the Coastal Zone
  - Policy CE 3.6: Mitigation of Wetland Fill
  - Policy CD 3.7: Lagoon Protection

2.6 California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. The act also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

2.7 Local Laws, Ordinances, Regulations, and Standards

In addition to the regulations identified above, the following local laws, ordinances, regulations, and standards apply to the environmental review of potential impacts on biological resources as a result of the Project.

2.7.1 City of Goleta General Plan/Coastal Land Use Plan

The City of Goleta adopted the Goleta General Plan/CLUP in 2006 (City of Goleta 2006). The General Plan/CLUP aims to create a coherent vision of the City's future that forms the foundation for the General Plan's goals, objectives, and policies. The General Plan/CLUP Conservation Element includes a focus on preserving, protecting, and enhancing the City's natural resources. Policies relevant to the biological resources at the Project site are provided in Appendix A and include:

- Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy [GP/CP]
  - Policy CE 1.1: Definition of Environmentally Sensitive Habitat Areas
  - Policy CE 1.2: Designation of Environmentally Sensitive Habitat Areas

  - Policy CE 1.3: Site-Specific Studies and Unmapped ESHAs
  - Policy CE 1.4: Illegal Destruction of ESHAs
  - Policy CE 1.5: Corrections to Mapping of ESHAs
  - Policy CE 1.6: Protection of ESHAs
  - Policy CE 1.7: Mitigation of Impacts to ESHAs
  - Policy CE 1.8: ESHA Buffers
  - Policy CE 1.9: Standards Applicable to Development Projects
  - Policy CE 1.10: Management of ESHAs
- Policy CE 2: Protection of Creeks and Riparian Areas [GP/CP]
  - Policy CE 2.1: Designation of Protected Creeks
  - Policy CE 2.2: Streamside Protection Areas
  - Policy CE 2.3: Allowable Uses and Activities in Streamside Protection Areas
  - Policy CD 2.4: Dedication of Easements or Other Property Interests
  - Policy CE 2.5: Maintenance of Creeks as Natural Drainage Systems
  - Policy CE 2.6: Restoration of Degraded Creeks
- Policy CE 3: Protection of Wetlands [GP/CP]
  - Policy CE 3.1: Definition of Wetlands
  - Policy CE 3.2: Designation of Wetland ESHAs
  - Policy CE 3.3: Site-Specific Wetland Delineations
  - Policy CE 3.4: Protection of Wetlands in the Coastal Zone
  - Policy CE 3.6: Mitigation of Wetland Fill
  - Policy CE 3.7: Lagoon Protection
- Policy CE 4: Protection of Monarch Butterfly Habitat Areas [GP/CP]
  - Policy CE 4.1: Definition of Habitat Area
  - Policy CE 4.2: Designation of Monarch Butterfly ESHAs
  - Policy CE 4.3: Site-Specific Studies and Unmapped Monarch ESHAs
  - Policy CE 4.4: Protection of Monarch Butterfly ESHA
  - Policy CE 4.5: Buffers Adjacent to Monarch Butterfly ESHAs
  - Policy CE 4.6: Standards Applicable to New Development Adjacent to Monarch ESHAs
- Policy CE 5: Protection of Other Terrestrial Habitat Areas [GP/CP]
  - Policy CE 5.1: Designation of Other Terrestrial ESHA
  - Policy CE 5.2: Protection of Native Grasslands
  - Policy CE 5.3: Protection of Coastal Bluff Scrub, Coastal Sage Scrub, and Chaparral ESHA
- Policy CE 6: Protection of Marine Habitat Areas [GP/CP]
  - Policy CE 6.1: Definition of Marine ESHAs
  - Policy CE 6.2: Protection of Marine ESHAs
- Policy CE 7: Protection of Beach and Shoreline Habitats [GP/CP]

  - Policy CE 7.1: Designation of Beach and Shoreline ESHAs
  - Policy CE 7.2: Protection of Dunes
  - Policy CE 7.3: Protection of Beach Areas
  - Policy CE 7.4: Permitted Uses of Beach and Shoreline Areas
  - Policy CE 7.5: Shoreline Protective Structures
  - Policy CE 7.6: Restoration of Degraded Shoreline Areas
  - Policy CE 7.7: Recreation Facilities on Beach Areas
  - Policy CE 7.8: Protection of Seabird Nest Areas
- Policy CE 8: Protection of Special-Status Species [GP/CP]
  - Policy CE 8.1: ESHA Designation
  - Policy CE 8.2: Protection of Habitat Areas
  - Policy CE 8.3: Site-Specific Biological Resources Study
  - Policy CE 8.4: Buffer Area for Raptor Species
- Policy CE 9: Protection of Native Woodlands [GP/CP]
  - Policy CE 9.1: Definition of Protected Trees
  - Policy CE 9.2: Tree Protection Plan
  - Policy CE 9.3: Native Oak Woodlands and Savannas
  - Policy CE 9.4: Tree Protection Standards
  - Policy CE 9.5: Mitigation of Impacts to Native Trees

3 Methods

Dudek conducted a literature review and field surveys in preparation of this Report. In addition to surveys Dudek conducted in 2021 and 2022 in support of the Project, biological surveys were conducted on the Project site for previously proposed projects. In general, surveys were conducted within the Project site boundary, including the undeveloped areas, such as in Bell Creek Canyon, west of the golf course. But several survey areas extended beyond the Project boundaries (Figure 3, Survey Areas).

3.1 Literature Review

Prior to conducting field surveys, Dudek initiated a review of available information on biological resources occurring or potentially occurring on the Project site. Several previous biological surveys have been conducted at the Sandpiper Golf Club, and various standard sources include information relevant to the occurrence or potential occurrence of sensitive biological resources on the Project site. The literature review first involved a search of standard databases for sensitive biological resources. Dudek queried the CNDDB (CDFW 2025b) to determine what special-status plant species and special-status wildlife species could occur in the region. Typical CNDDB queries include nine U.S. Geological Survey (USGS) quadrangles (quads): the Project quad and the eight surrounding quads. However, because of the coastal location of the Project site, only five quads border the Project quad. Therefore, the query focused on the following six quads: Dos Pueblos Canyon (the Project quad), Goleta, Tajiguas, Santa Ynez, Lake Cachuma, and San Marcos Pass. Dudek also queried the CNPS Inventory of Rare and Endangered Plants (CNPS 2025a) for special-status plant species observed in the region and the USFWS's Information for Planning and Consultation (IPaC) Trust Resources website (USFWS 2025a) for a list of potentially occurring federally listed species. Other sources consulted included:

- California Natural Community List (CDFW 2025a)
- CNPS A Manual of California Vegetation Online (CNPS 2025b)
- Google aerial imagery (Google 2025)
- USFWS National Wetlands Inventory (USFWS 2025b)
- U.S. Geological Survey's National Hydrography Dataset (USGS 2025)

Local sources include the City's General Plan/CLUP (City of Goleta 2006), which in addition to its biological resources policies, includes occurrences of special-status plant and wildlife species. Other local sources that provide information on biological resources occurring in the area include:

- City of Goleta Creek & Watershed Management Plan (City of Goleta 2020)
- Final Ellwood Mesa/Sperling Preserve Open Space Monarch Butterfly Habitat Management Plan (City of Goleta 2019)
- Goleta Urban Forest Management Plan (City of Goleta 2017)
- Monarch Butterfly Overwintering Sites (Xerces Society 2022a)
- Monarch Butterfly Overwintering Sites in Santa Barbara County California (Meade 1999)
- The Birds of Santa Barbara County, California (Lehman 2024)

Finally, reports on previous biological surveys, which pertain mostly to the presence of California red-legged frog (*Rana draytonii*) and birds, included:

- Biological Assessment for the Sandpiper Golf Course Renovation Project, Goleta, California (Dana Bland & Associates 2004)
- California Red-legged Frog Status, Sandpiper Golf Course, Goleta, California (Rathbun 2004)
- Sandpiper Golf Course: Conceptual Plan for Riparian and Red-Legged Frog Habitat Restoration (Tierney 2004)
- Sandpiper Golf Course Renovation Project: Winter Bird Surveys (TOBC 2004a)
- Sandpiper Golf Course Renovation Project: Spring Bird Surveys (TOBC 2004b)
- Sandpiper Golf Course Renovation Project: Bird Surveys (TOBC 2006)
- Sandpiper Golf Course: Monarch Butterfly Survey (Althouse and Meade Inc. 2004)

3.2 Field Surveys in 2021 and 2022

Dudek conducted a reconnaissance survey and vegetation mapping in 2021. Based on results of the reconnaissance survey and biological resources issues identified during the literature review, Dudek conducted additional, focused surveys in 2022, as described below. Survey types, dates, times, personnel, and conditions are included in Table 1.

Table 2. Surveys, Dates, Personnel, and Conditions

Date	Time	Personnel	Conditions	Survey Type
4/2/2021	0800–1415	HM	53°F–63°F; 0%–100% cc; 1–3 mph winds	Reconnaissance/ Vegetation Mapping
11/24/2021	0630–0900 (P) 0915–1200 (R)	AD	51°F–60°F; 0% cc; 0–2 mph winds	Monarch butterfly
01/06/2022	0700-1020 (P) 1030-1200 (R)	AD	54°F–63°F; 5%–10% cc; 0–2 mph winds	Monarch butterfly
3/22/2022	0735–1121	DC	61°F–83°F; 0%–10% cc; 1–6 mph winds	Coastal raptor
4/13/2022	0720–1118	DC	51°F–61°F; 0% cc; 1–4 mph wind	Coastal raptor
4/25/2022	1529–1730	AD	73°F; 0% cc; 1–2mph wind	CRLF (daytime)
4/25/2022	2031-2355	AD, DC	72°F; 50% cc; 0–1mph wind	CRLF (nighttime)
4/27/2022	0737–1121	DC	55°F–64°F; 0%–10% cc; 3–8 mph wind	Coastal raptor
5/4/2022	1126–1800	HM	64°F–66°F; 0% cc; 1–7 mph wind	Special-status plants
5/10/2022	0801–1601	HM, RS	56°F–64°F; 10% cc; 1–15 mph wind	Aquatic resources delineation

Table 2. Surveys, Dates, Personnel, and Conditions

Date	Time	Personnel	Conditions	Survey Type
5/11/2022	0754–1727	HM, RS	56°F–67°F; 0% cc; 2–15 mph wind	Aquatic resources delineation
5/11/2022	1955-2133	AD, RS	59°F; 0% cc; 0–1 mph wind	CRLF (nighttime)
5/13/2022	1120-1630	AD	72°F–77°F; 0% cc; 1–3 mph wind	CRLF (daytime)
5/24/2022	2107-2323	AD, HM	55°F; 100% cc; 0–1 mph wind	CRLF (nighttime)
5/26/2022	0758–1724	HM	59°F–60°F; 100% cc; 2–5 mph wind	Native grassland assessment
5/27/2022	0740–1132	HM	59°F–60°F; 100% cc; 1–5 mph wind	Native grassland assessment
5/18/2022	0711–1111	DC	55°F–60°F; 0%–50% cc; 1–5 mph wind	Coastal raptor
6/20–21/2022	2103-0007	AD, DC	71°F–77°F; 0% cc; 0–2 mph wind	CRLF (nighttime)
7/21/2022	2058-2345	AD, RS	61°F–62°F; 0%–10% cc; 0–3 mph wind	CRLF (nighttime)
6/10/2022	0741–1104	DC	61°F–63°F; 100% cc; 0–4 mph wind	Coastal raptor
7/27/2022	1430-1730	AD	61°F–71°F; 0% cc; 1–3 mph wind	CRLF (daytime)
7/7/2022	0745–1549	HM	65°F–71°F; 0% cc; 0–7 mph wind	Special-status plants
8/12/2022	0950–1126	HM	69°F–71°F; 0% cc; 1–6 mph wind	Aquatic resources delineation

Notes: CRLF = California red-legged frog; P = Project Site; R = Reference Site (for monarch butterflies); F = Fahrenheit; cc = cloud cover; mph = miles per hour.
Biologists' initials: AD = Andrea Dransfield; DC = Dave Compton; HM = Heather Moine; RS = Rachel Swick.

3.2.1 Reconnaissance Survey

On April 2, 2021, Dudek performed a reconnaissance-level field survey within the Project site (Table 2). The reconnaissance-level field survey was conducted to identify existing biological resources and potential biological constraints. Dudek mapped vegetation within the Project site, including the golf course and areas outside the golf course, which occur along Bell Canyon Creek, the Pacific Ocean bluffs, and the eastern boundary of the site, as well as club house area, maintenance yard, and the historic Barnsdall Gas Station. The reconnaissance survey also included a habitat assessment for special-status plant and wildlife species and an assessment of aquatic resources that could occur on the Project site, including the golf course, other golf course facilities, and the area around Bell Canyon Creek and Bell Canyon Creek Lagoon, west of the golf course. During the survey, the biologist recorded all plant species observed and all wildlife species detected by sight, calls, tracks, scat, or other sign. Methods for vegetation mapping are described below.

3.2.2 Vegetation Mapping

A Dudek biologist performed vegetation mapping on the Project site consistent with the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and vegetation communities were identified using the Manual of California Vegetation Online (MCV) (CNPS 2025b). Vegetation communities were classified based on site factors, descriptions, membership rules, distribution, and characteristic species present in the area. Information such as dominant species and associated cover classes were recorded. In some areas, the vegetation communities observed in the field did not match those described in MCV (CNPS 2025b) or included on the California Natural Community List (CDFW 2025a). In these instances, Dudek generated additional site-specific vegetation community or land cover classifications. Additionally, Bell Canyon vegetation had been mapped as part of the City of Goleta Creek & Watershed Management Plan (City of Goleta 2020); therefore, the vegetation mapping included in this plan was incorporated into the vegetation map.

Vegetation communities were generally mapped to the alliance level, except where mapping to the finer-scale association level was necessary to determine sensitivity in accordance with the California Natural Community List (CDFW 2025a). Since the Project site is in the coastal zone, no minimum mapping units apply to sensitive vegetation communities and riparian and wetland vegetation communities; therefore, all sensitive vegetation communities observed were mapped.

Dudek biologists mapped vegetation communities on the Project site while in the field using an Esri ArcGIS mobile application. A Dudek geographic information system (GIS) technician transferred the vegetation boundaries into an ArcGIS file and created a GIS coverage for vegetation communities. Once major line work and community designations were completed, a geodatabase was created to verify that these data were topologically correct and met final quality control and assurance procedures.

3.2.3 Aquatic Resources Delineation

Dudek conducted a field delineation of aquatic resources of the Project site in accordance with the procedures of the Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2) (USACE 2008a). The instruction guidelines for jurisdictional determinations (USACE 2007) present regulation responsibilities of USACE under the CWA: USACE regulates traditional, navigable waters of the United States, adjacent wetlands, and relatively permanent waters tributary to TNW and adjacent wetlands. Wetland vegetation was classified using CNPS (2025b). Wetland areas under the jurisdiction of USACE were delineated based on the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. Non-wetland waters of the United States under the jurisdiction of USACE were delineated based on the presence of an ordinary high water mark (OHWM) and nexus to a TNW of the United States. Identification of the OHWM followed the A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b), where present. The aquatic resources delineation also included the collection of CDFW jurisdictional boundaries subject to Section 1600-1616 of the California Fish and Game Code, which extend to the top of bank or the outermost edge of riparian vegetation, whichever is greater, associated with a stream channel or waterway. Additionally, the aquatic resources delineation included waters of the state under the jurisdiction of the RWQCB, pursuant to Section 401 of the federal CWA and the Porter-Cologne Act as wetlands or drainages. However, the Central Coast RWQCB (Region 3 - Monterey to Santa Barbara counties) regularly includes riparian habitat within its jurisdiction and is often coterminous with the CDFW jurisdiction. The RWQCB jurisdiction was based on RWQCB Region 3's interpretation of Waters of

the State. The aquatic resources delineation included an evaluation of the survey area for features meeting the definition of a coastal wetland under Section 30121 of the CCA. City of Goleta defines wetlands as the most protective of USFWS, CDFW (formerly California Department of Fish and Game), and CCC wetland definitions using indicators of a single parameter (plants, soil, or hydrology) to determine the boundary of a wetland. Lastly, City of Goleta identifies watercourses and their associated riparian areas as Environmentally Sensitive Habitat Areas (ESHAs) and have associated protection policies.

Hydrophytic Vegetation

During the aquatic resources delineation, a "sampling point" was considered positive for hydrophytic vegetation if it passed the basic dominance test (Indicator 1), meaning that more than 50% of the dominant species sampled were characterized as either obligate, facultative wetland, and/or facultative per the National Wetland Plant List (USACE 2020). A description of the hydrophytic vegetation categories is provided in Table 3 (Lichvar et al. 2012). In those cases where the dominance test failed but there were positive indicators of hydric soils and/or hydrology, the vegetation parameter was re-evaluated using the prevalence index (Indicator 2), which takes into account all plant species in the community, not just dominants. All plant species observed during the surveys were identified and recorded.

Table 3. National Indicator Status Ratings and Their Rating Categories

Indicator Status (abbreviation)	Percent Occurrence in Wetlands
Obligate (OBL). Occur almost always under natural conditions in wetlands.	99
Facultative Wetland (FACW). Usually occur in wetlands but occasionally found in non-wetlands.	67–99
Facultative (FAC). Equally likely to occur in wetlands and non-wetlands.	34–66
Facultative Upland (FACU). Usually occur in non-wetlands but occasionally found in wetlands.	1–33
Upland (UPL). Occur in wetlands in another region, but occur almost always under natural conditions in non-wetlands in the region specified.	1

Source: Lichvar et al. 2012
Note: The three facultative categories are subdivided by (+) and (−) modifiers.

Soils

According to the National Technical Committee for Hydric Soils, hydric soils are "soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA 1994). Soil pits were prepared using a shovel to determine if hydric soils were present. The presence of hydric soils was determined through consultations with the 1987 Manual, as well as Field Indicators of Hydric Soils in the United States v. 7.0 (USDA-NRCS 2010) and the USACE's Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Munsell Soil Color Charts were used to determine soil chroma and value. Where feasible, soil pits were prepared to depths as deep as 16 inches. Dry soils were moistened to obtain the most accurate color.

Hydrology

Per the guidelines prescribed in the Arid West Supplement (USACE 2008a), wetland hydrology indicators are separated into four major groups: A, B, C, and D. Group A indicators are based on direct observations of surface flow, ponding, and soil saturation/groundwater. Group B indicators consist of evidence that the site has been or is currently subjected to ponding including, but not limited to, water marks, drift deposits, and sediment deposits. Group C indicators include signs of previous and/or current saturation including oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur, both of which are indicative of extended periods of soil saturation. Group D indicators consist of "vegetation and soil features that are indicative of current rather than historic wet conditions and include a shallow aquitard and results of the FAC-Neutral test" (USACE 2008a). Each group is subdivided into primary and secondary categories based on their frequency and reliability to occur in the Arid West region. Signs of hydrology were investigated on site by intensive field review.

3.2.4 Special-Status Plant Survey

A Dudek botanist familiar with the target special-status plant species and general flora of Santa Barbara County conducted floristic surveys (spring and early summer passes) (Table 2) in accordance with USFWS, CDFW, and CNPS guidelines (Cypher 2002; CDFW 2018; CNPS 2001). The botanist surveyed all undeveloped areas of the Project site for special-status plant species by walking the site for 100% visual survey coverage, depending on topography and vegetative cover. The botanist did not survey hardscape areas or golf course fairways or greens. The botanist meandered to ensure the entire Project site was completely surveyed. During the surveys, when a special-status plant species was observed, the location was mapped using Environmental Systems Research Institute (ESRI) Field Maps application on a handheld iOS device boosted with a Trimble R1, for sub-meter accuracy.

Native and naturalized plant species encountered during the surveys were identified and recorded. Scientific and common names for plant species with a California Rare Plant Rank (CRPR) follow the CNPS Online Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2025a). For plant species without a CRPR, scientific names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2025) and common names follow the California Natural Community list (CDFW 2025a) or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2025a).

3.2.5 Native Grassland Assessment

During initial vegetation mapping and identification of biological constraints, the Dudek botanist noted the presence of native grasses. As a result, during the April 2022 special-status plant species survey pass, prior to conducting an assessment of potential native grasslands, the Dudek botanist recorded the general locations of native grasses on the Project site using an ESRI ArcGIS Field Maps application on a handheld iOS device. In May 2022, the Dudek botanist conducted the native grassland assessment by walking areas with native grasses providing 100% visual survey coverage. When native grasses were observed, pin flags were placed adjacent to native grass individuals to the outside of the polygon, ensuring the whole native grass plant was included in the polygon. Once an entire polygon was delineated with pin flags, the polygon was assigned a unique identifier and mapped using ESRI ArcGIS Field Maps application on a handheld iOS device boosted with a Trimble R1 by following the pin flag boundary. After GPSing the polygon, the botanist decided which assessment method of the two described below was most appropriate based on the polygon size.

Quantitative Method

For polygons of native grasses where it was feasible to establish a transect and 1-meter-square quadrats, the quantitative method was applied. Transect locations were chosen using a non-random design that allowed for the greatest coverage of the polygon and varied in length, depending on the size of the polygon being assessed. For larger, more irregularly shaped polygons, multiple transects were established. Transect start and end points were recorded when the transect was established. Starting at the zero end of the transect tape, the botanist placed a 1-meter-square quadrat on alternating sides of the transect at 2-meter intervals. Within each 1-meter-square quadrat, the botanist estimated the percent cover of native grasses relative to plant cover and counted the number of native grass individuals. For grass species that were difficult to count, such as salt grass (*Distichlis spicata*), the total number of individuals was not recorded.

Qualitative Method

For polygons of native grasses where it was infeasible to establish a transect and 1-meter-square quadrats (polygons that were too small), the percent cover of native grasses relative to plant cover was visually estimated and the number of native grass individuals was recorded. For grass species that were difficult to count, such as salt grass, the total number of individuals was not recorded.

Upon completing the native grassland field survey, Dudek performed a desktop assessment of the native grass relative plant cover percent and size of each polygon to determine whether polygons met the City defined thresholds for a native grassland (see Goleta General Plan/Coastal Land Use Plan – Policy CE 5: Protection of Other Terrestrial Habitat Areas [GP/CP]). Under the Goleta General Plan/CLUP (City of Goleta 2006), native grasslands are areas were where native grassland species comprise 10% or more of the total relative plant cover. Additionally, the Goleta General Plan/CLUP (City of Goleta 2006) further defines native grasslands by size and includes that removal or disturbance to native grass patches less than 0.25 acres that are clearly isolated and not part of a significant native grassland or an integral component of a larger ecosystem may be allowed.

Dudek biologists calculated the mean native grassland species relative plant cover for the 1-meter-square quadrats for each polygon to determine the coverage of native grassland species for each polygon containing native grasses. For polygons assessed using the qualitative method, the visually estimated relative percent cover of native grassland species was noted for each polygon. Dudek biologists then assessed the size of individual polygons containing native grasses and clusters of polygons containing native grasses to determine if the City defined thresholds for native grasslands was met. Areas identified as native grasslands were then incorporated into the vegetation map.

3.2.6 Roosting Monarch Butterfly Survey

Dudek Biologist Andrea Dransfield conducted two monarch butterfly surveys in November 2021 and January 2022 (Table 2). The survey methodology generally followed Xerces Society monitoring guidelines for statewide monarch counts (Xerces Society 2022b). Surveys were conducted in the early morning starting when temperatures were low (below 55°F) and monarchs were still clustered. Surveys were not conducted during heavy precipitation or strong winds.

Monarch butterfly surveys were conducted both at the Project site and at several reference locations (Figure 4, Monarch Butterfly Survey Area) to understand the Project survey results within the larger regional context of monarch activity. The Santa Barbara Shores/Ellwood Butterfly Grove, adjacent to and directly east of the Project

site, served as the primary reference site (Figure 4). Ellwood contains a large complex of eucalyptus groves and is a well-documented monarch aggregation site (Meade 1999). The Dudek biologist generally surveyed Xerces Society Site Nos. 2744, 2745, 3178, 2747, 2749, 2750, and 2751 as reference locations (Figure 4). For each visit, the biologist walked all habitat on the Project site and adjacent reference areas, and used binoculars to examine all potentially suitable overwintering trees. Areas difficult to access were surveyed using binoculars (10×42) to record all occurrences of monarch individuals and/or clusters. The locations and numbers of individuals were counted and recorded on an aerial map.

In addition to the surveys, Dudek conducted a brief habitat assessment of the Project site. This assessment included noting tree clusters, freshwater locations, and plants potentially providing nectar sources.

3.2.7 Protocol California Red-legged Frog Surveys

Previous surveys, in October 2001 and June 2004, detected California red-legged frog on the Project site in the Golf Course Pond, in Bell Canyon Creek, and in an unnamed wetland feature near the bluff (which Rathbun referred to as the "clubhouse gully") (Rathbun 2004). Therefore, Dudek conducted an initial habitat assessment and California red-legged frog surveys in areas supporting aquatic habitat on the Project site and within 500 feet (Figure 3) from April 25, 2022, to July 27, 2022, in accordance with the Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (USFWS 2005a). The protocol states that, for each suitable aquatic habitat, these surveys shall:

- Consist of up to eight surveys conducted over a minimum period of 6 weeks
- Include two day surveys and four night surveys during the breeding season
- Include one day and one night survey during the non-breeding season (July 1 through September 30)
- Be spaced at least 7 days apart
- Have daytime surveys conducted between 1 hour after sunrise and 1 hour before sunset
- Have night surveys commence no less than 1 hour after sunset
- Cease if a California red-legged frog is identified at any time during the course of a survey

Dudek Biologist Andrea Dransfield conducted all surveys, with assistance during night surveys from Dudek Biologists Rachel Swick, Dave Compton, and Heather Moine. Upon arrival at each aquatic habitat, biologists listened for approximately 10 minutes for calling frogs prior to disturbing the site. If calls were identified, the detection and the approximate location of the call was recorded. For both daytime and night surveys, visual encounter was the main method of survey. Dudek generally walked along the edges of suitable habitat and avoided walking within the habitat itself whenever possible.

During daytime surveys during the breeding season, Dudek biologists searched primarily for egg masses, larvae, and metamorphosing sub-adults (metamorphs). Biologists searched for both metamorphs and adults during the non-breeding season daytime.

During night surveys, biologists searched primarily for adults and metamorphosing sub-adults. Night surveys were not conducted during periods of heavy rains, fog, or other conditions that may impair the surveyor's ability to visually detect frogs. Night surveys were conducted using lights that met standards specified in USFWS (2005) and permitted detection from eye shine. Binoculars were used to facilitate detection of eye shine. Dudek biologists recorded species and population numbers for all amphibians encountered during the surveys.

3.2.8 Nesting Raptor Surveys

Dudek conducted raptor surveys in accordance with the CCC (2004) protocol for breeding raptors. The protocol states that these surveys shall:

- Be conducted between March 1 and June 15
- Consist of at least five visits
- Be spaced at least 1 week apart
- Consist of at least 2 hours on site between dawn and 10:00 a.m.
- Include three visits immediately before nightfall, if habitat for ground-nesting owls is present
- Specifically involve searches for nests, foraging birds, and birds using trees for nesting, perching, or roosting

No habitat for ground-nesting owls are known to be present in the region during the breeding season (CDFW 2025b; Lehman 2022), so Dudek did not conduct evening surveys. The survey covered the entire Project site and a 500-foot buffer (Figure 3). Dudek Senior Ornithologist Dave Compton conducted all surveys. Mr. Compton walked or drove a golf cart around the entire golf course and covered the Project buffer entirely on foot and by scanning from key locations. Mr. Compton typically stopped in several locations during the course of the survey for 10 to 20 minutes to scan for raptors and observe raptor behavior. Each of the five morning surveys took between 3.5 and 4.0 hours, during which Mr. Compton searched for and observed raptors, raptor nests, other raptor breeding evidence, and raptor foraging. At least 2 hours prior to 10:00 a.m., per CCC (2004) protocol, were spent observing within each survey area during each survey pass. Survey routes permitted inspection of all suitable trees for raptor nests, through either close-up examination or scanning a group of trees at a distance.

Nesting, Perching, and Roosting

Mr. Compton searched for raptor nests in mature trees within each of the survey areas (including the 500-foot buffer), especially if a raptor in the area displayed behavior indicating potential breeding or nest building. Trees of interest included eucalyptus (*Eucalyptus* spp.), ornamental pines (*Pinus* spp.), Monterey cypress (*Hesperocyparis macrocarpa*), other large ornamentals, and mature oaks (*Quercus* spp.), western sycamores (*Platanus racemosa*), and willows (*Salix* spp.). The ornithologist also examined all suitable raptor perching areas and listened for raptor calls. Locations of any raptor perches or nests were noted on an aerial image displayed in the Field Maps mobile app on an iOS device. In addition, the locations of other breeding-related behaviors or of raptor fledglings were noted on the aerial field map. Locations recorded in the field were later digitized by a GIS technician.

Although the term "roosting" may be applied to multiple behaviors, and the meaning of this term overlaps with "perching," roosting may refer specifically to occupying a location during the nighttime hours, often referred to as "night roosting." Some species, such as white-tailed kite (*Elanus leucurus*), a state fully protected species, may roost communally at night, especially during winter. White-tailed kite roosts typically occur in dense vegetation in riparian habitat, orchards, oaks (*Quercus* spp.), and other trees. Dudek noted the suitability of on-site habitat for such roosting. However, the timing of the surveys as dictated by the protocol (CCC 2004), which is during the spring and during daytime hours, does not permit direct observations of communal night roosting for most species.

Foraging

As the Project would result in very limited permanent impacts from development, surveys focused on nesting and perching rather than foraging, which for most raptors in the region occurs mostly in more open habitats. However, the presence of adjacent foraging habitat is an important component of nesting habitat. Red-tailed hawks, for example, tend to establish nests in locations where they have views over adjacent foraging habitat. In general, raptors will nest in locations where they have ready access to foraging habitat. Therefore, Dudek noted any foraging activities observed and the presence of nearby foraging habitat during surveys.

3.3 Previous Surveys

Several previous surveys were conducted for biological resources. Most surveys were conducted in the period from 2004 to 2006. California red-legged frog surveys were conducted in 2002, 2003, and 2004 (Rathbun 2004). Research zoologist Galen Rathbun conducted the frog surveys. Although he conducted the surveys prior to the issuing of the USFWS survey guidance for the species (USFWS 2005a), he employed similar field methods, including daytime surveys for egg masses and tadpoles and night-time surveys for adults. Surveys focused on the golf course pond, Bell Canyon Creek (including Bell Canyon Creek lagoon), Devereux Creek, and the unnamed wetland feature ("Clubhouse Gully" per Rathbun) along the bluff near the center of the site. In addition to the surveys described above, Dr. Rathbun also conducted dip-netting for tadpoles at the golf course pond in 2002 only, and also conducted dip-netting at the unnamed wetland feature in 2004.

Tom Olson Biological Consulting conducted winter and spring bird surveys on the site in 2004 (TOBC 2004a, 2004b, 2006). These surveys were conducted on foot and through use of golf cart, and they focused on locations of particular interest to birds, such as the golf course pond, Devereux Creek, the eucalyptus grove along the eastern boundary of the property, scattered trees around the course, and Bell Canyon Creek. Althouse and Meade Inc. (2004) conducted monarch butterfly (*Danaus plexippus*) surveys in 2003 and 2004, including surveys of the known aggregation site at the eastern boundary of the golf course in fall and winter and a habitat assessment of the entire course in January 2004.

4 Results

4.1 Biological Setting

The Project site includes the Sandpiper Golf Club and an undeveloped area along Bell Canyon Creek west of the golf course, which are both part of Assessor's Parcel Number 079-210-059. The Project site is located near the western limit of the City of Goleta, in southern Santa Barbara County. In general, most development associated with the City of Goleta occurs to the east and northeast, and lands to the north and west are largely undeveloped or sparsely developed. The Project site is situation along a coastal bluff above the Pacific Ocean, which lies to the south, and adjacent to a large complex of coastal open space to the east that includes the Ellwood Mesa/Sperling Preserve and, farther east, the University of California, Santa Barbara's North Campus Open Space and Coal Oil Point Reserve. The Ellwood Onshore Beacon West Energy Group facility is situated between the Bell Canyon and Sandpiper Golf Club portions of the Project site, and the Ritz-Carlton Bacara property is west of Bell Canyon. Residential properties, the Union Pacific Railroad, and U.S. 101 are north of the golf club and Hollister Avenue. Additional residential areas are to the east, between Ellwood Mesa and Hollister Avenue. Photos of the Project site are included in Appendix B.

4.2 Vegetation Communities and Land Covers

This section describes the vegetation communities and land covers identified on the Project site (Figure 5, Vegetation Communities and Land Covers). As shown on Table 4, a total of 16 vegetation communities and six additional land cover types were mapped during field surveys. Of the 16 vegetation communities, 14 are described in the Manual of California Vegetation Online (MCV; CNPS 2025b) and the California Natural Community List (NCL; CDFW 2025a). Two are general vegetation community types occurring in portions of Bell Canyon Creek far from any Project impacts and were not investigated closely enough to assign to the alliance level. The six additional land cover types are not described in MCV or NCL and are characterized as beach, disturbed habitat, golf course – developed, open water, parks and ornamental plantings, and urban/developed. Vegetation communities and land cover types observed are summarized in Table 4 and described below. Despite the variety of land cover types, many of which occur in the undeveloped parts of the Project site, 61% of the entire Project site is occupied by maintained areas of the developed golf course (fairways, tees, greens, sand traps, surrounds) and or structures and hardscape associated mostly with the clubhouse and maintenance yard. Patches of less-maintained areas occur around the golf course, mostly consisting or non-native grasses and planted trees, and much of the remaining areas, and nearly all of the sensitive biological resources occurring on the Project site, occur in areas outside or at the fringes of the existing golf course: along Bell Canyon Creek, along the beach and bluffs, and along the eastern boundary, which is dominated by eucalyptus trees (*Eucalyptus* spp.).

Table 4. Summary of Vegetation Communities and Land Cover Types

Category	Vegetation Community/Land Cover Type	State Rarity Rank	ESHA	Sum of Acres
Woodland				
Riparian Woodland	Coast live oak woodland alliance	S4	Yes	0.7
Woodland	Monterey cypress - Monterey pine stands semi-natural alliance	SNA	Potentially Yes	2.9
	Pepper tree or Myoporum groves semi-natural alliance	SNR	No	1.3
Woodland or Riparian Woodland	*Eucalyptus* (*globulus*, *camaldulensis*) provisional semi-natural association	SNA	Potentially Yes	11.2
			Woodland Total	**16.1**
Scrub				
Coastal Bluff Scrub	*Baccharis pilularis* - *Toxicodendron diversilobum* association	S5?	Yes	0.4
	Coyote brush scrub alliance	S5	Yes	2.7
	Quailbush scrub alliance	S4	Yes	8.3
Coastal Sage Scrub	California brittle bush - Ashy buckwheat scrub alliance	S3	Yes	0.1
	Coastal sage scrub	NA	Yes	0.1
Riparian Scrub	Arroyo willow thickets association	S4	Yes	5.5
			Scrub Total	**17.0**
Grass and Herb Dominated				
Native Grassland	Needle grass - Melic grass grassland alliance	S3S4	Yes	0.4
Non-native Grass	Wild oats and annual brome grasslands semi-natural alliance	SNA	No	28.2
Non-native Herb	Upland mustards or star-thistle fields semi-natural alliance	SNA	No	0.1
			Grass and Herb Dominated Total	**28.7**
Bog and Marsh				
Wetland	Cattail marshes alliance	S5	Yes	1.2
	Emergent wetland	NA	Yes	0.2
			Bog and Marsh Total	**1.4**
Dune				
Dune	Beach	NA	Yes	8.4
	Ice plant mats semi-natural alliance	SNA	No	0.1
			Dune Total	**8.6**
Other				
Other	Disturbed habitat	NA	No	0.6
	Golf course – Developed	NA	No	115.2
	Open water	NA	Yes	2.0

Table 4. Summary of Vegetation Communities and Land Cover Types

Category	Vegetation Community/Land Cover Type	State Rarity Rank	ESHA	Sum of Acres
	Parks and ornamental plantings	NA	No	0.7
	Urban/Developed	NA	No	3.4
			Other Total	**121.9**
			Grand Total	**193.7**

Notes:
? = denotes inexact numeric rank. Indicates best estimate of the rank, insufficient samples over the full expected range of the type, but existing information points to this rank.
NA = not applicable. Not identified in A Manual of California Vegetation (CNPS 2025a) or California Natural Community List (CDFW 2025a); therefore, there is no sensitivity status.
S3 = Vulnerable, sensitive. At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent widespread declines, threats, or other factors.
S4 = Apparently secure, not sensitive. At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many population occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 = secure, not sensitive. At a very low risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.
SNA = Semi-natural alliance or association. Associated with a non-native plant; therefore, there is no sensitivity status.
SNR = State not ranked.

4.2.1 Coast live Oak Woodland Alliance

The coast live oak woodland alliance (CLO) is recognized by NCL and MCV, and has a state rarity rank of S4. Although this indicates it is not sensitive, it is considered ESHA under the City of Goleta General Plan/CLUP (City of Goleta 2006). Coast live oak woodland alliance includes coast live oak (*Quercus agrifolia*) as the dominant or codominant tree in the canopy. Coast live oak woodland has a continuous to open canopy less than 30 meters (98 feet) in height with a sparse to intermittent shrub canopy, and sparse or grassy ground layer (CNPS 2025b). Species associated with the coast live oak woodland alliance include bigleaf maple (*Acer macrophyllum*), blue oak (*Quercus douglasii*), box-elder (*Acer negundo*), California bay (*Umbellularia californica*), Engelmann oak (*Quercus engelmannii*), western sycamore (*Platanus racemosa*), Southern California black walnut (*Juglans californica*), valley oak (*Quercus lobata*), arroyo willow (*Salix lasiolepis*), California black oak (*Quercus kelloggii*), and madrone (*Arbutus menziesii*) (CNPS 2025b).

Coast live oak woodland is limited on the Project site to a single stand between Bell Canyon Creek and the Beacon West Group facility (Figure 5). A portion of the oak woodland occurs within an area the City has mapped as Riparian/Marsh/Vernal Pool ESHA (City of Goleta 2016). Other species occurring within coast live oak woodland on the Project site include California blackberry (*Rubus Ursinus*), poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), arroyo willow (*Salix lasiolepis*), western white clematis (*Clematis ligusticifolia*), and fennel *(Foeniculum vulgare*). Approximately 0.7 acres of coast live oak woodland occurs on the Project site, but all of this occurs well outside the existing golf course. See also Section 4.3.1, Sensitive Vegetation Communities (Table 4).

4.2.2 Monterey Cypress – Monterey Pine Semi-Natural Alliance

Monterey cypress – Monterey pine semi-natural alliance (MC-MPS) is recognized in MCV and NCL but possesses no state rarity rank. It includes Monterey cypress (*Hesperocyparis macrocarpa*) and/or Monterey pine (*Pinus radiata*) as the dominant species in the canopy. Although both species are native to parts of California, neither Monterey

cypress nor Monterey pine is native to the Project region. However, where this community supports habitat for nesting raptors, it may be considered ESHA.

Clusters of Monterey cypress and Monterey pines occur widely in relatively small and open stands across the southern and eastern parts of the golf course, with Monterey cypress stands predominating (Figure 5). Other species occurring within Monterey cypress – Monterey pine include non-native grasses, prickly Russian thistle (*Salsola tragus*), and Australian saltbush (*Atriplex semibaccata*). Approximately 2.9 acres of Monterey cypress – Monterey pine semi-natural alliance occurs on the Project site (Table 4).

4.2.3 Pepper Tree or Myoporum Groves Semi-Natural Alliance

Pepper tree or myoporum groves semi-natural alliance (PTMG) is recognized in both MCV and NCL and has no state rarity rank. Pepper tree or myoporum groves consist of myoporum (*Myoporum laetum*) or pepper trees (*Schinus* spp.) as the dominant species in the tree canopy. These groves have an open to continuous tree canopy less than 18 meters (59 feet) in height. Understory shrubs are infrequent or common and the herbaceous layer is simple to diverse. Throughout Central and Southern California, the pepper trees or myoporum groves semi-natural alliance occurs in coastal canyons, washes, slopes, riparian areas, and roadsides (CNPS 2025b).

Stands of both Brazilian pepper trees (*Schinus terebinthifolius*) and myoporum occur on the Project site, both in limited areas, in the northwest near Hollister Avenue and near the bluffs (Figure 5). Other species occurring within this community include shortpod mustard (*Hirschfeldia incana*), non-native grasses, white bladderflower (*Araujia sericifera*), castorbean (*Ricinus communis*), and Sydney golden wattle (*Acacia longifolia*). The Project site supports approximately 1.3 acres of pepper tree or myoporum groves semi-natural alliance (Table 4).

4.2.4 Eucalyptus (*globulus, camaldulensis*) Provisional Semi-Natural Association

Eucalyptus (*globulus*, *camaldulensis*) semi-natural association (EUC) is an association of Eucalyptus - tree of heaven - black locust groves semi-natural alliance that contains eucalyptus trees (*Eucalyptus spp.*) as the dominant species. It is recognized in MCV and NCL, but has no state rarity rank. However, eucalyptus may be ESHA where they support monarch butterfly roosts or nesting raptors, especially special-status species such as white-tailed kite (*Elanus leucurus*). Eucalyptus have an intermittent to continuous canopy less than 50 meters (164 feet) in height with a sparse to intermittent shrub and herbaceous layer. Throughout California, eucalyptus were planted as trees, groves, and windbreaks and have naturalized on uplands and stream courses (CNPS 2025b). Understories of eucalyptus are usually depauperate, due to a buildup of allelopathic chemicals in the soil and buildup of debris (CNPS 2025b).

The largest eucalyptus stand on the Project site is along the eastern border, overlapping Ellwood Mesa (Figure 5). Several isolated areas of *Eucalyptus* (*globulus*, *camaldulensis*) semi-natural association occur elsewhere in the eastern part of the golf course and at several locations along Hollister Avenue, including within the parking lot where the canopy of red ironbark (*Eucalyptus sideroxylon*) shades the pavement. A large eucalyptus stand west of Bell Canyon Creek also overlaps the far western part of the Project site, well away from the golf course. Eucalyptus trees occurring on site include Tasmanian blue gum (*Eucalyptus globulus*), river redgum (*Eucalyptus camaldulensis*), lemonscented gum (*Eucalyptus citriodora*), and red ironbark. Some non-native grasses and cape ivy (*Delairea odorata*) occur in the understory where vegetation is not completely suppressed by buildup of allelopathic chemicals

and leaf litter and other debris. Approximately 11.2 acres of *Eucalyptus* (*globulus*, *camaldulensis*) provisional semi-natural association occurs on the Project site (Table 4).

4.2.5 *Baccharis pilularis – Toxicodendron diversilobum* Association

Baccharis pilularis - Toxicodendron diversilobum association (BP-TD) is an association of coyote brush scrub alliance that is recognized by MCV and NCL and has a state rarity rank of S5?. Although this rank indicates that this association is not rare, it may be considered ESHA under the General Plan/CLUP (City of Goleta 2006), as coastal bluff scrub or coastal sage scrub. This community includes a mixed shrub canopy of coyote brush (*Baccharis pilularis*) and poison oak (*Toxicodendron diversilobum*). It includes a canopy less than 3 meters (approximately 10 feet) and variable herbaceous layer.

One patch of *Baccharis pilularis – Toxicodendron diversilobum* occurs on the Project site, adjacent to the Beacon West Energy Group facility, in the northwestern part of the site (Figure 5). Other species this area supports includes coast live oak and blue elderberry (*Sambucus mexicana*). The Project site supports approximately 0.4 acres of *Baccharis pilularis - Toxicodendron diversilobum* association (Table 4).

4.2.6 Coyote Brush Scrub Alliance

Coyote brush scrub alliance (CYS) is recognized by MCV and NCL and has a state rarity rank of S5. Although this rank indicates that this alliance is not rare, it may be considered ESHA under the General Plan/CLUP (City of Goleta 2006), as coastal bluff scrub or coastal sage scrub. Coyote brush scrub includes coyote brush as the dominant or co-dominant shrub (50% relative cover in the shrub canopy) in the canopy. It has a variable shrub canopy less than 3 meters (10 feet) in height with a variable ground layer. Associated species include field mustard (*Brassica rapa*), California brittle bush (*Encelia californica*), quailbush (*Atriplex lentiformis*), hottentot fig (*Carpobrotus edulis*), and blue elderberry. Throughout California, the coyote brush scrub alliance occurs on stream sides, stabilized dunes of coastal bars, river mouths, spits along the coastline, coastal bluffs, open slopes, ridges, and terraces.

Several stands of coyote brush scrub occur on the Project site, with most near the bluffs and one along Devereux Creek in the eastern part of the site (Figure 5). Other species associated with this community on the Project site include California sagebrush (*Artemisia californica*), fennel, shortpod mustard, myoporum, sea fig (*Carpobrotus chilensis*), and hottentot fig (*Carpobrotus edulis*). The Project site supports approximately 2.7 acres of coyote brush scrub (Table 4).

4.2.7 Quailbush Scrub Alliance

Quailbush scrub alliance (QS) is recognized by MCV and NCL and has a state rarity rank of S4. Although these designations indicate this community is not sensitive, it may be considered ESHA under the General Plan/CLUP (City of Goleta 2006), as coastal bluff scrub, when it occurs on bluffs along the immediate coast. In addition, this community may be considered ESHA where it supports special-status species. This vegetation community includes quailbush as a dominant species. Quailbush scrub has an open to intermittent scrub canopy less than five meters (16 feet) in height with a variable herbaceous layer (CNPS 2025b).

Quailbush scrub occurs on the Project site in a large, long stand that extends almost the length of the golf course, along the bluffs (Figure 5). On the Project site, this community supports several small populations of cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*), which possesses a California Rare Plant Rank (CRPR) of 4.2, and a single population of woolly seablite (*Suaeda taxifolia*), also a CRPR 4.2 species. Other species occurring within quailbush scrub on the Project site include coyote brush, fennel, Hottentot fig, and sea fig. The Project site supports approximately 8.3 acres of quailbush scrub (Table 4).

4.2.8 California Brittle Bush – Ashy Buckwheat Scrub Alliance

California brittle bush – ashy buckwheat scrub alliance (CBB – ABS) is recognized by MCV2 and NCL and has a state rarity rank of S3, and therefore is a sensitive vegetation community. In addition, the General Plan/CLUP designates this community as ESHA, as a coastal sage scrub community. This alliance includes California brittle bush (*Encelia californica*) and or ashy buckwheat (*Eriogonum cinereum*) as dominant or co-dominant in the shrub canopy. At the Project site, this alliance is dominated by California brittle bush. This alliance includes California brittle bush with greater than 30% relative cover in the shrub canopy. Some species associated with this community include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), bush monkeyflower (*Diplacus aurantiacus*), ashy buckwheat (*Eriogonum cinereum*), Menzies's golden bush (*Isocoma menziesii*), deer weed (*Acmispon glaber*), chaparral yucca (*Hesperoyucca whipplei*), desert wishbone-bush (*Mirabilis laevis*), coast prickly pear (*Opuntia littoralis*), purple sage (*Salvia leucophylla*), and black sage (CNPS 2025b).

One small patch of California brittle bush scrub occurs on the Project site, along the bluff in the far southwestern part of the golf course (Figure 5). Other species occurring within this community on the Project site include giant wild rye (*Elymus condensatus*) and New Zealand spinach (*Tetragonia tetragonoides*). The Project site supports approximately 0.1 acre of this vegetation alliance (Table 4).

4.2.9 Coastal Sage Scrub

Coastal sage scrub (CSS) is a general vegetation type that most closely corresponds to Venturan coastal sage scrub in Holland (1986). It is not recognized by MCV or NCL, but encompasses several communities described in those sources. Although this community does not possess a state rarity rank, it is considered ESHA where it occurs, under the General Plan/CLUP (City of Goleta 2006). It is typically dominated by California sagebrush, but other dominant plants occur, including brittle bush (*Encelia californica*), black sage (*Salvia mellifera*), Menzies' goldenbush (*Isocoma menziesii*), and coyote brush.

One stand of coastal sage scrub occurs on the Project site, west of Bell Canyon Creek, well away from any proposed Project activities (Figure 5). This stand supports a mixture of California sagebrush and coyote brush. The Project site supports approximately 0.1 acres of coastal sage scrub (Table 4).

4.2.10 Arroyo Willow Thickets Association

Arroyo willow thickets association (AWT) is an alliance recognized by MCV and NCL as a state rarity rank of S4. While these designations do not indicate this community is rare, arroyo willow thickets are considered riparian habitat and designated as ESHA in the City of Goleta General Plan/CLUP (City of Goleta 2006). This alliance includes arroyo willows (*Salix lasiolepis*) with greater than 60% relative cover in the shrub canopy with poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), California rose (*Rosa californica*), and quailbush (*Atriplex*

lentiformis). Throughout California, the arroyo willow thickets association occurs along stream banks and benches, slope seeps, and stringers along drainages (CNPS 2025b).

Arroyo willow thickets occur in two parts of the site, in two patches along Devereux Creek in the eastern part of the golf course and along Bell Canyon Creek, west of the golf course and away from proposed Project activities (Figure 5). Other species occurring within arroyo willow thickets on the Project site include California rose (*Rosa californica*), California blackberry, and western white clematis. The Project site supports approximately 5.5 acres of arroyo willow thickets (Table 4).

4.2.11 Needle Grass - Melic Grass Grassland Alliance

Needle grass – melic grass grassland alliance (NG – MGG) is recognized by MCV and NCL with a S3S4 state rarity rank (CDFW 2025a). Locally, it is considered an environmentally sensitive habitat area (ESHA) under the General Plan/CLUP (City of Goleta 2006). Needle grass – melic grass grassland includes California melicgrass (*Melica californica*), Torrey's melicgrass (*Melica torreyana*), nodding needlegrass (*Stipa cernua*), foothill needlegrass (*Stipa lepida*), and/or purple needlegrass (*Stipa pulchra*) as dominant or characteristically present in the herbaceous layer with other perennial grasses and herbs. At the Project site, this alliance is dominated by purple needlegrass. Some species associated with this community include *Astragalus* spp., *Avena* spp., *Bromus* spp., San Diego reed grass (*Calamagrostis koelerioides*), *Calochortus* spp., *Calystegia* spp., wavyleaf soap plant (*Chlorogalum pomeridianum*), *Clarkia* spp., sand-aster (*Corethrogyne filaginifolia*), dove weed (Croton setiger), *Cryptantha* spp., American wild carrot (*Daucus pusillus*), bluedicks (*Dipterostemon capitatus*), blue wildrye (*Elymus glaucus*), *Eriogonum* spp., *Erodium* spp., California poppy (*Eschscholzia californica*), California fescue (*Festuca californica*), perennial rye grass (*Festuca perennis*), shortpod mustard (*Hirschfeldia incana*), yellowflower tarweed (*Holocarpha virgata*), meadow barley (*Hordeum brachyantherum*), prairie Junegrass (*Koeleria macrantha*), *Lasthenia* spp., *Plantago* spp. onesided bluegrass (*Poa secunda*), *Sanicula* spp., western blue-eyed grass (*Sisyrinchium bellum*), and *Trifolium* spp. (CNPS 2025b).

This vegetation community includes the perennial bunchgrass purple needlegrass (*Stipa pulchra*) as a dominant or co-dominant grass. These communities are mid-height grasslands, typically up to 2 feet tall. According to Holland (1986), native and introduced annuals grow between bunches of purple needlegrass and often exceed it in cover. Trees or shrubs may also be present within the grassland. Needle grass grassland occurs on deep soils that have a high clay content. Sites that are moist or waterlogged during winter and very dry during summer are favorable (Holland 1986). Under the Goleta General Plan/CLUP (City of Goleta 2006), native grasslands, including needle grass grassland, are areas were where native grassland species comprise 10% or more of the total relative plant cover. Additionally, the Goleta General Plan/CLUP (City of Goleta 2006) further defines native grasslands by size and includes that removal or disturbance to native grass patches less than 0.25 acre that is clearly isolated and not part of a significant native grassland or an integral component of a larger ecosystem may be allowed. Needle grass – melic grass grassland alliance occurs in one location within the Project site, in a less maintained area of the southwestern part of the Project site (Figure 5). Approximately 0.4 acres of needle grass – melic grass grassland occurs within the Project site (Table 4).

4.2.12 Wild Oats and Annual Brome Grasslands Semi-Natural Alliance

The wild oats and annual brome grasslands semi-natural alliance (WOABG) is a non-native grassland community recognized by MCV and NCL that does not have a state rarity rank. It is dominated by wild oats (*Avena* spp.) and several brome species including ripgut brome (*Bromus diandrus*), soft brome (*B. hordeaceus*), or false brome (*Brachypodium distachyon*). The herbaceous layer is less than 1.2 meters (approximately 4 feet) in height, and cover is open to continuous (CNPS 2025b). This community is found between 0 and 2,200 meters (7,216 feet) amsl.

Wild oats and annual brome grasslands semi-natural alliance are the dominant vegetation community on site, and the dominant land cover outside the golf course manifestation of urban/developed (Figure 5). Stands are widely distributed around the golf course. Ripgut brome (*Bromus diandrus*) and slender wild oats (*Avena barbata*) are dominant species within this community on site. Other species occurring here include mouse barley (*Hordeum murinum*), shortpod mustard, cheeseweed mallow (*Malva parviflora*), and perennial ryegrass (*Festuca perennis*). The Project site supports approximately 28.2 acres of wild oats and annual brome grasslands semi-natural alliance (Table 4).

4.2.13 Upland Mustards or Star-Thistle Fields Semi-Natural Alliance

Upland mustards is an association of upland mustards or star-thistle fields semi-natural alliance (UM) is a natural community recognized by MCV and NCL but that does not have a state rarity rank. Within this community, black mustard (*Brassica nigra*), shortpod mustard, or other mustards occur at greater than 80% relative cover in the herbaceous layer. Emergent trees and shrubs may be present at low levels.

A single patch of upland mustards or star-thistle fields semi-natural alliance occurs on the Project site near Hollister Avenue, west of the clubhouse (Figure 5). Other species occurring with upland mustards on the Project site include non-native grasses, castorbean, fennel, Maltese star-thistle (*Centaurea melitensis*), and prickly lettuce (*Lactuca serriola*). The Project site supports 0.1 acre of this vegetation community (Table 4).

4.2.14 Cattail Marshes Alliance

Cattail marshes alliance (CTM) is recognized by MCV and NCL with a state rarity rank of S5. Although this rank indicates this community is not sensitive, as a wetland community, cattail marshes is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Cattail marshes is dominated by broadleaf cattail (*Typha latifolia*), southern cattail (*Typha domingensis*), or narrowleaf cattail (*Typha angustifolia*). Throughout California, the cattail marsh alliance occurs in brackish or semi-permanently flooded freshwater marshes. Cattail marshes have a continuous or intermittent herbaceous canopy of less than 1.5 meters (4.9 feet) in height. This alliance occurs from sea level to 350 meters (1,148 feet) amsl (CNPS 2025b).

Cattail marsh on the Project site is limited to Bell Canyon Creek, away from existing development associated with the golf course, and a wetland feature near the bluffs (Figure 5). This community consists almost entirely of southern cattail on the Project site. The City has mapped cattail marshes along Bell Canyon Creek as ESHA (City of Goleta

2016). The Project site supports 1.2 acres of cattail marshes (Table 4), all of which occur well outside the area of proposed Project activities.

4.2.15 Emergent Wetland

Emergent wetland (EM) is a general vegetation type that is not described in MCV or NCL. It is considered "emergent" because it consists of erect, rooted, herbaceous plants growing in water or on a substrate. It is dominated by perennial plants that are present for most of the growing season in most years. As a wetland community, it is considered ESHA under the General Plan/CLUP (City of Goleta 2006).

Emergent wetland on the Project site is limited to Bell Canyon Creek, away from existing development associated with the golf course (Figure 5). The City mapped this stand of emergent vegetation as ESHA (City of Goleta 2016). This stand is dominated by California bulrush (*Schoenoplectus californicus*) and also supports southern cattail and saltmarsh bulrush (*Bolboschoenus maritimus*). The Project site supports approximately 0.2 acres of emergent wetland (Table 4), all of which is well outside the area of proposed Project activities.

4.2.16 Beach

Beach (B) is an unvegetated land cover that is not included in MCV or NCL. Beaches are characterized as narrow, sandy, and stony areas along the ocean that are partly or completely covered by water during high tide and exposed during low tide. Beach and shoreline resources are considered ESHA under the General Plan/CLUP.

The beach area occurs below the bluff on the south edge of the Project site (Figure 5). For the most part, this land cover supports no plant species. The Project site supports 8.4 acres of beaches (Table 4).

4.2.17 Ice Plant Mats Semi-Natural Alliance

Ice plant mats semi-natural alliance (IPM) is recognized by MCV and NCL, but that does not have a state rarity rank. Ice plant mats contains hottentot fig (*Carpobrotus edulis*), sea fig (*Carpobrotus chilensis*), or other ice plant taxa as the dominant or co-dominant species in the herbaceous layer. These non-native species invade coastal bluff scrub, dune mat, dune scrub, and coastal prairies and compete with native plants (CNPS 2025b). Ice plant mats areas have an intermittent to continuous canopy within the herbaceous layer less than 0.5 meters (1.6 feet) in height.

On the Project site, ice plant mats semi-natural alliance occurs in two small patches in the southwest, along the bluffs (Figure 5). Both sea fig and Hottentot fig occur within ice plant mats on the Project site. Other species occurring here include non-native grasses and New Zealand spinach. The Project site supports 0.1 acres of ice plant mats semi-natural alliance (Table 4).

4.2.18 Disturbed Habitat

Disturbed habitat (DH) is an anthropogenic land cover that is not described in NCL or MCV2. Disturbed areas include natural, impervious ground with scattered non-native plants species, and they display evidence of physical disturbance, such as from active maintenance or occasional ground disturbance. Areas mapped as this land cover on the Project site are bare and support little weedy herbaceous vegetation. Disturbed habitat on the Project site is limited

to the access road leading from the Beacon West Energy Group facility and below the bluffs to the oil piers (Figure 5). This area is nearly entirely unvegetated. The Project site supports 0.6 acre of disturbed habitat (Table 4).

4.2.19 Golf Course – Developed

Golf course – developed (Golf Course) is a land cover that is not recognized by MCV or NCL. Golf course areas include an abundance of open space largely made up of turf grass and row trees. Although these areas are considered to be developed, wildlife may still utilize the trees as nesting and cover habitat and the turf grass as foraging and movement habitat. These areas are generally irrigated and highly maintained. Golf course –developed occurs throughout the golf course and account for the largest portion of the Project site (Figure 5). The Project site supports approximately 115.2 acres of the golf course – urban developed land cover (Table 4).

4.2.20 Open Water

Open water (OW) is not recognized in MCV or NCL. It consists of standing water with no emergent vegetation and can occur in marine, estuarine, riverine, lacustrine, and palustrine systems. On the Project site, open water occurs at the golf course pond and within Bell Canyon Creek (Figure 5). The Project site supports 2.0 acres of open water (Table 4).

4.2.21 Parks and Ornamental Plantings

Parks and ornamental plantings (ORN) are not described MCV2 or NCL because this is not a naturally occurring community in California. Areas mapped as ornamental include planted areas where ornamental landscaping has been installed. Ornamental plantings on the Project site are limited to several small areas near the clubhouse and around and near the maintenance yard, in the northeast part of the site (Figure 5). The Project site supports 0.7 acre of parks and ornamental plantings (Table 4).

4.2.22 Urban/Developed

Urban/developed areas (DEV) are not described in MCV2 or NCL because they are not naturally occurring communities in California. Areas designated as developed have been altered from their natural states for human uses and provide no habitat and foraging potential for wildlife due to the lack of cover by native vegetation. On the Project site, the urban/developed land cover is limited to the clubhouse and parking lot (Figure 5). There are approximately 3.3 acres of urban/developed lands (Table 4).

4.3 General Wildlife

During surveys since 2002, 116 species have been detected on the Project site. Common species known and expected to occur are described below. All wildlife species observed during surveys, including 2021-2022 surveys and those conducted previously, are included in Appendix C, Wildlife Compendium.

4.3.1 Invertebrates

The Project site aquatic habitats, wetland vegetation, riparian vegetation, coastal sage scrub, coastal bluff scrub, and maintained irrigated vegetation that likely support a variety of invertebrates. Only two invertebrate species have been confirmed to occur during surveys, both of which were butterfly species: monarch butterfly (discussed in Section 4.3.3) and cabbage white (*Pieris rapae*).

4.3.2 Fish

No fish surveys were conducted in 2022, and available data from past fish surveys was limited to results of surveys of Bell Canyon Creek for the federally endangered tidewater goby (*Eucyclogobius newberryi*). The only other species confirmed during surveys was mosquitofish (*Gambusia affinis*), in the golf course pond, where it presumably has been introduced for vector control purposes. Bell Canyon Creek, including the lagoon, likely support a variety of species, including those occurring in fresh and brackish water.

4.3.3 Amphibians

The life cycles of amphibians typically have aquatic and upland phases. Despite the presence of suitable aquatic habitats for amphibians, only three species, from two families, have been observed on the Project site. In addition to the federally listed threatened California red-legged frog (*Rana draytonii*), discussed in Section 4.3.3, two common species of frog have been detected: the native Baja California treefrog (*Pseudacris hypochondriaca*) and the non-native American bullfrog (*Lithobates catesbeianus*). Other common species that potentially occur, based on the habitat present, are western toad (*Anaxyrus boreas*) and black-bellied slender salamander (*Batrachoseps nigriventris*).

4.3.4 Reptiles

Reptiles occur in a variety of habitats. Many species shelter in small burrows, which they use as refuge from extreme temperatures and to avoid predators. Biologists observed one common reptile species, western fence lizard (*Sceloporus occidentalis*), on the Project site during surveys. Other common reptiles likely to occur on site based on the habitat present include but are not limited southern alligator lizard (*Elgaria multicarinata*) and gopher snake (*Pituophis catenifer*).

4.3.5 Birds

A total of 102 bird species representing 38 families were observed on site, or flying over the site. Some species are those that are tolerant of human presence, while many are species attracted to the irrigated plantings and to the permanent water in the golf course pond, where several species winter or stop in during migration. Breeding species include those that may use some of the ornamental trees and the narrow, wooded patches along the golf course fringes, the taller and denser stands of herbaceous habitats in the less well-maintained parts of the golf course, and the limited riparian area along a portion of Devereux Creek. Several species of blackbirds, such as Brewer's blackbird (*Euphagus cyanocephalus*) and brown-headed cowbird (*Molothrus ater*), are attracted to irrigated parts of the golf course, where they forage for insects. Wintering species such as American pipit (*Anthus rubescens*) use these areas as well, and swallow species such as cliff swallow (*Petrochelidon pyrrhonota*) and northern rough-winged swallow (*Stelgidopteryx serripennis*) forage over these areas in spring and summer. Water birds that use the pond for resting and foraging during winter and migration include American coot (*Fulica americana*), pied-billed grebe (*Podilymbus podiceps*), and several species of waterfowl.

Heron and egret species that may forage along the edges of the pond at any season include great blue heron (*Ardea herodias*), great egret (*Ardea alba*), and black-crowned night-heron (*Nycticorax nycticorax*). Common songbirds that may breed on the property include song sparrow (*Melospiza melodia*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), California towhee (*Melozone crissalis*), and hooded oriole (*Icterus cucullatus*). Grassland species occurring on the site include western meadowlark (*Sternula neglecta*; winter) and lark sparrow (*Chondestes grammacus*)

Common Raptors

Raptor Habitat: Raptor habitat is influenced by a number of factors, and habitat varies by raptor species. Those species potentially nesting in the Sandpiper Golf Club vicinity include red-tailed hawk, red-shouldered hawk, white-tailed kite (see Section 4.3.3), Cooper's hawk (See Section 4.3.3), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and barn owl (*Tyto alba*). Other species have the potential to perch and hunt over portions of campus. Some of these are species that winter in the area, such as northern harrier (*Circus hudsonius*), or that may forage over campus at any time of year, such as peregrine falcon, but are very unlikely in the immediate vicinity of the golf club. Species such as bald eagle and Osprey (*Pandion haliaetus*) may be attracted on occasion to fish resources associated with the pond, but have little attraction to other parts of the Project site and immediate vicinity. In addition, these latter species are not known to nest along the coast of southern Santa Barbara County.

Therefore, the assessment of trees as raptor habitat focused on the nesting potential for the above known nesting species, and the potential for perching and roosting by a greater variety of species. Additional factors that influence raptor habitat are the level of human disturbance, such as from pedestrian and vehicular traffic; the ability of a tree's branches to support the nests of larger species such as red-tailed hawk; the visual cover provided by a tree's branches and foliage (especially important for a species such as white-tailed kite); whether foraging habitat occurs adjacent to the trees; and whether the trees provide prominent perches with views of foraging habitat.

The Project site and parts of the 500-foot buffer are characterized by suitable nesting habitat in larger trees at the eastern and western Project boundaries, in some of the larger trees on the golf course, and in various large trees nearby, especially eucalyptus trees near Bell Canyon Creek, in the Ellwood Mesa area east of the site, and between U.S. 101 and Hollister Avenue within the 500-foot buffer. Foraging habitat occurs in open spaces throughout, although foraging habitat on the golf course, is somewhat limited due to the prevalence of highly maintained greens, tees, fairways, and surrounds.

Two common raptor species common in the region were detected during raptor surveys in 2022: red-shouldered hawk (*Buteo lineatus*) and red-tailed hawk (*Buteo jamaicensis*) (Figure 6, Raptor Survey Results; Table 5). Occurrence and potential occurrence of Cooper's hawk, which was also detected during 2022 surveys, and white-tailed kite are discussed in Section 4.3.3. In addition, one owl species, great horned owl (*Bubo virginianus*), was detected during previous surveys. Observations from 2022 are summarized in Table 2, and observations of all raptor species detected during surveys are described below.

Cooper's hawk. This species was detected on one occasion during surveys in 2022 (Figure 6; Table 5), It was not detected during earlier surveys. The lone individual detected during 2022 raptor surveys was observed perching in a eucalyptus tree on the north side of Hollister Avenue, within the survey buffer, on March 22, 2022. The species was not detected during bird surveys in 2004 and 2006, but the eBird database includes several reports of the species in winter (CLO 2022). Suitable nesting habitat occurs widely in the area, including in the eucalyptus groves at the eastern edge of the golf course and at the western edge of the golf course. Although nesting has not been

recorded during surveys of the Project site, data included on the Goleta General Plan/CLUP species map (City of Goleta 2016) includes a nesting location immediately east of the Project site (Figure 6).

Red-shouldered Hawk. This species was detected on four of five surveys in 2022 (Table 5), and it was also detected during both winter and spring surveys in 2004 (TOBC 2004a, 2004b). A pair was detected copulating over a suitable nest structure in a eucalyptus tree on March 22, 2022 (Figure 6), and an independent observer reported copulation at the same location seven days later (SBAS 2022). However, no additional evidence of nesting was detected during surveys. Adults were observed in the vicinity of the nest structure on the three subsequent surveys, on April 13, April 27, and May 18, 2022, but the species was never detected in the nest, and no other suitable nest was found. The species has been detected nesting in the vicinity, including as recently as 2005 (City of Goleta 2016; TOBC 2006; SBAS 2022), but it has not been detected nesting on the site. It has potential to nest at the location where the unused nest was observed in 2022, as well as at various other locations on the Project site, especially in trees at the eastern, western, and northern fringes of the site.

Red-tailed Hawk. This species nested on the Project site in 2021 near the eastern boundary, and during 2022 focused raptor surveys (Figure 6; Table 5). During focused surveys in 2022, adults were observed perching and flying in the nest vicinity during each survey. Two nestlings were observed in the nest on April 13, 2022, and a fledgling was in the area, accompanies by an adult, on June 10, 2022. An adult and fledgling were recorded on the site during bird surveys in 2004, south of the clubhouse, but no nest was found (TOBS 2004b). This species has established territories around Goleta, and it was also known to have nested north of the Project site, in a development just south of U.S. 101, in 2020 and 2021 (SBAS 2022). In addition, regular sightings of individuals in the western part of the golf course indicate the potential presence of a third nesting territory west of the golf course. A red-tailed hawk perched in eucalyptus west of Bell Canyon Creek on May 18, 2022, may have been one of these individuals. During surveys in 2022, perching and flying behaviors were most associated with the 2022 nest vicinity and the western edge of the golf course. Multiple individuals were detected during all surveys. This species has the potential to forage in most parts of the golf course, especially away from the well maintained fairways, greens, and tees

Great Horned Owl. Although this species was not detected during raptor surveys in 2022, a recent fledgling was detected incidentally on the ground along Bell Canyon Creek in April 2022 during reconnaissance for California red-legged frog surveys. Given the condition of fledgling, which was barely able to fly, it is likely it hatched in a nest very nearby, possible within the site boundaries, although likely not in a tree on the golf course. The species was detected nesting in March 2006 immediately east of the Project site, in the large eucalyptus grove that occurs along the eastern boundary on both sides of the property line. A fledgling detected in May 2006 indicated the nesting had been successful.

Table 5. Raptor Survey Results

Survey No.	Date / Time	Site Conditions	Biologists	Observations[1]
1	March 22, 2022 0735–1121	Sunny with light (1-6 mph) winds. Temperatures ranged from 61°F to 83°F.	Dave Compton	RSHA – 2 total: pair copulating above suitable nest in Tasmanian blue gum at N edge of golf course, near maintenance yard and abandoned gas station. *P* in trees nearby and *F* around area. RTHA – 2 total: 1 adult *P* on Monterey cypress trees near center of golf course and near ocean. 1 adult *P* in Monterey cypress and *Eucalyptus* sp. and *F* in western part of golf course. COHA – 1 adult *P* in eucalyptus tree in survey buffer N of the club house and Hollister Ave.
2	April 13, 2022 0620–1018	Clear with light (1-4 mph) winds. Temperatures ranged from 51°F to 61°F.	Dave Compton	RTHA – 3 total adults (2 nestlings): 1 adult on nest in *Eucalyptus* sp. just east of Devereux Creek, tending 2 downy nestlings; 1 *P* in Monterey cypress trees near the bluffs in the center of the golf course; 1 *F* between *P* in Monterey cypress and Tasmanian blue gum (*Eucalyptus globulus*) at the western edge of the golf course. RSHA – 1 calling near previously noted nest site near Hollister Ave., but no activity detected visually around nest during visit.
3	April 27, 2022 0737–1121	Sunny (0-10% cloud cover), with light to moderate (3-8 mph) winds. Temperatures ranged from 55°F to 64°F.	Dave Compton	RTHA – 4 total adults, 2 nestlings: Pair nr known nest in E part of golf course, ranging around nest vicinity; 2 nestlings with juvenile feathers coming in. 1 ad *P* at W edge of golf course, the *F* to Bell Canyon Creek area. 1 ad soaring N of Hollister. RSHA – 2 total adults: both adults near previously identified nest nr N edge of golf course, but no activity in nest. 1 RSHA *P* on wire W of nest; later both adults heard calling.

Table 5. Raptor Survey Results

Survey No.	Date / Time	Site Conditions	Biologists	Observations[1]
4	May 18, 2022 0711–1111	Sunny, becoming partly cloudy with light (1-5 mph) winds. Temperatures ranged from 55°F to 60°F.	Dave Compton	RTHA – 4 total adults: Pair nr known nest in E part of golf course, *F, P*, and calling in vicinity and to SW. No nestlings in nest, and no fledglings detected. Second pair presumed at W edge of golf course and across Bell Canyon Creek. One adult *P* around east side of the Beacon West Energy Group facility, while second *P* more than one hour in eucalyptus on W side of Bell Canyon Creek. RSHA – 1 adult minimum: *F* nr nest at N edge of golf course. Calling later heard in vicinity, but only one confirmed. No activity in nest. Close inspection of nest area revealed no unknown nests
5	June 10, 2022 0738–1104	Overcast with light (0-5 mph) winds. Temperatures ranged from 61°F to 63°F.	Dave Compton	RTHA – 2 minimum. Minimum 1 adult *P* in eucalyptus and Monterey cypress in southeastern part of golf course, near nest. Minimum 1 fledgling *P* with ad and calling in Monterey cypress west of nest, and *P* and *F* near bluff. RTHA nest and RSHA nest both empty.

Note:

[1] *F* = flew, flying
P = perch, perching
COHA = Cooper's hawk
RSHA = red-shouldered hawk
RTHA = red-tailed hawk

4.3.6 Mammals

Golf course maintenance likely limits the presence of some mammal species, especially burrowing small mammals, although some species survive in the less maintained areas on the Project site. Some medium-size mammals also persist in the area, likely favoring habitats along the fringes, but also moving around the golf course at nighttime to forage, such as for insects and rodents. California ground-squirrels (*Otospermophilus beecheyi*) are encountered regularly during the day. Other common species observed during the nighttime include striped skunk (*Mephitis mephitis*), northern raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), Virginia opossum (*Didelphis virginiana*), and long-tailed weasel (*Neogale frenata*). Although bats have been observed foraging over the Project site in the evening, the species observed have not been identified. Wooded areas in the immediate vicinity of the golf course may provide roosting habitat for some bats, although habitat on the golf course itself is limited. The historic gas station potentially supports roosting bats, and eucalyptus woodland around the fringes of the site may as well. The golf course is likelier much more important as foraging habitat, due to the presence of insects attracted by water associated with the pond and because of irrigation of the site.

4.4 Special-Status/Regulated Resources

The following resources are discussed in this section: (1) vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife; (2) plant and animal species present or potentially present on the Project site that are given special recognition by federal, state, or local resource agencies and environmental organizations owing to declining, limited, or threatened populations, that are the result, in most cases, of habitat reduction; (4) aquatic resources under the jurisdiction of state, federal, and local agencies; and (3) habitat areas that may support wildlife movement or wildlife nurseries.

4.4.1 Sensitive Vegetation Communities

Sensitive vegetation communities include wetlands and riparian communities, as well as those communities that CDFW has identified as a high priority for inventory due to rarity or threat in California. In addition, within the City of Goleta, several communities are identified as sensitive under the Conservation Element of the General Plan/CLUP (City of Goleta 2006). The latter includes oak woodlands, coastal bluff scrub, any coastal sage scrub community, and any native grasslands meeting the criteria describe in Policy CE 5.2 (Appendix D, Native Grassland Data Forms), which applies to both the coastal and non-coastal portion of the plan area. Therefore, for the purposes of this report, sensitive vegetation communities or habitats are:

- Alliances on CDFW's California Natural Communities List with a state rarity rank of S1, S2, or S3 (CDFW 2025a);
- Riparian and wetland communities; or
- Communities considered sensitive in City (2006).

Other communities may be protected (identified as ESHA) if they provide habitat for protected species, such as roosting monarch butterflies or nesting raptors, but are not themselves considered sensitive. Ten vegetation communities considered sensitive either because of their state rarity rank because they are considered ESHA under the General Plan/CLUP (City of Goleta 2006), occur on the Project site:

- Coast live oak woodland alliance has a state rarity rank of S4. Although this rank indicates this community is not sensitive, oak woodlands are considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of

this, any area designated as coast live oak woodland is considered sensitive. This community occurs along Bell Canyon Creek, well west of the golf course and west of the Beacon West Energy Group facility.

- Arroyo willow thickets association alliance has a state rarity rank of S3, indicating it is sensitive. In addition, as a riparian community, arroyo willow thickets is considered ESHA under the General Plan/CLUP (City of Goleta 2006). This community occurs along Bell Canyon Creek (well west of the golf course) and along Devereux Creek.
- *Baccharis pilularis – Toxicodendron diversilobum* association has a state rarity rank of S5. Although this rank indicates this community is not sensitive, as a coastal sage scrub community, *Baccharis pilularis – Toxicodendron diversilobum* association is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of this, any area designated as *Baccharis pilularis – Toxicodendron diversilobum* association is considered sensitive. This community occurs in a small area near Hollister Avenue, near the northwestern part of the golf course.
- Quailbush scrub alliance has a state rarity rank of S4. Although this rank indicates this community is not sensitive, as a coastal bluff scrub community, quailbush scrub is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of this, any area designated as quailbush scrub is considered sensitive. This community occurs extensively along the bluff, just south of the golf course.
- Coastal sage scrub is a general vegetation type that is not described in MCV or NCL, therefore it does not possess a state rarity rank. However, coastal sage scrub is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of this, any area designated as emergent wetland is considered sensitive. On the Project site, areas mapped as coastal sage scrub occur only west of Bell Canyon Creek lagoon, well away from the golf course.
- California brittle bush scrub alliance has a state rarity rank of S3 and therefore considered sensitive. As a type of coastal sage scrub vegetation, is also considered ESHA under the General Plan/CLUP. One small patch of this community occurs along the bluff, adjacent to the southwestern part of the golf course.
- Cattail marshes alliance has a state rarity rank of S5. Although this rank indicates this community is not sensitive, as a wetland community, cattail marshes is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of this, any area designated as cattail marshes is considered sensitive. This community occurs in Bell Canyon Creek (west of the golf course) and in a wetland along the bluff.
- Emergent wetland is a general vegetation type that is not described in MCV or NCL, therefore it does not possess a state rarity rank. However, as a wetland community, cattail marshes is considered ESHA under the General Plan/CLUP (City of Goleta 2006). Because of this, any area designated as emergent wetland is considered sensitive. On the Project site, this community occurs within Bell Canyon Creek, west of the golf course.
- Needle grass grassland alliance has a state rarity rank of S4. Although this rank indicates this community is not sensitive, as a wetland community, as a native grassland community, this community is considered sensitive under the General Plan/CLUP (City of Goleta 2006). A patch of approximately 0.25 acres occurs in the southeastern portion of the Project site (Figures 7A and 7B, Native Grassland Assessment). Other small patches of native grasses occur in the vicinity that do not meet all the criteria to qualify as needle grass grassland, but occur in other, non-native grass communities.

In addition to the above, the General Plan/CLUP (City of Goleta 2006) provides protection for the beach land cover as “beach and shoreline habitat” and for open water areas.

4.4.1.1 Native Grassland Assessment

Botanical surveys resulted in the identification of five species of native grasses: meadow barley (*Hordeum brachyantherum*), purple needlegrass (*Stipa pulchra*), salt grass, creeping ryegrass (*Elymus triticoides*), and smallflower melicgrass (*Melica imperfecta*). Within the native grassland assessment polygons, native plant species clustered tarweed (*Deinandra fasciculata*), western vervain (*Verbena lasiostachys*), and western blue-eyed grass (*Sisyrinchium bellum*), often associated with native grasslands, were observed but not within the one-meter square quadrats. During the native grassland assessment field surveys, a total of 32 polygons containing native grasses were recorded ranging in size from 4 square feet (NG-7) to 9,663 square feet (0.22 acres; NG-20) (Figures 7A and 7B). These polygons containing native grass species generally occur in clusters in the less maintained parts of the golf course, outside the fairways, greens, tees, and surrounds. In general, these polygons containing native grass species occur within areas mapped as the wild oats and annual brome grasslands vegetation community. Table 6 includes the polygons containing native grasses, the associated polygon ID, the assessment method (qualitative or quantitative), the native grassland species observed, and native grassland percent cover.

Table 6. Native Grassland Results by Polygon

Polygon ID	Qualitative or Quantitative	Area (square feet/acres)	Native Grassland Species	Native Grassland Percent Cover[a]
NG-1	Qualitative	55/0.00[b]	*Hordeum brachyantherum* *Stipa pulchra*	5
NG-2	Qualitative	92/0.00[b]	*Hordeum brachyantherum* *Stipa pulchra*	10
NG-3	Qualitative	86/0.00[b]	*Hordeum brachyantherum* *Stipa pulchra*	5
NG-4	Qualitative	108/0.00[b]	*Hordeum brachyantherum* *Stipa pulchra*	35
NG-5	Qualitative	21/0.00[b]	*Stipa pulchra*	25
NG-6	Qualitative	461/0.01	*Hordeum brachyantherum* *Stipa pulchra*	30
NG-7	Qualitative	4/0.00[b]	*Stipa pulchra*	10
NG-8	Quantitative	346/0.01	*Hordeum brachyantherum* *Stipa pulchra*	15
NG-9	Quantitative	597/0.01	*Hordeum brachyantherum* *Stipa pulchra*	23
NG-10	Quantitative	172/0.00[b]	*Stipa pulchra*	25
NG-11	Quantitative	345/0.01	*Hordeum brachyantherum* *Stipa pulchra*	14
NG-12	Quantitative	647/0.01	*Distichlis spicata*	40
NG-13	Quantitative	6,182/0.14	*Stipa pulchra*	15
NG-14	Quantitative	5,042/0.12	*Stipa pulchra*	24
NG-15	Quantitative	756/0.02	*Stipa pulchra*	6
NG-16	Quantitative	1,081/0.02	*Stipa pulchra*	9
NG-17	Quantitative	1,126/0.03	*Hordeum brachyantherum* *Stipa pulchra*	9

Table 6. Native Grassland Results by Polygon

Polygon ID	Qualitative or Quantitative	Area (square feet/acres)	Native Grassland Species	Native Grassland Percent Cover[a]
NG-18	Qualitative	53/0.00[b]	*Hordeum brachyantherum*	10
NG-19	Qualitative	481/0.01	*Elymus triticoides*	10
NG-20	Quantitative	9,663/0.22	*Melica imperfecta* *Stipa pulchra*	12
NG-21	Quantitative	649/0.01	*Stipa pulchra*	8
NG-22	Quantitative	2,149/0.05	*Stipa pulchra*	3
NG-23	Qualitative	194/0.00[b]	*Hordeum brachyantherum*	5
NG-24	Qualitative	113/0.00[b]	*Hordeum brachyantherum*	2
NG-25	Qualitative	125/0.00[b]	*Hordeum brachyantherum* *Stipa pulchra*	10
NG-26	Qualitative	27/0.00[b]	*Hordeum brachyantherum*	10
NG-27	Quantitative	2,692/0.06	*Hordeum brachyantherum*	10
NG-28	Quantitative	6,196/0.14	*Hordeum brachyantherum* *Melica imperfecta* *Stipa pulchra*	8
NG-29	Quantitative	3,529/0.08	*Hordeum brachyantherum*	14
NG-30	Qualitative	27/0.00[b]	*Hordeum brachyantherum*	5
NG-31	Qualitative	299/0.01	*Hordeum brachyantherum* *Stipa pulchra*	5
NG-32	Qualitative	740/0.02	*Hordeum brachyantherum* *Melica imperfecta* *Stipa pulchra*	15

Notes:

[a] Native grassland species percent cover of the total relative plant cover.

[b] Less than 0.00 acres when rounded.

Of the 32 polygons with native grasses, a total of 20 met or exceeded the native grassland Conservation Element of the General Plan/CLUP (City of Goleta 2006) threshold of supporting at least 10% or more of native grassland species of the total relative plant cover; however, each polygon was less than 0.25 acre in size (Table 6). Since native grasslands dominated by perennial bunch grasses tend to be patchy, groupings of polygons were assessed based on the percent cover, size of each polygon, and proximity of polygons resulting in one native grassland area containing NG-20, NG-21, and NG-22 (Figure 7B). These polygons were combined to delineate the whole area needle grass grassland and incorporated into the vegetation map (Figure 5).

4.4.2 Special-Status Plant Species

Focused special-status plant species surveys were conducted in May and July 2022 (Figure 8, Rare Plant Results; Table 2). Surveys resulted in identification of 134 species of plants on the Project site. Appendix E, Plant Compendium, lists all species observed during surveys. The literature review identified 28 special-status species that occur in the region. Species are considered to have low to no potential to occur primarily due to the lack of suitable habitat and/or lack of observations within the Project site during the focused surveys. These species are

not further analyzed in this Report because no direct, indirect, or cumulative impacts are expected. The following sections address special-status species observed on the Project site during surveys.

Monterey cypress and Monterey pines were observed throughout the southern and eastern parts of the golf course in relatively small and open stands. Monterey cypress trees are not naturally occurring within the Goleta area and instead are documented as native in occurrences located in the Monterey, California area (CNPS 2025a); therefore, Monterey cypress trees are not considered special-status plants species at the Project site. Additionally, Monterey pine trees are not naturally occurring within the Goleta area; only three native stands occur in California, at Ano Nuevo, Cambria, and the Monterey Peninsula (CNPS 2025a). Therefore, Monterey pine trees are not considered special-status plant species at the Project site. However, Monterey cypress trees and Monterey pine trees could be considered ESHA if used by nesting raptors.

4.4.2.1 Cliff Malacothrix

Cliff malacothrix *(Malacothrix saxatilis* var. *saxatilis)* is a perennial herb with a CRPR of 4.2 that occurs in coastal bluff scrub and coastal scrub at approximately 3 to 65 meters (10 to 220 feet) in elevation. It occurs along the coast from Orange County north to Santa Barbara County, and inland in Kern and San Bernardino Counties. During surveys in 2022, cliff desert malacothrix was documented in clusters distributed along the bluffs the length of the Project site (Figure 8).

4.4.2.2 Red Sand Verbena

Red sand verbena (*Abronia maritima*) is a perennial herb with a CRPR of 4.2 species that occurs in coastal dunes and coastal strand habitats at approximately 0 to 100 meters (0 to 330 feet) elevation. It occurs along the California coast from San Luis Obispo County southward, and on the Channel Islands. Within the Project site, it occurs along the upper beach just west of the Bell Canyon Creek lagoon, at the far western portion of the site (Figure 8).

4.4.2.3 Santa Barbara Honeysuckle

Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) is a perennial evergreen shrub with a CRPR of 1B.2 species that occurs in chaparral, cismontane woodland, and coastal scrub habitats at approximately 10 to 1,000 meters (35 to 3,280 feet) elevation. Within the Project site, it occurs in the eastern part of the Project site, within the on-site monarch butterfly grove and in coyote brush scrub associated with Devereux Creek (Figure 8).

4.4.2.4 Southern California Black Walnut

Southern California black walnut (*Juglans californica*) is a perennial deciduous tree with a CRPR of 4.2 that occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland at approximately 50 to 90 meters (165 to 2,966 feet) elevation. Within the Project site, six of theses tree occur just west of the golf course, at the southern end of the Beacon West Energy Group facility (Figure 8).

4.4.2.5 Woolly Seablite

Woolly seablite *(Suaeda taxifolia)* is a perennial evergreen shrub species with a CRPR of 4.2 that occurs in coastal bluff scrub, coastal dune, and marsh and swamp habitats at approximately 0 to 50 meters (0 to 165 feet) elevation. It occurs along the coast from Orange County north to San Luis Obispo County, as well as on the Channel Islands.

On the Project site, this species occurs along the bluff in a patch by approximately 6 meters (20 feet) wide by 40 meters (130 feet) long (Figure 8).

4.4.3 Special-Status Wildlife Species

The literature review identified 35 special-status wildlife species with potential to occur in the Project region (Appendix F). Of these, 13 either were identified on the Project site during 2021-2022 surveys, were identified as occurring on site during previous surveys or through the literature review or have at least a moderate potential to occur due to the species' range and the occurrence of suitable habitat on the Project site. Note that several of these species are those identified on the Project site, but only occur during phases of their life cycles for which they are not designated as having special status—particularly birds that occur in migration or winter. Species with at least a moderate potential to occur are discussed in greater detail below.

4.4.3.1 Invertebrates

Crotch Bumble Bee

Crotch bumble bee (*Bombus crotchii*) is considered a candidate species under CESA, and as such it receives the same protection against take prohibitions as listed species. The crotch bumble bee formerly ranged throughout much of Central and Southern California, along the Central and Southern California coasts, through the Central Valley, and in the surrounding foothills. However, it now appears to be absent from much of its former range, and its population appears to have declined drastically, especially in its former stronghold in the Central Valley (Xerces Society et al. 2018; CDFW 2019). Crotch bumble bee occurs in open grassland and scrub communities supporting suitable floral resources. Queens emerge first from hibernation and are active from late February to early October, with a peak in activity in early April. Workers begin to emerge in late March, peak in abundance in early July, and may remain active until September (Thorp et al. 1983). Because of its short tongue, the Crotch bumble bee is best suited to foraging at open flowers with short corollas. Data from a variety of resources included observations most commonly associating the species with plants, in descending order based on number of observations, from the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Richardson et al., as cited in Xerces Society et al. 2018). Williams et al. (2014) cited the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* as example food plants. The species nests primarily underground and may be reliant on small mammal burrows. Little is known about winter hibernacula, but the species is presumed to rely on microhabitats for overwintering similar to those of other bumble bees, including loose, disturbed soil, leaf litter, and other debris (Xerces Society et al. 2018; CDFW 2019). An "adult female" Crotch bumble bee was collected at Santa Barbara Shores, less than 0.2 mile east of the Project site, in 2017 (CDFW 2025b). Crotch bumblebee has not been recorded on the Project site. No focused surveys have been conducted, but no bumble bee species of any type was observed on the site during other biological surveys in 2021 or 2022. Suitable habitat likely occurs at the eastern extreme of the Project site, immediately adjacent to Santa Barbara Shores, within and immediately adjacent to the eucalyptus woodland, where suitable debris and lack of maintenance permit conditions that could support overwintering and nesting by the species. The existing maintained golf course is not suitable, due to the high level of maintenance, and even less maintained areas outside fairways, greens, tees, and surrounds are relatively unlikely to supporting nesting and wintering by this species. Although a variety of species occur in families cited as potential floral resources in Xerces Society et al. (2018) occur on the Project site, particularly species in the large Asteraceae family, only one species in the genera cited in Williams et al. (2014) occurs. In general, due to the maintained

nature of the Project site, suitable floral resources there are limited. Given the close proximity of occurrences of this species, it may occur there on occasion, including flying over the site in transit between habitats.

Globose Dune Beetle

The globose dune beetle is included on the CDFW Special Animals list, but often is not considered special-status species. It is included here because the City of Goleta General Plan/CLUP species map (City of Goleta 2016) includes occurrences of the species. The globose dune beetle inhabits coastal sand dune habitat from Sonoma County south to Ensenada, Mexico. It burrows beneath the sand and is most common underneath dune vegetation. The nearest occurrences are from the mouth of Tecolote Creek, only 0-.3 miles west of the Project site and 0.4 miles west of the golf course. Potential habitat on the Project site is limited to areas well away from the golf course, on the west side of Bell Canyon Creek lagoon. The Project site lacks the dune habitat suitable for this species, with the possible exception of a small area west of Bell Canyon Creek lagoon and more than 200 feet from the golf course.

Monarch Butterfly

The monarch butterfly is protected in its roosting habitats under the City's General Plan/CLUP (City of Goleta 2006) and is proposed for listing under the federal Endangered Species Act, although the latter status entails no protections. This invertebrate species follows a pattern of seasonal migration. The summer grounds of the species extend as far north as Canada. Eastern monarchs migrate southwest to wintering grounds in the Sierra Madre range of Mexico. Some western monarchs remain in the wintering grounds to breed. Those summering in the Pacific Northwest and the Rocky Mountains migrates to wintering grounds along the California coast (USFWS 2020).

Distribution of monarch butterflies in the breeding season is determined by availability of its host plant, milkweed (*Asclepias* spp.). Adults lay their eggs on the host plant, and larvae emerge two to five days later. Upon hatching, the larvae feed on the leaves of the plant and stay on the same plant throughout their molting stages. The larva then pupates into its chrysalis before closing as an adult monarch butterfly six to fourteen days later (USFWS 2020). Multiple generations are produced during spring and summer. During the fall, the last generation of monarchs migrate to overwintering sites and live for 6 to 9 months (Xerces Society 2016). Overwintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, generally near the coast.

No milkweed of any species was observed on the Project Site during focused botanical surveys. Numerous overwintering sites have been recorded in Santa Barbara County, including the Goleta area (Meade 1999; Xerces Society 2021, 2022a, 2022b). Several roosting locations in the Project vicinity occur to the west and (especially) the east of the Project site (Figure 9, Monarch Butterfly Survey Results). Poor to unsuitable habitat occurs in the interior part of the golf course. Multiple single cypress (*Cupressus* sp.) and eucalyptus trees scattered throughout the site do not offer the protected habitat and important microhabitat conditions that monarchs require, including appropriate levels of sunlight, canopy cover, wind protection, humidity, and temperature. The majority of the Project site is also highly landscaped and lacks areas composed of abundant floral/nectar resources. Although some nectar resources, such as coyote brush (*Baccharis pilularis*) occur on site, monarchs would be more likely to gravitate toward the abundant nectar resources in the adjacent properties containing coastal sage scrub that surround the site. The scrub habitats in the surrounding area provide a variety of nectar plants for monarchs such as California brittlebush (*Encelia californica*), coyote brush, California sagebrush (*Artemisia californica*), and black sage (*salvia mellifera*). Fresh water resources may include water within Tecolote Canyon and Bell Canyon creeks, coastal fog/precipitation, and possibly within the treated pond within the golf course. In addition, suitable roosting habitat

occurs on the eastern boundary and within the Project site boundary along Bell Canyon Creek, which are closer to these areas supporting better foraging habitat. Although roosting habitat on the eastern boundary of the site is adjacent to golf course, the habitat along Bell Canyon Creek is more than 500 feet west of the golf course and far from proposed Project activities.

Althouse and Meade Inc. (2004) conducted surveys on the Project site in the fall-winter 2003–2004, recording a high of 1,254 monarch butterflies on November 18, 2003, at "Site #60" (Xerces Site No. 2747) a roost at the eastern boundary of the Project site at Devereux Creek. Of these, 98 were in a cluster on the Project site and the rest were in clusters on the property to the east. The high total recorded on the Project site was 123, recorded in a different cluster on the south side of Devereux Creek on December 4, 2003. Numbers decreased at Xerces Site No.2747 and on the Project site as winter progressed, and only 2 roosting butterflies were recorded on site in the final four surveys, through February 29, 2004 (Althouse and Meade Inc. 2004). During surveys in 2021–2022, no clustering or overwintering individuals were detected during monarch surveys within the boundaries of the Project site. Individual fliers (i.e., monarchs in flight) were observed on both surveys along the eastern and western boundaries. Along the eastern boundary (Xerces Site No. 2747), approximately nine individual fliers were observed on the first visit and seven individual fliers along with two dead individuals were observed on the second visit. Along the western boundary, on the west side of Bell Canyon Creek and more than 500 feet from the golf course (Xerces Site No. 2745), only one individual flier was observed during the first visit. In addition, one individual was detected flying within the west central portion of the property. Multiple individual fliers were also observed within the reference sites north and west of the Project site. No additional transitory or overwintering clusters were observed within any areas of the Project site. Clustering individuals were only detected in Ellwood Butterfly Grove. On the first visit to the Ellwood reference sites, single monarch individuals were observed flying at the four westernmost observation points in Site No. 2749 (0.2 mile east of the Project site), single monarch individuals were observed flying in Site No. 2750, and approximately 1,000 individuals were observed clustering, flying and sunning at the easternmost observation point in Site No. 2751 (Figure 9). The second site visit to Ellwood Butterfly Grove returned similar results. Although low numbers were recorded during Dudek's surveys, in December 2021, over 15,000 monarchs were documented overwintering at the Ellwood Butterfly Grove (City of Goleta 2021).

4.4.3.2 Fish

Tidewater Goby

The tidewater goby is federally listed as endangered and an SSC. It is found in brackish or freshwater in bays, sounds, and lagoons, and creeks along the coast from Del Norte County south to San Diego County. Half-grown and adult tidewater gobies move upstream in summer and fall, usually up to 1 kilometer (0.62 mile) from the estuary, but in some areas from 5 to 8 kilometers (3.1 to 5.0 miles). Reproduction occurs at all times of year, but peak spawning occurs during spring and late summer (USFWS 2005b). The species is subject to periodic extirpations, but is adapted to recolonization of previously occupied sites from nearby occupied locations (USFWS 2005b). This species inhabits creeks along the entire coast of Santa Barbara County (Swift et al. 1989). It is known to be present in the Bell Canyon Creek, on the Project site but west of the golf course, and the creek has been designated as critical habitat for the species (73 FR 5920-6006). Although the species was not observed here during surveys in 2008, it was detected on at least four occasions between 1984 and 1999, and a minimum of 100 were present on the latter date (CDFW 2025b). The species is presumed present in Bell Canyon Creek, but habitat is absent on the golf course or elsewhere within the Project site.

4.4.3.3 Amphibians

California Red-legged Frog

The California red-legged frog (*Rana draytonii*) is federally listed as threatened (FT) and a California SSC. It occurs on the coastal slope of Southern California, in the coast ranges and immediate coast from central California north to Mendocino County, and in the foothills of the Sierra Nevada and the Cascade Range bordering the Central Valley. California red-legged frog can survive in a variety of habitat types, including various aquatic, riparian, and upland habitats. Preferred aquatic habitat of the California red-legged frog is characterized by dense shrubby, or emergent riparian vegetation, such as arroyo willow (*Salix lasiolepis*), cattails (*Typha* spp.), and bulrushes (*Schoenoplectus* spp.), associated with deep (greater than two feet), still or slow-moving water. The California red-legged frog will also utilize ephemeral ponds, intermittent streams, seasonal wetlands, springs, seeps, permanent ponds, perennial creeks, manmade aquatic features, marshes, dune ponds, lagoons, riparian corridors, blackberry thickets, non-native annual grasslands, and oak savannas. California red-legged frog have been known to breed successfully in artificial ponds with little or no emergent vegetation, although they generally use emergent aquatic vegetation to act as braces to anchor egg masses (USFWS 2002).

Galen Rathbun (2004) conducted surveys on the Project site and in suitable aquatic habitat on the surrounding area between 2002 and 2004. Rathbun conducted six day and night surveys from January 2003 to March 2004 at Bell Canyon Creek. At least one adult California red-legged frog was observed during each survey, with the highest number of 13 observed during the January 2003 survey (Rathbun 2004). Rathbun observed a single egg mass in Bell Canyon Creek during the March 2004 survey. Seven surveys (day, night, dip-net, and minnow trap) were conducted at the Golf Course Pond from August 2002 to March 2004 (Rathbun 2004). Rathbun observed at least one adult during four of those surveys. Four adults were observed at the Golf Course Pond in both August 2022 and March 2003 (Rathbun 2004). Rathbun conducted four surveys (day, night, and dip-net) in the "Clubhouse Gully" (the unnamed wetland feature near the bluff) from January to June 2004. Two adults were observed during the February 2004 survey, and one adult was observed during the March 2004 survey (Rathbun 2004). Rathbun conducted seven surveys (day, night, and dip-net) in Devereux Creek and its related features from January 2003 to June 2004. No California red-legged frog were observed during any survey conducted in Devereux Creek or its related features (Rathbun 2004).

Ted Mullen and Rosemary Thompson of Science Applications International Corporation (SAIC) observed two California red-legged frog in the Golf Course Pond during surveys conducted in October 2001 (Rathbun 2004). In September 2001, Mullen and Thompson also observed a single subadult in Devereux Creek approximately 0.1 mile north of the Project site in a plunge pool between U.S. Highway 101 and the UPRR (Rathbun 2004). Mullen and Thompson identified Bell Canyon Creek as suitable for breeding.

In addition, the CNDDB includes three occurrences within one mile of the Project site. The nearest of these occurrences is at Tecolote Creek, approximately 0.3 mile west of Bell Canyon Creek and the western edge of the Project site, where California red-legged frog have been observed in 1997, 2009, and 2010. One California red-legged frog specimen was collected in June 1997 at an undisclosed location in Tecolote Creek. In 2009, Tecolote Creek was surveyed from the mouth of the creek to the railroad tracks and an undisclosed number of frogs were observed over an approximately 500-foot stretch of creek. In April 2010, three females, four males, and five juveniles were observed at an undisclosed location in Tecolote Creek. Another CNDDB occurrence is located approximately 0.5 miles north of the Project site in Bell Canyon, adjacent to Bell Canyon Creek. During emergency road and culvert repair in October and November 2008, over the course of three surveys, a total of ten adults, four

juveniles, and 1 tadpole were observed. Three of these adults and one juvenile were relocated downstream in Bell Canyon Creek, in closer proximity to the Project site. An additional CNDDB occurrence from 2008 is located approximately 1.0 mile west of the Project site.

Dudek identified aquatic habitat at three locations on the Project site and within 500 feet and focused on these areas during surveys. the locations were Bell Canyon Creek south of U.S. 101, several shallow pools within the on-site wetland feature near the bluff, and the Golf Course Pond (Table 7; Figure 10, California Red-Legged Frog Survey Results). Although a single subadult was observed in Devereux Creek on the Project site in 2001 (Rathbun 2004), Dudek observed no pooling within Devereux Creek anywhere on the Project site or within 500 feet. Water was observed in the plunge pool between U.S. 101 and the UPRR, but this location was outside the designated survey area. The one day-time and four night-time breeding season surveys were conducted from April 25 to June 20, 2022. The nigh-time and daytime non-breeding season California red-legged frog surveys were conducted on July 21 and July 27, 2022, respectively (Table 7). The habitat assessment was conducted as part of the daytime breeding-season survey.

Aquatic habitat was not initially identified in the wetland feature near the bluff, but additional investigations following the initial survey identified habitat here prior to the second night-time survey. Although this area was surveyed during each subsequent visit, pooling here was considered too shallow to support breeding by California red-legged frog, although it may still be used on occasion for dispersal. Aquatic habitat at this location consisted of two pools approximately one foot deep, two feet wide and three feet long, containing gently flowing water were present during the remaining surveys. Water was clear and lacked debris. The pools were well shaded by surrounding cattails but had no overhanging vegetation.

The Golf Course Pond is up to fifteen feet deep and has no overhanging or emergent wetland vegetation. Despite the suitable depth, given the lack of overhanging vegetation and any adjacent vegetation other than maintained turf grass, habitat is not optimal as a breeding site, although the site may still be used as a dispersal site.

Bell Canyon Creek has optimal habitat for California red-legged frog and was surveyed from Hollister Avenue to the Bell Canyon Creek Lagoon. At Hollister Avenue, the Creek was four to six inches deep and did not support pooling. Shortly downstream, the creek quickly deepens, and ranges between one and four feet deep down to Bell Canyon Creek Lagoon. Dense riparian vegetation covering the banks of the creek is dominated by arroyo willows and cattails. Water was turbid throughout Bell Canyon Creek and contained substantial woody debris and overhanging vegetation. Bell Canyon Creek Lagoon likely reaches depths of up to six feet but does not support any overhanging vegetation. Emergent cattails dominated the fringes of much of the lagoon, with beach sand occurring near the mouth.

No California red-legged frog were observed or heard during any of the focused surveys. At Bell Canyon Creek, dense vegetation and limited visibility may have inhibited detection of California red-legged frog. However, California red-legged frog are unlikely to have avoided detection at the Golf Course Pond and the unnamed wetland feature. Baja California treefrogs (*Pseudacris hypochondriaca*) were detected during every survey, at every aquatic habitat feature surveyed, and they were particularly abundant at the Golf Course Pond and Bell Canyon Creek. Adults and tadpoles were present at all aquatic habitat areas surveyed. Egg masses were observed only at the Golf Course Pond, where they were detected during both the daytime and nighttime surveys on April 25, 2022. One calling American bullfrog (*Lithobates catesbeianus*) was detected at the Golf Course Pond during nighttime surveys on April 25, May 11, and May 24, 2022.

Table 7. California Red-Legged Frog Surveys (2022)

Survey Type, No.	Aquatic Habitat Area Surveyed	Date	Start/End Time	Breeding/ Non-Breeding Season	Water Temp (°C) (Start/End)	Moon Phase	CRLF Found	Other amphibians
Day 1	Gold Course Pond	April 25, 2022	1630-1700	Breeding	24.0 / 24.0	last quarter	None	Baja California treefrog
Day 1	Bell Canyon Creek	April 25, 2022	1700-1730	Breeding	14.0 / 25.0	last quarter	None	Baja California treefrog
Night 1	Golf Course Pond	April 25, 2022	2039-2151	Breeding	23.0 / 23.0	last quarter	None	Baja California treefrog, American bullfrog
Night 1	Bell Canyon Creek	April 25, 2022	2230-2355	Breeding	13.2 / 13.2	last quarter	None	Baja California treefrog
Night 1	Unnamed wetland	May 11, 2022	1955-2005	Breeding	16.0 / 16.0	first quarter	None	Baja California treefrog
Night 2	Golf Course Pond	May 11, 2022	2005-2030	Breeding	23.0 / 23.0	first quarter	None	Baja California treefrog, American bullfrog
Night 2	Bell Canyon Creek	May 11, 2022	2030-2133	Breeding	16.0 / 16.0	first quarter	None	Baja California treefrog
Day 1	Unnamed wetland	May 13, 2022	1120-1138	Breeding	19.1 / 19.1	waxing gibbous	None	Baja California treefrog
Day 2	Golf Course Pond	May 13, 2022	1140-1201	Breeding	26.1 / 26.1	waxing gibbous	None	Baja California treefrog
Day 2	Bell Canyon Creek	May 13, 2022	1523-1604	Breeding	16.1 / 16.1	waxing gibbous	None	Baja California treefrog
Night 2	Unnamed wetland	May 24, 2022	2107-2123	Breeding	16.6 / 16.6	last quarter	None	Baja California treefrog
Night 3	Gold Course Pond	May 24, 2022	2130-2157	Breeding	22.1 / 22.1	last quarter	None	Baja California treefrog
Night 3	Bell Canyon Creek	May 24, 2022	2226-2323	Breeding	14.1 / 21.7	last quarter	None	Baja California treefrog
Night 3	Unnamed wetland	June 20, 2022	2115-2135	Breeding	17.7 / 22.2	last quarter	None	Baja California treefrog

Table 7. California Red-Legged Frog Surveys (2022)

Survey Type, No.	Aquatic Habitat Area Surveyed	Date	Start/End Time	Breeding/ Non-Breeding Season	Water Temp (°C) (Start/End)	Moon Phase	CRLF Found	Other amphibians
Night 4	Golf Course Pond	June 20, 2022	2135-2219	Breeding	22.2 / 24.2	last quarter	None	Baja California treefrog
Night 4	Bell Canyon Creek	June 20, 2022	2254-0007	Breeding	25.0 / 16.7	last quarter	None	Baja California treefrog
Night 1	Unnamed wetland	July 21, 2022	2058-2120	Non-Breeding	16.0 / 16.0	last quarter	None	Baja California treefrog
Night 1	Golf Course Pond	July 21, 2022	2135-2229	Non-Breeding	24.1 / 23.1	last quarter	None	Baja California treefrog
Night 1	Bell Canyon Creek	July 21, 2022	2259-2345	Non-Breeding	16.9 / 24.2	last quarter	None	Baja California treefrog
Day 1	Unnamed wetland	July 27, 2022	1430-1458	Non-Breeding	16.6 / 16.6	new moon	None	Baja California treefrog
Day 1	Golf Course Pond	July 27, 2022	1500-1545	Non-Breeding	25.0 / 25.0	new moon	None	Baja California treefrog
Day 1	Bell Canyon Creek	July 27, 2022	1556-1730	Non-Breeding	16.1 / 25.0	new moon	None	Baja California treefrog

4.4.3.4 Reptiles

Southwestern Pond Turtle

The southwestern pond turtle (*Actinemys pallida*) is an SSC that is proposed for listing under ESA. It is found throughout the Pacific slope of California. It is highly associated with water, occurring in permanent ponds, lakes, streams, and irrigation ditches in forest, open woodlands, and grassland. Southwestern pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or mud banks. Females lay eggs in nests constructed on dry land as far as 100 meters (328 feet) from water. The southwestern pond turtle feeds on aquatic plant material, beetles, aquatic invertebrates, fishes, and frogs. The nearest CNDDB occurrence is from approximately 1.3 miles east of the Project site, at a downstream portion of Devereux Creek, in 2007 (CDFW 2025b). However, Dudek observed this species in May 2022, approximately 0.75 mile west of the Project site, in Tecolote Creek. Bell Canyon Creek, within the Project site property but west of and outside the golf course (i.e., Project), provides suitable aquatic habitat to support this species, as well as extensive suitable surrounding upland habitats. The golf course supports suitable aquatic habitat, but basking sites are limited to the steep banks along the edges of maintained areas of the golf course. In addition, because the surrounding area is mostly maintained golf course, this location is mostly isolated from upland habitats. No pond turtles were observed at either location during California red-legged frog surveys in April to July 2022, a time of year when a high percentage of turtles tend to be in available aquatic habitats (Rathbun et al. 2002, Pilliod et al. 2013). Therefore, the lack of observations in 2022, and during any previous biological surveys, suggests these sites are likely not regular locations for southwestern pond turtle. Of the two locations, Bell Creek Canyon is the more suitable, and because of that locations proximity to the golf course, the species has potential to occur on the golf course on occasion.

4.4.3.5 Birds

American Peregrine Falcon

The peregrine falcon (*Falco peregrinus*) is a fully protected species that was formerly listed under both CESA and ESA. It occurs widely across California. In addition, the American peregrine falcon (*F. p. anatum*), the subspecies that nests in California, is absent as a nester in the Central Valley and parts of the coast. It typically nests on ledges, and may sometimes nest on human-made structures, such as tall buildings or transmission towers, or in trees. Nests are usually near water and available prey, although this species may travel long distances from the nest to forage. They feed in open habitat, such as marshes, where they hunt mostly birds, ranging in size from songbirds to small geese (White et al. 2020). Several nesting locations are known from south slopes of the Santa Ynez Mountains, including in the Goleta area. But the species is not known to nest near the coast in the Goleta area (Lehman 2022). The eBird citizen-science database (CLO 2022) includes several reports of peregrine falcon from Sandpiper Golf Course. However, nesting habitat is absent from the Project site and immediate area, and any observations of this species likely involve wintering individuals or breeding falcons foraging far from nest sites.

American White Pelican

The American white pelican (*Pelecanus erythrorhynchos*) is an SSC. It occurs throughout California in winter, during migration, and as a non-breeding summer resident. Historically, it nested in the San Joaquin Valley, the Colorado River Valley, and the Salton Sink, but its breeding range in the state is now limited to northeastern California (Shuford 2008). American white pelicans nest I colonies on remote islands where abundant suitable habitat (lakes, marshes, canals, reservoirs) supporting suitable fish prey occurs. Breeding birds may fly many miles to foraging

habitat. Away from the breeding grounds, American white pelicans will also forage in estuarine habitats. This species occurs at almost any season in Santa Barbara County, especially from late summer through winter. Reports from the south coast are mostly from late fall and winter. This species was not recorded during formal surveys of the Project site, but eBird (CLO 2022) includes multiple reports in winter for this easily identified species. However, the Project site does not support breeding habitat for this species, which does not breed in the region, and these reports likely involved individuals moving about the region.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is an SSC and state candidate for listing. It occurs in open habitats throughout much of California, but its breeding range is now mostly restricted to the eastern deserts, Great Basin, Central Valley, Coast Ranges, and limited sections of the coast. It is extirpated as a breeder in southern Santa Barbara County, but occurs rarely in open habitats during migration and winter. As a wintering species, it has been recorded regularly at locations such as the University of California, Santa Barbara's North Campus Open Space (approximately 1.0 mile east of the Project Site), More Mesa, and the San Marcos Foothills (the latter both between Santa Barbara and Goleta). It nests and takes refuges in burrows of California ground squirrels and other burrowing mammals, and it can also occupy openings in debris piles and anthropogenic structures on the ground. It forages in open habitats such as grassland, agricultural lands, and some disturbed habitats. It was not observed during biological surveys of the Project Site in 2021 and 2022. Most open areas on the Project Site are well maintained, and therefore lack suitable burrows, and consistent human presence on the golf course is likely to deter overwintering by this species. The potential to occur for this species is low (Appendix F). Although species with low potential to occur are generally not discussed in this section, burrowing owl is included herein because of its sensitivity of a state candidate species.

California Brown Pelican

California brown pelican (*Pelecanus occidentalis californicus*) is a California fully protected species that was formerly listed as endangered under the ESA. It nests in California only on the Channel Islands, at Anacapa Island and Santa Barbara Island, but occurs widely along the California coast at all seasons. It often roosts communally on beaches, sandspits, nearshore islands, and other isolated or protected areas along the immediate coast. It forages in marine environments, mostly along and near the coast, and occasionally occurs in deep water far from shore. California brown pelicans are common year-round in southern Santa Barbara County. Dozens to hundreds may occur in feeding flocks on occasion, in nearshore waters. The species roosts in high numbers very locally along the coast, such as at the Santa Barbara Harbor, where hundreds may be observed roosting on the sandspit. Smaller numbers roost on occasion on the Bird Island structures 0.25 mile offshore of the Project site. At the Project site, this species is generally unexpected, because of its habitat of rarely wandering inland of the immediate cost. However, during an unusual incursion of this species to inland areas in the spring of 2022, Dudek observed one roosting along the edge of the golf course pond in May 2022.

Cooper's Hawk

The Cooper's hawk (*Accipiter cooperii*; nesting) is a CDFW Watch List species. It is found throughout California in wooded areas. It inhabits live oak, riparian, deciduous, or other forest habitats (Rosenfeld et al. 2020). This species nests in many species of trees in both extensive forests or isolated trees in natural and urbanized landscapes, often within 1 kilometer of water (Rosenfeld et al. 2020). Cooper's hawks use patchy woodlands and edges with snags for perching while they are hunting for medium-sized birds and small mammals (Rosenfeld et al. 2020). Along the

south coast of Santa Barbara County, this species is a common transient and winter visitor, and its breeds locally along several rivers and creeks (Lehman 2022). An active nest of this species was observed just east of the Project site in 2006, although the success of the nest was not confirmed (TOBC 2006). Several other occurrences in the site vicinity include one approximately 0.5 mile east of the site in 2017, in the Ellwood Butterfly Preserve (SBAS 2022). Cooper's hawk was not recorded on the Project site during surveys in 2022, but was recorded once in the survey buffer, on March 22, 2022, perched in a eucalyptus tree on the north side of Hollister Avenue and north of the clubhouse (Figure 6).

Redhead

The redhead (*Aythya americana*) is a duck species that is considered an SSC in California. It winters throughout California and breeds locally in wetlands in the Central Valley, northeastern California, the eastern deserts, and several locations in the southern coast north to northern Santa Barbara County (Beedy and Deuel 2008; Lehman 2022). Redheads nest in emergent vegetation in relatively deep wetlands with extensive open water, and they winter in relatively large, deep bodies of water. Redheads are not known to nest in southern Santa Barbara County, but in recent years they have nested on the northern coast of the county, with several records from the Santa Ynez River estuary and one from the Santa Maria River estuary (Lehman 2022). Redheads were not observed during any formal biological surveys of the Project site, but eBird includes a reports of a bird that was present in January 2022 (CLO 2022). This individual was presumably wintering in the area. Suitable nesting habitat is absent from the Project site, and the species is not known to nest in southern Santa Barbara County.

White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is a state FP species that is a common to uncommon, yearlong resident in coastal and valley lowlands throughout the Pacific slope of California. It nests in treetops with dense foliage, including orchards, and hunts in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. It prefers to prey on voles and other small mammals, and occasionally feeds on birds, insects, reptiles, and amphibians. White-tailed kites roost communally in the non-nesting season. This species is a local breeder along the southern coast of Santa Barbara County (Lehman 2022). The white-tailed kite population has been known to rise and fall dramatically over the years, and the local population in Goleta appears to be at low levels currently (Lehman 2022; D. Compton, personal observation). A white-tailed kite pair was observed on the Project site in 2004, when they were recorded vocalizing from several trees on the golf course, but no evidence of nesting of nesting was detected, including during subsequent breeding bird surveys (TOBC 2004a, 2004b, 2006). Nesting was recorded in eucalyptus just east of the site in March 2006, the species reportedly was seen over the golf course on occasions prior to 2000 (TOBC 2006). The species is well-known to nest and forage in the Ellwood Mesa area to the east of the site and has been recorded to nest as near as approximately 0.3 miles, in 2010 (SBAS 2022). The species was not observed on the Project site or within the site buffer during surveys in 2022.

Yellow Warbler

The yellow warbler (*Setophaga petechia*) is an SSC during its nesting period. It breeds widely across California, but is absent from the high Sierras, most of the southern deserts, and most of the Central Valley. The species is largely absent from the state in winter. Spring migrants pass through from April through early June, and fall migrants occur from late July to mid-October. At these seasons, this species occurs in a wide variety of habitats. Yellow warblers breed primarily in deciduous riparian woodlands, including those dominated by cottonwoods, willows, and alders, up to 8000 feet; they also breed in montane chaparral and open conifer forests. In the Santa Barbara and Goleta

area, it breeds at several locations characterized by ornamental plantings and irrigation, as well as at several locations supporting riparian habitats typically associated with the species (Lehman 2022; D. Compton, personal observation). This species was detected during April raptors surveys, but not subsequently, and the individuals detected were assumed to be migrants. It has a moderate to low potential to nest on the Project site, especially in riparian at Bell Canyon Creek or in the vicinity of Devereux Creek.

Yellow-headed Blackbird

The yellow-headed blackbird is an SSC for nesting. In California, it breeds locally in the Great Basin, Colorado Valley, Imperial Valley, western Mojave Desert, Central Valley, and select areas nearer the coast (Jaramillo 2008). It formerly bred more widely. This species nests in colonies in emergent wetlands. It occurs regularly in Santa Barbara County, including the Goleta area, in spring and fall (Lehman 2022, D. Compton, personal observations). However, it has not bred in Goleta since the early 20th century (Lehman 2022). A female of this species was observed at the golf course pond during raptor surveys on May 18, 2022, and eBird (CLO 2022) includes observations of up to two during May 2022 (Figure 11, Other Special-Status Wildlife Species Observations).

4.4.4 Jurisdictional Aquatic Resources

Dudek conducted a formal aquatic resources delineation within the Project site of waters of the United States (including wetlands and non-wetlands) regulated by the USACE, waters of the state regulated by the Central Coast RWQCB, jurisdictional streambed and riparian vegetation regulated by CDFW, and coastal wetlands and riparian regulated by the CCC and the City (Figure 12, Aquatic Resources Delineation). In addition to the aquatic resources described below, the aquatic resources delineation investigated non-jurisdictional features associated with WSP-01, WSP-03, WSP-04, WSP-05, WSP-06, WSP-07, WSP-08, and WSP-09. Investigations at wetland sample points WSP-01, WSP-04, WSP-05, and WSP-09 did not result in identification of hydrophytic vegetation, hydric soils, or wetland hydrology. The aquatic resource delineation at wetland sample points WSP-03, WSP-06, WSP-07, and WSP-08 identified hydrophytic vegetation; however, each wetland sample point was dominated by facultative (FAC) plant species: Australian saltbush (*Atriplex semibaccata*), bristly oxtongue (*Helminthotheca echioide*s), and perennial rye grass (*Festuca perennis,* previously named *Lolium multiflorum* and *Lolium perenne*). "Facultative" is defined as "equally likely to occur in wetlands and non-wetlands." Since these plant species are widespread throughout the Project site, including slopes and non-jurisdictional areas, it was determined that WSP-03, WSP-06, WSP-07, and WSP-08 are in upland areas and not jurisdictional. EF-HLM-01 was documented as an erosional feature, thus non-jurisdictional and USW-HLM-04 was an upland swale with lower topography from surrounding areas but was not hydrologically connected to other features and lacked hydrophytic vegetation, thus was non-jurisdictional. Photo documentation is provided in Appendix B, wetland determination data forms and OHWM data sheets are provided in Appendix G.

4.4.4.1 Aquatic Resource A – Bell Canyon Creek

Aquatic Resource A – Bell Canyon Creek is an intermittent stream that forms the western Project boundary (Figure 12A, Aquatic Resource A - Bell Canyon Creek). In the northwestern corner of the City above Cathedral Oaks Road, Ellwood Canyon Creek and Winchester Canyon Creek converge to become Bell Canyon Creek which continues to the coast and discharges into a lagoon at the Pacific Ocean, a traditional navigable water (TNW). The lagoon within the lowermost portion of Bell Canyon Creek is influenced by tides and back-water effects of the lagoon and the seasonally present beach sand bar barrier at the mouth of the stream. Bell Canyon Creek is intermittent and regularly inundated, which makes it a relatively permanent water. Within the Project site, the creek supports

extensive riparian habitat, wetland waters, and non-wetland waters. The riparian habitat is dominated by arroyo willow thickets, pepper tree or myoporum groves, eucalyptus groves, and coast live oak woodland. Cattail marsh, emergent wetland, and open water habitats comprise the wetland waters and non-wetland waters.

Bell Canyon Creek was characterized as part of the City of Goleta Creek & Watershed Management Plan (City of Goleta 2020); therefore, the vegetation mapping included in this plan was incorporated into the vegetation map and aquatic resources delineation. Additionally, the City of Goleta Creek & Watershed Management Plan (City of Goleta 2020) includes information on the watershed area, creek length, creek elevation, land use adjacent to the creek, channel alignment, hydrology, beneficial uses, water quality, channel geomorphology, channel sediments, flooding, and biological resources.

The areas containing hydrophytic wetland vegetation and riparian habitats delineated to the extent of riparian vegetation associated with Bell Canyon Creek are potentially jurisdictional. In summary, Aquatic Resource A – Bell Canyon Creek is potential jurisdiction of the following: 1.20 acres USACE wetland waters of the United States, 0.86 acre USACE non-wetland waters of the United States, 1.20 acres RWQCB wetland waters of the state – stream channel, 6.85 acres RWQCB non-wetland waters of the state – stream channel, 5.99 acres CDFW riparian, 2.06 acres CDFW streambed, 2.06 acres CCC and City wetland, and 5.99 acres CCC and City riparian (Table 8). In total Aquatic Resource A – Bell Canyon Creek is 1,076 linear feet.

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Table 8. Summary of Potential Jurisdictional Aquatic Resources

Feature ID	USACE Wetland Waters of the United States (acres)	USACE Non-Wetland Waters of the United States (acres)	RWQCB Wetland Waters of the State - Stream Channel (acres)	RWQCB Wetland Waters of the State – Wetland (acres)	RWQCB Non-Wetland Waters of the State - Stream Channel (acres)	CDFW Lake (acres)	CDFW Riparian (acres)	CDFW Streambed (acres)	CCC/City Wetland (acres)	CCC/City Riparian (acres)	Linear feet
Aquatic Resource A - Bell Canyon Creek											
NWW-HLM-08	–	0.74	–	–	0.74	–	–	0.74	0.74	–	625
NWW-HLM-09	–	0.12	–	–	0.12	–	–	0.12	0.12	–	451
RIP-RFS-05	–	–	–	–	5.99	–	5.99	–	–	5.99	–
WET-HLM-05	1.03	–	1.03	–	–	–	–	1.03	1.03	–	–
WET-HLM-06	0.17	–	0.17	–	–	–	–	0.17	0.17	–	–
Subtotal	*1.20*	*0.86*	*1.20*	–	*6.85*	–	*5.99*	*2.06*	*2.06*	*5.99*	*1,076*
Aquatic Resource B - Devereux Creek											
NWW-HLM-03	–	0.08	–	–	0.08	–	–	0.08	0.08	–	258
NWW-HLM-05	–	0.02	–	–	0.02	–	–	0.02	0.02	–	161
NWW-HLM-06	–	0.49	–	–	0.49	–	–	0.49	0.49	–	706
RIP-RFS-01	–	–	–	–	0.68	–	0.68	–	–	0.68	–
RIP-RFS-02	–	–	–	–	0.44	–	0.44	–	–	0.44	–
RIP-RFS-03	–	–	–	–	1.72	–	1.72	–	–	1.72	–
RIP-RFS-04	–	–	–	–	0.74	–	0.74	–	–	0.74	–
Subtotal	–	*0.59*	–	–	*4.17*	–	*3.58*	*0.59*	*0.59*	*3.58*	*1,125*
Aquatic Resource C - Golf Course Pond											
WET-HLM-07	–	–	–	1.26	–	1.26	–	–	1.26	–	–
Subtotal	–	–	–	*1.26*	–	*1.26*	–	–	*1.26*	–	–
Aquatic Resource D											
NWW-HLM-02	–	0.01	–	–	0.01	–	–	0.01	0.01	–	46
Subtotal	–	*0.01*	–	–	*0.01*	–	–	*0.01*	*0.01*	–	*46*
Aquatic Resource E											
NWW-HLM-01	–	–	–	–	0.01 *	–	–	0.01*	–	–	40
Subtotal	–	–	–	–	*0.01*	–	–	*0.01*	–	–	*40*
Aquatic Resource F											
NWW-HLM-04	–	0.03	–	–	0.03	–	–	0.03	0.03	–	237
WET-HLM-01	0.14	–	0.14	–	–	–	–	0.14	0.14	–	–
Subtotal	*0.14*	*0.03*	*0.14*	–	*0.03*	–	–	*0.17*	*0.17*	–	*237*
Total	**1.34**	**1.49**	**1.34**	**1.26**	**11.06**	**1.26**	**9.57**	**2.84**	**4.09**	**9.57**	**2,524**

* - Potentially non-jurisdictional; to be determined in consultation with resources agencies.

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4.4.4.2 Aquatic Resource B – Devereux Creek

Aquatic Resource B – Devereux Creek within the Project site is the western most tributary to the Devereux Creek watershed (Figures 12B, Aquatic Resource B – Devereux Creek). Aerial imagery from 1947 to 1967 depicts Devereux Creek as continuously vegetated within the Project site and the next most recent aerial image, 1972, shows the golf course development and discontinuous vegetated areas associated with Devereux Creek (Historic Aerials 2022) pursuant to the original golf course grading plans approved by the County of Santa Barbara on September 24, 1971.

Within the Project site, Devereux Creek is an intermittent stream (although most portions of the creek were observed as dry during Dudek surveys) that enters the site south of Hollister Avenue near the northeast corner of the Project site, with flows directing south and southeast to the eastern boundary of the Project site. Devereux Creek enters the Project site via an approximately 4-foot by 4-foot culvert. and flow is conveyed through a channel with an OHWM of 3 feet, a top of bank width of 6 feet, and an overstory of riparian habitat dominated by eucalyptus with Australian cheesewood (*Pittosporum undulatum*), Douglas' sagewort (*Artemisia douglasiana*), and poison oak (*Toxicodendron diversilobum*) (NWW-HLM-05). Observed OHWM indicators included vegetation matted down, bent, absent, scour, bed and banks, and change in plant community and/or cover. The creek then enters an approximately 1.5 diameter culvert and pipe under the fairway of golf course hole number one. Devereux Creek daylights again on the south side of the fairway of golf course hole number 1 into a wide channel with an OHWM of 25 feet, a top of bank width of 30 feet, and an overstory of riparian habitat dominated by arroyo willows with Australian cheesewood (*Pittosporum undulatum*), Cape-ivy (*Delairea odorata*), petty spurge (*Euphorbia peplus*), poison oak (*Toxicodendron diversilobum*), smilograss (*Stipa miliacea* var. *miliacea*), tall flatsedge (*Cyperus eragrostis*), and western vervain (*Verbena lasiostachys*) (NWW-HLM-06). Observed OHWM indicators included wracking, break in slope at OHWM, scour, deposition, and bed and banks. As Devereux Creek extends southeast of the arroyo willows, it is assumed that approximately 450 feet of surface flows would occur across the fairway of golf course hole number 2, under a bridge vegetated, and into an arroyo willow habitat. A culvert was observed within this area to suggest that flows are conveyed through a subsurface pipe (please refer to photos 21 and 22 in Appendix B - Photos). Additionally, there is no evidence of flow or standing water within this surface flow area which is likely due to golf course maintenance of fairways and adjacent areas. The topography within this downstream arroyo willow habitat is slightly lower than adjacent areas; however, there was no observed OHWM or top of bank within the riparian canopy. Similar to the upstream area, it is assumed that approximately 310 feet of surface flows would occur across the fairway of golf course hole number 5 into a channel with a OWHM varying between 3 feet to 16 feet and top of bank widths between 6 feet and 22 feet with OHWM indicators from presence of litter and debris; wracking; vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; bed and banks; and change in plant community and/or cover. The riparian habitat was dominated by eucalyptus, with nasturtium (*Tropaeolum majus*) and poison hemlock (*Conium maculatum*) (NWW-HLM-03). Additionally, two upland swales convey water into this downstream portion of Devereux Creek. Note that, while eucalyptus woodland is not typically considered riparian habitat, it may be regarded as riparian vegetation where it is associated with a stream course and provides important habitat for other species. Despite assumptions that communities dominated by non-native eucalyptus is poor habitat for wildlife compared to native woodlands, evidence suggests that native and eucalyptus woodlands in California support a similar species richness (Sax 2002). Eucalyptus woodland along Devereux Creek is especially valuable as is supports habitat for special-status species including Santa Barbara honeysuckle (see Section 4.4.2) and monarch butterfly (see Section 4.4.3).

Riparian habitats were delineated along Devereux Creek, and these and areas extending to the OHWM are potentially jurisdictional. Additionally, two non-jurisdictional swales convey water into the downstream portion of Devereux Creek along the eastern boundary of the Project site. In summary, Aquatic Resource B – Devereux Creek is potential jurisdiction of the following: 0.59 acre USACE non-wetland waters of the United States, 4.17 acres RWQCB non-wetland waters of the state – stream channel, 3.58 acres CDFW riparian, 0.59 acre CDFW streambed, 0.59 acre CCC and City wetland, and 3.58 acres CCC and City riparian (Table 8). In total Aquatic Resource B – Devereux Creek is 1,125 linear feet.

4.4.4.3 Aquatic Resource C – Golf Course Pond

Aquatic Resource C – golf course pond is within the northwestern portion of the Project site (Figure 12C, Aquatic Resource C – Golf Course Pond). Aerial imagery from 1947 to 1967 depicts this area as upland habitat with scattered vegetation; the next most recent aerial image, from 1984, shows the pond, which was developed during construction of the golf course (Historic Aerials 2022). The golf course pond is a man-made (anthropogenic) perennial aquatic feature surrounded by maintained mowed turf with no emergent wetland vegetation. The tee for golf course hole number 18 is on a peninsula extending from the adjacent golf cart path into the pond. The pond is not hydrologically connected to downstream features and is approximately 780 feet from Bell Canyon Creek riparian habitat and approximately 900 feet from the Pacific Ocean.

Since Aquatic Resource C – golf course pond is isolated, it is not expected to be jurisdiction of USACE. The limits of the pond are potential jurisdiction of the following: 1.26 acres RWQCB wetland waters of the state – wetland, 1.26 acres CDFW lake, and 1.26 acres CCC and City wetland (Table 8).

4.4.4.4 Aquatic Resource D

Aquatic Resource D is an unnamed feature within the southwestern portion of the Project site (Figure 12D, Aquatic Resource D). This aquatic resource was inundated during the May 2022 aquatic resources survey and is likely fed by golf course irrigation, resulting in an intermittent to perennial feature. The aquatic resource has an OHWM of 2 feet and a top of bank width of 6 feet with observed natural line impressed on the bank, scour, bed and banks, and change in plant community and/or cover (NWW-HLM-02). Plant species observed included annual rabbitsfoot grass (*Polypogon monspeliensis*), brass buttons (*Cotula coronopifolia*), bristly oxtongue (*Helminthotheca echioides*), castorbean (*Ricinus communis*), fat hen (*Atriplex prostrata*), fiddle dock (*Rumex pulcher*), field mustard (*Brassica rapa*), and shortpod mustard (*Hirschfeldia incana*), Downstream of the channel the flow is conveyed by a pipe onto the beach and via an undefined swale through iceplant. A wetland sampling point (WSP-02) was recorded within the channel. Vegetation was dominated by annual rabbitsfoot grass (*Polypogon monspeliensis*; FACW), bristly oxtongue (*Helminthotheca echioides*; FAC), castorbean (*Ricinus communis*; FACU), fat hen (*Atriplex prostrata*; FACW), and field mustard (*Brassica rapa*; FACU), which passed the dominance test resulting in hydrophytic vegetation. A soil pit was excavated to a depth of 16 inches and hydric soil indicators hydrogen sulfide and redox dark surface were observed resulting in hydric soils. Wetland hydrology indicators surface water, high water table, saturation, aquatic invertebrates, hydrogen sulfide, and drainage patterns were observed resulting wetland hydrology.

Areas extending to top of bank and extending to the OHWM are potentially jurisdictional. Additionally, there is one swale, non-jurisdictional, that conveys water onto the beach downstream of Aquatic Resource D. In summary, Aquatic Resource D is potential jurisdiction of the following: 0.01 acre USACE non-wetland waters of the United States, RWQCB non-wetland waters of the state – stream channel, CDFW streambed, and CCC and City wetland (Table 8). In total Aquatic Resource D is 46 linear feet.

4.4.4.5 Aquatic Resource E

Aquatic Resource E is an unnamed, anthropogenic feature along the northern Project boundary within the northwestern portion of the Project site (Figure 12E, Aquatic Resource E). This aquatic resource was dry during the May 2022 aquatic resources survey and is likely an ephemeral feature constructed to convey storm flows from the area immediately west of the clubhouse. Upstream of the aquatic resource is an undefined swale through upland mustard and wild oats and annual brome grassland. The aquatic resource has an OHWM of 5-feet and a top of bank width of 8-feet (NWW-HLM-01). Dominant plant species observed included castorbean (*Ricinus communis*), coyote brush (*Baccharis pilularis*), petty spurge (*Euphorbia peplus*), poison hemlock (*Conium maculatum*), and shortpod mustard (*Hirschfeldia incana*). No associated riparian vegetation was observed. At the downstream end of the channel a 3-foot wide by 2-foot tall culvert conveys water downstream likely into the storm drain which flows to the Pacific Ocean. This anthropogenic feature shows no signs of recent maintenance.

Areas extending to top of bank are potentially jurisdictional. Additionally, there is one swale, non-jurisdictional, that conveys water into Aquatic Resource E. In summary, Aquatic Resource E is potential jurisdiction of the following: RWQCB non-wetland waters of the state – stream channel and CDFW streambed (Table 8). In total Aquatic Resource D is 40 linear feet.

4.4.4.6 Aquatic Resource F

Aquatic Resource F is an unnamed feature along the southern boundary of the Project site within the central portion of the Project site (Figure 12F, Aquatic Resource F). The general area extending upslope of the aquatic resource to the north through the topographic low area is sometimes referred to as the "Clubhouse Gully" per Rathbun (2004). Aerial imagery from 1947 to 1967 depicts this Aquatic Resource F area with darker likely riparian or hydrophytic vegetation (Historic Aerials 2022). However, the next most recent aerial image, from 1984, shows darker, likely riparian or hydrophytic vegetation extending upslope of the aquatic resource to the north through the topographically lower area, which was likely disturbed/removed during construction of the golf course.

Aquatic Resource F begins with an undefined swale that conveys water south to a channel with OHWM varying between 1 foot and 5 feet and a top of bank width varying between 5 feet and 10 feet (NWW-HLM-04). OHWM indicators included break in slope at OHWM, scour, and bed and banks. Plant species observed included annual rabbitsfoot grass (*Polypogon monspeliensis*), coyote brush (*Baccharis pilularis*), field mustard (*Brassica rapa*), poison hemlock (*Conium maculatum*), and southern cattail (*Typha domingensis*). No surface water was observed within the swale; however, a 3-inch white PVC pipe and 4-inch black corrugated HDPE pipe were observed within the inundated channel which are likely fed by golf course irrigation water. Downstream of the channel is a large wetland area dominated by cattails. Water was observed flowing from the limits of the cattail wetland through the seawall to the beach.

Areas extending to top of bank and extending to the OHWM are potentially jurisdiction. Additionally, there is one swale, non-jurisdictional, that conveys water into Aquatic Resource F. In summary, Aquatic Resource F is potential jurisdiction of the following: 0.14 acre USACE wetland waters of the United States, 0.03 acre USACE non-wetland waters of the United States, 0.14 acre RWQCB wetland waters of the state – stream channel, 0.03 acre RWQCB non-wetland waters of the state – stream channel, 0.17 acre CDFW streambed, and 0.17 acre CCC and City wetland (Table 8). In total Aquatic Resource F is 237 linear feet.

4.4.4.7 Jurisdiction

Aquatic Resources A, B, D, and F may be regulated by USACE given their duration of flow and downstream connection to a traditional navigable water (the Pacific Ocean). These features may also be regulated by the RWQCB, CDFW, CCC, and the City. In addition, RWQCB, CDFW, CCC, and the City may regulate streambeds beyond the OHWM (to top of bank) and associated riparian habitat. Based on the aquatic resources delineation the following potential jurisdictions are on the Project site: 1.34 acres of USACE wetland waters of the United States, 1.49 acres of USACE non-wetland waters of the United States, 1.34 RWQCB wetland waters of the state – stream channel, 1.26 RWQCB wetland waters of the state – wetland, 11.06 RWQCB non-wetland waters of the state – stream channel, 1.26 acres of CDFW lake, 9.57 acres of CDFW riparian, 2.84 acres of CDFW streambed, 4.09 acres of CCC and City wetland, and 9.57 acres of CCC and City riparian (Table 8).

4.4.5 Protected Trees

Arborist Duke McPherson conducted an inventory of trees on the golf course in 2023 and also conducted an analysis of impacts on trees from course grading and reconfiguration (McPherson 2023a, 2023b). The tree inventory included all of the golf course except trees along Devereux Creek and trees clusters consisting mostly of *Eucalyptus* spp. along the eastern boundary, immediately west of the Barnsdall Gas Station, and east of the clubhouse parking area. In addition, no trees along Bell Canyon Creek, which is within the Project Site but outside the golf course, were mapped or assessed. The inventory notes species of trees assessed, diameter, location, and health, and it also noted which trees were to be removed by the Project. The inventory included 231 trees of 16 species. Tree locations are shown on the Preliminary Landscape Plan (Earthform Design 2023). All trees inventoried were non-native, except a single western sycamore and a single coast live oak, both of which had been planted.

4.4.6 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for dispersal or migration of animals and dispersal of plants (e.g., via wildlife vectors). Wildlife corridors contribute to population viability by assuring continual exchange of genes between populations, which helps maintain genetic diversity.

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage is a potential route for gene flow and long-term dispersal. Habitat linkages may serve both as habitat and avenues of gene flow for small animals such as reptiles, amphibians, and rodents. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat “islands” that function as stepping stones for dispersal and movement (especially for birds and flying insects). Wildlife corridors and habitat linkages provide avenues for dispersal or migration of animals that also contribute to population viability in several ways, including (1) ensuring continual exchange of genes between populations to aid in maintaining genetic diversity, (2) providing habitat for some species, (3) providing access to adjacent habitat areas representing additional territory for foraging and mating, (4) allowing for a greater carrying capacity, and (5) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes.

The Project site is situated adjacent to a large area of open Space within the City of Goleta at Ellwood Mesa, extending eastward to the University of California, Santa Barbara’s Coal Oil Point Reserve, North Campus Open

Space, and Devereux Slough. This complex of open spaces includes grassland, coastal scrub, coastal salt marsh and flood plain, and an extensive area of eucalyptus supporting monarch butterflies. Bell Canyon Creek, occupying the western section of the Project site, provides various wildlife species with access to the coast from extensive undeveloped lands in the Santa Ynez Mountain foothills and beyond. Although the Project site is mostly developed as a golf course, and daytime human activity likely deters movement by larger and medium-size terrestrial mammals. It serves several connectivity functions, including opportunities for gene flow for plant and smaller animal species, therefore providing a genetic connection between the Santa Ynez Mountain foothills and coastal open space, as well as night-time movement opportunities for larger and medium-size wildlife travelling between these areas and foraging opportunities for a variety of species. Scrub habitats along the bluff and riparian habitats along Devereux Creek provide potential for gene flow along the coast and between inland and coastal areas, respectively. The golf course itself is almost entirely free of structures and human activity during nighttime, and the more mobile wildlife species occurring the area, such as coyotes (*Canis latrans*) and bobcat (*Lynx rufus*), potentially move through this area on occasional to access foraging habitat at Ellwood Mesa and other open space, as well as along Bell Canyon Creek. Some medium-sized to smaller mammals, such as red fox (*Vulpes vulpes*) and striped skunk (*Mephitis mephitis*) may occupy areas along the bluff or in Bell Canyon Creek and access the golf course at night to forage. Although some larger mammals, such as mule deer (*Odocoileus hemionus*) or American black bear (*Ursus americanus*), also have the potential to use these areas for movement on occasion, available foraging habitat along the coast is limited for these species.

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5 Impacts and Recommendations

This section describes the potential Project's impacts and consistency with City policy and environmental thresholds and guidelines (City 2006 and County of Santa Barbara 1992, rev 2002). It also recommends measures to avoid, minimize, and mitigate potential impacts. General Plan/CLUP Conservation Element policies relevant to biological resources in the Coastal Zone are provided in Appendix A. As described below, development of the proposed Project contains the possibility for several potential impacts, however, the in-depth analysis concludes that only minimum impacts occur to sensitive biological resources or ESHA and these impacts and uses are consistent with several General Plan/CLUP policies, including, but not limited to CE 1.6, 1.7, and CE 2.5 related to protection of ESHA, appropriate restoration opportunities for degraded creeks, and mitigation for public uses that encroach into ESHA and ESHA buffers. Dudek has also prepared an ESHA memorandum (memo) that discusses the ESHA and ESHA buffers on the Project site (Dudek 2023, rev 2025) and request the addition, subtraction, or modification of ESHA buffers as depicted in the City's Conservation Element Figure 4-1.

General Plan/CLUP Policies pertaining to ESHA are included in Appendix A. Policy CE 1.6, regarding protection of ESHA, states that "No development, except as otherwise allowed by this element, shall be allowed within ESHA." Allowable uses, which include public road crossings, utility lines, restoration and enhancement, nature education, biological resource, and Public Works projects, are not part of the Project. CE 1.7 states that "New development shall be cited and designed to avoid impacts to ESHA," but does allow for project design with the "fewest or least significant impacts," if no feasible alternative exists to avoid impacts completely. As the Project generally occurs on maintained portions of an existing golf course, in many cases, the activities being conducted are not new development. However, elements of the Project are new, and could result in impacts if they occur within ESHA or ESHA setbacks.

5.1 Definition of Impacts

5.1.2 Direct Impacts

Direct impacts from development projects typically include direct permanent impacts from development (permanent removal of biological resources) and direct temporary impacts to areas affected by Project activities during construction, but where no permanent development occurs. Injury or mortality of special-status wildlife species would also be a direct impact to that species.

Most of the existing golf course is already developed as golf course or supports structures and other golf course support facilities (parking areas, maintenance yard, restrooms). In addition, a small area is occupied by the historic Barnsdall Gas Station, where improvements are proposed. Therefore, most areas subject to Project impacts are already developed, although they may not support structures or hardscape typically associated with development. Even those areas that are more natural are islands of vegetation interspersed among the more extensive, maintained parts of the golf course. However, sensitive resources occur in several locations, especially around the fringes of the golf course, and many of these resources are ESHA, and their designation as such entails development setbacks (Figure 13, ESHA, Sensitive Resources, and Setbacks).

Project activities could result in a variety of potential direct impacts to these resources and setbacks. Most grading and other ground disturbance (trenching for utilities, excavating bioretention basins, fence installation) would occur

in areas already considered developed as maintained golf course (tees, greens, fairways, sand traps, surrounds) or more traditional development; but some grading or other ground disturbances will occur in areas that are not maintained and do not support hardscape or structures. Grading or other ground disturbance may also be proposed in ESHA setbacks, and therefore may have potential to result in impacts to ESHA resources, especially where the impacts occur in more natural parts of the existing golf course. New golf cart paths may also occur in areas supporting sensitive resources or within ESHA setbacks. And sand-capping may overlap some natural areas, and thus could result in impacts to sensitive biological resources, although it would not constitute an impact to regularly maintained portions of the golf course, including those within ESHA setbacks. Finally, if Project activities occur outside any of these areas, unknown direct impacts could occur, if ESHA boundaries and setbacks are disregarded. Direct impacts included in the analysis below are:

- Grading (including all Project elements occurring within the grading footprint, such as structures, fencing, paving, and creation of drainage features, and utility trenching)
- Temporary trenching for drainage, sewage lines, water mains, and electrical utilities outside the grading footprint
- Excavation for permanent, above-ground features for drainage (bioretention basins, storm drain outlets) outside the grading footprint
- Creation of new cart paths outside the grading footprint
- Sand-capping in areas supporting sensitive resources
- Removal of sensitive resources for landscaping purposes.
- Tree removal

5.1.3 Indirect Impacts

Indirect impacts are reasonably foreseeable effects caused by Project implementation on remaining or adjacent biological resources outside the direct construction disturbance zone. They include short-term, construction-related impacts that occur outside the area of construction activities and long-term, operations-related impacts that result in adjacent habitats due to project construction.

Short-term, construction-related impacts from the Project could include noise and vibration, water quality impacts, chemical spills into sensitive areas, and dust. In general, these impacts are avoided or minimized in regulatory requirements that are incorporated in plan design (water quality and dust impacts) or they are minimized in avoidance of buffers around sensitive resources. However, the analysis below addresses the potential for all of these impacts to occur.

Because the Project does not propose a change in land use for the Project Site, long-term effects from golf course operations-already occur. Therefore, the analysis for long-term indirect impacts focuses on whether the Project will result in an increase in these effects, and whether such increases would constitute a significant impact. Potential long-term indirect impacts may include increased noise, increased human presence including any change in hours of operations), and effects of exterior lighting on sensitive biological resources. Many Projects that increase the extent of hardscape can also result in water quality impacts. However, the Project would not change the land use of the Project Site or create new areas of hardscape, except for the limited area around the new western parking lot. In addition, the use of sand-capping over much of the course is intended to promote improved water quality and

drainage, and the creation of bioretention basins, including one immediately south of the new parking lot, should minimize any long-term water quality effects.

The following analysis considers all potential types of impacts; the nature of the resource potentially subject to impacts, such as whether it is present seasonally versus year-round or temporarily versus permanently;.current land use (including whether a location is already subject to regular maintenance); current levels of effects from golf course operations; and Project consistency with General Plan/CLUP policies.

5.2 Impacts to Vegetation Communities and Land Covers, Including Native Grassland

The Project site supports 12 sensitive vegetation communities designated as an Environmentally Sensitive Habitat Area (ESHA) and that receive protection, guidance, and mitigation under the General Plan/CLUP policies (City of Goleta 2006) (Table 9). Several General Plan/CLUP policies specifically address protection and mitigation for ESHA that are applicable to the proposed Project:

CE 1.6 **Protection of ESHAs. [GP/CP]** ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within ESHAs or their buffers. The following shall apply:

a. No development, except as otherwise allowed by this element, shall be allowed within ESHAs and/or ESHA buffers.

b. A setback or buffer separating all permitted development from an adjacent ESHA shall be required and shall have a minimum width as set forth in subsequent policies of this element. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area.

c. Public accessways and trails are considered resource-dependent uses and may be located within or adjacent to ESHAs. These uses shall be sited to avoid or minimize impacts on the resource to the maximum extent feasible. Measures— such as signage, placement of boardwalks, and limited fencing or other barriers—shall be implemented as necessary to protect ESHAs.

d. The following uses and development may be allowed in ESHAs or ESHA buffers only where there are no feasible, less environmentally damaging alternatives and will be subject to requirements for mitigation measures to avoid or lessen impacts to the maximum extent feasible: 1) public road crossings, 2) utility lines, 3) resource restoration and enhancement projects, 4) nature education, 5) biological research, and 6) Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives.

e. If the provisions herein would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel. Alternatively,

the City may establish a program to allow transfer of development rights for such parcels to receiving parcels that have areas suitable for and are designated on the Land Use Plan map for the appropriate type of use and development.

CE 1.7 **Mitigation of Impacts to EHSAs. [GP/CP]** New development shall be sited and designed to avoid impacts to ESHAs. If there is no feasible alternative that can eliminate all impacts, then the alternative that would result in the fewest or least significant impacts shall be selected. Any impacts that cannot be avoided shall be fully mitigated, with priority given to onsite mitigation. Offsite mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on site. If impacts to onsite ESHAs occur in the Coastal Zone, any offsite mitigation area shall also be located within the Coastal Zone. All mitigation sites shall be monitored for a minimum period of 5 years following completion, with changes made as necessary based on annual monitoring reports. Where appropriate, mitigation sites shall be subject to deed restrictions. Mitigation sites shall be subject to the protections set forth in this plan for the habitat type unless the City has made a specific determination that the mitigation is unsuccessful and is to be discontinued.

CE 2.2 **Streamside Protection Areas. [GP/CP]** A streamside protection area (SPA) is hereby established along both sides of the creeks identified in Figure 4-1. The purpose of the designation shall be to preserve the SPA in a natural state in order to protect the associated riparian habitats and ecosystems. The SPA shall include the creek channel, wetlands and/or riparian vegetation related to the creek hydrology, and an adjacent upland buffer area. The width of the SPA upland buffer shall be as follows:

a. The SPA upland buffer shall be 100 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater. The City may consider increasing or decreasing the width of the SPA upland buffer on a case-by-case basis at the time of environmental review. The City may allow portions of a SPA upland buffer to be less than 100 feet wide, but not less than 25 feet wide, based on a site specific assessment if (1) there is no feasible alternative siting for development that will avoid the SPA upland buffer; and (2) the project's impacts will not have significant adverse effects on streamside vegetation or the biotic quality of the stream.

b. If the provisions above would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the landuse plan, exceptions to the foregoing may be made to allow a reasonable. economic use of the parcel, subject to approval of a conditional use permit.

CE 2.5 **Maintenance of Creeks as Natural Drainage Systems. [GP/CP]** Creek banks, creek channels, and associated riparian areas shall be maintained or restored to their natural condition wherever such conditions or opportunities exist. Creeks carry a significant amount of Goleta's stormwater flows. The following standards shall apply:

a. The capacity of natural drainage courses shall not be diminished by development or other activities.

b. Drainage controls and improvements shall be accomplished with the minimum vegetation removal and disruption of the creek and riparian ecosystem that is necessary to accomplish the drainage objective.

c. Measures to stabilize creek banks, improve flow capacity, and reduce flooding are allowed but shall not include installation of new concrete channels, culverts, or pipes except at street crossings, unless it is demonstrated that there is no feasible alternative for improving capacity.

d. Drainage controls in new development shall be required to minimize erosion, sedimentation, and flood impacts to creeks. Onsite treatment of stormwater through retention basins, infiltration, vegetated swales, and other best management practices (BMPs) shall be required in order to protect water quality and the biological functions of creek ecosystems.

e. Alteration of creeks for the purpose of road or driveway crossings shall be prohibited except where the alteration is not substantial and there is no other feasible alternative to provide access to new development on an existing legal parcel. Creek crossings shall be accomplished by bridging and shall be designed to allow the passage of fish and wildlife. Bridge abutments or piers shall be located outside creek beds and banks, unless an environmentally superior alternative exists. (Amended by Reso. 09-59, 11/17/09)

Several Project activities have potential to result in direct impacts to these communities, although the impacts from these activities vary. However, all impacts shown in Table 9, if occurring directly within a sensitive community or land cover, would result in removal or alteration of existing habitat and would therefore be a direct impact. Impacts from grading generally involve recontouring and sand-capping within the existing golf course, followed by installation of turf or native revegetation, and are, therefore, not considered new development. The impact from establishment of a cart path or bridge within the designated setback of a sensitive community depends on the type of bridge proposed and the location of the golf cartpath (whether or not it is within a currently maintained part of the golf course) and whether the re-routing of the path will result in an increase or decrease in the area within ESHA or an ESHA buffer. Other permanent impacts include creation of any new structures, although most of these will be within currently developed areas, including those in the vicinities of the clubhouse, the exiting comfort station, the maintenance yard, and the Barnsdall Gas Station. Some new features that may result in permanent impacts to vegetation communities include installation of bioretention basins and storm-drain outlets. The Project also includes trenching for storm drains, new sewage and water lines, and undergrounding of existing utilities in the off-site area within the Hollister Avenue right of way (Figure 14, Impacts to Sensitive Resources). Finally, direct impacts may occur to ESHA from landscaping, if landscaping results in replacement of sensitive vegetation with non-native or other non-sensitive vegetation. Indirect impacts to sensitive vegetation communities considered ESHA potentially include water quality effects, chemical spills and vehicle leaks near and within sensitive areas, dust, and inadvertent habitat destruction during construction. Long-term impacts could occur from increased human presence, which could result in trampling of sensitive vegetation. However, although the Project will result in an overall increase in staff numbers, it will limit the number of golfers present at any time, thus reducing the overall number of golfers using the course. At the same time, hours of operation will not change, and therefore the Project will not result in increased human presence. Inclusion of appropriate ESHA buffers in accordance with General Plan/CLUP policies will minimize indirect impacts to sensitive vegetation communities. Specifics of Project impacts to the sensitive vegetation, considered ESHA, are described further below. Additional impacts to ESHA and ESHA buffer are discussed by resource type in the following sections, including Section 5.5, Jurisdictional Waters.

Table 9 shows all direct impacts to sensitive vegetation communities. Several Project features would result in impacts to ESHA vegetation communities or to buffers for these communities as established in General Plan/CLUP. Installation of a storm drain and associated storm drain outlet in the eastern portion of the Project Site would result in temporary and permanent impacts to ESHA vegetation, as well as addition temporary impacts to the ESHA buffer. The installation of a storm drain outlet within arroyo willow thickets associated with Devereux Creek would result in 0.002 acres (73 square feet) in permanent impacts to arroyo willow thickets, and trenching for the installation of the storm drain will result in 0.005 acres (225 square feet) in temporary impacts to this community. Trenching for the storm drain will result in additional temporary impacts to the ESHA buffer, but these areas currently support wild oats and annual brome grasslands, a non-sensitive community consisting of non-native vegetation, and developed golf course. A new golf cart path within the existing, maintained golf course would not unto itself constitute a new

Table 9. Impacts to Sensitive Vegetation Communities and Land Cover Types

Category	Setback (ft)	Total acreage	Permanent Impacts (acres)				Temporary Impacts (acres)	
			Grading	Struc-ture	Cart Path	Bridge	Tren-ching	Sand-Capping
Arroyo willow thickets (riparian) *	100 (maximum)	5.50	—	0.002	—	—	0.005	—
Beach	N.A.	8.45	—	—	—	—	—	—
California brittle bush - Ashy buckwheat scrub (coastal sage scrub)	25	0.07	—	—	—	—	—	—
Cattail marshes (wetland)	100	1.19	—	—	—	—	—	—
Coast live oak woodland (oak woodland)	N.A.	0.73	—	—	—	—	—	—
Coastal sage scrub (coastal sage scrub)	25	0.11	—	—	—	—	—	—
Emergent wetland (wetland)	100	0.17	—	—	—	—	—	—
Needle grass grassland (native grassland	10	0.36	—	—	—	—	—	—
Quailbush scrub (coastal bluff scrub)	25	8.32	—	—	—	—	—	—

* - Impacts from installation of a storm drain outlet.

The replacement cart path and free-span bridge proposed between Holes 4 and 5 will also result in impacts to ESHA (arroyo willow thickets) setback (Figure 14, Table 9). General Plan/CLUP Policy CE 1.6 provides protections for ESHA and ESHA buffers against development. However, this policy allows for public accessways and trails. In addition, this replacement cart path and bridge will replace an existing cart path and Arizona crossing that also crosses through ESHA that is both Devereux Creek riparian and Monarch Butterfly Roosting ESHA at the eastern edge of the property (also see Section 5.4.1 for monarch butterfly impacts). The replacement path would significantly reduce the area of the cart path within ESHA and the ESHA buffer. The current cart path, culvert, and Arizona crossing that will be removed from the golf course will be revegetated. The proposed Project, therefore, reduces the area of the cart path within ESHA buffer. The Project design includes 1) replacement of the cart path/culvert/Arizona crossing under Devereux Creek that connects Holes 4 and 5; 2), installation of a new free-span bridge; 3) and re-establishment of a natural creek channel with sandstone boulders and riparian vegetation on the banks. The result is the configuration of a free-flowing natural stream channel in conjunction with an environmentally superior Project design consistent with Policy CE 1.7 and CE 2.5 with the inclusion of recommended Mitigation Measures below. The Project would also result in sand-capping within the 100-foot buffer of Devereux Creek riparian where non-native grasses (wild oats and annual brome grassland) will be replaced with a driving range, or new developed golf course (Figure 14-F). Although the habitat value of wild oats and annual brome grassland is low compared to native vegetation communities, the sand-capping of a natural vegetation community and its replacement with a portion of a driving range would constitute replacement of natural vegetation with developed golf course. Policy CE 2.2 designates a 100-foot setback for Streamside Protection Areas (SPA), including Devereux Creek, as measured from the top of bank or outer edge of riparian, whichever is greater. However, the policy also states that the City may accept a buffer reduction to as little as 25 feet, if “there is no feasible alternative” and “impacts will not have

significant adverse effects on streamside vegetation or the biotic quality of the stream." Because the grassland within the buffer is currently part of the golf course, any adverse effects to streamside vegetation would be minimal. Also, the daylighting of downstream portions of the creek and removal of an underground culvert would provide benefits to the overall biotic quality of the stream that would outweigh the minor effects of the driving range. Additionally, sand-capping is proposed within the setbacks for quailbush scrub and California brittle bush – ashy buckwheat scrub alliance (all considered coastal bluff scrub/coastal sage scrub) near the bluffs (Figures 14-G, 14-J, 14-L). These activities would support replanting of turf grass in areas that are already maintained golf course and, therefore, would not constitute a new impact. Sand-capping would also occur within the 100-foot setback of cattail marshes habitat associated with Bell Canyon Creek, near the Hole 11 green (Figure 14-J), but would occur more than 25 feet from this vegetation community. It would also be in support of modifications to the existing golf course.

Table 10. Policy Consistency Summary for Project Impacts to ESHA, SPA, and ESHA and SPA Buffers

Impact (T/P)[1]	Golf Course Location	ESHA	SPA	Policy Consistency
Grading (T)	Event Lawn / Golf Course Pond near Hole 18	No	No	The golf course pond is an open unvegetated coastal wetland in the northwestern portion of the project. It's construction pre-dates the CCA and City of Goleta GP. The proposed grading and event lawn will be completely within the existing golf course green and sand traps at Hole 18. No new disturbance will occur within the wetland buffer, including the area where the event lawn encroaches into the minimum buffer. All impacts are within the existing golf course footprint; however, the reduced buffer is 20 feet at its closest in the northern portion of the pond and covers 7,711 SQFT of existing golf course within the minimum buffer. The remainder of the pond has the maximum buffer imposed. The golf course pond will not be impacted by project impacts per CE 3.4 for the pond wetland will continue to be protected and function similarly as it has for decades. Dudek (2025a) does not consider this aquatic feature to be an ESHA due to its lack of hydrophytic vegetation and frequent maintenance which includes emptying and refilling the depression up to twice a year.
Grading (T) and Sand Capping (P)	Coastal Bluff, Holes 12, 13, 14, and 6; and Devereux Creek, Holes 2, 5, 7, and 8	Yes	Yes	Grading and sand capping is located throughout the existing golf course, but occurs in several areas within the minimum ESHA and SPA buffers near Devereux Creek and the coastal bluff for a total of 18,766 SQFT. In areas, the buffer is reduced to 0 feet and is adjacent to the coastal bluff scrub and riparian. The benefits of sand capping are better infiltration of water, reduced waterlogging, and better root growth. It is consistent with CE 5.3 in that all ESHA is avoided and sand capping within minimum buffer will be in areas that are already existing golf course and will remain turf or in a playable area of the golf course. Installation of native plants will occur in all sand cap areas in the ESHA buffer that are not "in-bounds" or "playable" per CE 5.3.c.
Installation of a Golf Cart Path Bridge (P)	Near Hole 3 Tee Box	Yes	Yes	Golf cart path has been moved out of ESHA and the SPA; however, it is proximate to the arroyo willow thickets and extends into the minimum buffer by 0 feet and 560 SQFT of coyote brush scrub. However, the public cart path is consistent with

Table 10. Policy Consistency Summary for Project Impacts to ESHA, SPA, and ESHA and SPA Buffers

Impact (T/P)[1]	Golf Course Location	ESHA	SPA	Policy Consistency
				CE 2.3 for allowable uses and includes the proposed restoration in the lower reach of Devereux Creek. Additionally, an existing golf cart path will be removed from the creek and the applicant has offered habitat restoration and/or enhancement to improve Devereux Creek and its ecological functions per CE 2.5 (please refer to Dudek 2025b Cart Path Bridge Location and Creek Enhancement near Hole 3).
Habitat Restoration (P)	Devereux Creek and Hole 2	Yes	Yes	Consistent with CE 2.3. Due to the golf cart path bridge and other impacts within Devereux Creek (storm drain and trenching), the applicant has proposed habitat restoration of the lower on-site reach of Devereux Creek including removal of an old storm drain and enhancing the existing riparian vegetation.
Storm Drain Outlet (P) at Devereux Creek	Storm drain outlet at the northern portion of Devereux Creek near Hole 1.	Yes	Yes	Placement of a storm drain outlet above the largest segment of Devereux Creek in the northeastern portion of the project site will allow surface flows to be diverted into Devereux Creek partially restoring the local hydrology into the stream channel. While this isn't necessary restoration, it allows and focuses storm runoff to recharge a creek which is mainly dry throughout the year. The sand capping, as indicated above, also will assist with percolation and filtering of stormwater and plant growth. We believe that installation of the storm drain is consistent with CE 2.3.c.
Storm Drain (P) for New Parking Lot	New parking lot in northwestern portion of the site. Storm drains beneath lot that feed a bioretention basin. North of Hole 10.	No	No	Not considered ESHA or SPA, so policies aren't relevant, however, impacts to the storm drain will be reviewed by the regulatory agencies.
Trench (T) for Utilities	Northern Project Boundary across Devereux Creek near Barnsdall Building	Yes	Yes	The utility trench crosses over the culvert below Hollister Avenue and above Devereux Creek. It's located within the minimum ESHA/SPA buffer; however, it's in the right of way of Hollister Avenue. The impact is temporary and is consistent with CE 2.2.a. and 2.3.c.

Notes:
[1] (T) Temporary, (P) Permanent
[2] Identified as ESHA per Figure 4-1

MM- BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, and MM BIO-6 are recommended for avoiding, minimizing and mitigating impacts to ESHA vegetation, including direct permanent impacts to 0.002 acres and direct temporary impacts to 0.005 acres of arroyo willow thickets; potential impacts from construction activities, including sand-capping, within ESHA buffers; and the potential for impacts from landscaping. Re-establishment of Devereux Creek and replacement of the culvert should be conducted in accordance with Policy CE 1.7 and to satisfy requirements in MM BIO-1, below.

MM BIO-1 Compensatory Mitigation for Impacts to Sensitive Communities and Riparian Habitat. On-site mitigation shall be provided to compensate for the permanent loss of arroyo willow thickets/riparian habitat (0.002 acre) at a ratio of 5:1. Temporary impacts to arroyo willow thickets/riparian habitat (0.005 acres), eucalyptus woodland/riparian habitat (0.09 acres), and non-wetland waters of the U.S. and State (0.002 acres) shall be restored at a 1:1 ratio. Details of the mitigation program requirements shall be described in a Habitat Mitigation and Monitoring Program (HMMP).

Final landscape plans for the Project shall not include removal of sensitive vegetation or aquatic resources in areas for landscaping purposes only (where no construction ground disturbances, including grading, trenching, excavation for bioretention basins or other drainage or utility features, is proposed).

Requirements described in the HMMP shall include:

1. Specification that mitigation shall be on-site and shall occur adjacent, or as near as possible, to any removed habitat area. Mitigation for loss of arroyo willow/riparian habitat associated with Devereux Creek shall occur only along Devereux Creek, and near the area of impacts to the extent possible.

2. Mitigation for the loss of riparian habitat and non-wetland waters of the U.S. and State shall conform with any requirements included within a Lake and Streambed Alteration Agreement provided by the California Department of Fish and Wildlife, a Clean Water Act 401 Certification or XXX issued by the Central Coast Regional Water Quality Control Board, or U.S. Army Corps of Engineers Clean Water Act Section 404 permit.

3. The mitigation program shall conform with all requirements of the City of Goleta General Plan/Coastal Land Use Plan and the City of Goleta Creeks and Watershed Management Plan.

4. Specification of a 5-year monitoring period for all restoration areas.

5. Development of a plant palate for each restoration area (arroyo willow thicket/riparian, eucalyptus woodland, non-wetland waters of the U.S. and State) in keeping with the character and plant composition of the native community being restored.

6. Restoration for temporary impacts within monarch butterfly winter roosting habitat shall conform with requirements of the City of Goleta General Plan/Coastal Land Use Plan.

7. Defined attainable and measurable goals and objectives to be achieved through implementation of the HMMP.

8. A restoration work plan that details methodologies, a restoration schedule, plant materials (seed), and implementation strategies.

9. A detailed maintenance plan to include removal of invasive non-native species.

10. Defined performance standards for restoration.

11. A monitoring plan that includes methods and analysis of results, goals for success or failure, and an adaptive management plan and suggestions for failed restoration efforts.

12. Restoration activities using native species from locally collected stock.

MM BIO-2 Delimiting and Avoidance of ESHA and ESHA Setbacks. Prior to initiation of Project-related activities, including grading, establishment of replacement cart paths, sand-capping, re-sodding, landscaping, or construction of the new clubhouse or other structures, all sensitive habitats and required setback shall be delineated with construction fencing and protected with BMPS, such as silt fencing or straw wattles. Areas protected under this measure shall include sensitive coastal sage scrub and coastal bluff scrub communities, riparian habitats associated with Devereux Creek, coastal wetlands, native grasslands, and areas supporting special-status plant species. Unless otherwise authorized, setbacks shall be as follows:

- Sensitive scrub communities: 25 feet
- Riparian vegetation: 100 feet unless otherwise authorized
- Coastal wetlands: 100 feet
- Native grasslands: 10 feet

No grading, no vehicles or heavy machinery, and no construction shall be permitted with the setbacks, unless setbacks are reduced for specific activities and locations. No grading, sand-capping, vehicles, heavy machinery, or construction activities shall be permitted within any ESHA at any time, unless these activities are covered under compensatory mitigation described in MM BIO-1.

MM BIO-3 Worker Environmental Awareness Program (WEAP). All construction personnel shall attend a WEAP training by a qualified biologist prior to commencement of Project activities. The training shall include a description of a special-status species potentially present in the area, jurisdictional habitats present proximate to the Project site, information on sensitive habitats to be avoided, and specific measures that are being implemented to protect special-status species and the boundaries within which the Project may be accomplished. Special-status plant species addressed in the WEAP training shall include, at a minimum, cliff malacothrix, red sand verbena, Santa Barbara honeysuckle, Southern California black walnut, southern tarplant, and woolly seablite.

Species-status wildlife species addressed in the WEAP, at a minimum, California red-legged frog, tidewater goby, western pond turtle, and white-tailed kite.

MM BIO-4 Biological Monitoring during Construction. The Project shall retain a qualified biologist to monitor construction and compliance of all recommended mitigation measures. The monitor shall perform daily clearance surveys prior to any grading, turf removal, other vegetation removal, to search for California red-legged frog, western pond turtle, and other special-status wildlife species. The monitor shall also perform regular inspections of construction fencing and BMPS around sensitive habitats and setbacks. Monitoring shall be daily during grading and vegetation removal, and weekly for the remainder of the Project. Reporting shall be on weekly basis. A final monitoring report shall be prepared after all Project activities have been completed by the contractor.

MM BIO-5 Best Management Practices. Best management practices, such as silt fending or straw wattles, shall be installed prior to conducting any Project activity within 100 feet of any aquatic resource, including sand-capping, grading, cart path construction, or bridge construction. Implementation of BMPs shall be consistent with any requirements for preparation of a Stormwater Pollution Prevention Plan (SWPPP) for the Project.

MM BIO-6 Equipment Maintenance Conducted Away from Environmentally Sensitive Habitat. In addition to any standard requirements for preventing pollutants entering waters or wetlands, vehicle or equipment maintenance shall not be conducted within 100 feet of any environmentally sensitive habitat.

5.3 Impacts to Special-Status Plants

Surveys identified the following special-status plant species as occurring on the Project site:

- Cliff malacothrix
- Red sand verbena
- Santa Barbara honeysuckle
- Southern California black walnut
- Woolly seablite

Of these, Southern California black walnut occurs within riparian vegetation associated with Bell Canyon, red sand verbena is associated with dunes near the mouth of Bell Canyon Creek, and cliff malacothrix and woolly seablite occur on the bluffs within scrub communities located away from Project ground-disturbing activities. Santa Barbara honeysuckle has been identified only within and adjacent to riparian habitat and monarch butterfly roosting habitat, away from the grading footprint and just outside the location of the proposed water main trench in this area. Therefore, no direct impacts are expected to known populations or individuals of special-status plants from ground disturbance. However, some landscaping activities are proposed within coyote brush scrub occupied by cliff malacothrix, along the bluffs. Some of the area occupied by Santa Barbara honeysuckle on the eastern boundary is propose for planting of milkweed. Although milkweed is potentially beneficial for monarch butterflies and pollinators such as Crotch's bumble bee, removal of Santa Barbara honeysuckle would be a significant impact. Also, as special-status plant surveys were last conducted in 2022, potentially occurring special-status plants could occur in locations where not previously detected at the time of construction, including areas subject to ground disturbance

or vegetation removal for landscaping. In addition, trenching for the water main from the comfort station to existing water lines at the sites eastern boundary would occur immediately adjacent to Santa Barbara honeysuckle, and any changes to the extent of the area supporting this species could result in expansion into the impact area for water main trenching.

In addition to the direct impacts, several short-term, construction-related direct impacts could occur during construction, including water quality effects, chemical spills near and within sensitive areas, dust, and inadvertent habitat destruction during construction. The latter is particularly of concern for the Santa Barbara honeysuckle adjacent to the proposed water main near the Project Site's eastern boundary. Long-term impacts could occur from increased human presence, which could result in trampling of sensitive vegetation. However, although the Project will result in an overall increase in staff numbers, hours of operation will not change, and, therefore, the Project will not result in increased human presence.

MM BIO-2, MM BIO-3, and MM BIO-4, MM BIO-5, MM BIO-6, and MM BIO-7 are recommended to avoid impacts to special-status plants.

MM BIO-7 Updated Surveys for Special-Status Plants. If, at the time construction is initiated, special-status plant surveys have not been conducted on the Project site for more than a period of two years, conduct updated special-status plant surveys, to determine current locations of special-status plants and special-status plant populations. Special-status plant surveys shall be conducted at the appropriate season, and in appropriate habitat, for identifying potentially occurring species, at least including cliff malacothrix, red sand verbena, woolly seablite, and Santa Barbara honeysuckle. The special-status plant species survey shall be conducted in conformance with the California Native Plant Society Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the U.S. Fish and Wildlife Service's General Rare Plant Survey Guidelines (Cypher 2002). If special-status plant species are encountered, field personnel will demarcate the edge of the area occupied by the plants. Any habitat area supporting special-status plants shall be considered ESHA, and appropriate setbacks shall be established within which no construction activities may occur and no landscaping that may occur that will result in removal of or harm to rare plants.

5.4 Impacts to Special-Status Wildlife Species

Dudek identified 14 species of wildlife that have been observed on the Project site or have the potential to occur that are considered special-status species, including three invertebrate species, one fish species, one amphibian species, one reptile species, and eight bird species (Section 4.4.3, Appendix F). One invertebrate species, globose dune beetle, has potential to occur only on the beach, and would not be subject to impacts from Project implementation. One bird species, burrowing owl, has a low potential to occur on the Project site, and potential occurrence is likely limited to winter. Also, the Project would not substantially alter habitat for this species.

5.4.1 Invertebrates

One special-status invertebrate species, monarch butterfly, has been observed on the Project site. Two additional species, Crotch bumble bee and globose dune beetle, have some potential to occur. Globose dune beetle has

potential to occur only on the beach, and is most likely to occur near the mouth of Bell Canyon Creek, far from any proposed impacts. Therefore, the Project would not result in impacts to globose dune beetle.

Although CNDDB (CDFW 2025b) includes an occurrence of Crotch bumble bee only 0.2 mile from the Project site, the maintained nature of most of the Project site likely limits available floral resources for foraging and available burrows and microhabitats such as leaf litter and woody debris that could provide opportunities for nesting and hibernation. In addition, these microhabitats would be mostly limited to areas near protected eucalyptus woodland along the eastern boundary of the site and scrub and riparian habitats associated with the bluffs, Devereux Creek, and Bell Canyon Creek, where no impacts are proposed. Also, as the Project proposes minimal new development, from the expansion of parking eastward and creation of a new comfort station, and the biological setting would remain essentially unchanged, little to no impacts are expected to floral resources that would negatively affect Crotch bumble bee. Therefore, direct impacts to Crotch's bumble bee habitat would be less than significant.

In addition, workers and other foraging bumble bees are mobile and would be able to escape harm, if they are present when foraging habitat is removed. However, although Crotch's bumble bee may be unlikely to nest on the Project site, this possibility is not discountable. Grading, trenching, or removal for landscaping purposes, for any native vegetation community, whether sensitive or not, or of any grassland, native or nonnative, could result in loss of a nesting Crotch's bumble bee colony and of the reproductive capacity of a generation of bumble bees, if a nest is present at the time of construction. And, as long as the species remains a candidate for listing under CESA, or becomes listed under CESA, any impacts to nesting bumble bees would be significant.

Although monarch butterfly overwintering sites were not observed directly within the main areas of the Project site during surveys in 2021-2022, monarchs continue to be present within the western and eastern historic and known overwintering sites along the western and eastern boundaries of the property, which are mapped as ESHA (City of Goleta 2006; Figure 13). As described in Section 4.3.3.1, no additional potential roosting habitat occurs on the site, and therefore ESHA is limited to that shown in the General Plan/CLUP. No Project activities are proposed within 200 feet of the monarch butterfly roost in Bell Canyon to the west. The grove along the eastern boundary is adjacent to the golf course. The Conservation Element of the City's General Plan/CLUP includes several policies for the protection of monarch butterfly roosting habitat and its designation as ESHA (Appendix A). Policies CE 4.4, Protection of Monarch Butterfly ESHAs; C.E. 4.5, Buffers Adjacent to Monarch Butterfly ESHAs; and C.E. 4.6 Standards Applicable to New Development Adjacent to Monarch ESHAs (Appendix A) describe required protections of monarch butterfly roosting habitat. The Project avoids new development within monarch butterfly ESHA. Grading, construction of a replacement cart path, and sand-capping are proposed within the 100-foot setback. Grading within this buffer occurs in two areas. The more northerly area, near the Hole 4 green, is in a portion of monarch butterfly ESHA where monarch butterflies have not been documented roosting. The historic monarch butterfly roosting location is farther south within this grove of trees, but not within several hundred feet of grading that will occur near the Hole 4 green. Although the second area of encroachment (along the Hole 5 fairway) is nearer the historic roost site, no butterflies were detected roosting here during surveys. In addition, none of the activities proposed in these areas would introduce new development within the setback, and instead would result in recontouring of a portion of the existing golf course facility, new plantings within existing maintained areas, and a replacement paved cart path within existing developed golf course. No new structures are proposed.

Indirect impacts to Crotch's bumble bee and monarch butterfly could include chemical spills and inadvertent destruction of nests during construction. Both could occur if equipment enters ESHA or ESHA buffers during construction, Vehicle maintenance activity or leaks outside disturbed or developed areas could result in chemical

contamination effecting individual Crotch's bumble bees, monarch butterflies, or their habitats. Vehicle straying into protected areas could inadvertently destroy bumble bee nests and foraging habitat for both species.

To ensure that project activities do not disturb nesting bumble bees, roosting butterflies, or these species' habitats, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-8, MM BIO-9, MM BIO-10, and MM BIO-11 are recommended.

MM BIO-8 Crotch's Bumble Bee Pre-construction Survey and Avoidance. Should Project ground-disturbing activities, including grading, trenching, and vegeteation removal such as grubbing, be scheduled to occur during the Crotch's bumble bee colony active period, a qualified biologist shall conduct a habitat assessment to identify areas containing suitable habitat for Crotch's bumble bee. The qualified biologist shall be approved by the California Department of Fish and Wildlife (CDFW). The habitat assessment shall be conducted in areas supporting suitable vegetation communities and land covers and shall focus on presence of suitable floral resources and potential nest sites.

Following completion of the habitat assessment, the qualified biologist shall conduct pre-construction surveys for Crotch's bumble bee in the areas identified as suitable, using a methodology (including number of surveys, timing of surveys, suitable survey conditions, and time of day) accepted by CDFW.

If Crotch's bumble bees are not detected, a qualified biologist shall be present during ground-disturbing Project activities that occur during the Crotch's bumble bee colony active period, to ensure that no impacts occur to a previously unidentified Crotch's bumble bee nest. But no additional work restrictions with regard to Crotch's bumble bee shall be implemented for the remainder of the colony active period.

If Crotch's bumble bees are detected, ground-disturbing activities shall be prohibited within 100 feet of any known, occupied Crotch's bumble bee nest, or as determined by a qualified biologist. Work shall not resume in this area for the duration of the Crotch's bumble bee colony active period, unless the qualified biologist determines the nest is inactive, with concurrence of CDFW.

If Crotch's bumble bee remains a state candidate species or is listed as endangered or threatened under the California Endangered Species Act, and should ground-disturbing activities in areas potentially supporting habitat extend into one or more subsequent years, the habitat assessment and, if necessary, the surveys, shall be repeated in areas where ground disturbance may occur that year. Prior to initiation of ground-disturbing activities, should the California Fish and Game Commission remove the candidate status of Crotch's bumble bee and determine the species shall not be listed, then no measure's protecting Crotch's bumble bee shall be required.

MM BIO-9 Monarch Butterfly Roost Buffers. A buffer of 100-feet from the outer extent of the entire grove/tree canopy of existing and historic overwintering sites shall be established. No development or construction work activities is allowed within this buffer, unless it otherwise is allowed by the City's General Plan/Coastal Land Use Plan (e.g., public accessways sited to avoid or minimize impacts to aggregation sites, interpretive signs which are visually unobtrusive) and authorized by the City of Goleta. Grading and other activities which alter the surface hydrology which sustains the tree groves are prohibited within the buffer, unless authorized by the City of Goleta. Fencing shall be installed along the outer boundary of the buffer zone prior to and during any grading and construction activities on site.

If an active roost or aggregation is present on the Project site, any construction grading, or other development within 200 feet of the active roost, shall be prohibited between October 1 and March 1.

MM BIO-10 Tree Removal Prohibition. Removal of trees and encroachment within the critical root zone of protected trees is not permitted without prior assessment and impact analysis by a certified arborist. Removal of vegetation within monarch ESHA is prohibited, except for minor pruning of trees or removal of dead trees and debris which pose a threat to public safety as determined by the City of Goleta. Damage to trees within monarch ESHA is also prohibited.

Prior to any ground disturbance adjacent to trees and outside the identified grading footprint, including trenching or excavation for storm drains, storm drain outlets, retention basins, water mains, sewage lines, undergrounding existing utilities, and fence installation, a certified arborist shall provide an assessment of the trees and the potential for tree damage from these activities. The assessment will be provided to ensure no impacts occur to protected trees and that trees removed or potentially damaged (such as from critical root zone encroachment) are replaced at a sufficient ratio and with appropriate species, depending on whether or not they are native species, species providing sensitive habitat, or protected non-native trees.

Should the arborist determine that any trees within monarch butterfly roosting habitat are subject to removal or critical root zone encroachment, a qualified biologist knowledgeable in monarch butterfly roosting habitat shall determine whether the loss of or damage to the trees, as determined by the certified arborist, may result in impacts to the monarch butterfly roosting habitat. Project activities shall not result in the loss of monarch roosting habitat identified within the Conservation Element of the Goleta General Plan/Coastal Land Use Plan.

MM BIO-11 Fall and Winter Pre-Construction Surveys. Surveys for roosting monarchs shall be conducted if work is proposed between October 1 and March 1. Between October to March a qualified biologist shall perform two site visits to document the presence/absence of active roost or aggregations within the eastern and western historic monarch groves. The site visits shall be spaced sufficiently apart to capture roosting individuals during this timeframe (e.g., November and January). The site visits shall be conducted during a time when monarchs are present at a local reference site. Depending on the observed monarch behavior, more than two site visits may be necessary to conclude the presence/absence of roosting monarchs throughout the season.

The surveys shall generally follow Xerces monitoring guidelines used for statewide monarch counts. Surveys shall be conducted in the early morning starting when temperatures are low (below 55°F) and monarchs are still clustered. Surveys shall not be conducted during heavy precipitation or strong winds. A survey report documenting the following shall be provided to the City within 24 hours of survey completion: date, weather conditions, survey times, surveying biologist, general survey methods, location of any monarchs, number of monarchs, behaviors (flying, clustering, sunning, etc.), and any recommendations.

5.4.2 California Red-Legged Frog

Protocol surveys for California red-legged frog of aquatic habitats on the Project site and within 500 feet in 2022 resulted in no observations of California red-legged frogs. However, suitable breeding habitat still occurs within the

Project site in Bell Canyon Creek, approximately 550 feet from any ground disturbances associated with the Project, and less than 100 feet from sand-capping and related activities. In addition, although the golf course pond and aquatic habitat in the unnamed wetland feature near the bluff are not considered suitable breeding habitat for California red-legged frog breeding, the species has been observed in these locations during the period when frogs are dispersing through habitats surrounding breeding ponds (Rathbun 2004). Despite recent negative surveys, California red-legged frogs may still occur in the Project vicinity, and may still breed in Bell Canyon Creek on occasion, as well as in Tecolote Creek, approximately 1,200 feet west of the Project site. Although no Project activities are proposed that would directly or indirectly affect aquatic habitat within Bell Canyon Creek, the Project has potential to result in impacts to California red-legged frog individuals dispersing across the golf course during Project activities. Therefore, grading has potential to result in injury or mortality to California red-legged frogs, resulting in take of a federally listed species.

Short-term, construction-related indirect impacts to California red-legged frogs, should it occur on or adjacent to the golf course in the future, could include water quality effects, chemical spills in sensitive areas, dust, and noise and vibration. Long-term, operations-related indirect impacts could include increased noise, increased human presence, and external lighting. Although during the operations phase the golf course would require a larger staff, the number of golfers present would be limited at any time, and the overall number of golfers per year would be lower than under current conditions. In addition, golf course hours would not change. Therefore, human presence and long-term noise effects above current conditions are unlikely. External, night-time lighting during the operations phase will all be downcast and low-level lighting and will be outside ESHA buffers, and far from any aquatic habitats. Therefore, only short-term, construction-related impacts are potentially significant.

MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6. MM BIO-12, and MM BIO-13 are recommended to avoid impacts of California red-legged frogs, and thus avoid take of a federally listed species.

MM BIO-12 California Red-legged Frog Avoidance. To avoid the potential for take of California red-legged frog that may disperse through the Project site, all initial ground disturbing activities shall be completed in the dry season (between June 1 and September 30), unless California red-legged frogs are determined not to be present in aquatic habitats within 300 feet of ground disturbance activities. To determine presence/absence, the qualified biologist shall conduct a survey meeting the requirements of the U.S. Fish and Wildlife Service protocol for California red-legged frog (USFWS 2005), with the final survey effort completed not sooner than 48 hours prior to the commencement of ground-disturbing activities. Initial grading activities also shall not occur after the first fall rains and before May of any year, unless it is determined through the above-described survey that California red-legged frogs are absent in aquatic habitats within 300 feet of Project activities.

If ground-disturbing activities occur during the rainy season (between October 1 and May 31) and if the National Weather Service (www.weather.gov) forecast predicts a rain event of 1⁄2 inch or more over a 48-hour or less period for the worksite area, these activities will be halted 24 hours before the rain event is anticipated. Ground-disturbing activities, for the purposes of this protective measure, consist of grading, excavating, trenching, modifying drainages, any other mechanical disturbance of the soil, or any Project activities that include driving vehicles or equipment. Ground-disturbing activities may resume only after the site has sufficiently dried and amphibians are unlikely to be dispersing through the Project site.

After each rain event and prior to resumption of suspended Project activities, a qualified biological monitor shall inspect the entire disturbance area for California red-legged frogs. The monitor shall conduct a clearance survey involving the inspection of excavations, trenches or other topographically depressed areas that may temporarily hold rainwater, pipes, logs, debris, and any other equipment that may provide refugia for this species. If no California red-legged frogs are observed within the Project site, construction may proceed. If a California red-legged frog is observed directly adjacent to the site, the monitor will remain on-site to monitor the individual's movements. If a California red-legged frog is found within the Project site, the monitor will direct the construction crews away from the individual so the frog(s) may move offsite on their own accord. No personnel or biologist will be allowed to touch the frog(s) without prior consultation with the USFWS.

In addition to the above, the following measures shall be taken:

- During evening hours and any periods when no construction activities are occurring, cover any excavations, including trenches, that could entrap California red-legged frogs.
- During Project activities, regularly remove all trash from work sites, to avoid attracting predators.

Once construction is complete, remove all trash and construction debris from work areas.

MM BIO-13 Sensitive Wildlife Survey Prior to Ground Disturbance. Prior to initiation of ground disturbances, a qualified biologist shall conduct a survey for special-status wildlife species within all areas where ground-disturbance is proposed. The survey shall focus on detecting any California red-legged frogs or southwestern pond turtles inhabiting upland habitats, and any other terrestrial special-status wildlife than may be present. If any special-status wildlife species are detected, the qualified biologist shall implement avoidance measures, including establishing setbacks of at least 50 feet around the animal. The qualified biologist shall monitor the animal, and no Project activities may occur within the setback until the animal has left the area on its own.

5.4.3 Southwestern Pond Turtle

Despite multiple surveys of aquatic habitats on the Project site, no southwestern pond turtles were detected during surveys in 2021 and 2022. However, the species has been observed recently at Tecolote Creek, approximately 1,200 feet west of the Project site, and may potentially occur in Bell Canyon Creek and occasionally occur in surrounding upland habitats, including the golf course, while dispersing to nest or take temporary shelter during winter. The golf course pond supports suitable aquatic habitat, if the turtles reach this location. Generally, the relatively steep slopes at the edge of the golf course and impenetrable emergent vegetation near the mouth of Bell Canyon Creek may deter southwestern pond turtle from entering the golf course from the more suitable habitat along Bell Canyon Creek. However, some possibility exists that the occasional southwestern pond turtle could reach the golf course from near the beach, and could occupy aquatic habitat in the golf course pond. If this occurs, a southwestern pond turtle could be injured or killed during grading on the golf course, or the nest of a southwestern pond turtle in more natural portions of the golf course subject to grading could be destroyed. Given the relatively low potential for this species to occur in impacts areas, the likelihood of this occurring is low. But this direct impact to individual pond turtles could be considered significant. Because the Project would not remove aquatic habitat

and land uses surrounding the golf course pond and adjacent to Bell Canyon Creek would remain the same, the Project would not result in permanent direct impacts to southwestern pond turtle habitat.

Short-term, construction-related indirect impacts to southwestern pond turtle, should it occur on or adjacent to the golf course in the future, could include water quality effects, chemical spills in sensitive areas, inadvertent destruction of habitats and individuals from construction equipment, dust, and noise and vibration. Long-term, operations-related indirect impacts could include increased noise, increased human presence, and external lighting. However, while during the operations phase the golf course would require a larger staff, the number of golfers present would be limited at any time, and the overall number of golfers per year would be lower than under current conditions. In addition, golf course hours would not change. Therefore, human presence and long-term noise effects above current conditions are unlikely. External, night-time lighting during the operations phase will all be downcast and low-level lighting and will be outside ESHA buffers. Therefore, only short-term, construction-related impacts are potentially significant.

MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, and MM BIO-13 are recommended to avoid impacts to southwestern pond turtle.

5.4.4 Special-Status and Common Raptor Species

Two special-status raptor species have been observed on the Project site: Cooper's hawk and white-tailed kite. Nest of these species, including historic nests are considered ESHA under Policy CE 8.1 of the General Plan/CLUP (City of Goleta 2006). In addition, nests of common raptor species such as red-tailed hawk are considered ESHA. Each of the species has been recorded on the Project site. Each species also has been recorded nesting on the site or in the vicinity. Historic nests of Cooper's hawk and white-tailed kite were recorded adjacent to the site to the east (Figure 6). Red-tailed hawk nested at different locations in 2021 and 2022 (Figure 6). Project activities and new development may be prohibited within approximately 100 feet of these nest sites. In addition to potential impacts to ESHA, if any of these species is nesting at the time of grading or other Project activities, disturbance to nesting could result. Because the Project would result in little loss of natural habitat, and because conditions after Project implementation would remain similar to conditions prior to implementation, and the Project would even result in planting of additional native vegetation on the golf course, the Project would not result in significant impacts to Cooper's hawk or white-tailed kite foraging habitat. The Project would avoid impacts to areas within 200 feet of either of the historic nests of the species and thus would not result in impacts to ESHA or ESHA setbacks from special-status raptor nest sites. Therefore, the only potentially significant impact to these species would be direct and indirect impacts to nesting Cooper's hawks and white-tailed kites. The Project proposes replacement golf cart paths near both recent nesting locations for red-tailed hawk. Project activities to establish these paths could result in impacts to nesting red-tailed hawks, if these Project activities occur during the nest season when these nest sites are active. However, the new cart path near these nests site would not result in new impacts, if the paths are established outside the nesting period. The new paths would not establish new human disturbance in these areas, which already occur along fairways subject to regular human presence.

Specific potential indirect impacts to these species are noise, vibration, and human presence during construction, all of which could result in nest disturbance. Long-term, operations-related noise and human presence would not exceed that under current conditions, because the Project would not increase levels of human presence and would not result in longer hours of operation. Although the staff size would increase, fewer golfers would be present on the Project Site. Therefore, in the long term, the Project would not reduce the potential for nesting by these species.

MM BIO-3, MM BIO-4, MM BIO-14, and MM BIO-15 are recommended to avoid impacts to nesting special-status raptors.

MM BIO-14 Pre-Project Nesting Bird Survey. Avoid initiating construction during the nesting bird season for native birds (February 1 to August 31). If construction must begin within the nesting bird season, a qualified biologist shall conduct a pre-construction survey to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and the California Fish and Game Code, are present in the construction zone or within 100 feet (300 feet for raptors) of the construction zone for the Project site. The survey should occur no less than one week prior to construction or site preparation activities.

MM BIO-15 Nesting Bird Buffers and Avoidance. If active nests are found, a no-construction buffer of 100-feet (300 feet for raptors) shall be established around the nest site where it overlaps with work areas. The buffer distance may be greater or less, depending on the bird species and Project activity, as determined by the biologist. Grading, construction, or other Project activities within no-construction buffers shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, young have fledged and are no longer dependent on the nest site, and there is no evidence of a second attempt at nesting. In addition, the qualified biologist shall map all active nests with geographic positioning system technology and provide the nest locations and buffers on aerial-based maps of the Project vicinity. The biologist shall regularly update maps to inform the Contractor of areas to avoid. A City-appointed biologist should also serve as a construction monitor during the breeding season to ensure that no inadvertent impacts occur to nesting birds.

5.4.5 Yellow Warbler and Other Special-Status Bird Species

Yellow warbler was detected during surveys. Nesting habitat for this species is considered ESHA, according to General Plan/CLUP Policy CE 8.1. However, this species was detected on the Project site only during the migratory season for this species. This species was not detected nesting, was not detected in suitable nesting habitat, and was not present through the nesting season. Therefore, no ESHA should be established on the Project site due to presence of this species. Although suitable habitat occurs along Bell Canyon Creek and Devereux Creek, the suitable habitat does not occur in the former location within 400 feet of grading, construction activities, or any other Project activity that would result in disturbance to yellow warblers. Grading would occur within approximately 50 feet of suitable habitat at Devereux Creek. But it would not result in permanent impacts that would alter yellow warbler habitat or change the character of the area surrounding the suitable habitat. However, if grading occurs here during the nesting season when yellow warblers are present, it could result in disturbance to nesting yellow warblers, which could be considered a significant impact. Other special-status bird species may have potential to occur, and impacts to these species would be similar to those for yellow warbler.

Potential indirect impacts to these species are noise, vibration, and human presence during construction, all of which could result in nest disturbance. Long-term, operations-related noise and human presence would not exceed that under current conditions, because the Project would not increase levels of human presence and would not result in longer hours of operation. Although the staff size would increase, fewer golfers would be present on the Project Site. Therefore, in the long term, the Project would not reduce the potential for nest by these species.

MM BIO-3, MM BIO-4, MM BIO-14, and MM BIO-15 are recommended to avoid impacts to nesting yellow warblers and other special-status bird species.

5.5 Impacts to Jurisdictional Waters

Table 8 provides a summary of potentially jurisdiction features. Table 10 summarizes impacts to potentially jurisdictional resources, and these impacts are shown graphically on Figure 15, Impacts to Aquatic Resources. Direct impacts to aquatic resources would occur within Devereux Creek (Aquatic Resource B). The Project would also result in the removal of Aquatic Resource E.

Direct impacts from installation of a storm drain outlet, described as impacts to arroyo willow thickets association in Section 5.2, would include permanent removal of 0.002 acre (75 square feet) of riparian and streambed habitat associated with Devereux Creek (Aquatic Resource B), under the jurisdiction of CDFW, RWQCB, and CCC, 0.001 acre (41 square feet) of which is also non-wetland waters of the U.S., under the USACE (Figure 15B, Proposed Impacts to Aquatic Resource B, Devereux Creek). Trenching to install the storm drain would result in 0.005 acres (225 square feet) in temporary impacts to riparian and streambed habitat under the jurisdictions of CDFW, RWQCB, and CCC, including 0.002 acre (87 square feet) of non-wetland waters of the U.S. also under the jurisdiction of USACE (Table 11).

Additional impacts would occur to Devereux Creek (Aquatic Resource B) within eucalyptus woodland riparian habitat and non-wetland waters of the U.S. and State on the eastern boundary of the Project Site (Figure 15B). Trenching associated with the water line installation occurs within the riparian eucalyptus near, and within the minimum 25-foot setback. The impact to aquatic resources is temporary, and it would not result in direct permanent removal of habitat. These impacts include direct temporary impacts to 0.04 acre (1,691 square feet) of riparian habitat under the jurisdictions of CDFW, RWQCB, and CCC, 0.003 (144 square feet) of which is also non-wetland waters under the jurisdiction of USACE. However, trenching at a depth of 4 feet would potentially result in damage to existing eucalyptus trees, and impacts to riparian habitat.

The Project would result in filling and grading of Aquatic Resource E, an anthropogenic stormwater drainage feature, and replacement of this feature with stormwater drainage into an onsite stormwater treatment basin (Figure 15E, Proposed Impacts to Aquatic Resource E). This activity would result in elimination of 0.01 acre (339 square feet) of potential CDFW streambed and potential non-wetland waters of the State under the jurisdiction of RWQCB (Table 11).

Although grading does not occur within any other potentially jurisdictional resource, it occurs within the 100-foot setback associated with the Golf Course Pond (Aquatic Resource C) and within 100 feet of riparian vegetation associated with Devereux Creek (Aquatic Resource B). Under Policy CE 2.2, a 100-foot setback may be reduced if there is no feasible alternative for siting and Project impacts "will not have a significant adverse effect on streamside vegetation or the biotic quality of the stream." Because the Project does not propose a change in land use, and the site is already a working golf course, areas where grading occurs less than 100 feet but more than 25 feet from riparian habitat is consistent with Policy CE 2.2.

To confirm whether USACE/RWQCB and CDFW would take jurisdiction of Aquatic Resource E, an anthropogenic feature near Hollister Avenue, and impacts to 0.01 acre of potential non-wetland waters of the State would require mitigation of 5:1 (creation:impact), Dudek recommends consultation with these agencies.

The Project also potentially would result in indirect impacts to aquatic resources. In addition to grading and trenching, sand-capping within several wetland and riparian buffers could result in short-term, construction-related indirect impacts. Impacts could occur to wetlands or riparian habitats if sand or chemicals from vehicles or

machinery enter the sensitive aquatic resources, including Bell Canyon Creek. Long-term human presence during operations is not expected to increase, despite an increase in golf course staff, because the number of golfers would decrease, and golf course hours would not change.

Table 11. Impacts to Aquatic Resources

		Permanent Impacts (acres)			Temporary Impacts (acres)			
	Feature ID	Grading	Storm Drain Outlet	*Total*	Storm Drain trenching	Water main trenching	Utility line trenching	*Total*
CDFW/RWQCB/ USACE/CCC	Aquatic Resource B	—	0.001 (41 sq ft)	*0.001 (41 sq ft)*	0.002 (87 sq ft)	0.003 (144 sq ft)	0.001 (60 sq ft)	*0.01 (291 sq ft)*
CDFW/RWQCB/ CCC	Aquatic Resource B	—	0.001 (32 sq ft)	*0.001 (32 sq ft)*	0.005 (225 sq ft)	0.04 (1,691 sq ft)	0.05 (2,129 sq ft)	*0.09 (3,959 sq ft)*
CDFW/RWQCB	Aquatic Resource E	0.01 (339 sq ft)	—	*0.01 (339 sq ft)*	—	—	—	—
		TOTAL PERMANENT		***0.01 (618 sq ft)***	*TOTAL TEMPORARY*			***0.1 (4,250 sq ft)***

MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-10, and MM BIO-16 are recommended to avoid direct and indirect impacts to jurisdictional aquatic resources. If jurisdictional resources are not completely avoided, the applicant will acquire the necessary permits from the CDFW, RWQCB, and USACE, as applicable, and adhere to compensatory mitigation requirements based on those permits. It is recommended that the project biologist meet with the aquatic resource agencies (i.e., verification and/or pre-application meeting) on jurisdictional boundaries, potential impacts, permitting, and mitigation, as applicable.

MM BIO-16 Avoidance of Aquatic Resources and Designated Setbacks. Avoid incidental grading or construction activities within aquatic resources and within the designated 100-foot setback for riparian or wetland habitats. All aquatic habitats and all 100-foot riparian and wetland setbacks shall be delineated in the field, and no unplanned construction activities shall take place within these areas.

5.6 Impacts to Protected Trees

The arborist report for grading and reconfiguration of the golf course identified 15 trees that would be removed and an additional 25 trees subject to encroachment of the critical root zone (McPherson 2023b; Table 11). The Project will also result in removal of 26 non-native trees in the clubhouse parking area. The tree inventory identified which trees were subject to critical root zone encroachment that would result in impacts sufficient to require mitigation. In all, a minimum 1:1 replacement is required for 26 trees on the golf course, and an additional 26 trees are to be removed around the golf course parking lot and will be replaced at a minimum ratio of 1:1. One tree native to the region, a coast live oak (*Quercus agrifolia*), that was planted in the median of Hollister Avenue has been identified as being removed by the Project, however, no other native trees were have been identified that will be subject to

critical root zone encroachment. Planting of one 72-inch boxed coast live oak (or three 24-inch boxed coast live oaks) is required to mitigated for removal of the one coast live oak. And the planting of 44 Monterey cypress trees and 91 New Zealand Christmas trees (*Metrosideros excelsa*) is sufficient to replace the trees identified as being removed or subject to critical root zone encroachment (McPherson 2023b). Therefore, the impacts from loss of trees identified in the arborist reports is less than significant.

However, the arborist reports focused on parts of the golf course where grading and other activities related to course re-routing are proposed. In addition to these activities, trenching will occur in several areas where protected trees mays occur: trenching to underground utilities along the Hollister right of way and within ESHA associated with eucalyptus woodland identified as riparian habitat along Devereux Creek; trenching for a storm drain and creation of a storm drain outlet south of the Hole 1 fairway and in the arroyo willow thicket associated with Devereux Creek; and trenching at the eastern property boundary within a eucalyptus woodland identified as ESHA because it is Devereux Creek riparian and monarch butterfly roosting habitat. Because trees in these three areas have not been inventoried or assessed, and it has not been determined whether any of the trees will be removed or subject to critical root zone encroachment, these are potentially significant impacts.

Table 12. Tree Impact Summary

Common Name	Scientific Name	No. Removed	No. Critical Root Zone Encroachment	Mitigation Required	Minimal to Medium Impact	Mitigation Provided
Golf Course						
Lemonscented gum	*Corymbia citriodora*	7	1	8	—	—
Monterery cypress	*Hesperocyparis macrocarpa*	7	18	12	13	44
Shamel ash	*Fraxinus udhei*	—	4	4	—	—
Red box	*Eucalyptus polyanthemos*	—	1	1	—	—
Paperbark meloleuca	*Meloleuca quinquinervia*	—	1	1	—	—
	Subtotal	*14*	*25*	*26*	*13*	*44*
Clubhouse Parking Area						
Monterery cypress	*Hesperocyparis macrocarpa*	1	—	1	—	—
Red ironbark	*Eucalyptus sideroxlyon*	19	—	19	—	—
Lemonscented gum	*Corymbia citriodora*	2	—	2	—	—
Red box	*Eucalyptus polyanthemos*	4	—	4	—	—
New Zealand Christmas tree	*Metrosideros excelsa*	—	—	—	—	91
	Subtotal	*26*	—	*26*	*0*	*91*
Hollister Road						
Coast Live Oak	*Quercus agrifolia*	1	—	1	—	1
	Subtotal	*1*	—	*1*	*0*	*1*
	Total	**15**	**25**	**53**	**13**	**134**

Protected trees, including those not identified specifically in the arborist reports (McPherson 2023a, 2023b) are also potentially subject to indirect impacts during construction, including chemical spills, vehicle leaks, and inadvertent habitat destruction during construction.

MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-10, and MM BIO-16 are recommended to avoid direct and indirect impacts to jurisdictional aquatic resources.

5.7 Impacts to Wildlife Corridors and Habitat Connectivity

The Project would result in redevelopment of areas already occupied by structures and other development, and current land uses would remain the same after implementation. It would therefore result in no permanent impacts to wildlife movement and habitat connectivity. Project implementation would result in some temporary disruptions to wildlife movement, but animals would continue to be able to pass through the site, even during Project implementation, during nighttime, as under current conditions. Important habitats such as Bell Canyon Creek, Devereux Creek, coastal bluff scrub and coastal sage scrub that receives protections as ESHA, and the golf course pond, would not be directly disturbed during construction, and populations of plants and animals that provide a genetic connection between undeveloped habitats to the north, east, and west, would persist. Because of the minimal impacts to wildlife movement and habitat connectivity, no measures are recommended.

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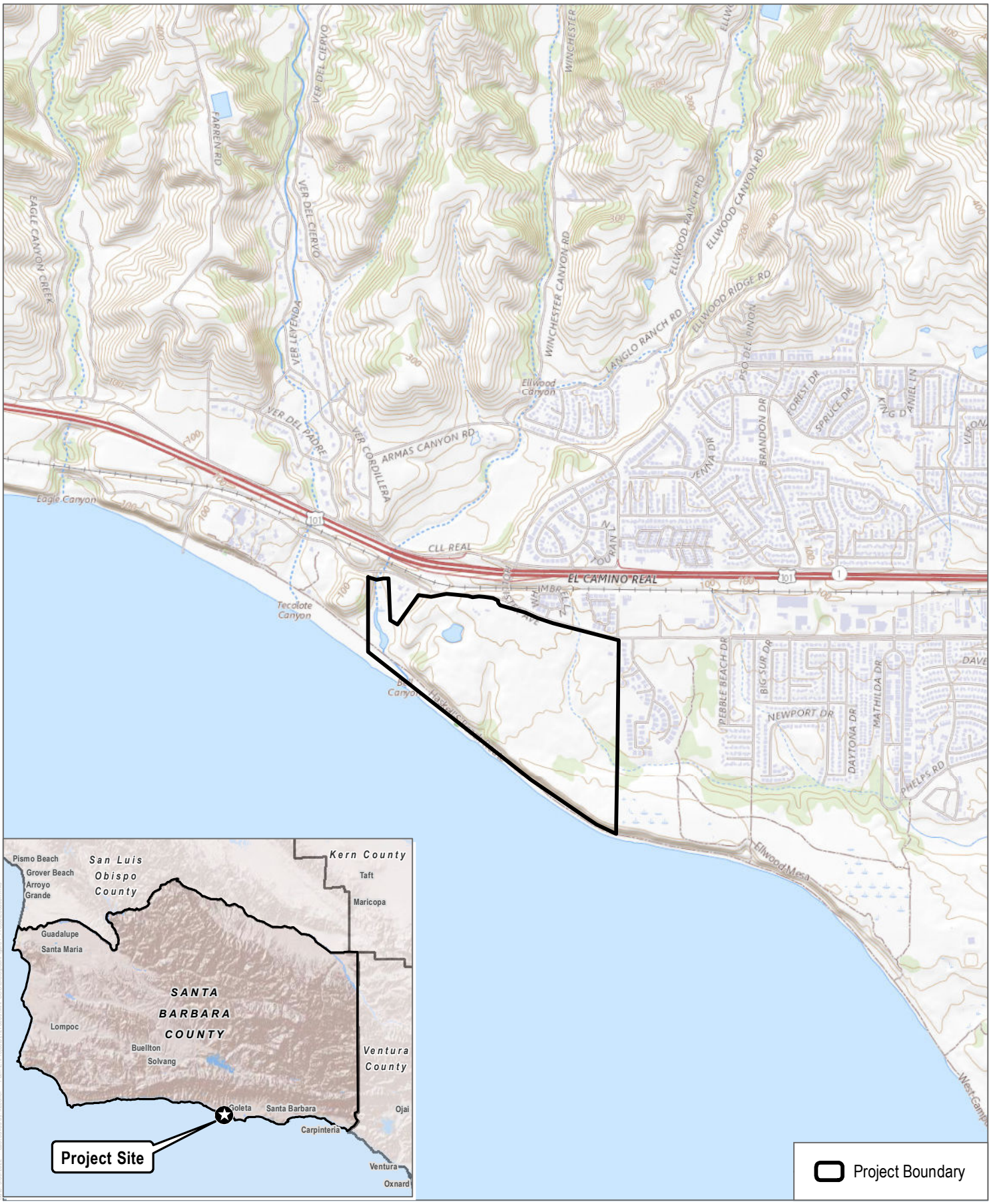

SOURCE: USGS National Map

FIGURE 1

Project Location

Biological Resources Assessment Report for the Sandpiper Golf Club Project

DUDEK

0 1,000 2,000 Feet

INTENTIONALLY LEFT BLANK

SOURCE: Sanborn 2020

DUDEK

0 250 500 Feet

FIGURE 2

Project Site

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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SOURCE: Aerial: Sanborn 2020

DUDEK

0 400 800 Feet

FIGURE 3

Survey Areas

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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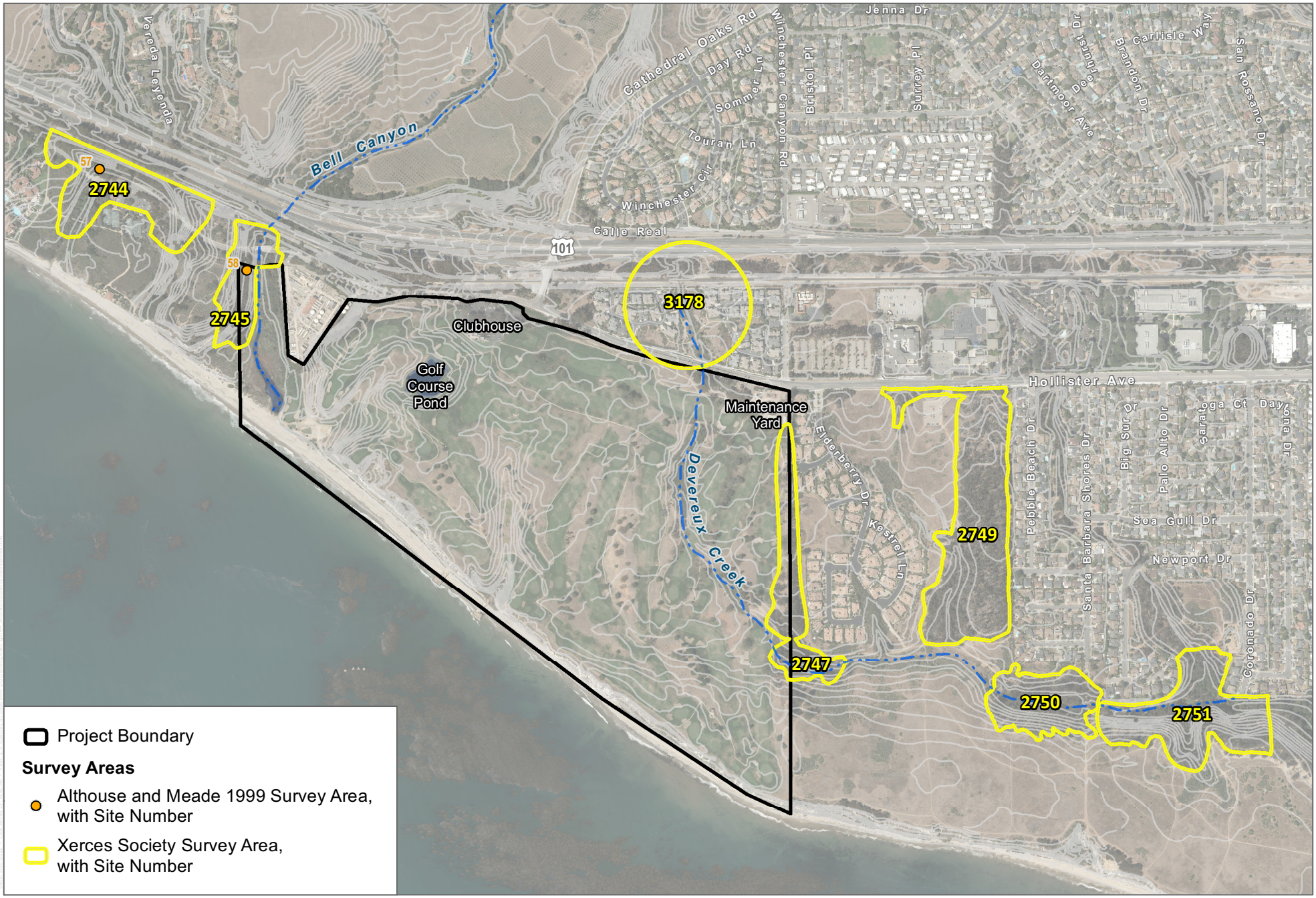

SOURCE: Aerial: Sanborn 2020

DUDEK

FIGURE 4

Monarch Butterfly Survey Area

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Project Boundary

Vegetation Communities

- AWT : Arroyo willow thickets Association
- UM : Upland mustards or star-thistle fields Semi-Natural Alliance
- BP-TD : Baccharis pilularis - *Toxicodendron diversilobum* Association
- CBB-ABS : California brittle bush - Ashy buckwheat scrub Alliance
- CLO : Coast live oak woodland Alliance
- CSS : Coastal sage scrub
- CTM : Cattail marshes Alliance
- CYS : Coyote brush scrub Alliance
- EM : Emergent Wetland
- EUC : Eucalyptus (*globulus, camaldulensis*) Provisional Semi-natural Association
- IPM : Ice plant mats Semi-Natural Alliance
- MC-MPS : Monterey cypress - Monterey pine stands Semi-Natural Alliance
- NG-MGG : Needle grass - Melic grass grassland Alliance
- PTMG : Pepper tree or Myoporum groves Semi-Natural Alliance
- QS : Quailbush scrub Alliance
- WOABG : Wild oats and annual brome grasslands Semi-Natural Alliance

Land Covers

- B : Beach
- DEV : Urban/Developed
- DH : Disturbed Habitat
- Golf Course : Golf Course - Developed
- ORN : Parks and ornamental plantings
- OW : Open water

SOURCE: Aerial: Sanborn 2020

DUDEK

0 215 430 Feet

FIGURE 5

Vegetation Communities and Land Covers

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Figure 6 Raptor Survey Results

Project Boundary

Raptor Survey Area

RaptorSurveyResults

Red-tailed hawk

Perching

Nest

Red-shouldered hawk

Calling

Perching

Nest (unsuccessful)

Cooper's hawk

Perching

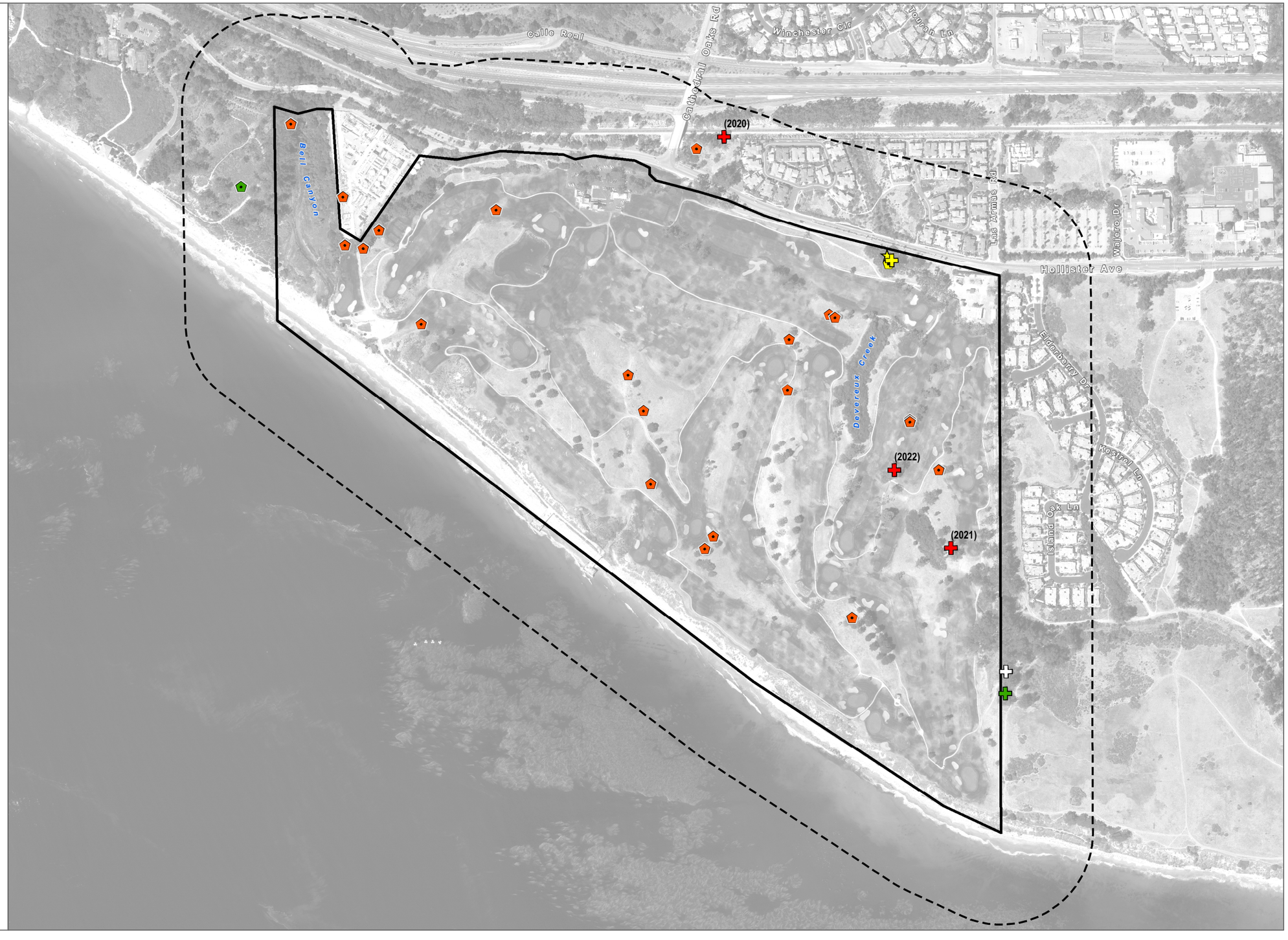
Nest (historic)

Great horned owl

Fledgling

White-tailed kite

Nest (historic)



SOURCE: Aerial: Sanborn 2020

DUDEK

0 270 540 Feet

FIGURE 6

Raptor Survey Results

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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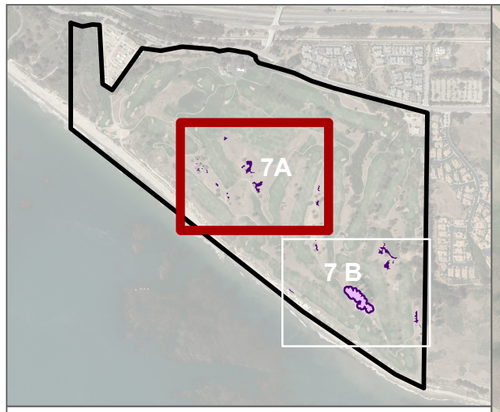

Project Boundary

Native Grassland Transects

Transect

Transect Start

Transect End

Native Grassland Assessment Results

Needle Grass Grassland (native grassland)

Native Grass Area (Does not meet native grassland criteria)

NG_01
NG_02
NG_03
NG_04
NG_05
NG_06
NG_07
NG_08
NG_09
NG_10
NG_11
NG_12
NG_13
NG_14
NG_15
NG_16
NG_32

SOURCE: Aerial: Sanborn 2020

DUDEK

0 62.5 125 Feet

FIGURE 7A

Native Grassland Assessment

Biological Resources Assessment Report for the Sandpiper Golf Club Project

Project Boundary

Native Grassland Transects

Transect

Transect Start

Transect End

Native Grassland Assessment Results

Needle Grass Grassland (native grassland)

Native Grass Area (Does not meet native grassland criteria)

NG_18
NG_17
NG_28
NG_31
NG_29
NG_30
NG_19
NG_20
NG_21
NG_22
NG_27
NG_26
NG_25
NG_24
NG_23

SOURCE: Aerial: Sanborn 2020

DUDEK

0 62.5 125 Feet

FIGURE 7 B

Native Grassland Assessment

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Project Boundary

Special-Status Plant Results

- Cliff malacothrix *(Malacothrix saxatilis* var.*saxatilis)*
- Red sand-verbena *(Abronia maritima)*
- Santa Barbara honeysuckle *(Lonicera subspicata* var.*subspicata)*
- Southern California black walnut *(Juglans californica)*
- Woolly seablite *(Suaeda taxifolia)*

SOURCE: Aerial: Sanborn 2020

DUDEK

0 215 430 Feet

FIGURE 8

Special-Status Plant Survey Results

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Project Boundary

Survey Areas

Althouse and Meade 1999 Survey Area, with Site Number

Xerces Society Survey Area, with Site Number

Survey Results

Monarch Butterfly (in flight)

Monarch Butterfly (clusters)

SOURCE: Aerial: Sanborn 2020

DUDEK

0 345 690 Feet

FIGURE 9

Monarch Butterfly Survey Results

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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- Project Boundary
- California Red-legged Frog Survey Area (500-foot Radius of Project Site)
- Survey Locations

California Red-Legged Frog (historical occurrence)

- Breeding
- Non-breeding

SOURCE: Aerial: Sanborn 2020

DUDEK

0 240 480 Feet

FIGURE 10

California Red-Legged Frog Survey Results

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Project Boundary

Other Special-Status Wildlife Species Observations

- California brown pelican
- Yellow-headed blackbird
- Globose dune beetle
- Tidewater goby

SOURCE: Aerial: Sanborn 2020

DUDEK

0 250 500 Feet

FIGURE 11

Other Special-Status Wildlife Species Observations

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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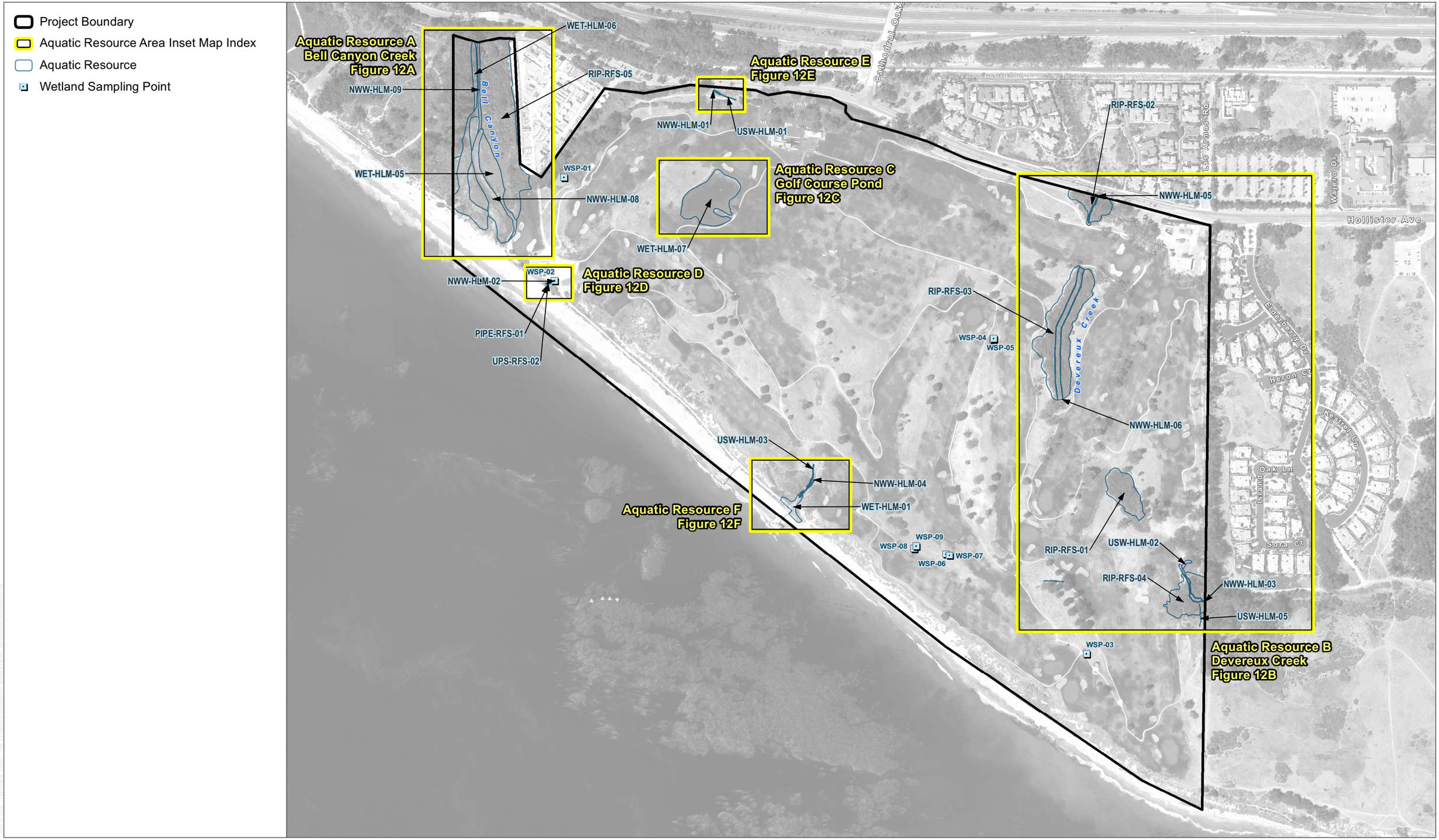
Figure 12 Aquatic Resources Delineation



SOURCE: Aerial: Sanborn 2020

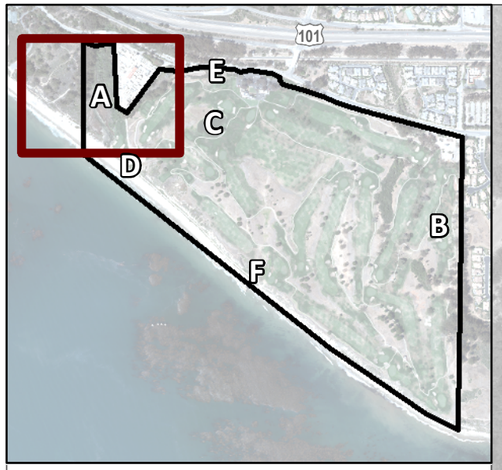
DUDEK

0 230 460 Feet

FIGURE 12

Aquatic Resources Delineation

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

U.S. Army Corps of Engineers

- Wetland Waters of the U.S.
- Non-Wetland Waters of the U.S.

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

- Waters of the State
- Waters of the State
- Waters of the State

California Department of Fish and Wildlife

- Riparian Area
- Streambed

California Coastal Commission/ City of Goleta

- Wetland
- Riparian

Other Features

- Wetland Sampling Point

WET-HLM-06

NWW-HLM-09

Bell Canyon

RIP-RFS-05

WSP-01

WET-HLM-05

NWW-HLM-08

SOURCE: Aerial: Sanborn 2020

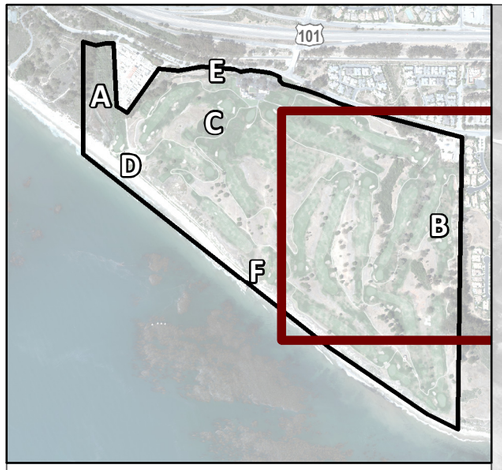
DUDEK

0 70 140 Feet

FIGURE 12A

Aquatic Resource A - Bell Canyon Creek

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

U.S. Army Corps of Engineers

Non-Wetland Waters of the U.S.

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

Waters of the State

California Department of Fish and Wildlife

Riparian

Streambed

California Coastal Commission/ City of Goleta

Wetland

Riparian

Other Features

Culvert

Wetland Sampling Point

OHWM Transects

Swale

CUL-RFS-07
NWW-HLM-05
T-NWW-HLM-05
CUL-RFS-06
RIP-RFS-02
CUL-RFS-08
T-NWW-HLM-06
RIP-RFS-03
WSP-05
WSP-04
Devereux Creek
NWW-HLM-06
RIP-RFS-01
WSP-09
WSP-08
WSP-07
WSP-06
USW-HLM-02
CUL-RFS-03
CUL-RFS-02
T-NWW-HLM-03
NWW-HLM-03
RIP-RFS-04
USW-HLM-05
Hollister Ave
Wajero Dr
Elderberry Dr
Heron Ct
Kestrel Ln
Oak Ln
Island
Sora Ct

SOURCE: Aerial: Sanborn 2020

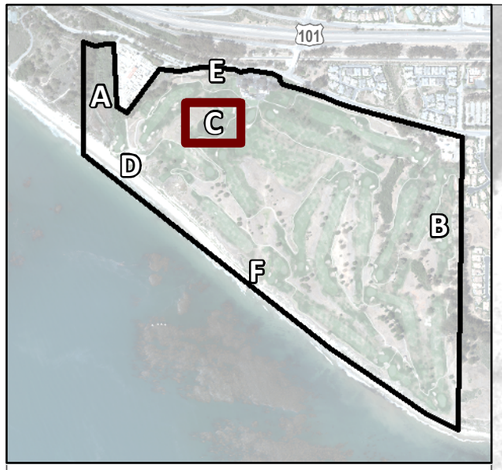
DUDEK

0 145 290 Feet

FIGURE 12B

Aquatic Resource B – Devereux Creek

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

California Department of Fish and Wildlife

Lake

California Coastal Commission/ City of Goleta

Wetland

SOURCE: Aerial: Sanborn 2020

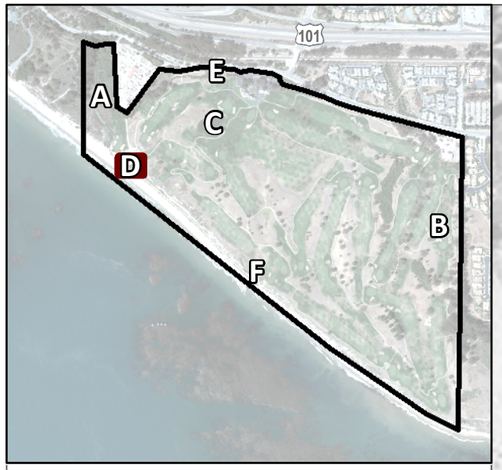
DUDEK

0 25 50 Feet

FIGURE 12C

Aquatic Resource C – Golf Course Pond

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

U.S. Army Corps of Engineers

Non-Wetland Waters of the U.S.

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

California Department of Fish and Wildlife

Streambed

California Coastal Commission/ City of Goleta

Wetland

Other Features

Wetland Sampling Point

OHWM Transects

Swale

Pipe

SOURCE: Aerial: Sanborn 2020

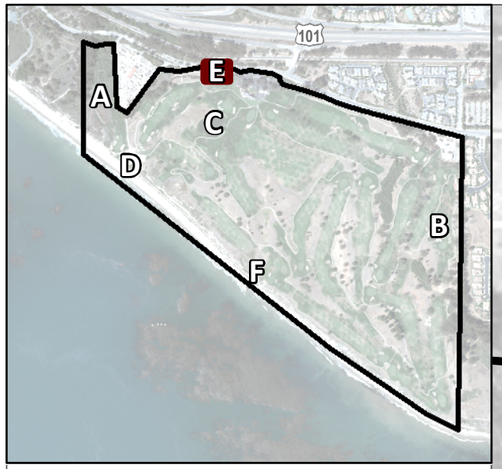
DUDEK

0 10 20 Feet

FIGURE 12D

Aquatic Resource D

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

California Department of Fish and Wildlife

Streambed

Other Features

Culvert

OHWM Transects

Swale

T-NWW-HLM-01

CUL-RFS-01

USW-HLM-01

NWW-HLM-01

SOURCE: Aerial: Sanborn 2020

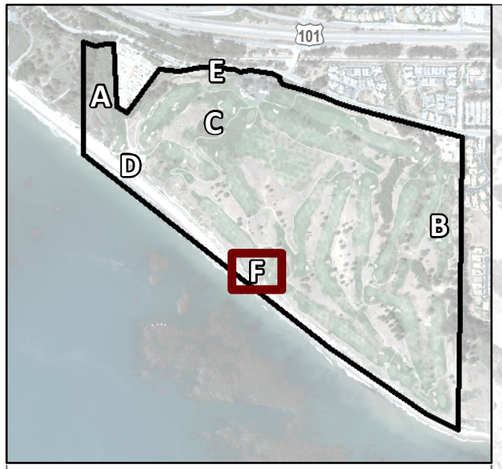
DUDEK

0 10 20 Feet

FIGURE 12E

Aquatic Resource E

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Potential Jurisdictional Aquatic Resources

U.S. Army Corps of Engineers

- Wetland Waters of the U.S.
- Non-Wetland Waters of the U.S.

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

- Waters of the State
- Waters of the State

California Department of Fish and Wildlife

- Streambed

California Coastal Commission/ City of Goleta

- Wetland

Other Features

- Culvert
- OHWM Transects
- Swale

SOURCE: Aerial: Sanborn 2020

DUDEK

0 20 40 Feet

FIGURE 12F

Aquatic Resource F

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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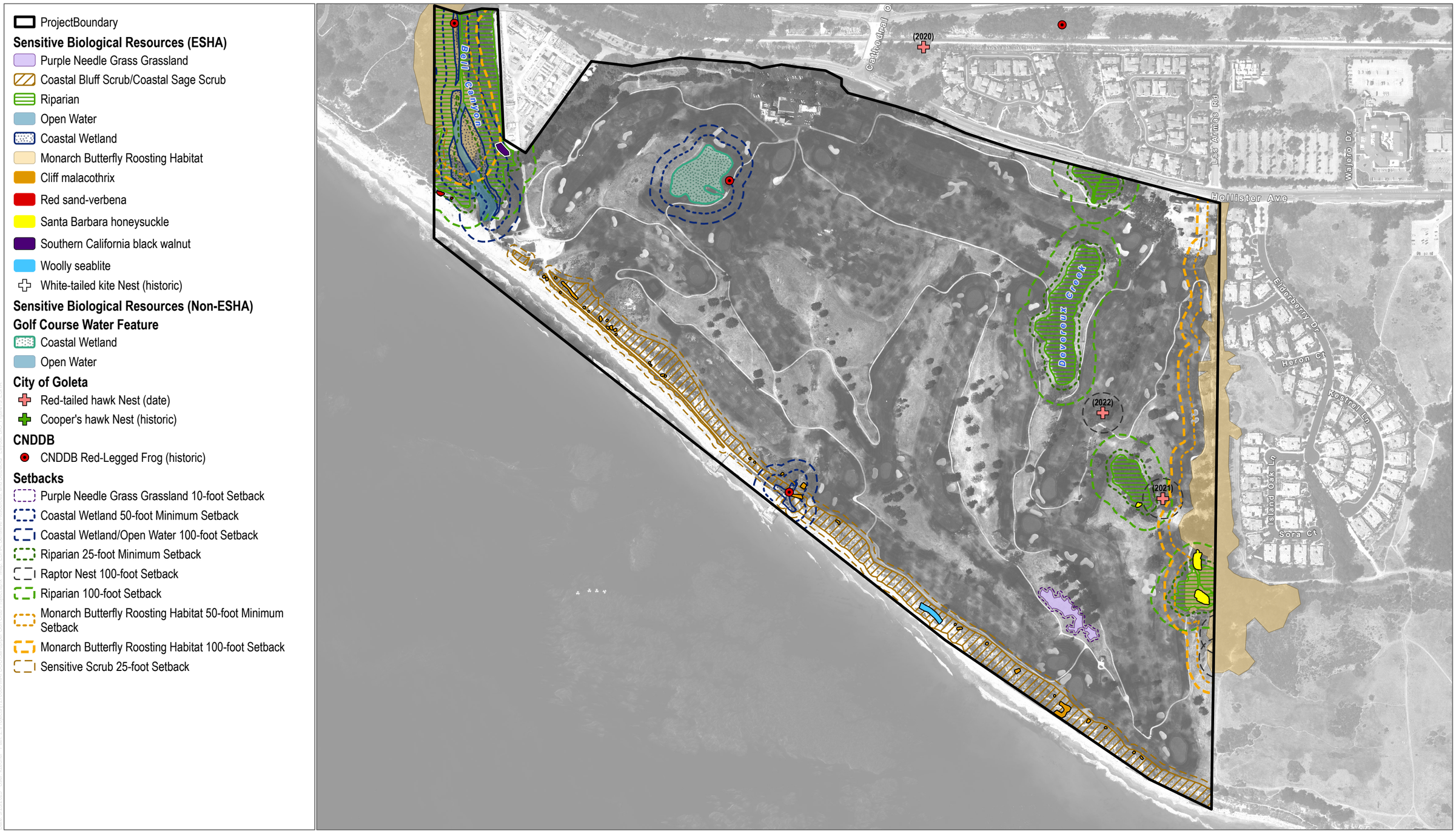

SOURCE: Sanborn 2020 Aerial

DUDEK

0 215 430 Feet

FIGURE 13

ESHA, Sensitive Resources, and Setbacks

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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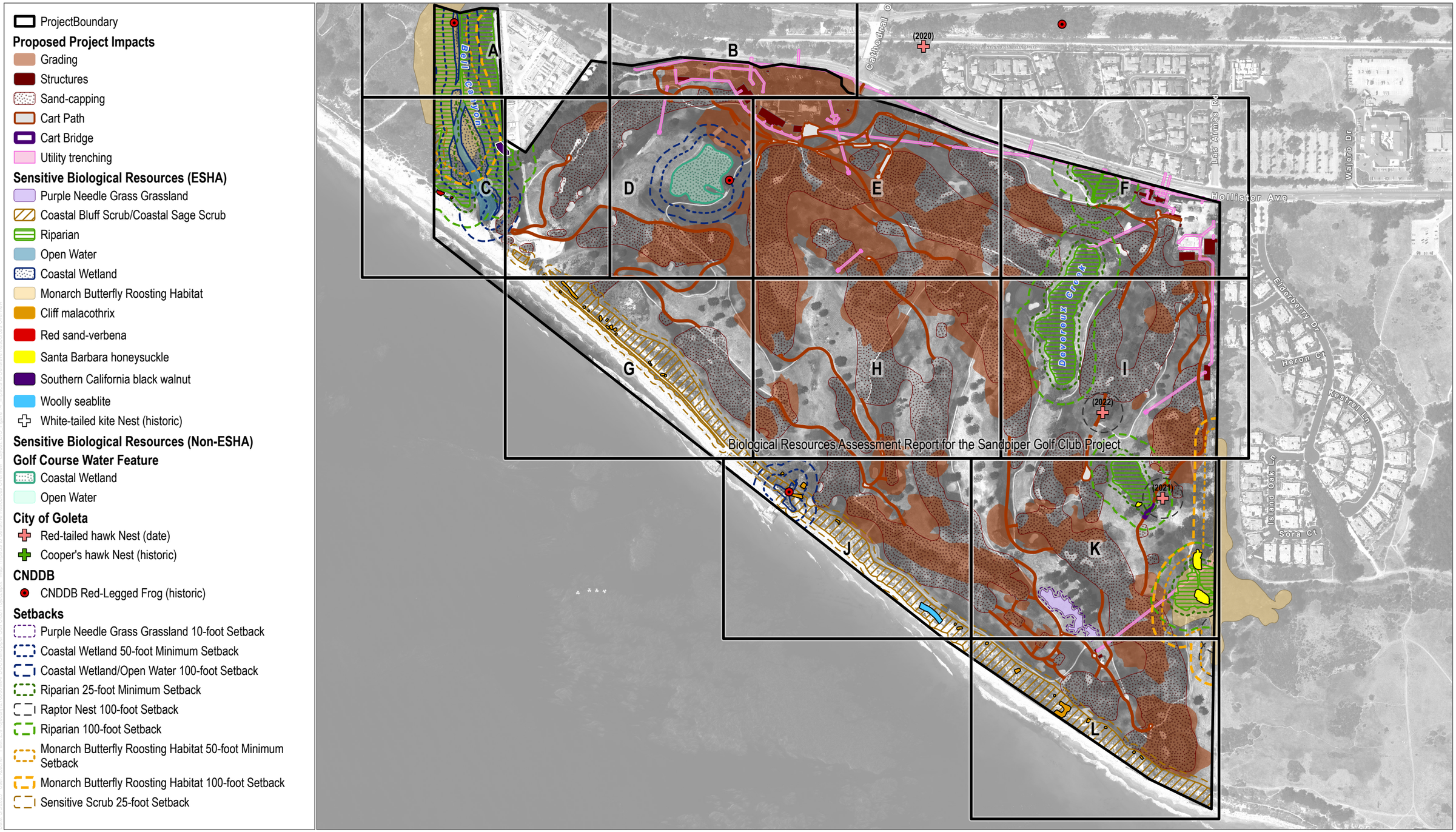

SOURCE: Sanborn 2020 Aerial

DUDEK

0 215 430 Feet

FIGURE 14

Impacts to Sensitive Resources Overview

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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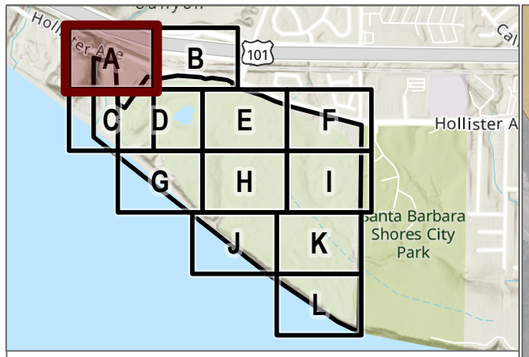
Figure 14-A Impacts to Sensitive Biological Resources



ProjectBoundary

Proposed Project Impacts

- Grading
- Sand-capping

Sensitive Biological Resources (ESHA)

- Riparian
- Open Water
- Coastal Wetland
- Monarch Butterfly Roosting Habitat
- Open Water

CNDDB

- CNDDB Red-Legged Frog (historic)

Setbacks

- Monarch Butterfly Roosting Habitat 50-foot Minimum Setback
- Monarch Butterfly Roosting Habitat 100-foot Setback
- Coastal Wetland 50-foot Minimum Setback
- Coastal Wetland/Open Water 100-foot Setback
- Riparian 25-foot Minimum Setback
- Riparian 100-foot Setback

SOURCE: Sanborn 2022 Aerial

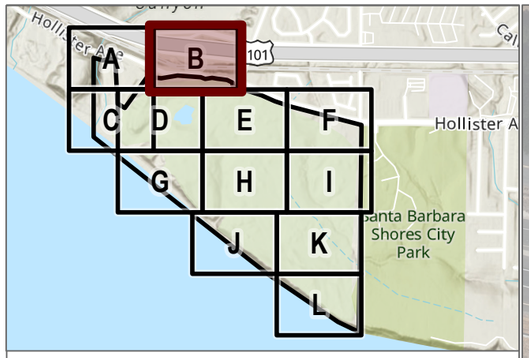
DUDEK

0 50 100 Feet

FIGURE 14-A

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

Proposed Project Impacts

- Grading
- Structures
- Sand-capping
- Cart Path
- Utility trenching

Sensitive Biological Resources (ESHA)

Setbacks

SOURCE: Sanborn 2022 Aerial

DUDEK

0 50 100 Feet

FIGURE 14-B

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project

SOURCE: Sanborn 2022 Aerial

DUDEK

0 50 100 Feet

FIGURE 14-C

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project

SOURCE: Sanborn 2022 Aerial

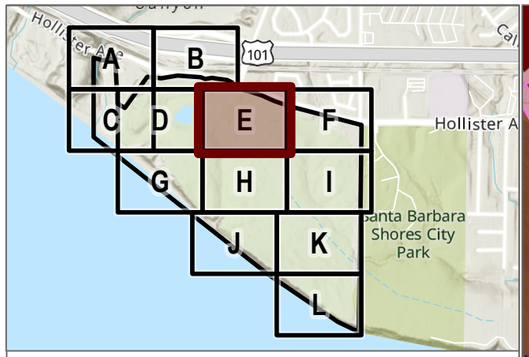
DUDEK

0 50 100 Feet

FIGURE 14-D

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

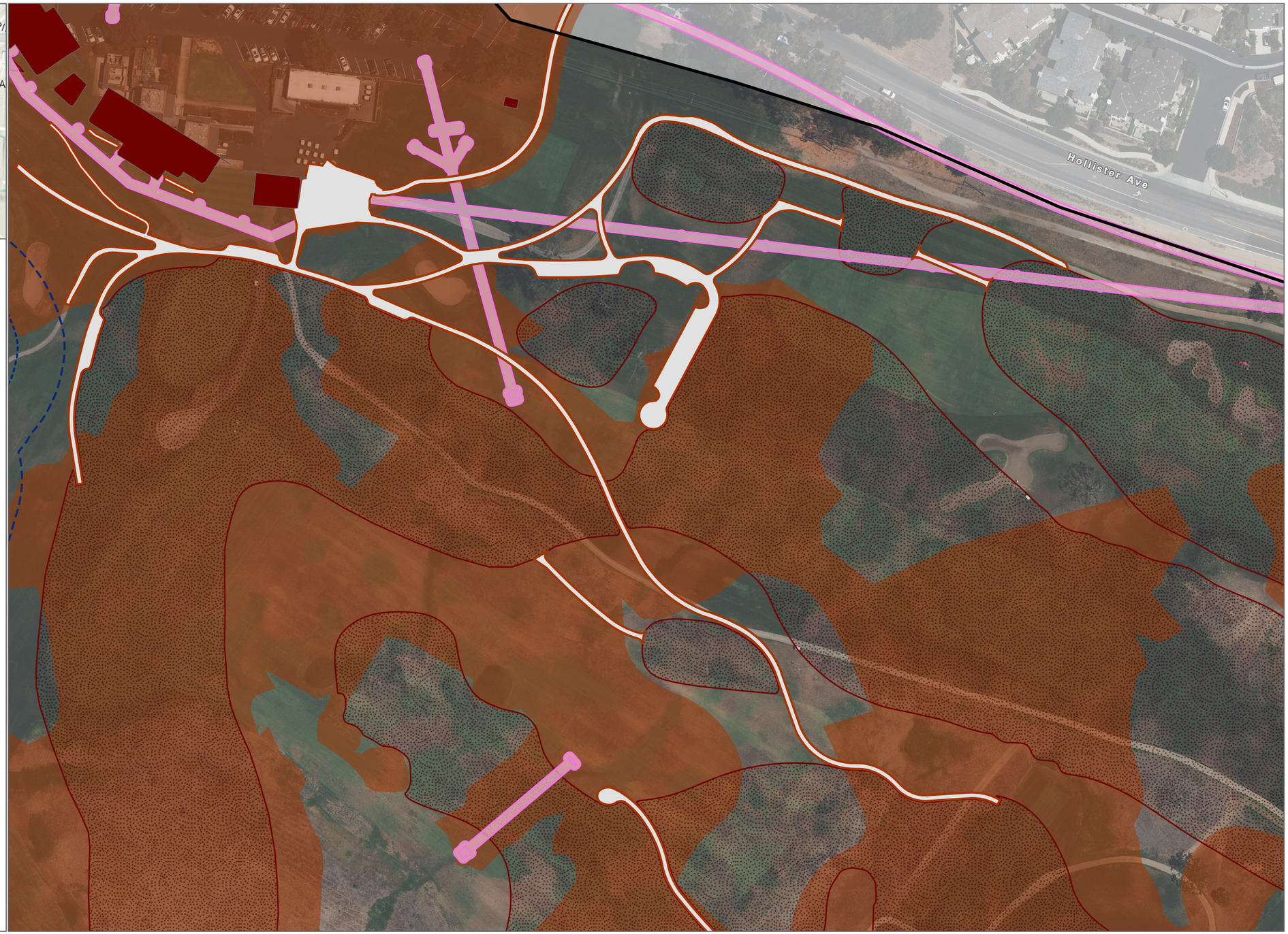
Proposed Project Impacts

- Grading
- Structures
- Sand-capping
- Cart Path
- Utility trenching

Sensitive Biological Resources (ESHA)

Setbacks

- Coastal Wetland 50-foot Minimum Setback
- Coastal Wetland/Open Water 100-foot Setback



SOURCE: Sanborn 2022 Aerial

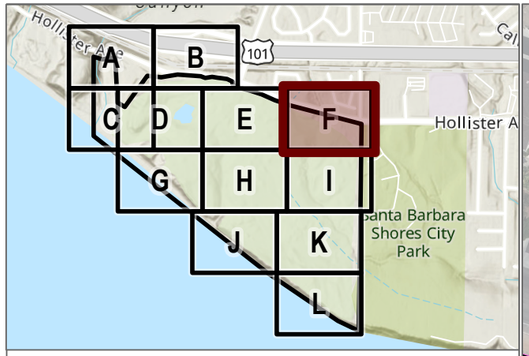
DUDEK

0 50 100 Feet

FIGURE 14-E

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

Proposed Project Impacts

- Grading
- Structures
- Sand-capping
- Cart Path
- Utility trenching

Sensitive Biological Resources (ESHA)

- Riparian

Setbacks

- Riparian 25-foot Minimum Setback
- Riparian 100-foot Setback

SOURCE: Sanborn 2022 Aerial

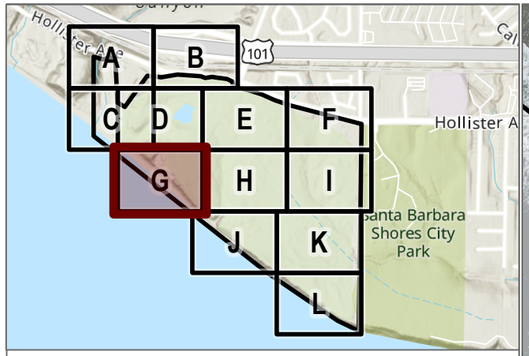
DUDEK

0 50 100 Feet

FIGURE 14-F

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

Proposed Project Impacts

Grading

Sand-capping

Cart Path

Sensitive Biological Resources (ESHA)

Coastal Bluff Scrub/Coastal Sage Scrub

Cliff malacothrix

Setbacks

Sensitive Scrub 25-foot Setback

Coastal Wetland/Open Water 100-foot Setback

SOURCE: Sanborn 2022 Aerial

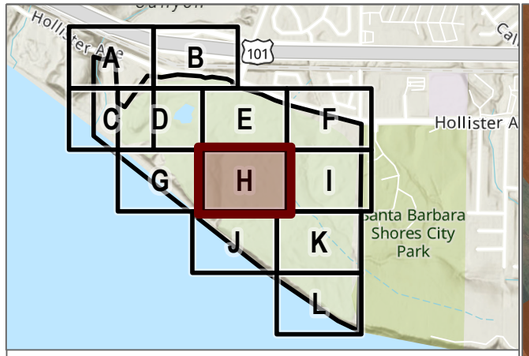
DUDEK

0 50 100 Feet

FIGURE 14-G

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

Proposed Project Impacts

- Grading
- Sand-capping
- Cart Path
- Utility trenching

Sensitive Biological Resources (ESHA)

- Coastal Bluff Scrub/Coastal Sage Scrub
- Cliff malacothrix

Setbacks

- Sensitive Scrub 25-foot Setback
- Coastal Wetland/Open Water 100-foot Setback

SOURCE: Sanborn 2022 Aerial

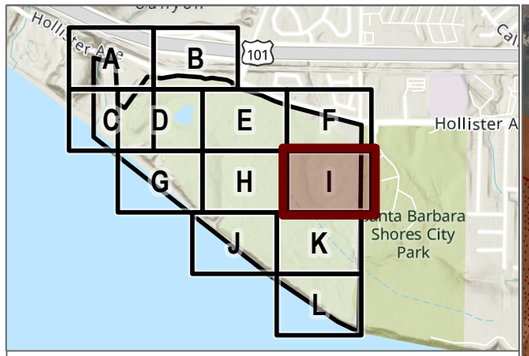
DUDEK

0 50 100 Feet

FIGURE 14-H

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



ProjectBoundary

Proposed Project Impacts

- Grading
- Structures
- Sand-capping
- Cart Path
- Utility trenching

Sensitive Biological Resources (ESHA)

- Riparian
- Monarch Butterfly Roosting Habitat

City of Goleta

- Red-tailed hawk Nest (date)

Setbacks

- Monarch Butterfly Roosting Habitat 50-foot Minimum Setback
- Monarch Butterfly Roosting Habitat 100-foot Setback
- Riparian 25-foot Minimum Setback
- Riparian 100-foot Setback
- Raptor Nest 100-foot Setback

SOURCE: Sanborn 2022 Aerial

DUDEK

N

0 50 100 Feet

FIGURE 14-I

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project

SOURCE: Sanborn 2022 Aerial

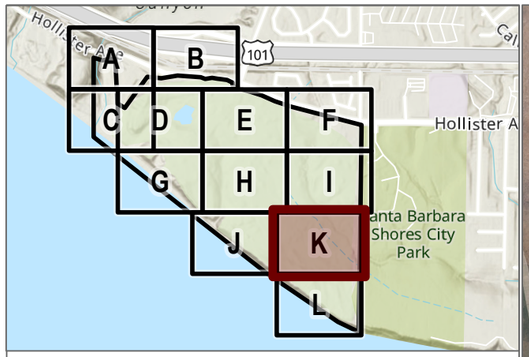
DUDEK

0 50 100 Feet

FIGURE 14-J

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



- ProjectBoundary

Proposed Project Impacts

- Grading
- Structures
- Sand-capping
- Cart Path
- Cart Bridge
- Utility trenching

Sensitive Biological Resources (ESHA)

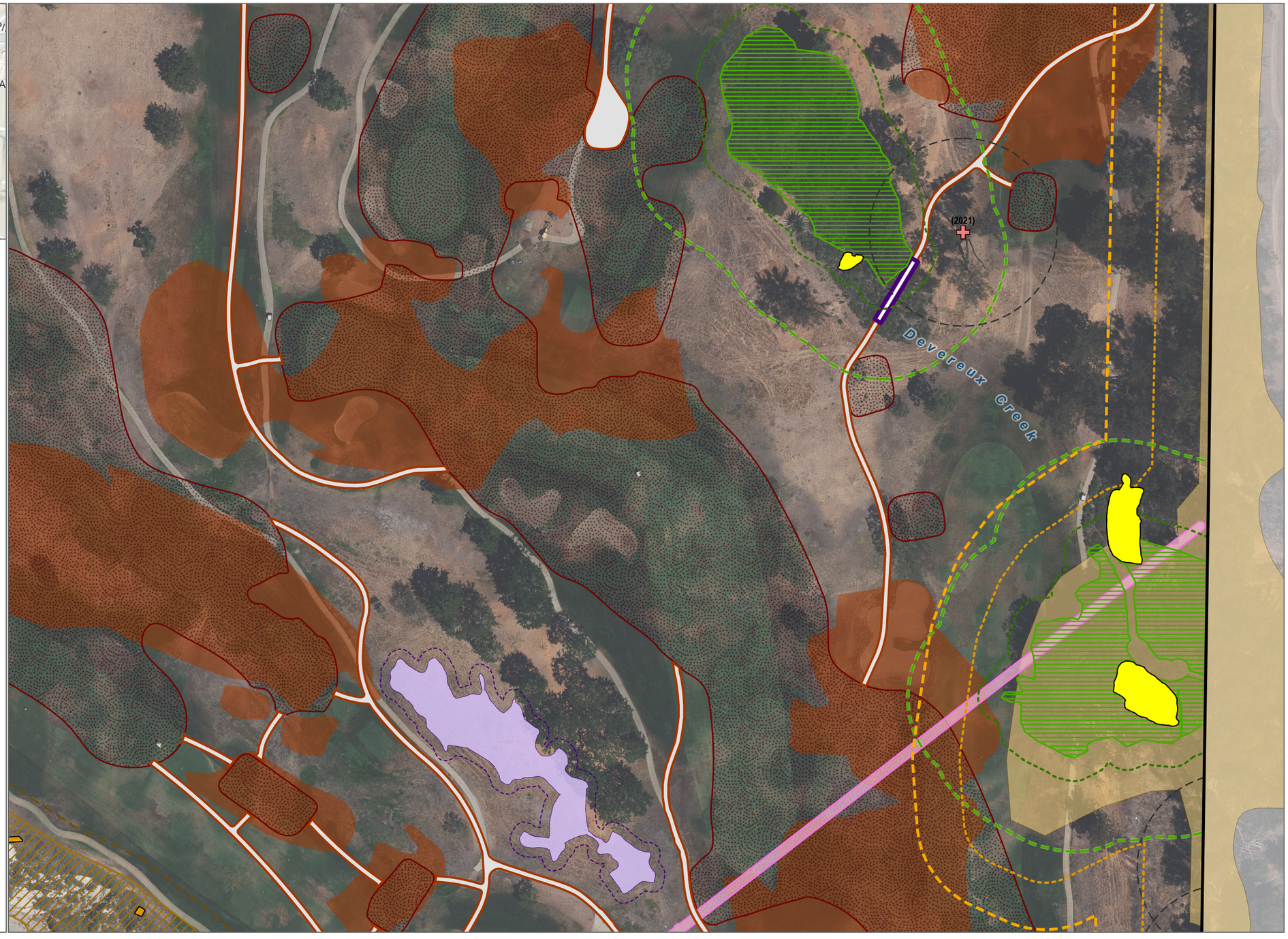
- Purple Needle Grass Grassland
- Coastal Bluff Scrub/Coastal Sage Scrub
- Riparian
- Monarch Butterfly Roosting Habitat
- Cliff malacothrix
- Santa Barbara honeysuckle

City of Goleta

- Red-tailed hawk Nest (date)

Setbacks

- Sensitive Scrub 25-foot Setback
- Monarch Butterfly Roosting Habitat 50-foot Minimum Setback
- Monarch Butterfly Roosting Habitat 100-foot Setback
- Riparian 25-foot Minimum Setback
- Riparian 100-foot Setback
- Raptor Nest 100-foot Setback
- Purple Needle Grass Grassland 10-foot Setback



SOURCE: Sanborn 2022 Aerial

DUDEK

0 50 100 Feet

FIGURE 14-K

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project

SOURCE: Sanborn 2022 Aerial

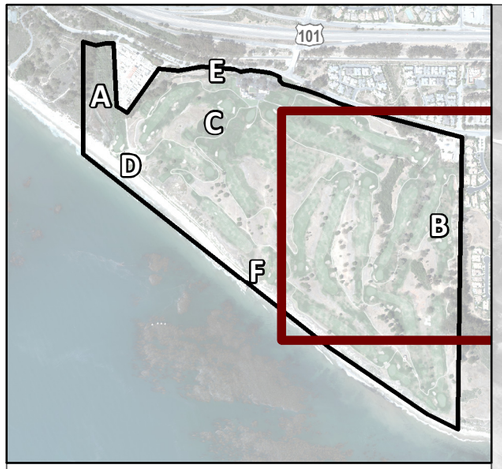
DUDEK

0 50 100 Feet

FIGURE 14-L

Impacts to Sensitive Resources

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Proposed Impacts

Permanent Impact

Trenching

Potential Jurisdictional Aquatic Resources

U.S. Army Corps of Engineers

Non-Wetland Waters of the U.S.

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

Waters of the State

California Department of Fish and Wildlife

Riparian

Streambed

California Coastal Commission/ City of Goleta

Wetland

Riparian

Other Features

Culvert

Wetland Sampling Point

OHWM Transects

Swale

CUL-RFS-07
NWW-HLM-05
T-NWW-HLM-05
CUL-RFS-06
RIP-RFS-02
CUL-RFS-08
T-NWW-HLM-06
RIP-RFS-03
WSP-05
WSP-04
Devereux Creek
NWW-HLM-06
RIP-RFS-01
WSP-09
WSP-08
WSP-07
WSP-06
USW-HLM-02
CUL-RFS-03
CUL-RFS-02
T-NWW-HLM-03
NWW-HLM-03
RIP-RFS-04
USW-HLM-05
Hollister Ave
Wajero Dr
Elderberry Dr
Heron Ct
Kestrel Ln
Oak Ln
Island
Sora Ct

SOURCE: Aerial: Sanborn 2020

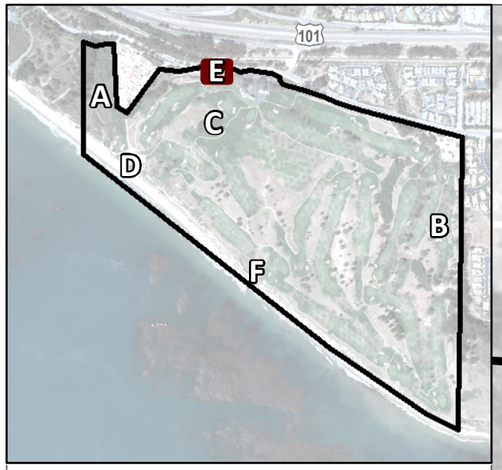
DUDEK

0 145 290 Feet

FIGURE 15B

Proposed Impacts to Aquatic Resource B – Devereux Creek

Biological Resources Assessment Report for the Sandpiper Golf Club Project



Project Boundary

Proposed Impacts

Permanent Impact

Potential Jurisdictional Aquatic Resources

Regional Water Quality Control Board

Waters of the State

California Department of Fish and Wildlife

Streambed

Other Features

Culvert

OHWM Transects

Swale

T-NWW-HLM-01

CUL-RFS-01

USW-HLM-01

NWW-HLM-01

SOURCE: Aerial: Sanborn 2020

DUDEK

0 10 20 Feet

FIGURE 15E

Proposed Impacts to Aquatic Resource E

Biological Resources Assessment Report for the Sandpiper Golf Club Project

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Appendix A
Local Policies

The City of Goleta adopted the Goleta General Plan/Coastal Land Use Plan in 2006 (City of Goleta 2006). The General Plan/Coastal Land Use Plan aims to create a coherent vision of the City's future that forms the foundation for the General Plan's goals, objectives, and policies. The General Plan/Coastal Land Use Plan Conservation Element includes a focus on preserving, protecting, and enhancing the City's natural resources. Policies relevant Sandpiper Golf Club are described below.

Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy [GP/CP]

CE 1.1 **Definition of Environmentally Sensitive Habitat Areas. [GP/CP]** ESHAs shall include, but are not limited to, any areas that through professional biological evaluation are determined to meet the following criteria:

a. Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments.

b. Any area that includes habitat for species and plant communities recognized as threatened or endangered by the state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; and those habitat types of limited distribution recognized to be of particular habitat value, including wetlands, riparian vegetation, eucalyptus groves associated with monarch butterfly roosts, oak woodlands, and savannas.

c. Any area that has been previously designated as an ESHA by the California Coastal Commission, the California Department of Fish and Game, City of Goleta, or other agency with jurisdiction over the designated area.

CE 1.2 **Designation of Environmentally Sensitive Habitat Areas. [GP/CP]** ESHAs in Goleta are generally shown in Figure 4-1, and Table 4-2 provides examples of the ESHAs and some locations of each. The provisions of this policy shall apply to all designated ESHAs. ESHAs generally include but are not limited to the following:

a. Creek and riparian areas.

b. Wetlands, such as vernal pools.

c. Coastal dunes, lagoons or estuaries, and coastal bluffs/coastal bluff scrub.

d. Beach and shoreline habitats.

e. Marine habitats.

f. Coastal sage scrub and chaparral.

g. Native woodlands and savannahs, including oak woodlands.

h. Native grassland.

i. Monarch butterfly aggregation sites, including autumnal and winter roost sites, and related habitat areas.

j. Beach and dune areas that are nesting and foraging locations for the western snowy plover.

k. Nesting and roosting sites and related habitat areas for various species of raptors.

l. Other habitat areas for species of wildlife or plants designated as rare, threatened, or endangered under state or federal law.

m. Any other habitat areas that are rare or especially valuable from a local, regional, or statewide perspective.

CE 1.6 **Protection of ESHAs. [GP/CP]** ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within ESHAs or their buffers. The following shall apply:

a. No development, except as otherwise allowed by this element, shall be allowed within ESHAs and/or ESHA buffers.

b. A setback or buffer separating all permitted development from an adjacent ESHA shall be required and shall have a minimum width as set forth in subsequent policies of this element. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area.

c. Public accessways and trails are considered resource-dependent uses and may be located within or adjacent to ESHAs. These uses shall be sited to avoid or minimize impacts on the resource to the maximum extent feasible. Measures— such as signage, placement of boardwalks, and limited fencing or other barriers—shall be implemented as necessary to protect ESHAs.

d. The following uses and development may be allowed in ESHAs or ESHA buffers only where there are no feasible, less environmentally damaging alternatives and will be subject to requirements for mitigation measures to avoid or lessen impacts to the maximum extent feasible: 1) public road crossings, 2) utility lines, 3) resource restoration and enhancement projects, 4) nature education, 5) biological research, and 6) Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives.

e. If the provisions herein would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel. Alternatively, the City may establish a program to allow transfer of development rights for such parcels to receiving parcels that have areas suitable for and are designated on the Land Use Plan map for the appropriate type of use and development.

CE 1.7 **Mitigation of Impacts to EHSAs. [GP/CP]** New development shall be sited and designed to avoid impacts to ESHAs. If there is no feasible alternative that can eliminate all impacts, then the alternative that would result in the fewest or least significant impacts shall be selected. Any impacts that cannot be avoided shall be fully mitigated, with priority given to onsite mitigation. Offsite mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on site. If impacts to onsite ESHAs occur in the Coastal Zone, any offsite mitigation area shall also be located within the Coastal Zone. All mitigation sites shall be monitored for a minimum period of 5 years following completion, with changes made as necessary based on annual monitoring reports. Where appropriate, mitigation sites shall be subject to deed restrictions. Mitigation sites shall be subject to the protections set forth in this plan for the habitat type unless the City has made a specific determination that the mitigation is unsuccessful and is to be discontinued.

CE 1.8 **ESHA Buffers. [GP/CP]** Development adjacent to an ESHA shall minimize impacts to habitat values or sensitive species to the maximum extent feasible. Native vegetation shall be provided in buffer areas to serve as transitional habitat. All buffers shall be of a sufficient size to ensure the biological integrity and preservation of the ESHA they are designed to protect.

CE 1.9 **Standards Applicable to Development Projects. [GP/CP]** The following standards shall apply to consideration of developments within or adjacent to ESHAs:

a. Site designs shall preserve wildlife corridors or habitat networks. Corridors shall be of sufficient width to protect habitat and dispersal zones for small mammals, amphibians, reptiles, and birds.

b. Land divisions for parcels within or adjacent to an ESHA shall only be allowed if each new lot being created, except for open space lots, is capable of being developed without building in any ESHA or ESHA buffer and without any need for impacts to ESHAs related to fuel modification for fire safety purposes.

c. Site plans and landscaping shall be designed to protect ESHAs. Landscaping, screening, or vegetated buffers shall retain, salvage, and/or reestablish vegetation that supports wildlife habitat whenever feasible. Development within or adjacent to wildlife habitat networks shall incorporate design techniques that protect, support, and enhance wildlife habitat values. Planting of nonnative, invasive species shall not be allowed in ESHAs and buffer areas adjacent to ESHAs.

d. All new development shall be sited and designed so as to minimize grading, alteration of natural landforms and physical features, and vegetation clearance in order to reduce or avoid soil erosion, creek siltation, increased runoff, and reduced infiltration of stormwater and to prevent net increases in baseline flows for any receiving water body.

e. Light and glare from new development shall be controlled and directed away from wildlife habitats. Exterior night lighting shall be minimized, restricted to low intensity fixtures, shielded, and directed away from ESHAs.

f. All new development should minimize potentially significant noise impacts on special-status species in adjacent ESHAs.

g. All new development shall be sited and designed to minimize the need for fuel modification, or weed abatement, for fire safety in order to preserve native and/or nonnative supporting habitats. Development shall use fire resistant materials and incorporate alternative measures, such as firewalls and landscaping techniques, that will reduce or avoid fuel modification activities.

h. The timing of grading and construction activities shall be controlled to minimize potential disruption of wildlife during critical time periods such as nesting or breeding seasons.

i. Grading, earthmoving, and vegetation clearance adjacent to an ESHA shall be prohibited during the rainy season, generally from November 1 to March 31, except as follows: 1) where erosion control measures such as sediment basins, silt fencing, sandbagging, or installation of geofabrics have been incorporated into the project and approved in advance by the City; 2) where necessary to protect or enhance the ESHA itself; or 3) where necessary to remediate hazardous flooding or geologic conditions that endanger public health and safety.

j. In areas that are not adjacent to ESHAs, where grading may be allowed during the rainy season, erosion control measures such as sediment basins, silt fencing, sandbagging, and installation of geofabrics shall be implemented prior to and concurrent with all grading operations.

Policy CE 2: Protection of Creeks and Riparian Areas [GP/CP]

CE 2.1 **Designation of Protected Creeks. [GP/CP]** The provisions of this policy shall apply to creeks shown in Figure 4-1. These watercourses and their associated riparian areas are defined as ESHAs. They serve as habitat for fish and wildlife, provide wildlife movement corridors, provide for the flow of stormwater runoff and floodwaters, and furnish open space and passive recreational areas for city residents.

CE 2.2 **Streamside Protection Areas. [GP/CP]** A streamside protection area (SPA) is hereby established along both sides of the creeks identified in Figure 4-1. The purpose of the designation shall be to preserve the SPA in a natural state in order to protect the associated riparian habitats and ecosystems. The SPA shall include the creek channel, wetlands and/or riparian vegetation related to the creek hydrology, and an adjacent upland buffer area. The width of the SPA upland buffer shall be as follows:

a. The SPA upland buffer shall be 100 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater. The City may consider increasing or decreasing the width of the SPA upland buffer on a case-by-case basis at the time of environmental review. The City may allow portions of a SPA upland buffer to be less than 100 feet wide, but not less than 25 feet wide, based on a site specific assessment if (1) there is no feasible alternative siting for development that will avoid the SPA upland buffer; and (2) the project's impacts will not have significant adverse effects on streamside vegetation or the biotic quality of the stream.

b. If the provisions above would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable Goleta General Plan/Coastal Land Use Plan 4.0 Conservation Element September 2006 4-14 economic use of the parcel, subject to approval of a conditional use permit.

CE 2.3 **Allowable Uses and Activities in Streamside Protection Areas. [GP/CP]** The following compatible land uses and activities may be allowed in SPAs, subject to all other policies of this plan, including those requiring avoidance or mitigation of impacts:

a. Agricultural operations, provided they are compatible with preservation of riparian resources.

b. Fencing and other access barriers along property boundaries and along SPA boundaries.

c. Maintenance of existing roads, driveways, utilities, structures, and drainage improvements.

d. Construction of public road crossings and utilities, provided that there is no feasible, less environmentally damaging alternative.

e. Construction and maintenance of foot trails, bicycle paths, and similar low-impact facilities for public access.

f. Resource restoration or enhancement projects.

g. Nature education and research activities.

h. Low-impact interpretive and public access signage.

i. Other such Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives.

CE 2.5 **Maintenance of Creeks as Natural Drainage Systems. [GP/CP]** Creek banks, creek channels, and associated riparian areas shall be maintained or restored to their natural condition wherever such conditions or opportunities exist. Creeks carry a significant amount of Goleta's stormwater flows. The following standards shall apply:

j. a. The capacity of natural drainage courses shall not be diminished by development or other activities.

k. b. Drainage controls and improvements shall be accomplished with the minimum vegetation removal and disruption of the creek and riparian ecosystem that is necessary to accomplish the drainage objective.

l. c. Measures to stabilize creek banks, improve flow capacity, and reduce flooding are allowed but shall not include installation of new concrete channels, culverts, or pipes except at street crossings, unless it is demonstrated that there is no feasible alternative for improving capacity.

m. d. Drainage controls in new development shall be required to minimize erosion, sedimentation, and flood impacts to creeks. Onsite treatment of stormwater through retention basins, infiltration, vegetated swales, and other best management practices (BMPs) shall be required in order to protect water quality and the biological functions of creek ecosystems.

n. e. Alteration of creeks for the purpose of road or driveway crossings shall be prohibited except where the alteration is not substantial and there is no other feasible alternative to provide access to new development on an existing legal parcel. Creek crossings shall be accomplished by bridging and shall be designed to allow the passage of fish and wildlife. Bridge abutments or piers shall be located outside creek beds and banks, unless an environmentally superior alternative exists. (Amended by Reso. 09-59, 11/17/09)

Policy CE 3: Protection of Wetlands [GP/CP]

CE 3.1 **Definition of Wetlands. [GP/CP]** Wetlands are defined as any area that meets the definition of a wetland as defined by the California Coastal Commission, California Department of Fish and Game, and U.S. 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 (soil, hydrology, or plants) to determine the boundary of a wetland.

CE 3.2 **Designation of Wetland ESHAs. [GP/CP]** Wetland ESHAs are included on Figure 4-1. In the Coastal Zone, wetlands are lands that may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. Goleta's wetlands are associated with small lagoons at the mouths of Bell Canyon and Tecolote Creeks, vernal pools, and freshwater marshes and ponds or impoundments, such as Lake Los Carneros. All wetlands are defined as ESHAs. Any unmapped areas that meet the criteria identified in CE 3.1 are wetlands and shall be granted all of the protections for wetlands set forth in this plan.

CE 3.4 **Protection of Wetlands in the Coastal Zone. [CP]** The biological productivity and the quality of wetlands shall be protected and, where feasible, restored in accordance with the federal and state regulations and policies that apply to wetlands within the Coastal Zone. Only uses permitted by the regulating agencies shall be allowed within wetlands. The filling, diking, or dredging of open coastal waters, wetlands, estuaries, and lakes is prohibited unless it can be demonstrated that:

a. There is no feasible, environmentally less damaging alternative to wetland fill.

b. The extent of the fill is the least amount necessary to allow development of the permitted use.

c. Mitigation measures have been provided to minimize adverse environmental effects.

d. The purposes of the fill are limited to: incidental public services, such as burying cables or pipes; restoration of wetlands; and nature study, education, or similar resource-dependent activities.

A wetland buffer of a sufficient size to ensure the biological integrity and preservation of the wetland shall be required. Generally the required buffer shall be 100 feet, but in no case shall

wetland buffers be 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. A 100-foot minimum buffer area shall not be reduced when it serves the functions and values of slowing and absorbing flood waters for flood and erosion control, sediment filtration, water purification, and ground water recharge. The buffer area shall serve as transitional habitat with native vegetation and shall provide physical barriers to human intrusion.

CE 3.7 **Lagoon Protection. [GP/CP]** The lagoons at the mouths of Bell Canyon and Tecolote Creeks shall be protected. Lagoon breaching or water level modification shall not be allowed.

Policy CE 4: Protection of Monarch Butterfly Habitat Areas [GP/CP]

CE 4.1 **Definition of Habitat Area. [GP/CP]** The monarch butterfly is recognized as a California and Goleta special resource. Although the species is not threatened with extinction, its autumnal and winter aggregation sites, or roosts, are especially vulnerable to disturbance. Sites that provide the key elements essential for successful monarch butterfly aggregation areas and are locations where monarchs have been historically present shall be considered ESHAs. These elements include stands of eucalyptus or other suitable trees that offer shelter from strong winds and storms, provide a microclimate with adequate sunlight, are situated near a source of water or moisture, and that provide a source of nectar to nourish the butterflies.

CE 4.2 **Designation of Monarch Butterfly ESHAs. [GP/CP]** Existing and known historical monarch roost sites, as shown on Figure 4-1, are hereby designated as ESHAs. These include about 20 known roosts, eight of which comprise the Ellwood Complex, a series of sites within a network consisting of eucalyptus groves and windrows interspersed by open fields and crossed by small creeks. This network includes several separate but interconnected autumnal and winter roost sites. The Ellwood Main site, the largest roost in Santa Barbara County and one of the largest in the state, occupies a site along Devereux Creek in the Sperling Preserve, a City-owned tract situated near the coastal bluffs in western Goleta.

CE 4.4 **Protection of Monarch Butterfly ESHAs. [GP/CP]** Monarch butterfly ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within these ESHAs or their buffer areas. The following standards shall apply:

a. No development, except as otherwise allowed by this policy, shall be allowed within monarch butterfly ESHAs or ESHA buffers.

b. Since the specific locations of aggregation sites may vary from one year to the next, the focus of protection shall be the entire grove of trees rather than individual trees that are the location of the roost.

c. Removal of vegetation within monarch ESHAs shall be prohibited, except for minor pruning of trees or removal of dead trees and debris that are a threat to public safety.

d. Public accessways are considered resource-dependent uses and may be located within a monarch ESHA or its buffer; however, such accessways shall be sited to avoid or minimize impacts to aggregation sites.

e. Interpretative signage is allowed within a monarch ESHA or its buffer, but shall be designed to be visually unobtrusive.

f. Butterfly research, including tree disturbance or other invasive methods, may be allowed subject to City approval of a permit.

CE 4.5 **Buffers Adjacent to Monarch Butterfly ESHAs. [GP/CP]** A buffer of a sufficient size to ensure the biological integrity and preservation of the monarch butterfly habitat, including aggregation sites and the surrounding grove of trees, shall be required. Buffers shall not be less than 100 feet around existing and historic roost sites as measured from the outer extent of the tree canopy. The buffer area shall serve as transitional habitat with native vegetation and shall provide physical barriers to human intrusion. The buffer may be reduced to 50 feet in circumstances where the trees contribute to the habitat but are not considered likely to function as an aggregation site, such as along narrow windrows. Grading and other activities that could alter the surface hydrology that sustains the groves of trees are prohibited within or adjacent to the buffer area.

CE 4.6 **Standards Applicable to New Development Adjacent to Monarch ESHAs. [GP/CP]** The following standards shall apply to consideration of proposals for new development adjacent to monarch ESHAs or ESHA buffers:

a. A site-specific biological study, prepared by an expert approved by the City who is qualified by virtue of education and experience in the study of monarch butterflies, shall be required to be submitted by the project proponent.

b. The study shall include preparation of a Monarch Butterfly Habitat Protection Plan, which at a minimum shall include: 1) the mapped location of the cluster of trees where monarchs are known, or have been known, to roost in both autumnal and over-wintering aggregations; 2) an estimate of the size of the population within the colony; 3) the mapped extent of the entire habitat area; and 4) the boundaries of the buffer zone around the habitat area.

c. A temporary fence shall be installed along the outer boundary of the buffer zone prior to and during any grading and construction activities on the site.

d. If an active roost or aggregation is present on the project site, any construction grading, or other development within 200 feet of the active roost, shall be prohibited between October 1 and March 1.

Policy CE 5: Protection of Other Terrestrial Habitat Areas [GP/CP]

CE 5.1 **Designation of Other Terrestrial ESHAs. [GP/CP]** The following habitats, which are not specifically included in other policies, are hereby designated ESHAs:

a. Native grasslands.

b. Coastal bluff scrub, coastal sage-scrub, and chaparral.

CE 5.2 **Protection of Native Grasslands. [GP/CP]** In addition to the provisions of Policy CE 1, the following standards shall apply:

a. For purposes of this policy, existing native grasslands are defined as an area where native grassland species comprise 10 percent or more of the total relative plant cover. Native grasslands that are dominated by perennial bunch grasses tend to be patchy. Where a high density of separate small patches occurs in an area, the whole area shall be delineated as native grasslands.

b. To the maximum extent feasible, development shall avoid impacts to native grasslands that would destroy, isolate, interrupt, or cause a break in continuous habitat that would (1) disrupt associated animal movement patterns and seed dispersal, or (2) increase vulnerability to weed invasions.

c. Removal or disturbance to a patch of native grasses less than 0.25 acre 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.

d. Impacts to protected native grasslands shall be minimized by providing at least a 10-foot buffer that is restored with native species around the perimeter of the delineated native grassland area.

e. Removal of nonnative and invasive exotic species shall be allowed; revegetation shall be with plants or seeds collected within the same watershed whenever feasible.

CE 5.3 **Protection of Costal Bluff Scrub, Coastal Sage Scrub, and Chaparral ESHA. [GP/CP]** In addition to the provisions of Policy CE 1, the following standards shall apply:

a. For purposes of this policy, coastal bluff scrub is defined as scrub habitat occurring on exposed coastal bluffs. Example species in bluff scrub habitat include Brewer's saltbush (*Atriplex lentiformis*), lemonade berry (*Rhus integrifolia*), seashore blight (*Suaeda californica*), seacliff buckwheat (*Eriogonum parvifolium*), California sagebrush (*Artemisia californica*), and coyote bush (*Baccharis pilularis*). Coastal sage scrub is defined as a drought-tolerant, Mediterranean habitat characterized by soft-leaved, shallow-rooted subshrubs such as California sagebrush (*Artemisia californica*), coyote bush (*Baccharis pilularis*), and California encelia (*Encelia californica*). It is found at lower elevations in both coastal and interior areas where moist maritime air penetrates inland. Chaparral is defined as fire- and drought-adapted woody, evergreen shrubs generally occurring on hills and lower mountain slopes. The area must have both the compositional and structural characteristics of coastal bluff scrub, coastal sage scrub, or chaparral habitat as described in Preliminary Descriptions of Terrestrial Natural Communities of California (Holland 1986) or other classification system recognized by the California Department of Fish and Game.

b. To the maximum extent feasible, development shall avoid impacts to coastal bluff scrub, coastal sage scrub, or chaparral habitat that is part of a wildlife movement corridor and the

impact would preclude animal movement or isolate ESHAs previously connected by the corridor such as (1) disrupting associated bird and animal movement patterns and seed dispersal, and/or (2) increasing erosion and sedimentation impacts to nearby creeks or drainages.

c. Impacts to coastal bluff scrub, coastal sage scrub, and chaparral ESHAs shall be minimized by providing at least a 25-foot buffer restored with native species around the perimeter of the ESHA, unless the activity is allowed under other CE subpolicies and mitigation is applied per CE 1.7

d. Removal of nonnative and invasive exotic species shall be allowed; revegetation shall be with plants or seeds collected within the same watershed whenever feasible.

Policy CE 6: Protection of Marine Habitat Areas [GP/CP]

CE 6.1 **Designation of Marine ESHAs. [GP/CP]** All marine areas offshore from Goleta extending from the mean high tide line seaward to the outer limit of state waters are hereby designated ESHAs. These areas include Areas of Special Biological Significance and Marine Protected Areas (as designated by the California Department of Fish and Game), and shall be granted the protections provided for ESHAs in this plan.

CE 6.2 **Protection of Marine ESHAs. [GP/CP]** The following protections shall apply to marine ESHAs:

a. Marine ESHAs shall be protected against significant disruption of habitat values, and only uses dependent on such resources, such as fishing, whale watching, ocean kayaking, and similar recreational activities, should be allowed within the offshore area.

b. All existing oil and gas production facilities, including platform Holly and the piers at State Lease 421, shall be decommissioned immediately upon termination of production activities. All facilities and debris shall be completely removed and the sites restored to their prior natural condition as part of the decommissioning activities. No new oil and gas leases or facilities shall be allowed within state waters offshore from Goleta.

c. Permitted uses or developments shall be compatible with marine and beach ESHAs.

d. Any development on beach or ocean bluff areas adjacent to marine and beach habitats shall be sited and designed to prevent impacts that could significantly degrade the marine ESHAs. All uses shall be compatible with the maintenance of the biological productivity of such areas. Grading and landform alteration shall be limited to minimize impacts from erosion and sedimentation on marine resources.

e. Marine mammal habitats, including haul-out areas, shall not be altered or disturbed by development of recreational facilities or activities, or any other new land uses and development.

f. Near-shore shallow fish habitats and shore fishing areas shall be preserved and, where appropriate and feasible, enhanced.

g. Activities by the California Department of Fish and Game; Central Coast Regional Water Quality Control Board; State Lands Commission; and Division of Oil, Gas and Geothermal Resources to increase monitoring to assess the conditions of near-shore species, water quality, and kelp beds, and/or to rehabilitate areas that have been degraded by human activities, such as oil and gas production facilities, shall be encouraged and allowed.

Policy CE 7: Protection of Beach and Shoreline Habitats [GP/CP]

CE 7.1 **Designation of Beach and Shoreline ESHAs. [GP/CP]** All areas extending from the mean high tide line landward to the top of the ocean bluffs are hereby designated as ESHAs.

CE 7.2 **Protection of Dunes. [GP/CP]** Dune ESHAs shall be protected and, where feasible, enhanced. Vehicle traffic through dunes shall be prohibited. Where pedestrian access through dunes is allowed, well-defined footpaths or other means of directing use and minimizing adverse impacts shall be used. Active nesting areas for sensitive birds, such as the western snowy plovers and least terns, shall be protected by fencing, signing, and other means.

CE 7.3 **Protection of Beach Areas. [GP/CP]** Access to beach areas by motorized vehicles, including offroad vehicles, shall be prohibited, except for beach maintenance and emergency response vehicles of public agencies. Emergency services shall not include routine vehicular patrolling by private security forces. Any beach grooming activities shall employ hand-grooming methods, and mechanical beach grooming equipment and methods shall be prohibited. All vehicular uses on beach areas shall avoid ESHAs to the maximum extent feasible.

CE 7.4 **Permitted Uses of Beaches and Shoreline Areas. [GP/CP]** Uses on beaches and shoreline areas shall be limited to coastal-dependent activities that are compatible with preservation of the quality of the resource, including coastal-dependent recreation activities such as swimming, surfing, boating and kayaking, and fishing. Any commercial coastal-dependent recreation activities that would limit use of beach and shoreline areas to customers and exclude the general public shall be subject to approval of a permit by the City. Any such permitted uses shall not degrade the quality or the habitat or cause impacts to birds and other wildlife.

CE 7.5 **Shoreline Protective Structures. [GP/CP]** New shoreline protective structures such as seawalls, revetments, and riprap shall be prohibited, except as provided in Policies SE 2 and SE 3.

CE 7.7 **Recreation Facilities on Beach Areas. [GP/CP]** When permitted, new public access and recreational facilities or structures on beaches shall be designed and located to minimize impacts to ESHAs and marine resources.

CE 7.8 **Protection of Seabird Nest Areas. [GP/CP]** To protect seabird nesting areas, no pedestrian access shall be provided on bluff faces except along existing and planned formal trails or stairways shown in this plan. New structures shall be prohibited on bluff faces except for stairs, ramps, or trails to provide for public beach access.

Policy CE 8: Protection of Special-Status Species [GP/CP]

CE 8.1 **ESHA Designation. [GP/CP]** Requisite habitats for individual occurrences of special-status plants and animals, including candidate species for listing under the state and federal endangered species acts, California species of special concern, California Native Plant Society List 1B plants, and other species protected under provisions of the California Fish and Game Code shall be preserved and protected, and their occurrences, including habitat requirements, shall be designated as ESHAs. These habitats include, but are not limited to, the following:

a. Special-status plant species such as Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), southern tarplant (*Centromadia parryi* ssp. *australis*) and black-flowered figwort (*Scrophularia atrata*).

b. Habitat capable of supporting special-status invertebrate species, such as the globose dune beetle (*Coelus globosus*), and roosting habitat for the monarch butterfly.

c. Aquatic habitat capable of supporting special-status fish species such as the steelhead trout (*Oncorhynchus mykiss*) and tidewater goby (*Eucyclogobius newberryi*).

d. Habitat capable of supporting special-status amphibians and reptiles such as the red-legged frog (*Rana aurora draytonii*) and western pond turtle (*Clemmys marmorata pallida*).

e. Nesting and roosting areas for various species of raptors such as Cooper's hawks (*Accipiter cooperii*), red-tailed hawks (*Buteo jamaicensis*), white-tailed kites (*Elanus leucurus*), and turkey vultures (*Cathartes aura*).

f. Nesting habitat for other special-status bird species such as western snowy plover, southwestern willow flycatcher (*Empidonax traillii extimus*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Dendroica petechia*), or tri-colored blackbird (*Agelaius tricolor*).

g. Nesting and foraging habitat for special-status mammals such as pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), Yuma myotis (*Myotis yumanensis*), and American badger (*Taxidea taxus*).

CE 8.2 **Protection of Habitat Areas. [GP/CP]** All development shall be located, designed, constructed, and managed to avoid disturbance of adverse impacts to special-status species and their habitats, including spawning, nesting, rearing, roosting, foraging, and other elements of the required habitats.

CE 8.3 **Site-Specific Biological Resources Study. [GP/CP]** Any areas not designated on Figure 4-1 that meet the ESHA criteria for the resources specified in CE 8.1 shall be accorded the same protections as if the area were shown on the figure. Proposals for development on sites where ESHAs are shown on the figure, or where there is probable cause to believe that an ESHA may exist, shall be required to provide the City with a site-specific biological study that includes the following information:

a. A base map that delineates topographic lines, parcel boundaries, and adjacent roads.

b. A vegetation map that 1) identifies trees or other sites that are existing or historical nests for the species of concern and 2) delineates other elements of the habitat such as roosting sites and foraging areas.

c. A detailed map that shows the conclusions regarding the boundary, precise location and extent, or current status of the ESHA based on substantial evidence provided in the biological studies.

d. A written report that summarizes the survey methods, data, observations, findings, and recommendations.

CE 8.4 **Buffer Areas for Raptor Species. [GP/CP]** Development shall be designed to provide a 100-foot buffer around active and historical nest sites for protected species of raptors when feasible. In existing developed areas, the width of the buffer may be reduced to correspond to the actual width of the buffer for adjacent development. If the biological study described in CE 8.3 determines that an active raptor nest site exists on the subject property, whenever feasible no vegetation clearing, grading, construction, or other development activity shall be allowed within a 300-foot radius of the nest site during the nesting and fledging season.

Policy CE 9: Protection of Native Woodlands [GP/CP]

CE 9.1 **Definition of Protected Trees. [GP/CP]** New development shall be sited and designed to preserve the following species of native trees: 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, unless as otherwise allowed in CE 9.

CE 9.2 **Tree Protection Plan. [GP/CP]** Applications for new development on sites containing protected native trees shall include a report by a certified arborist or other qualified expert. The report shall include an inventory of native trees and a Tree Protection Plan.

CE 9.3 **Native Oak Woodlands or Savannas. [GP/CP]** Native oak woodlands and savannas are designated as ESHAs and shall be preserved and protected. A minimum buffer area shall be established via the implementation of CE-IA-4, Preparation of a Tree Protection Ordinance.

CE 9.4 **Tree Protection Standards. [GP/CP]** The following impacts to native trees and woodlands should be avoided in the design of projects: 1) removal of native trees; 2) fragmentation of habitat; 3) removal of understory; 4) disruption of the canopy, and 5) alteration of drainage patterns. Structures, including roads and driveways, should be sited to prevent any encroachment into the protection zone of any protected tree and to provide an adequate buffer outside of the protection zone of individual native trees in order to allow for future growth. Tree protection standards shall be detailed in the Tree Protection Ordinance called for in CE-IA-4.

CE 9.5 **Mitigation of Impacts to Native Trees. [GP/CP]** Where the removal of mature native trees cannot be avoided through the implementation of project alternatives or where development encroaches into the protected zone and could threaten the continued viability of the tree(s), mitigation measures shall include, at a minimum, the planting of replacement trees on site, if suitable area exists on the subject site, or offsite if suitable onsite area is unavailable, consistent with the Tree Protection Ordinance (see also CE-IA-4). The Tree Protection Ordinance shall establish the

mitigation ratios for replacement trees for every tree removed. Where onsite mitigation is not feasible, offsite mitigation shall be provided by planting of replacement trees at a site within the same watershed. If the tree removal occurs at a site within the Coastal Zone, any offsite mitigation area shall also be located within the Coastal Zone. Minimum sizes for various species of replacement trees shall be established in the Tree Protection Ordinance. Mitigation sites shall be monitored for a period of 5 years. The City may require replanting of trees that do not survive.

Policy CE 10: Watershed Management and Water Quality [GP/CP]

CE 10.1 **New Development and Water Quality. [GP/CP]** New development shall not result in the degradation of the water quality of groundwater basins or surface waters; surface waters include the ocean, lagoons, creeks, ponds, and wetlands. Urban runoff pollutants shall not be discharged or deposited such that they adversely affect these resources.

CE 10.2 **Siting and Design of New Development. [GP/CP]** New development shall be sited and designed to protect water quality and minimize impacts to coastal waters by incorporating measures designed to ensure the following: a. Protection of areas that provide important water quality benefits, areas necessary to maintain riparian and aquatic biota, and areas susceptible to erosion and sediment loss. b. Limiting increases in areas covered by impervious surfaces. c. Limiting the area where land disturbances occur, such as clearing of vegetation, cut-and-fill, and grading, to reduce erosion and sediment loss. d. Limiting disturbance of natural drainage features and vegetation.

CE 10.3 **Incorporation of Best Management Practices for Stormwater Management. [GP/CP]** New development shall be designed to minimize impacts to water quality from increased runoff volumes and discharges of pollutants from nonpoint sources to the maximum extent feasible, consistent with the City's Storm Water Management Plan or a subsequent Storm Water Management Plan approved by the City and the Central Coast Regional Water Quality Control Board. Post construction structural BMPs shall be designed to treat, infiltrate, or filter stormwater runoff in accordance with applicable standards as required by law. Examples of BMPs include, but are not limited to, the following:

a. Retention and detention basins.

b. Vegetated swales.

c. Infiltration galleries or injection wells.

d. Use of permeable paving materials.

e. Mechanical devices such as oil-water separators and filters.

f. Revegetation of graded or disturbed areas.

g. Other measures as identified in the City's adopted Storm Water Management Plan and other City-approved regulations.

CE 10.4 **New Facilities. [GP/CP]** New bridges, roads, culverts, and outfalls shall not cause or contribute to creek bank erosion or creek or wetland siltation and shall include BMPs to minimize impacts to water quality. BMPs shall include construction phase erosion control, polluted runoff control plans, and soil stabilization techniques. Where space is available, dispersal of sheet flow from roads into vegetated areas, or other onsite infiltration practices, shall be incorporated into the project design.

CE 10.5 **Beachfront and Blufftop Development. [GP/CP]** Development adjacent to the beach or blufftop shall incorporate BMPs designed to prevent or minimize polluted runoff to the beach and ocean waters.

CE 10.6 **Stormwater Management Requirements. [GP/CP]** The following requirements shall apply to specific types of development:

h. Commercial and multiple-family development shall use BMPs to control polluted runoff from structures, parking, and loading areas.

i. Restaurants shall incorporate BMPs designed to minimize runoff of oil and grease, solvents, phosphates, and suspended solids to the storm drain system.

j. Gasoline stations, car washes, and automobile repair facilities shall incorporate BMPs designed to minimize runoff of oil and grease, solvents, car battery acid, engine coolants, and gasoline to the stormwater system.

k. Outdoor materials storage areas shall be designed to incorporate BMPs to prevent stormwater contamination from stored materials.

l. Trash storage areas shall be designed using BMPs to prevent stormwater contamination by loose trash and debris.

CE 10.7 **Drainage and Stormwater Management Plans. [GP/CP]** New development shall protect the absorption, purifying, and retentive functions of natural systems that exist on the site. Drainage Plans shall be designed to complement and use existing drainage patterns and systems, where feasible, conveying drainage from the site in a nonerosive manner. Disturbed or degraded natural drainage systems shall be restored where feasible, except where there are geologic or public safety concerns. Proposals for new development shall include the following:

m. A Construction-Phase Erosion Control and Stormwater Management Plan that specifies the BMPs that will be implemented to minimize erosion and sedimentation; provide adequate sanitary and waste disposal facilities; and prevent contamination of runoff by construction practices, materials, and chemicals.

n. A Post-Development-Phase Drainage and Stormwater Management Plan that specifies the BMPs—including site design methods, source controls, and treatment controls—that will be implemented to minimize polluted runoff after construction. This plan shall include monitoring and maintenance plans for the BMP measures.

CE 10.9 **Landscaping to Control Erosion. [GP/CP]** Any landscaping that is required to control erosion shall use native or drought-tolerant noninvasive plants to minimize the need for fertilizer, pesticides, herbicides, and excessive irrigation.

Appendix B
Photo Log

Photo 1. Bell Creek Lagoon (Aquatic Resource A, California red-legged frog survey area, tidewater goby critical habitat), facing north. July 7, 2022.

Photo 2. Bell Creek, facing south. May 13, 2022.

Photo 3. Devereux Creek. Culvert leading from northern portion of creek under fairway of Hole 1. May 11, 2022.

Photo 4. Devereux Creek, looking south from fairway of Hole 1. May 11, 2022.

Photo 5. Golf Course Pond, with surrounding maintained turf and golf cart path, facing south. July 7, 2022.

Photo 6. Aquatic Resource D. NWW-HLM-02 and WSP-02 facing south. May 10, 2022.

Photo 7. Aquatic Resource D. WSP-02, hydric soil indicator F6: redox dark surface. May 10, 2022.

Photo 8. Aquatic Resource F. NWW-HLM-04 and WET-HLM-01, facing southwest. California red-legged frog survey area. May 11, 2022.

Photo 9. NG_21. Native grassland assessment polygon 21 containing native grass species purple needlegrass. May 26, 2022.

Photo 10. NG_22. Native grassland assessment polygon 22 containing native grass species purple needlegrass. May 26, 2022.

Photo 11. NG_20A. Native grassland assessment polygon 20 containing native grass species smallflower melicgrass (*Melica imperfecta*) and purple needlegrass (*Stipa pulchra*). Combined with NG-21 and NG-22, these polygons result in the one native grassland area on the Project site. May 26, 2022.

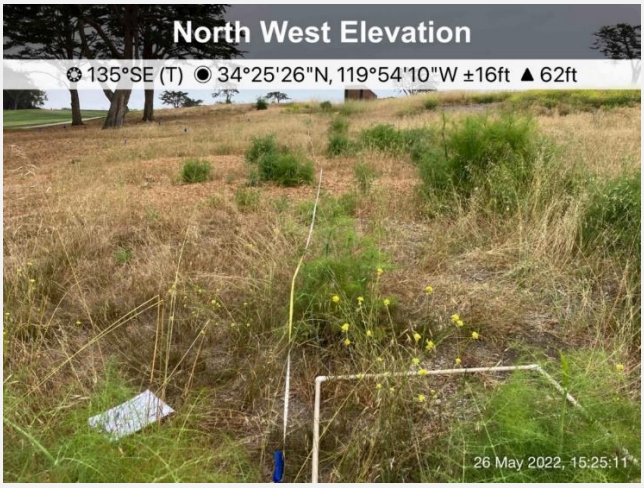


Photo 12. NG_20B. Native grassland assessment polygon 20 containing native grass species smallflower melicgrass and purple needlegrass. May 26, 2022.

Photo 13. Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) CRPR 1B.2. Facing north. July 7, 2022.

Photo 14. Southern California Black Walnut (*Juglans californica*) CRPR 4.2. Facing west. April 2, 2022.

Photo 15. Red sand verbena (*Abronia maritima*) CRPR 4.2. Facing north. May 4, 2022.

Photo 16. Cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*) CRPR 4.2. Facing south. May 4, 2022.

Photo 17. Baja California tree frog (*Pesudacris hypochondriaca*) observed during nighttime California red-legged frog surveys in the Golf Course Pond. May 11, 2022.

Photo 18. Baja California tree frog egg mass observed during nighttime California red-legged frog surveys in the Golf Course Pond. April 25, 2022.

Photo 19. American bullfrog (*Lithobates catesbeianus*) observed during nighttime California red-legged frog surveys in the Golf Course Pond. April 25, 2022.

Photo 20. Red-tailed hawk (*Buteo jamaicensis*) nest with nestlings, in a eucalyptus tree in eastern portion of the Project site. April 27, 2022.

Photo 21. Culvert inlet between Holes 4 and 5. An Arizona Crossing currently occurs in Devereaux Creek. Photo provided by SEPPS.

Photo 22. Culvert outlet in Devereaux Creek between Holes 4 and 5 where the Arizona crossing is located. Photo provided by SEPPS.

Appendix C
Wildlife Compendium

Wildlife Species

Amphibians

Frogs

HYLIDAE - TREEFROGS

Pseudacris hypochondriaca—Baja California treefrog

RANIDAE – TRUE FROGS

Rana draytonii—California red-legged frog
Lithobates catesbeianus—American bullfrog*

Birds

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Accipiter cooperii—Cooper's hawk
Buteo jamaicensis—red-tailed hawk
Buteo lineatus—red-shouldered hawk
Elanus leucurus—white-tailed kite

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

ANATIDAE – DUCKS, GEESE, AND SWANS

Anas platyrhynchos—mallard
Anser albifrons—greater white-fronted goose
Aythya affinis—lesser scaup
Aythya collaris—ring-necked duck
Branta canadensis—Canada goose
Bucephala albeola—bufflehead
Chen caerulescens – snow goose
Lophodytes cucullatus—hooded merganser
Oxyura jamaicensis—ruddy duck
Mareca strepera—gadwall
Mareca americana—American wigeon

AREIDAE – HERONS, BITTERNS, AND ALLIES

Ardea alba—great egret
Ardea herodias—great blue heron
Egretta thula—snowy egret
Nycticorax nycticorax—black-crowned night-heron

APODIDAE - SWIFTS

Chaetura vauxi—Vaux's swift

CARDINALIDAE – CARDINALS AND ALLIES

Pheucticus melanocephalus—black-headed grosbeak

CATHARTIDAE – NEW WORLD VULTURES

Cathartes aura—turkey vulture

CHARADRIIDAE – LAPWINGS AND PLOVERS

Charadrius vociferus—killdeer

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura—mourning dove
Columba livia—rock pigeon (rock dove)*
Streptopelia decaocto—Eurasian collared-dove*

CORVIDAE – CROWS AND JAYS

Aphelocoma californica—California scrub-jay
Corvus brachyrhynchos—American crow

ESTRILDIDAE - WAXBILLS

Lonchura punctulata—scaly-breasted munia*

FRINGILLIDAE –FINCHES AND ALLIES

Haemorhous mexicanus—house finch
Haemorhous purpureus—purple finch
Spinus psaltria—lesser goldfinch

HIRUNDINIDAE - SWALLOWS

Hirundo rustica—barn swallow
Petrochelidon pyrrhonota—cliff swallow
Stelgidopteryx serripennis—northern rough-winged swallow
Tachycineta bicolor—tree swallow
Tachycineta thalassina—violet-green swallow

LARIDAE – GULLS, TERNS, AND SKIMMERS

Larus californicus—California gull
Larus delawarensis—ring-billed gull
Larus heermanni—Heermann's gull
Larus occidentalis—western gull

ICTERIDAE - BLACKBIRDS

Agelaius phoeniceus—red-winged blackbird
Euphagus cyanocephalus—Brewer's blackbird
Icterus bullockii—Bullock's oriole
Icterus cucullatus—hooded oriole
Sturnella neglecta—western meadowlark
Xanthocephalus xanthocephalus—yellow-headed blackbird
Molothrus ater—brown-headed cowbird*

MIMIDAE – MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

MOTACILLIDAE – WAGTAILS AND PIPITS

Anthus rubescens—American pipit

ODONTOPHORIDAE – NEW WORLD QUAIL

Callipepla californica—California quail

PARIDAE – CHICKADEES AND TITMICE

Baeolophus inornatus—oak titmouse

PARULIDAE – WOOD WARBLERS

Cardellina pusilla—Wilson's warbler
Geothlypis trichas—common yellowthroat
Setophaga coronata—yellow-rumped warbler
Setophaga petechia—yellow warbler
Setophaga townsendi—Townsend's warbler
Leiothlypis celata—orange-crowned warbler

PASSERELLIDAE – NEW WORLD SPARROWS

Chondestes grammacus—lark sparrow
Junco hyemalis—dark-eyed junco
Melospiza lincolnii—Lincoln's sparrow
Melospiza melodia—song sparrow
Melozone crissalis—California towhee
Pipilo maculatus—spotted towhee
Zonotrichia leucophrys—white-crowned sparrow

PELECANIDAE - PELICANS

Pelecanus occidentalis—brown pelican

PHALACROCORACIDAE - CORMORANTS

Nannopterum auritus—double-crested cormorant

PICIDAE – WOODPECKERS AND ALLIES

Melanerpes formicivorus—acorn woodpecker
Dryobates nuttallii—Nuttall's woodpecker
Dryobates pubescens—downy woodpecker

PODICIPEDIDAE - GREBES

Podilymbus podiceps—pied-billed grebe

POLIOPTILIDAE - GNATCATCHERS

Polioptila caerulea—blue-gray gnatcatcher

PTILOGONATIDAE – SILKY-FLYCATCHERS

Phainopepla nitens—phainopepla

RALLIDAE – RAILS, GALLINULES, AND COOTS

Fulica americana—American coot

RECURVIROSTRIDAE – STILTS AND AVOCETS

Himantopus mexicanus—black-necked stilt

REGULIDAE - KINGLETS

Regulus satrapa—golden-crowned kinglet
Corthylio calendula—ruby-crowned kinglet

SCOLOPACIDAE – SANDPIPERS, PHALAROPES, AND ALLIES

Calidris alba—sanderling
Calidris minutilla—least sandpiper
Limnodromus griseus—short-billed dowitcher
Limosa fedoa—marbled godwit
Numenius phaeopus—whimbrel
Tringa melanoleuca—greater yellowlegs
Tringa semipalmata—willet

STRIGIDAE – TYPICAL OWLS

Bubo virginianus—great horned owl

STURNIDAE - STARLINGS

Sturnus vulgaris—European starling*

THRESKIORNITHIDAE – IBISES AND SPOONBILLS

Plegadis chihi—white-faced ibis

TROCHILIDAE - HUMMINGBIRDS

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

TROGLODYTIDAE - WRENS

Cistothorus palustris—marsh wren
Troglodytes aedon—house wren
Thryomanes bewickii—Bewick's wren

TURDIDAE - THRUSHES

Sialia mexicana—western bluebird
Turdus migratorius—American robin

TYRANNIDAE – TYRANT FLYCATCHERS

Empidonax difficilis—Pacific-slope flycatcher
Sayornis nigricans—black phoebe

Sayornis saya—Say's phoebe
Tyrannus verticalis—western kingbird
Tyrannus vociferans—Cassin's kingbird

VIREONIDAE - VIREOS

Vireo gilvus—warbling vireo
Vireo huttoni—Hutton's vireo

Fishes

POECILIIDAE - POECILIIDS

Gambusia affinis—mosquitofish*

GOBIDAE - GOBIES

Eucyclogobius newberryi—tidewater goby

Invertebrates

Butterflies

NYMPHALIDAE – BRUSH-FOOTED BUTTERFLIES

Danaus plexippus—monarch

PIERIDAE – WHITES AND SULFURS

Pieris rapae—cabbage white

Mammals

CANIDAE – WOLVES AND FOXES

Vulpes vulpes—red fox*

DIDELPHIDAE – NEW WORLD OPOSSUMS

Didelphis virginiana—Virginia opossum*

LEPORIDAE – HARES AND RABBITS

Sylvilagus bachmani—brush rabbit

MUSTELIDAE – WEASELS, SKUNKS, AND OTTERS

Neogale frenata—long-tailed weasel

PROCYONIDAE – RACCOONS AND RELATIVES

Procyon lotor—northern raccoon

SCIURIDAE - SQUIRRELS

Otospermophilus beecheyi—California ground squirrel

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis—western fence lizard

* signifies introduced (non-native) species

Appendix D

Native Grassland Data Sheets

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/20/2022

Biologist(s): Heather Moire

Transect ID: NG_08

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	30 / 4					5
2 m	R		10 / 6				10
4 m	L		5 / 3				5
6 m	R		15 / 7				5
8 m	L		15 / 6				10
10 m							
12 m							
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	FESMYU, HORMUR, ATRSEM, BACPIL, CYNDAC, SPERUB, FESPER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_09

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	5/2					75
2 m	R	5/3					80
4 m	L	10/6					65
6 m	R	20/9					15
8 m	L		70/23				5
10 m	R		30/13				5
12 m							
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	FESMYU, HORMUR, CYNDAC, ATRSEM, MEDPOL, SPERUB, FESPER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Maine

Transect ID: NG_10

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	30/6					5
2 m	L	40/12					5
4 m	R	5/3					15
6 m							
8 m							
10 m							
12 m							
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	MEDPOL, FESMYU, HORMUR, ATRSEM, PLALAN, BROHOR, Spergularia sp., FESPER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG-11

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L		10 / 7				10
2 m	R		25 / 17				10
4 m	L	10 / 3	5 / 3				10
6 m	R		5 / 3				20
8 m							
10 m							
12 m							
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	CYNDAC, ATRSEM, Speergularia, MEDPOL, FESMYU, FESPER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_12

Quad	Left (L) or Right (R)	Native Grass Species: DISSP1 (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	15/-					0
2 m	R	20/-					0
4 m	L	25/-					5
6 m	R	10/-					0
8 m	L	95/-					0
10 m	R	75/-					10
12 m							
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments

unable to count # of DISSP1 individuals

BRODIA, FESMYU, BRADIS, Avena sp., HORMUR, CYNDAC, BRANIG, FESPER

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG-13

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	25 / 15					10
2 m	L	15 / 10					5
4 m	R	10 / 5					5
6 m	L	10 / 6					5
8 m	R	5 / 2					5
10 m	L	5 / 2					10
12 m	R	2 / 1					5
14 m	L	0 / 0					5
16 m	R	5 / 2					5
18 m	L	5 / 1					0
20 m	R	15 / 5					5
22 m	L	20 / 9					5
24 m	R	35 / 6					5
26 m	L	5 / 1					5
28 m	R	35 / 8					0
30 m	L	30 / 12					0
32 m	R	40 / 18					10
34 m	L	10 / 5					5
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	FOEVUL, Avena, ATRSEM, BRADIS, CYNDAC, DEIFAS, PLALAN, Viscia, BRODIA, FESPER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_14

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	45/33					5
2 m	L	20/17					15
4 m	R	15/13					15
6 m	L	5/4					30 ← small mammal disturbance
8 m	R	25/19					10
10 m	L	50/24					5
12 m	R	40/26					5
14 m	L	35/15					Ø
16 m	R	1/1					50 ← small mammal disturbance
18 m	L	40/19					5
20 m	R	15/9					40 ← small mammal disturbance
22 m	L	5/1					60 ← small mammal disturbance
24 m	R	15/7					20
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: PLALAN, BROHOR, FESMYU, Spergularia sp., SISBEL, BRODIA, Avena sp., CONARV, HORMUR, FESPER

HOR BRA - observed in poly, southern portion. Few Melica sp. individuals observed in poly off transect

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_15

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # indiyiduals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	5 / 2					10
2 m	L	5 / 2					10
4 m	R	Ø / Ø					45
6 m	L	5 / 3					30
8 m	R	20 / 8					15
10 m	L	10 / 4					40
12 m	R	1 / 1					25
14 m	L	Ø / Ø					15
16 m	R	10 / 7					45
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: ~~FESTM~~ FESPER, PLALAN, CYNDAC, HORMUR, EROCIC, BROHOR ARTSEM

Sparse Stipa, most occuring along outter portions of poly

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_16

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	10 / 8					25
2 m	R	10 / 5					50*
4 m	L	15 / 6					40*
6 m	R	15 / 7					35*
8 m	L	10 / 2					10
10 m	R	5 / 1					15
12 m	L	5 / 1					20
14 m	R	5 / 2	10 / 6				30
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments		* wood chips FESPER, ATRSEM, MEDPOL, SISBEL, Spergularia					

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG - 17

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species: _____ (Percent cover / # individuals)	_____ Percent cover	_____ Percent cover	_____ Bare Ground Percent cover
0 m	R	5 / 5					40
2 m	L	Ø / Ø					50
4 m	R	10 / 11					15
6 m	L	5 / 2					30
8 m	R	10 / 12					10
10 m	L	Ø / Ø					40
12 m	R	10 / 3	3 / 2				75 *
14 m	L		15 / 19				25 *
16 m	R		20 / 17				20 *
18 m	L	10 / 3					15
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: FESPER, ATRSEM, Spergularia, HORMAR, MEDPOL, HORMUR

* wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG-20A

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: Melica imperfecta (Percent cover / # individuals)	Native Grass Species: _____ (Percent cover / # individuals)	_____ Percent cover	_____ Percent cover	_____ Bare Ground Percent cover
0 m	L	5 / 2	5 / 2				5
2 m	R		10 / 3				Ø
4 m	L	5 / 1					5
6 m	R	5 / 1					Ø
8 m	L	10 / 3					Ø
10 m	R	5 / 2	5 / 2				5
12 m	L	10 / 2	10 / 5				5
14 m	R	10 / 2					Ø
16 m	L	5 / 3					5
18 m	R	5 / 3					10
20 m	L	Ø / Ø					5
22 m	R	Ø / Ø					15
24 m	L	10 / 4					5
26 m	R	20 / 4					Ø
28 m	L	55 / 33					10 *
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: Avena, FESPER, HELECH, FOEVUL, BRODIA, CONARV

* wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/20/2022

Biologist(s): Heather Moine

Transect ID: NG-20B

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	25/9					15*
2 m	L	20/8					10
4 m	R	Ø/Ø					50*
6 m	L	Ø/Ø					75*
8 m	R	Ø/Ø					80*
10 m	L	Ø/Ø					90*
12 m	R	Ø/Ø					50*
14 m	L	5/3					90*
16 m	R	25/5					40*
18 m	L	35/15					50*
20 m	R	5/2					75*
22 m	L	45/16					10*
24 m	R	5/1					10*
26 m	L	5/1					10
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: HIRINC, Avena sp, FOEVUL, HORMUR, FESPER, MEDPOL, PLALAN, STIMILMIL

*wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_21

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	5/2					Ø
2 m	L	15/4					Ø
4 m	R	5/2					5
6 m	L	10/4					5
8 m	R	10/2					5
10 m	L	5/Ø					5
12 m	R	5/1					5
14 m							
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments	FESPER, Avena, HIRINC, CYNDAC, HORMUR, LACSER						

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/26/2022

Biologist(s): Heather Moine

Transect ID: NG_22

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	R	15 / 3					5*
2 m	L	Ø / Ø					5
4 m	R	1 / 1					10
6 m	L	Ø / Ø					10 small mammal disturbance
8 m	R	Ø / Ø					5
10 m	L	Ø / Ø					10
12 m	R	Ø / Ø					5
14 m	L	5 / 1					5
16 m	R	10 / 2					10
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: Avena sp., HORMUR, HELECH, FESPER, MEDPOL, HIRINC, FOEVUL, CYNDAC, ATRSEM

* wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/27/2022

Biologist(s): Heather Moine

Transect ID: NG_27

Quad	Left (L) or Right (R)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	10 / 10					10
2 m	R	40 / 37					10
4 m	L	0 / 0					5
6 m	R	0 / 0					50 *
8 m	L	0 / 0					5
10 m	R	1 / 1					5
12 m	L	0 / 0					5
14 m	R	0 / 0					5
16 m	L	0 / 0					5
18 m	R	2 / 1					15
20 m	L	1 / 1					5
22 m	R	5 / 2					5
24 m	L	15 / 14					0
26 m	R	15 / 19					5
28 m	L	55 / 53					0
30 m	R	15 / 16					5
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: PLALAN, HELEC* FESPER MEDPOL, FOEVUL, BRODIA, CYNDAC, LACSER, HORMUR, BROMAD, Vicia sp., SISBEL, BROHOR, HOR MAR

* wood chips, in areas w/o native grasses in quad, native grasses observed outside quad

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/27/2022

Biologist(s): Heather Moine

Transect ID: NG_28A

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: Melica imperfecta (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	50 / 20					5
2 m	R	15 / 8					25
4 m	L	30 / 13					10
6 m	R	2 / 1					75
8 m	L	5 / 1					20
10 m	R		5 / 3				40
12 m	L	0/0					85*
14 m	R		5/3				70*
16 m	L		2/0				50*
18 m	R		15/7				70*
20 m	L	0/0					85*
22 m	R	0/0					75*
24 m	L	10/5					80*
26 m	R	5/1					40
28 m	L	10/2					30* 25
30 m	R		2/1				20* 20
32 m	L		20/4				5
34 m	R	5/3					85*
36 m	L		15/2				60*
38 m	R	5/2					50
40 m	L	10/3					50
42 m	R	0/0					80
44 m	L	2/0					30
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: FESPER, HIRING, BRODIA, HORMUR, BRARAP, ELYCAM, VERLAS, BACPIL, SALTRA

high amount of herbivory on native grasses along edge of riparian, rabbit scat observed

* wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/27/2022

Biologist(s): Heather Marie

Transect ID: NG_28B

Quad	Left (L) or Right (R)	Native Grass Species: Stipa (Percent cover / # individuals)	Native Grass Species: HORBRA (Percent cover / # individuals)	Native Grass Species: Melica imperfecta (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	20 / 6					~~0~~
2 m	R		5/ 4				5
4 m	L	0/0					75*
6 m	R		10 / 6				80*
8 m	L		5/ 2				75*
10 m	R		3/ 2				35*, 5
12 m	L	2/1					15
14 m	R	5/1					
16 m							
18 m							
20 m							
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							

Other plant species observed along the transect/ Comments: SISBEL, FESMYU, FESPER, LACSER, MEDPOL, PLALAN, HELECH, BROHOR, ATRSEM, BRODIA, Spergularia, CYNDAC

* wood chips

DUDEK

Project: 12760 – Sandpiper **Task: Native Grassland Assessment** **Date:** 5/27/2022

Biologist(s): Heather Moine

Transect ID: NG_29

Quad	Left (L) or Right (R)	Native Grass Species HORBRA (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Native Grass Species (Percent cover / # individuals)	Percent cover	Percent cover	Bare Ground Percent cover
0 m	L	10 / 10					5
2 m	R	0/0					10
4 m	L	5 / 8					5
6 m	R	5 / 9					10
8 m	L	8 / 11					5
10 m	R	10 / 15					Ø
12 m	L	20 / 28					5
14 m	R	20 / 26					10
16 m	L	25 / 30					10
18 m	R	30 / 41					15
20 m	L	25 / 38					15
22 m							
24 m							
26 m							
28 m							
30 m							
32 m							
34 m							
36 m							
38 m							
40 m							
42 m							
44 m							
46 m							
48 m							
50 m							
Other plant species observed along the transect/ Comments		Avena sp., FESPER, PLALAN, SONASP, MEDPOL, BACPIL, HORMAR, ATRSEM BROHOR					

Appendix E
Plant Compendium

Dicots

ADOXACEAE—MUSKROOT FAMILY

Sambucus mexicana—blue elderberry

AIZOACEAE—FIG-MARIGOLD FAMILY

* *Carpobrotus chilensis*—sea fig
* *Carpobrotus edulis*—hottentot fig
* *Tetragonia tetragonoides*—New Zealand spinach

AMARANTHACEAE—AMARANTH FAMILY

Amaranthus blitoides—mat amaranth

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

Rhus integrifolia—lemonade berry
* *Schinus molle*—Peruvian peppertree
* *Schinus terebinthifolius*—Brazilian peppertree

Toxicodendron diversilobum—poison oak

APIACEAE—CARROT FAMILY

* *Conium maculatum*—poison hemlock
* *Foeniculum vulgare*—fennel

APOCYNACEAE—DOGBANE FAMILY

* *Araujia sericifera*—white bladderflower
* *Nerium oleander*—oleander

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia chamissonis—silver bur ragweed

Ambrosia psilostachya—western ragweed

Artemisia californica—California sagebrush

Artemisia douglasiana—Douglas' sagewort

Baccharis glutinosa—saltmarsh baccharis

Baccharis pilularis—coyote brush
* *Carduus pycnocephalus*—Italian plumeless thistle
* *Centaurea melitensis*—Maltese star-thistle
* *Cotula coronopifolia*—brass buttons

Deinandra fasciculata—clustered tarweed
* *Delairea odorata*—Cape-ivy

Encelia californica—California brittle bush
* *Erigeron bonariensis*—asthmaweed

* *Helminthotheca echioides*—bristly oxtongue
  Isocoma menziesii var. *vernonioides*—Menzies' goldenbush
  Jaumea carnosa—marsh jaumea
* *Lactuca serriola*—prickly lettuce
  Malacothrix saxatilis var. *saxatilis*—cliff malacothrix
  Pseudognaphalium californicum—ladies' tobacco
* *Pseudognaphalium luteoalbum*—Jersey cudweed
* *Silybum marianum*—blessed milkthistle
* *Sonchus asper*—spiny sowthistle
* *Sonchus oleraceus*—common sowthistle
* *Taraxacum officinale*—common dandelion
  Xanthium strumarium—cocklebur

BORAGINACEAE—BORAGE FAMILY

Heliotropium curassavicum—salt heliotrope

BRASSICACEAE—MUSTARD FAMILY

* *Brassica nigra*—black mustard
* *Brassica rapa*—field mustard
* *Cakile maritima*—European searocket
* *Hirschfeldia incana*—shortpod mustard
* *Lepidium didymum*—lesser swinecress
* *Raphanus sativus*—cultivated radish

CACTACEAE—CACTUS FAMILY

* *Opuntia ficus-indica*—Barbary fig
  Opuntia littoralis—coast prickly pear

CAPRIFOLIACEAE—HONEYSUCKLE FAMILY

Lonicera subspicata var. *subspicata*—Santa Barbara honeysuckle

CARYOPHYLLACEAE—PINK FAMILY

* *Spergularia rubra*—red sandspurry

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex lentiformis—quailbush
Atriplex leucophylla—beach saltbush
* *Atriplex prostrata*—fat hen
* *Atriplex semibaccata*—Australian saltbush
* *Chenopodium album*—lambsquarters
* *Chenopodium murale*—nettleleaf goosefoot
Salicornia pacifica—Pacific swampfire

* *Salsola tragus*—prickly Russian thistle

Suaeda taxifolia—woolly seablite

CONVOLVULACEAE—MORNING-GLORY FAMILY

Calystegia macrostegia ssp. *cyclostegia*—island false bindweed

* *Convolvulus arvensis*—field bindweed

EUPHORBIACEAE—SPURGE FAMILY

* *Euphorbia peplus*—petty spurge

* *Euphorbia terracina*—Geraldton carnation weed

* *Ricinus communis*—castorbean

FABACEAE—LEGUME FAMILY

* *Acacia longifolia*—Sydney golden wattle

* *Medicago polymorpha*—burclover

* *Melilotus albus*—yellow sweetclover

* *Melilotus indicus*—annual yellow sweetclover

* *Vicia villosa*—winter vetch

FAGACEAE—OAK FAMILY

Quercus agrifolia—coast live oak

FRANKENIACEAE—FRANKENIA FAMILY

Frankenia salina—alkali heath

GERANIACEAE—GERANIUM FAMILY

* *Erodium botrys*—longbeak stork's bill

* *Erodium cicutarium*—redstem stork's bill

* *Erodium moschatum*—musky stork's bill

JUGLANDACEAE—WALNUT FAMILY

Juglans californica—Southern California black walnut

MALVACEAE—MALLOW FAMILY

* *Malva parviflora*—cheeseweed mallow

Malvella leprosa—alkali mallow

MYRSINACEAE—MYRSINE FAMILY

* *Lysimachia arvensis*—scarlet pimpernel

MYRTACEAE—MYRTLE FAMILY

* *Corymbia ficifolia*—red flowering gum

* *Eucalyptus camaldulensis*—river redgum

* *Eucalyptus citriodora*—lemonscented gum
* *Eucalyptus globulus*—Tasmanian bluegum
* *Eucalyptus sideroxylon*—red ironbark

NYCTAGINACEAE—FOUR O'CLOCK FAMILY

Abronia maritima—red sand-verbena
Abronia umbellata—pink sand verbena

OLEACEAE—OLIVE FAMILY

Fraxinus dipetala—California ash

ONAGRACEAE—EVENING PRIMROSE FAMILY

* *Ludwigia peploides*—floating primrose-willow

OXALIDACEAE—OXALIS FAMILY

* *Oxalis pes-caprae*—Bermuda buttercup

PAPAVERACEAE—POPPY FAMILY

Eschscholzia californica—California poppy

PITTOSPORACEAE—PITTOSPORUM FAMILY

* *Pittosporum undulatum*—Australian cheesewood

PLANTAGINACEAE—PLANTAIN FAMILY

* *Plantago coronopus*—buckhorn plantain
* *Plantago lanceolata*—narrowleaf plantain
* *Plantago major*—common plantain

PLATANACEAE—PLANE TREE, SYCAMORE FAMILY

Platanus racemosa—California sycamore

PLUMBAGINACEAE—LEADWORT FAMILY

* *Plumbago auriculata*—Cape leadwort

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum cinereum—ashy buckwheat
* *Polygonum aviculare*—prostrate knotweed
* *Rumex crispus*—curly dock
* *Rumex pulcher*—fiddle dock

PORTULACACEAE—PURSLANE FAMILY

* *Portulaca oleracea*—little hogweed

RANUNCULACEAE—BUTTERCUP FAMILY

Clematis ligusticifolia—western white clematis

ROSACEAE—ROSE FAMILY

Heteromeles arbutifolia—toyon

* *Rhaphiolepis indica*—Indian hawthorn

Rosa californica—California rose

Rubus ursinus—California blackberry

SALICACEAE—WILLOW FAMILY

* *Salix babylonica*—Weeping willow

Salix lasiolepis—arroyo willow

SCROPHULARIACEAE—FIGWORT FAMILY

* *Myoporum laetum*—myoporum

Scrophularia californica—California figwort

SOLANACEAE—NIGHTSHADE FAMILY

* *Nicotiana glauca*—tree tobacco

Solanum americanum—American black nightshade

Solanum douglasii—greenspot nightshade

TAMARICACEAE—TAMARISK FAMILY

* *Tamarix ramosissima*—tamarisk

TROPAEOLACEAE—NASTURTIUM FAMILY

Tropaeolum majus—nasturtium*

URTICACEAE—NETTLE FAMILY

Urtica dioica—stinging nettle

VERBENACEAE—VERVAIN FAMILY

* *Lantana montevidensis*—trailing shrubverbena

Verbena lasiostachys—western vervain

Gymnosperms and Gnetophytes

CUPRESSACEAE—CYPRESS FAMILY

Hesperocyparis macrocarpa—Monterey cypress

PINACEAE—PINE FAMILY

* *Pinus canariensis*—Canary Island pine

* *Pinus halepensis*—aleppo pine

Monocots

ARECACEAE—PALM FAMILY

* *Phoenix canariensis*—Canary Island date palm
* *Washingtonia robusta*—Washington fan palm

ASPARAGACEAE—ASPARAGUS FAMILY

* *Asparagus asparagoides*—African asparagus fern

CYPERACEAE—SEDGE FAMILY

Bolboschoenus maritimus—salt marsh bulrush
Cyperus eragrostis—tall flatsedge
Schoenoplectus californicus—California bulrush

IRIDACEAE—IRIS FAMILY

Sisyrinchium bellum—western blue-eyed grass

JUNCACEAE—RUSH FAMILY

Juncus patens—western rush

POACEAE—GRASS FAMILY

* *Arundo donax*—giant reed
* *Avena barbata*—slender oat
* *Avena fatua*—wild oat
* *Brachypodium distachyon*—purple false brome
* *Bromus diandrus*—ripgut brome
* *Bromus hordeaceus*—soft brome
* *Bromus madritensis*—compact brome
* *Bromus rubens*—red brome
* *Cortaderia jubata*—purple pampas grass
* *Cynodon dactylon*—Bermudagrass

Distichlis spicata—salt grass
Elymus condensatus—giant wild rye
Elymus triticoides—creeping ryegrass

* *Festuca myuros*—rat-tail fescue
* *Festuca perennis*—perennial rye grass
* *Holcus lanatus*—common velvet grass

Hordeum brachyantherum—meadow barley

* *Hordeum marinum*—seaside barley
* *Hordeum murinum*—mouse barley

Melica imperfecta—smallflower melicgrass

* *Paspalum dilatatum*—dallisgrass
* *Poa annua*—annual bluegrass
* *Polypogon monspeliensis*—annual rabbitsfoot grass
* *Polypogon viridis*—beardless rabbitsfoot grass
* *Stipa miliacea* var. *miliacea*—smilograss
  Stipa pulchra—purple needlegrass
* *Stipa tenuissima*—no common name

TYPHACEAE—CATTAIL FAMILY

Typha domingensis—southern cattail

* signifies introduced (non-native) species

Appendix F

Plant and Wildlife Potential to Occur Tables

Special-Status Plant Species Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia maritima	red sand-verbena	None/None/4.2	Coastal dunes/perennial herb/Feb–Nov/0–330	Occurs within the Project site. This species was observed in sand dunes adjacent to the beach during 2022 botanical surveys.
Amsinckia douglasiana	Douglas' fiddleneck	None/None/4.2	Cismontane woodland, Valley and foothill grassland; Dry/annual herb/Mar–May/0–6,395	Not expected to occur. While some suitable grassland habitat is present within the Project site, this species has not been observed south of the Santa Ynez Mountains since 1935 (Calflora 2022), and it was not detected during surveys in 2022 during botanical surveys.
Arctostaphylos refugioensis	Refugio manzanita	None/None/1B.2	Chaparral/perennial evergreen shrub/(May)Dec–Mar/900–2,690	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Atriplex coulteri	Coulter's saltbush	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/perennial herb/Mar–Oct/10–1,505	Not expected to occur. This perennial species was not observed during botanical surveys conducted in May and July 2022. Suitable coastal bluff scrub, and coastal dune habitat present is within the Project site to support this species. In addition, there are clay soils present within the Project site. The nearest occurrence is from 2003 approximately 3.3 miles east of the Project site (CDFW 2022b).
Atriplex serenana var. davidsonii	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; Alkaline/annual herb/Apr–Oct/35–655	Low potential to occur. While this species was not observed during botanical surveys conducted in May and July 2022, there is suitable coastal bluff scrub, and coastal dune habitat present within the Project site to support this species. The nearest occurrence is from 1948 aproximately 3.5 miles east of the Project site (CDFW 2022b).
Baccharis plummerae ssp. plummerae	Plummer's baccharis	None/None/4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub; Rocky/perennial deciduous shrub/May–Oct/15–1,390	Not expected to occur. No suitable vegetation is present to support this species within the Project site. The nearest recent occurrence is from 2021 approximately 8.1 miles west of the Project site (Calflora 2022).

Special-Status Plant Species Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calandrinia breweri	Brewer's calandrinia	None/None/4.2	Chaparral, Coastal scrub; Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)/annual herb/(Jan)Mar–June/35–4,000	Not expected to occur. While some disturbed habitat is present within the Project site, it is not expected to support this species. The nearest occurrence is from 1956 approximately 7.2 miles northeast of the Project site (Calflora 2022). In addition, the only occurrences of this species south of the Santa Ynez Mountains are from the foothills in Santa Barbara and Montecito.
Calochortus catalinae	Catalina mariposa lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/(Feb)Mar–June/50–2,295	Low potential to occur. While this species was not observed during botanical surveys conducted in May and July 2022, some suitable grassland habitat is present within the Project site to support this species. The nearest occurrence is from 1982, approximately 1.8 miles northwest of the Project site (Calflora 2022).
Calochortus fimbriatus	late-flowered mariposa-lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; Serpentinite (sometimes)/perennial bulbiferous herb/June–Aug/900–6,250	Not expected to occur. The site is outside of the species' known elevation range.
Centromadia parryi ssp. australis	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/May–Nov/0–1,570	Low potential to occur. While this species was not observed during the botanical surveys conducted in May and July 2022, there is some suitable grassland habitat (consisting of wild oat and annual brome) present to support this species within the Project site. The nearest occurrence was observed in 1997, approximately 1.4 miles east of the Project site (CDFW 2022b).
Chorizanthe palmeri	Palmer's spineflower	None/None/4.2	Chaparral, Cismontane woodland, Valley and foothill grassland; Rocky, Serpentinite/annual herb/Apr–Aug/180–3,100	Not expected to occur. This species was not observed during the botanical surveys conducted in May and June 2022. While some suitable habitat occurs within the Project site that could support this species, it has not been observed south of the Santa Ynez Mountains since 1876 (Calflora 2022).

Special-Status Plant Species Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eriogonum elegans	elegant wild buckwheat	None/None/4.3	Cismontane woodland, Valley and foothill grassland; Gravelly (usually), Roadsides (sometimes), Sandy (usually), Washes (often)/annual herb/May–Nov/655–5,000	Not expected to occur. The site is outside of the species' known elevation range.
Fritillaria ojaiensis	Ojai fritillary	None/None/1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest; Rocky/perennial bulbiferous herb/Feb–May/740–3,270	Not expected to occur. The site is outside of the species' known elevation range and no suitable vegetation occurs.
Galium cliftonsmithii	Santa Barbara bedstraw	None/None/4.3	Cismontane woodland/perennial herb/May–July/655–4,000	Not expected to occur. The site is outside of the species' known elevation range and no suitable vegetation occurs.
Horkelia cuneata var. puberula	mesa horkelia	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Feb–July(Sep)/230–2,655	Not expected to occur. The site is outside of the species' known elevation range and no suitable vegetation occurs. In addition, this species was not observed during either the May or July 2022 botanical surveys. The nearest occurrence is from 1981, approximately 1.6 miles northeast of the Project site (CDFW 2022b).
Juglans californica	Southern California black walnut	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/perennial deciduous tree/Mar–Aug/165–2,950	Occurs within the Project site. This species was observed within the upper banks of Bell Creek in riparian woodland vegetation during May and July 2022 botanical surveys.
Juncus acutus ssp. leopoldii	southwestern spiny rush	None/None/4.2	Coastal dunes, Marshes and swamps, Meadows and seeps/perennial rhizomatous herb/(Mar)May–June/10–2,950	Not expected to occur. This perennial species was not observed during the botanical surveys conducted in May and July 2022. Suitable coastal dune habitat occurring within the Project site could support this species. The nearest occurrence is from 1991, approximately 3.6 miles southeast of the Project site (Calflora 2022).
Juncus luciensis	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/985–6,690	Not expected to occur. The site is outside of the species' known elevation range.

Special-Status Plant Species Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Lasthenia conjugens	Contra Costa goldfields	FE/None/1B.1	Cismontane woodland, Playas, Valley and foothill grassland, Vernal pools; Mesic/annual herb/Mar–June/0–1,540	Not expected to occur. This species was not observed during botanical surveys conducted in May and July 2022. In addition, no suitable vernal pool habitat is present within the Project site to support this species. This species is typically observed farther north in California, around the San Francisco Bay area. The nearest occurrence was last observed in 1950, approximately 2.6 miles southeast of the Project site (CDFW 2022b).
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/1B.1	Marshes and swamps, Playas, Vernal pools/annual herb/Feb–June/5–4,000	Not expected to occur. This species was not observed during botanical surveys conducted in May and July 2022. In addition, no suitable vernal pool or marsh and swamp habitat is present within the Project site to support this species. A known population occurs approximately 2.9 miles east of the Project site (CDFW 2022b).
Layia heterotricha	pale-yellow layia	None/None/1B.1	Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/annual herb/Mar–June/985–5,590	Not expected to occur. The site is outside of the species' known elevation range.
Lepechinia fragrans	fragrant pitcher sage	None/None/4.2	Chaparral/perennial shrub/Mar–Oct/65–4,295	Not expected to occur. This species was not observed during botanical surveys conducted in May and July 2022. In addition, no suitable chaparral habitat is present within the Project site to support this species. The nearest occurrence is from 2020, approximately 6.9 miles northeast of the Project site (Caflora 2022).
Lonicera subspicata var. subspicata	Santa Barbara honeysuckle	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub/perennial evergreen shrub/(Feb)May–Aug(Dec)/35–3,280	Occurs within the Project site. This species was observed within several channelized areas mapped as non-wetland waters during botanical surveys conducted in May and July 2022.

Special-Status Plant Species Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Malacothrix saxatilis var. saxatilis	cliff malacothrix	None/None/4.2	Coastal bluff scrub, Coastal scrub/perennial rhizomatous herb/Mar–Sep/10–655	Occurs within the Project site. This species was observed within coastal bluff scrub on the cliffs above the beach during botanical surveys conducted in May and July 2022.
Monardella hypoleuca ssp. hypoleuca	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug(Sep–Dec)/165–5,000	Not expected to occur. This species was not observed during botanical surveys conducted in May and July 2022. In addition, no suitable chaparral or cismontane woodland habitat is present within the Project site to support this species. The Project site is outside of the species' known elevation range.
Pelazoneuron puberulum var. sonorensis	Sonoran maiden fern	None/None/2B.2	Meadows and seeps/perennial rhizomatous herb/Jan–Sep/165–2,000	Not expected to occur. The Project site is outside of the species' known elevation range. In addition, this species was not observed during botanical surveys conducted in May and July 2022.
Scrophularia atrata	black-flowered figwort	None/None/1B.2	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub, Riparian scrub/perennial herb/Mar–July/35–1,640	Not expected to occur. This perennial species was not observed during botanical surveys conducted in May and July 2022. Limited suitable coastal dune habitat is present within the Project site that could support this species. The nearest occurrence is from 1958, approximately 2.6 miles southeast of the Project site (CDFW 2022b).
Suaeda esteroa	estuary seablite	None/None/1B.2	Marshes and swamps/perennial herb/(Jan–May)July–Oct/0–15	Not expected to occur. This species was not observed during botanical surveys conducted in May and July 2022. In addition, no suitable marsh or swamp habitat is present within the Project site to support this species. The nearest occurrence is from 1979, approximately 3.3 miles east of the Project site (CDFW 2022b).

[1] The federal and state status of species is based on the Special Animals List (CDFW 2022c).

Status Abbreviations

FE: Federally listed as endangered

FT: Federally listed as threatened

FC: Federal candidate species (former Category 1 candidates)
FPD: Federally proposed for delisting
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
SE: State listed as endangered
ST: State listed as threatened
SCD: State candidate for delisting

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
Rana boylii pop. 6	foothill yellow-legged frog - south coast DPS	FPE/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. No suitable rocky streams or open banks are present within the BSA to support this species. In addition, Bell Creek's close proximity to the coast makes it unsuitable for this species. The nearest occurrence was observed in 1933 approximately 7.6 miles north of the BSA (CDFW 2022b).
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	High potential to occur. While this species was not observed during protocol-level, focused California red-legged frog surveys conducted between April and July 2022, this species has been known to breed in Bell Creek and has a high potential to still do so. In addition, there is potential for the species to disperse across the golf course and use the golf course pond and other aquatic features while dispersing. The nearest occurrence was last observed in 2010 in Bell Creek approximately 0.5

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				miles north of the Project site (CDFW 2022b).
Taricha torosa	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur. Occurrences of this species in the vicinity are limited to the Santa Ynez Mountains and foothills, and it is not known to be along the immediate coast. The nearest occurrence is from 2011, approximately 1.5 miles north of the Project site in Ellwood Canyon (CDFW 2022b).
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	High potential to nest. Stands of eucalyptus trees are present within several areas of the Project site that provide suitable nesting habitat. In addition, the riparian woodland habitat found adjacent to Bell Creek provides suitable nesting habitat for this species. The nearest nesting occurrence, from 2019, is from approximately 0.25 miles east of the BSA (SBAS 2022). One individual was observed perching offsite, north of Hollister, during raptor surveys in 2022.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to nest. Some emergent vegetation occurring on the Project site may provide limited areas of suitable habitat. But this species is considered extirpated as a breeder in southern Santa Barbara County (Lehman 2022). Nesting has not been recorded in the area in approximately 40 years. The nearest occurrence were from Goleta in the 1970s

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				to early 1980s, more than 3.0 miles to the east (CDFW 2022b).
Ammodramus savannarum (nesting)	grasshopper sparrow	None/SSC	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Low potential to occur. Although the species occurs at nearby Ellwood Mesa (SBAS 2022; Lehman 2022), the Project site supports only fragmented suitable open grassland habitat and generally lacks suitable scattered shrubs this species uses for perching.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Low potential to occur. While this species has been observed on golf courses, it is considered extirpated as a nesting species in southern Santa Barbara County (2022). California ground squirrel presence on the Project site suggests some potential for this species to occur in fall or winter, when it is a rare visitor to the area, such as at the North Campus Open Space, University of California, Santa Barbara, approximately 1.0 mile east of the Project site (CLO 2022). However, most open areas are well maintained, and consistent human presence on the golf course is likely to deter overwintering.
Aythya americana	redhead	None/SSC	Nests in freshwater emergent vegetation in areas with deep open water, as well as in some more alkaline areas.	Not expected to nest. This species was observed within the golf course pond in January 2022 (CLO 2022), during its wintering period. Suitable habitat is absent on the Project site. The nearest known nesting locations are along the northern coast of Santa Barbara County (Lehman 2022).

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Low potential to occur. Not expected to nest. Any potential for this species to occur is likely limited to the small dune area just west of Bell Creek, away from the golf course. Although this species is known to nest approximately 1.0 mile to the southeast, at Coal Oil Point Reserve (CDFW 2022b, SBAS 2022), it has never been observed nesting within or adjacent to the Project site, and the beach below the bluffs is too narrow and subject to inundation during high tides to support nesting by this species. If the species forages here on occasion, this would occur only on the beaches, away from the golf course.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Moderate potential to nest. Suitable trees are present to support nesting, especially along the eastern boundary of the Project site. Willows and other trees along Bell Creek and some trees elsewhere on the golf course may also provide suitable nesting habitat, although relatively continual human presence may limit the potential for nesting. Although a pair was observed on the Project site in 2004 (TOBC 2004a), no evidence of nesting was observed, and the species was not subsequently detected. No white-tailed kites were observed on the site during surveys in 2022. The General Plan/CLUP species map (City 2016) includes a nesting occurrence immediately adjacent

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				to the eastern boundary of the Project site. Additional nesting occurrences are from as near as 0.3 miles to the east, in 2010 (SBAS 2022).
Falco mexicanus (nesting)	prairie falcon	None/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. No suitable nesting cliffs or bluffs are present on the Project site, and any occurrence of this species is very rare in southern Santa Barbara County (Lehman 2022). CNDDB includes several historical occurrences from unspecified locations well north of the site, but there are no recent records of this species nesting anywhere on the south coast (Lehman 2022, CDFW 2022b).
Falcon peregrinus anatum	American peregrine falcon	FD/SD, FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Not expected to nest. This species has been reported on several occasions since 2017 through the eBird database (CLO 2022) and likely occurs here while foraging at different times of year. Waterfowl and other birds attracted to the golf course pond probably provide an attractant to foraging peregrine falcons, but nesting habitat is absent.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	BCC/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.)	Not expected to occur. No suitable coastal saltmarsh habitat is present on the Project site, which is just north of the known range of this subspecies, which occurs north to Devereux Slough, approximately 1.4 miles to the southeast (Lehman 2022).

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Pelecanus occidentalis californicus (nesting colonies & communal roosts)	California brown pelican	FPD/FP, SCD	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	Observed on the Project Site. Not expected to nest. The nearest breeding locations are on the Channel Islands, at Anacapa Island and Santa Barbara Island. Regular roosting locations are along the immediate shore. One was observed during surveys in May 2022, resting at the golf course pond. But this species generally stays along the beach and in nearshore waters.
Plegadis chihi	white-faced ibis	None/None		Observed on the Project Site. Not expected to nest and expected to occur only as a rare visitor. This species is not known to nest in Santa Barbara County (Lehman 2022). The only observations on the Project site during surveys were of single foraging birds in the spring and early summer 2022. Individuals and small flocks have been reported in the eBird database (CLO 2022).
Rallus obsoletus levipes	Light-footed Ridgway's rail	FE/FP, SE	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No suitable coastal wetlands, brackish areas, or coastal saline emergent wetlands are present within the Project site. The nearest occurrence was in 1974 approximately 3.2 miles east of the Project in the Goleta Slough, where believed to be extirpated (CDFW 2022b; Lehman 2022).
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to occur. This species is no longer known to nest in Santa Barbara County (Lehman 2022) and may be extirpated as a breeding species in southern California. The nearest CNDDB

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				occurrence was in 1913 approximately 7.3 miles east of the Project site (CDFW 2022b). The species may pass over the Project site occasionally during migration.
Setophaga petechia	yellow warbler	None/SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada.	Low potential to nest. This species was detected during raptor surveys in April 2022 and likely occurs regularly as a migrant on the Project site, in spring and fall. No evidence of nesting has been detected, but marginally suitable nesting habitat occurs along Devereux Creek.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. No suitable nesting habitat occurs on the Project site. The species likely occurs along the shore during migration and post-breeding dispersal. Nesting formerly occurred approximately 1.2 miles southeast of the Project site, at the mouth of Devereux Slough (now Coal Oil Point Reserve), and several pairs nested here again in 2004 to 2007 (Lehman 2022).
Xanthocephalus xanthocephalus	yellow-headed blackbird	None/None		Observed on the Project site. A single individual was observed in May 2022 in the vicinity of the golf course pond. However, this observation was consistent with migration, and the species is not known to nest anywhere in Santa Barbara County.
Fishes				
Eucyclogobius newberryi	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	Observed. While this species was not observed incidentally in Bell Creek during other biological surveys, this species has been observed previously in Bell Creek, on

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				the Project site (Goleta 2006). USFWS has designated this area as critical habitat.
Invertebrates				
Bombus crotchii	Crotch bumble bee	None/None	Open grassland and scrub communities supporting suitable floral resources.	Low potential to occur. While suitable open grassland habitat is present within the Project site, the generally maintained nature of the site limits the availability of both suitable floral resources and nesting and wintering habitat. As CNDDB includes an occurrence from 2017 approximately 0.2 miles east of the Project site, the species may fly over the site on occasion (CDFW 2022b).
Coelus globosus	globose dune beetle	None/None	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico	Low potential to occur. Suitable habitat may occur along the beach, well away from the golf course. And suitable habitat may be limited to areas west of Bell Creek lagoon. The nearest occurrences are from less than 0.5 miles southeast and west of the Project site (CDFW 2022b).
Danaus plexippus pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Observed on the Project site. A known monarch roost at the eastern boundary overlaps the Project site. A cluster of 98 individuals were observed on the Project site in 2003, and more were observed in the roosting grove just offsite. No clustering butterflies were observed here during surveys in 2021-2022, but butterflies were observed in flight in several locations on the Project site. Several additional known roosting sites are near the Project site.

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees.	Not expected to roost. Moderate potential to forage. No suitable rocky outcrops or manmade structures present to support the roosting habits of this species. This species may forage on occasion over the Project site. The nearest occurrence is an acoustic detection from 2017 approximately 1.8 miles east of the Project site (CDFW 2022b).
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to roost. Low potential to forage. No suitable roosting habitat is present in the survey area. The nearest occurrence is from 2005, approximately 4.3 miles northwest of Project site (CDFW 2022b).
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not expected to occur. Suitable roosting habitat is absent from the vicinity. The nearest occurrence is an acoustic detection from 2008, approximately 5.9 miles east of the Project site (CDFW 2022b).
Lasiurus blossevillii	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Low potential to roost. Moderate potential to forage. While riparian habitat occurs on the Project site, the species prefers more well-developed riparian habitats. Much of the site is suitable foraging habitat. The nearest occurrence is an acoustic detection from 2017, approximately 1.8 miles east of the Project site (CDFW 2022b).

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Myotis yumanensis	Yuma myotis	None/None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Moderate potential to roost. Moderate potential to forage. The primary roosting habitat types are absent from the Project site, but this species may roost occasionally, such as for night roosts, in trees on the Project site. Suitable riparian and aquatic foraging habitat is present within the Project site, along Devereux and Bell Creeks. The nearest occurrence is an acoustic detection from 2008, approximately 5.9 miles east of the Project site (CDFW 2022b).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. Some coastal scrub and coastal bluff scrub on the Project site may be suitable, but this species is not known to occur along the immediate coast locally. No woodrat middens were observed during surveys in 2021-2022. The nearest occurrence is from 2015, approximately 5.7 miles northeast of the Project site, in the foothills of the Santa Ynez Mountains (CDFW 2022b).
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Low potential to occur. The supports open areas superficially suitable for this species, but it lacks the prey base required by this species and is too subject to disturbance from human present to support residence by the species. It is possible this species passes through on occasion, while moving between more suitable habitats, during night hours. The nearest CNDDB occurrence is from 1922,

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				approximately 9.9 miles west of the survey area (CDFW 2022b).
Reptiles				
Anniella pulchra	northern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Low potential to occur. Riparian woodland or coastal scrub habitats in the survey area have a small potential to support this species. But unmaintained areas are very limited on the Project site and are mostly isolated from populations elsewhere. The nearest, recent CNDDB occurrence is from 2018, approximately 6.4 miles northwest of the Project site, in the leaf litter of a coast live oak woodland (CDFW 2022b).
Emys marmorata	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Moderate potential to occur. Bell Creek provides suitable aquatic habitat to support this species. Dudek observed this species in May 2022, approximately 0.75 miles west of the Project site in Tecolote Creek, and it may also occur in Bell Creek, on the Project site. Although the bluff and dense vegetation at the eastern edge of the golf course may present an obstacle to movement onto the golf course, it may have a low potential to reach this area.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. Coastal scrub and coastal bluff scrub along the bluffs provide suitable habitat for this species, but it is not known from the coast in the immediate vicinity. The nearest occurrence is from 2010, approximately 6.7 miles northeast of the Project site (CDFW 2022b).

Special-Status Wildlife Species with Potential to Occur on the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. This species is known in the vicinity from chaparral habitats in the Santa Ynez Mountains but is not known to occur in the lowlands of the south coast of Santa Barbara County. The nearest CNDDB occurrence is from 1978, approximately 7.4 miles northwest of the Project site (CDFW 2022b).

[1] The federal and state status of species is based on the Special Animals List (CDFW 2022c).

Status Abbreviations
FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal candidate species (former Category 1 candidates)
FPD: Federally proposed for delisting
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
SE: State listed as endangered
ST: State listed as threatened
SCD: State candidate for delisting

Appendix G
Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta, Santa Barbara Sampling Date: May 10, 2022

Applicant/Owner: State: CA Sampling Point: WSP-01

Investigator(s): H. Moine, R. Swick Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): slope Slope (%): 5

Subregion (LRR): C: Mediterranean CA Lat: 34.430014°N Long: 119.911465°W Datum: WGS84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 30 to 50 percent slopes, eroded NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: Area potentially receiving water from irrigation investigated due to presence of Helminthotheca echioides & Rumex crispus

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: —)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: —)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 25ft²)			
1. Helminthotheca echioides	25	Y	FAC
2. Rumex crispus	45	N	FAC
3. Brachypodium distachyon	5	Y	NL
4. Malva sp.	5	N	NL
5. Brassica rapa	1	N	FACU
6.			
7.			
8.			
	81 = Total Cover		
Woody Vine Stratum (Plot size: —)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	70	x 3 =	210
FACU species	1	x 4 =	4
UPL species	10	x 5 =	50
Column Totals:	81 (A)		264 (B)

Prevalence Index = B/A = 3.26

Hydrophytic Vegetation Indicators:

N Dominance Test is >50%

N Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: WSP-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-13	10YR3/4	100	—	—	—	—	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): —

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): —

Water Table Present? Yes ___ No X Depth (inches): —

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): —

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WSP-01 is on a slope with no low topographic area

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta Sampling Date: 10MAY22

Applicant/Owner: State: CA Sampling Point: WSP-02

Investigator(s): RFS, HLM Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.428541°N Long: 119.911590°W Datum: WGS84

Soil Map Unit Name: Beaches NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓ No ____	3-parameter
Wetland Hydrology Present?	Yes ✓ No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: NA)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	Ø = Total Cover		
Sapling/Shrub Stratum (Plot size: NA)			
1.			
2.			
3.			
4.			
5.			
	Ø = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Ricinus communis	10	DOM	FACU
2. Brassica rapa	20	DOM	FACU
3. Polypogon monspeliensis	30	DOM	FACW
4. Rumex pulcher	4	—	FAC
5. Cotula coronopifolia	—	—	OBL
6. Helminthotheca echioides	10	DOM	FAC
7. Atriplex prostrata	10	DOM	FACW
8.			
	84 = Total Cover		
Woody Vine Stratum (Plot size: NA)			
1.			
2.			
	Ø = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	10	x 3 =	30
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	80 (A)		230 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: WSP-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					CL	
8-12	10YR 3/2	95	7.5YR 4/6	5	C	M	CL	
12-16	GLEY1 5/5G-/1		5Y 2.5/1	30		M	C	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ✓ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ✓ Aquatic Invertebrates (B13)
- ✓ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): 1in

Water Table Present? Yes ✓ No ___ Depth (inches): 0in

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 0in

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Amphipods present

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta, SB County Sampling Date: 10MAY22

Applicant/Owner: State: CA Sampling Point: WSP-03

Investigator(s): RFS, HLM Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.423379°N Long: 119.902337°W Datum: WGS84

Soil Map Unit Name: Diablo Clay, 9 to 15 percent slopes, warm MAAT NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N/A Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N/A (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	one-parameter, veg only
Hydric Soil Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:
This area has a slight topographic depression.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5' x 5')			
1. Festuca perennis	60	DOM	FAC
2. Helminthotheca echioides	30	DOM	FAC
3. Brachypodium distachyon	1	—	UPL
4. Hordeum murinum	<1	—	FACU
5.			
6.			
7.			
8.			
	~91 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	90	x 3 =	270
FACU species	<1	x 4 =	4
UPL species	1	x 5 =	5
Column Totals:	91 (A)		279 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

ND Prevalence Index is ≤3.0[1]

NO Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

NO Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: WSP-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 2.5/1	90					SCL	unnatural soil components

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Soil probably impacted from construction of golf course. Chunks of asphalt and other manmade material found in pit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): —

Water Table Present? Yes _____ No ✓ Depth (inches): —

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): —

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta / Santa Barbara Sampling Date: May 11, 2022

Applicant/Owner: State: CA Sampling Point: WSP-04

Investigator(s): H. Moine, R. Swick Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.427824°N Long: 119.904043°W Datum: WGS 84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slopes NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: paired w/ WSP-05
"normal circumstances" - adjacent areas irrigated and likely fertilized which may have resulted in a powdery salt crust but not a "hard or brittle salt crust" as defined in Indicator B11: salt crust

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: NA)			
1.			
2.			
3.			
4.			
	Ø = Total Cover		
Sapling/Shrub Stratum (Plot size: NA)			
1.			
2.			
3.			
4.			
5.			
	Ø = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Cynodon dactylon	40	Y	FACU
2. Festuca perennis	20	Y	FAC
3. Polygonum aviculare	5	N	FAC
4. Convolvulus arvensis	2	N	NL
5. Spergularia rubra	1	N	FAC
6. Malva parviflora	1	N	NL
7.			
8.			
	69 = Total Cover		
Woody Vine Stratum (Plot size: NA)			
1.			
2.			
	Ø = Total Cover		

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	26	x 3 =	78
FACU species	40	x 4 =	160
UPL species	3	x 5 =	15
Column Totals:	69 (A)		253 (B)

Prevalence Index = B/A = 3.67

Hydrophytic Vegetation Indicators:

N Dominance Test is >50%

N Prevalence Index is ≤3.0[1]

N Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: WSP-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 2.5/2	98	7.5YR 5/4	2	D	M	clay	
2-10	7.5YR 2.5/3	95	5YR 5/8	5	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: —

Depth (inches): —

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): —

Water Table Present? Yes ___ No X Depth (inches): —

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): —

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: although faint salt accumulations were observed, the salts were not "hard or brittle salt crusts" but instead a powdery salt

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta / Santa Barbara Sampling Date: May 11, 2022

Applicant/Owner: State: CA Sampling Point: WSP-05

Investigator(s): H. Moine, R. Swick Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.427840°N Long: 119.904033°W Datum: WGS84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slopes NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: paired w/ WSP-04

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: NA)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: NA)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5'x5')			
1. Festuca perennis	35	Y	FAC
2. Hordeum murinum	5	N	FACU
3. Cynodon dactylon	55	Y	FACU
4.			
5.			
6.			
7.			
8.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: NA)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	35	x 3 =	105
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	95 (A)		345 (B)

Prevalence Index = B/A = 3.63

Hydrophytic Vegetation Indicators:

N Dominance Test is >50%

N Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: paired w/ WSP

SOIL

Sampling Point: WSP-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: paired w/ WSP-04 - assumed similar/ more upland soils - no hydric soils present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): -

Water Table Present? Yes _____ No X Depth (inches): -

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): -

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta/Santa Barbara Sampling Date: 11MA422

Applicant/Owner: State: CA Sampling Point: WSP-06

Investigator(s): R. Swick, H Moine Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.424759°N Long: 119.904785°W Datum: WGS84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slopes NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

1-parameter

Remarks:
depressional feature in grassland paired w/ WSP-07

"Normal circumstances" - adjacent areas irrigated and likely fertilized which may result in powdery salt but not a hard or brittle salt crust", as defined with Indicator B11: Salt Crust

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	Ø = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	Ø = Total Cover		
Herb Stratum (Plot size: ____)			
1. Festuca perenis	40	DOM	FAC
2. Cynodon dactylon	5	—	FACU
3. Sperqularia rubra	12	—	FAC
4. Atriplex semibacata	15	DOM	FAC
5. Hordeum mannum	2	—	FAC
6.			
7.			
8.			
	74 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	Ø = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	69	x 3 =	207
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	74 (A)		227 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: WSP-06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/2							
2-8	7.5YR 3/2		7.5YR 6/8	2	C	M	SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): —

Water Table Present? Yes _____ No ✓ Depth (inches): —

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): —

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: although a powdery salt accumulation was observed, does not meet indicator B11: salt crust definition of "hard or brittle salt crusts"

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta/Santa Barbara Sampling Date: 11MAY22

Applicant/Owner: State: CA Sampling Point: WSP-07

Investigator(s): R. Swick H. Moine Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): C: Mediterranean Lat: 34.424740°N Long: 119.904724°W Datum: WGS 84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slopes NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ✓ No ____

Hydric Soil Present? Yes ____ No ✓

Wetland Hydrology Present? Yes ____ No ✓

one-parameter; veg only

Is the Sampled Area within a Wetland? Yes ____ No ✓

Remarks:

paired point for WSP-06

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	Ø	= Total Cover	
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	Ø	= Total Cover	
Herb Stratum (Plot size: ____)			
1. Festuca perennis	85	DOM	FAC
2. Hordeum murinum	1	—	FACU
3. Medicago polymorpha	2	—	FACU
4.			
5.			
6.			
7.			
8.			
	88	= Total Cover	
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	Ø	= Total Cover	

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	85	x 3 =	255
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	88 (A)		267 (B)

Prevalence Index = B/A = 3.03

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: WSP-07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

paired w/ WSP-06, assumed no hydric soils.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): —

Water Table Present? Yes ____ No X Depth (inches): —

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): —

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta/ Santa Barbara Sampling Date: 11MAY22

Applicant/Owner: State: CA Sampling Point: WSP-08

Investigator(s): R.Swick, H Moine Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C-Mediterranean CA Lat: 34.424835°N Long: 119.905333°W Datum: WGS84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slope NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks: paired w/ WSP-09 "normal circumstances" - adjacent areas irrigated and likely fertilized which may result in powdery salt - but not a "hard or brittle salt crust" associated with Indicator B11: salt crust 1-parameter

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	Ø	= Total Cover	
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	Ø	= Total Cover	
Herb Stratum (Plot size: 5'x5')			
1. Festuca Perennis	75	DOM	FAC
2. Cynodon dactylon	10		FACU
3. Sideraulania rubra	1		FAC
4. Medicago polymorpha	1		FACU
5.			
6.			
7.			
8.			
	87	= Total Cover	
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	Ø	= Total Cover	

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	76	x 3 =	228
FACU species	11	x 4 =	44
UPL species	0	x 5 =	0
Column Totals:	87 (A)		272 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: WSP-08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Based on nearby features and soil conditions, soil is assumed to not be hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): —

Water Table Present? Yes _____ No ✓ Depth (inches): —

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): —

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

powdery salt accumulation observed. Does not meet Indicator B11: salt crust definition of "hard or brittle salt crusts"

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Sandpiper City/County: Goleta / Santa Barbara Sampling Date: May 11, 2022

Applicant/Owner: State: CA Sampling Point: WSP-09

Investigator(s): H. Moine, R. Swick Section, Township, Range: 15, 04N, 29W

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C: Mediterranean CA Lat: 34.424866°N Long: 119.905298°W Datum: WGS84

Soil Map Unit Name: Milpitas-Positas fine sandy loams, 2 to 9 percent slopes NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: NA)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	Ø = Total Cover		
Sapling/Shrub Stratum (Plot size: NA)			
1.			
2.			
3.			
4.			
5.			
	Ø = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Festuca perennis	75	Y	FAC
2. Cynodon dactylon	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: NA)			
1.			
2.			
	Ø = Total Cover		

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust Ø

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	105 (A)		345 (B)

Prevalence Index = B/A = 3.29

Hydrophytic Vegetation Indicators:

N Dominance Test is >50%

N Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: WSP-09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

near WSP-06 that did not have hydric soils, and in similar area; therefore no hydric soils

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

OHWM DATA SHEET

Project: Sandpiper Date: May 10, 2022 Transect: Transect - NWW-HLM-01

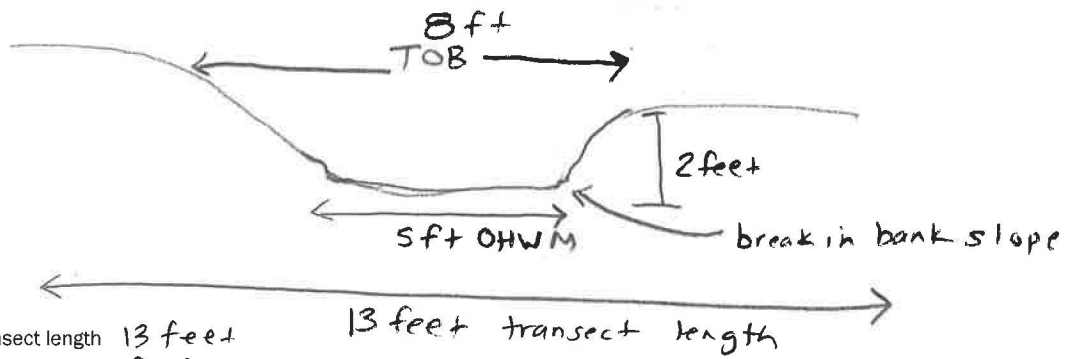
Investigator(s): H. Morine, R. Swick Feature Name: NWW-HLM-01

Site Location: Sandpiper golf course along Hollister Ave

Feature Type: ☒ Ephemeral ☐ Intermittent ☐ Perennial ☐ Other

Transect (cross-section) drawing(s):

View Facing: SE



☒ Transect length 13 feet
☒ OHWM width 5 feet
☒ Channel depth 2 feet
☐ Photo

Break in Slope at OHWM: ☐ Sharp (>60°) ☒ Moderate (30-60°) ☐ Gentle (<30°)

☐ Natural line impressed on the bank	☐ Sediment sorting
☐ Shelving	☐ Leaf litter disturbed or washed away
☐ Changes in the character of soil	☐ Scour
☐ Destruction of terrestrial vegetation	☐ Deposition
☐ Presence of litter and debris	☒ Bed and banks
☐ Wracking	☐ Water staining
☐ Vegetation matted down, bent, or absent	☐ Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X	X			

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	/	40	40	20
Below OHWM	/	50	30	20

Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☐ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
BACPIL CONMAC HIRINC EUPPEP RICCOM no associated riparian veg	CONMAC EUPPEP RIC COM	EUPPEP RICCOM CONMAC

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):
culvert - flow pattern to north, towards Hollister into concrete culvert - 3 ft width, 2 foot height dome shaped

Hydrology:

☐ Flowing water	Avg. depth: —	Min. depth: —
☐ Standing water	Temp: —	Max. depth: —
☐ Saturated		
☒ Dry		

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (plan view), notes:

Upstream of NWW-HLM-01 is a less defined feature lacking OHWM indicators → USW-HLM-01

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)
☐ Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Sandpiper Date: May 10, 2022 Transect: transect-EF-HLM-01

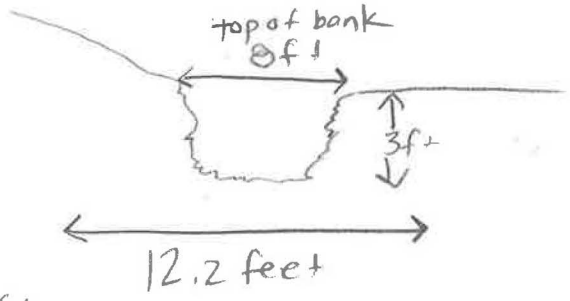
Investigator(s): H Moine, R Swick Feature Name: EF+HLM-01

Site Location: sandpiper golf course along bluffs

Feature Type: ☒ Ephemeral ☐ Intermittent ☐ Perennial ☐ Other

Transect (cross-section) drawing(s):

View Facing: E



☒ Transect length 12.2ft
☒ OHWM width NA
☒ Channel depth 3ft
☒ Photo

Break in Slope at OHWM: ☐ Sharp (>60°) ☐ Moderate (30-60°) ☐ Gentle (<30°)

☐ Natural line impressed on the bank	☐ Sediment sorting
☐ Shelving	☐ Leaf litter disturbed or washed away
☐ Changes in the character of soil	☐ Scour
☐ Destruction of terrestrial vegetation	☐ Deposition
☐ Presence of litter and debris	☐ Bed and banks
☐ Wracking	☐ Water staining
☐ Vegetation matted down, bent, or absent	☐ Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X	X			
Below OHWM	X	X			

general veg	Tree (%) Ø	Shrub (%) 40	Herb (%) 30	Bare (%) 30
Above OHWM				
Below OHWM				

Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☐ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
BACPIL BRODIA TOXDIV Carpobrotus ENCCAL	BACPL	TOXDIV ENCCAL

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):

Hydrology:

☐ Flowing water	Avg. depth: —	Min. depth: —
☐ Standing water	Temp: —	Max. depth: —
☐ Saturated		
☒ Dry		

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (plan view), notes:

no OHWM indicators observed
erosional feature
topo / slopes towards beach/ocean

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)
☐ Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Sandpiper Date: May 10, 2022 Transect: Transect-NWW-HLM-02

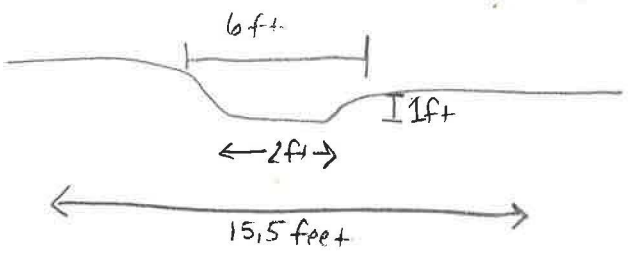
Investigator(s): H. Moine, R Swick Feature Name: NWW-HLM-02

Site Location: Sandpiper golf course - coastal bluff adjacent

Feature Type: ☐ Ephemeral ☐ Intermittent ☒ Perennial ☐ Other

Transect (cross-section) drawing(s):

View Facing: SW



☒ Transect length 15.5ft
☒ OHWM width 2ft
☐ Channel depth 1ft
☐ Photo

Break in Slope at OHWM: ☐ Sharp (>60°) ☒ Moderate (30-60°) ☐ Gentle (<30°)

☒ Natural line impressed on the bank	☐ Sediment sorting
☐ Shelving	☐ Leaf litter disturbed or washed away
☐ Changes in the character of soil	☒ Scour
☐ Destruction of terrestrial vegetation	☐ Deposition
☐ Presence of litter and debris	☒ Bed and banks
☐ Wracking	☐ Water staining
☐ Vegetation matted down, bent, or absent	☒ Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X	X			

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	—	50	40	10
Below OHWM	—	25	65	10

Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☐ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
RICCOM HIR INC BRA RAP	BRARAP HELECH RICCOM	POL MON COTCOR HELECH ATR PRO RUMPUL

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):
feature has water present, flowing. Downstream pipes towards ocean

Hydrology:

- ☒ Flowing water
- ☐ Standing water
- ☐ Saturated
- ☐ Dry

Avg. depth:
Temp:
Min. depth:
Max. depth:

Checklist of resources (if available):

☐ Aerial photography	☐ Vegetation maps	☐ GPS unit
☐ Remotely-sensed images	☐ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (plan view), notes:

Other forms related to this feature: ☐ Yes ☐ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)
☐ Low flow channel or other representative section (OHWM datasheet)

Transect - NWW - HLM - 03

OHWM DATA SHEET

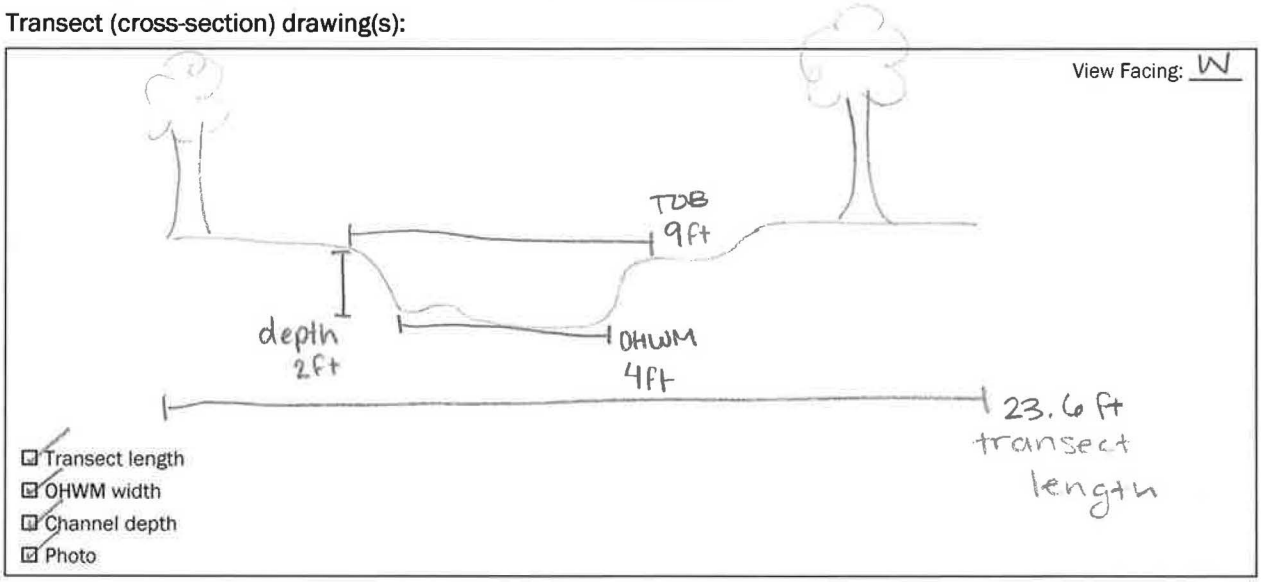
Project: Sandpiper Date: 10 MAY22 Transect: ____

Investigator(s): HLM, RFS Feature Name: NWW - HLM-03

Site Location: In riparian forest along the eastern edge of the site

Feature Type: ☐ Ephemeral ☐ Intermittent ☐ Perennial ☐ Other

Transect (cross-section) drawing(s):



Break in Slope at OHWM: ☐ Sharp (>60°) ☑ Moderate (30-60°) ☐ Gentle (<30°)

☐ Natural line impressed on the bank	☑ Sediment sorting
☐ Shelving	☑ Leaf litter disturbed or washed away
☐ Changes in the character of soil	☐ Scour
☐ Destruction of terrestrial vegetation	☐ Deposition
☑ Presence of litter and debris	☑ Bed and banks
☑ Wracking	☐ Water staining
☑ Vegetation matted down, bent, or absent	☑ Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	90	0	10	0	0
Below OHWM	40	0	60	0	0

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	40	0	10	
Below OHWM	0	0	0	100

Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☑ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
eucalyptus TROMAJ	CONMAC	N/A

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):
trash, no other evidence of disturbance

Hydrology:

- ☐ Flowing water
- ☐ Standing water
- ☐ Saturated
- ☑ Dry

Avg. depth:
Temp:
Min. depth:
Max. depth:

Checklist of resources (if available):

☐ Aerial photography	☐ Vegetation maps	☑ GPS unit
☐ Remotely-sensed images	☑ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (plan view), notes:

Other forms related to this feature: ☐ Yes ☑ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)
☐ Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

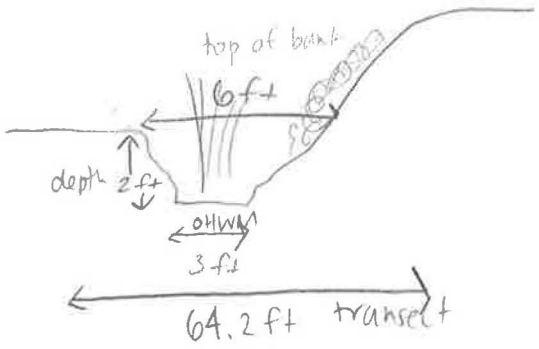
Project: Sandpiper Date: May 11, 2022 Feature ID: NWW-HLM-04

Investigator(s): H. Moine, R. Swick Transect ID: transect - NWW-HLM-04

Site Location: Sandpiper golf course
Center of site, along bluffs

Feature Type: ☐ Ephemeral ☐ Intermittent ☒ Perennial ☐ Other

Transect (cross-section) drawing(s): View Facing: S



☒ Transect length
☒ OHWM width 3ft
☐ Channel depth 2ft
☒ Photo

OHWM Indicators (at OHWM; primary indicators indicated with *)

- ☐ Natural line impressed on the bank
- ☐ Shelving
- ☐ Changes in the character of soil (texture)*
- ☐ Destruction of terrestrial vegetation
- ☐ Presence of litter and debris
- ☐ Wracking
- ☐ Vegetation matted down, bent, or absent
- ☐ Sediment sorting
- ☐ Leaf litter disturbed or washed away
- ☒ Scour
- ☐ Deposition
- ☒ Bed and banks
- ☐ Water staining
- ☐ Change in plant community and/or cover*

☒ Break in Slope at OHWM*: ☒ Sharp (>60°) ☐ Moderate (30-60°) ☐ Gentle (<30°)

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X				

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	Ø	20	50	30
Below OHWM	Ø	20	40	40

Veg Stage: ☐ Early (herbs & seedlings) ☒ Mid (herbs, shrubs, saplings) ☐ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
Conium maculatum Brassica rapa Baccharis pilularis Polypogon monspelensis	Typha sp. Conium maculatum	Typha sp.

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

piped water providing H_2O input to feature
- white PVC 3 inch CUL-RFS-04
- black corrugated pipe 4 inch HDPE CUL-RFS-05

Hydrology

☒ Flowing water	Avg. depth: 4 inches	Min. depth:	0.5 inche
☒ Standing water	Temp: —	Max. depth:	8 inches
☐ Saturated			
☐ Dry			

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (aerial view), notes:

- Canyon sloping towards beach / Pacific Ocean
- Slope veg includes TOXDIV, MYOLAE, BACPIL, Cortaderia, HIRINC, CONMAC

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)

☐ Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

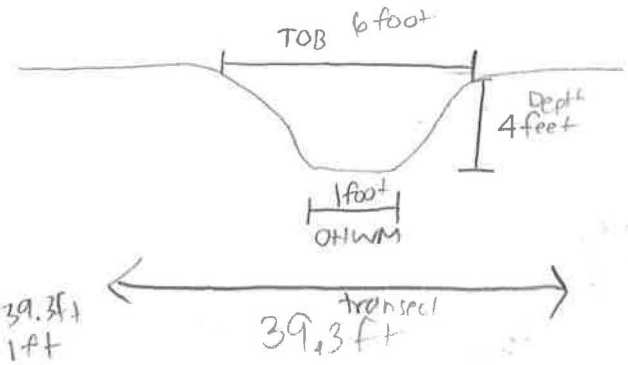
Project: Sandpiper Date: May 11, 2022 Feature ID: NWW-HLM-05

Investigator(s): H. Moine, R. Swick Transect ID: transect -NWW-HLM-05

Site Location: Sandpiper golf course, top of Devereux Creek

Feature Type: ☒ Ephemeral ☐ Intermittent ☐ Perennial ☐ Other

Transect (cross-section) drawing(s): View Facing: S



☒ Transect length 39.3ft
☒ OHWM width 1ft
☒ Channel depth 4ft
☐ Photo

OHWM Indicators (at OHWM; primary indicators indicated with *)

- ☐ Natural line impressed on the bank
- ☐ Shelving
- ☐ Changes in the character of soil (texture)*
- ☐ Destruction of terrestrial vegetation
- ☐ Presence of litter and debris
- ☐ Wracking
- ☒ Vegetation matted down, bent, or absent
- ☐ Sediment sorting
- ☐ Leaf litter disturbed or washed away
- ☒ Scour
- ☐ Deposition
- ☒ Bed and banks
- ☐ Water staining
- ☒ Change in plant community and/or cover*

☐ Break in Slope at OHWM*: ☐ Sharp (>60°) ☒ Moderate (30-60°) ☐ Gentle (<30°)

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X				

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	90	0	5	80
Below OHWM	0	0	0	100

Veg Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☒ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
Eucalyptus Pittosporum undulatum Toxicodendron diversilobum	Artemesia douglasiana	—

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- Upstream box culvert under Hollister Ave
- downstream culvert under golf course

Hydrology

☐ Flowing water	Avg. depth: —	Min. depth: —
☐ Standing water	Temp: —	Max. depth: —
☐ Saturated		
☒ Dry		

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)

☐ Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

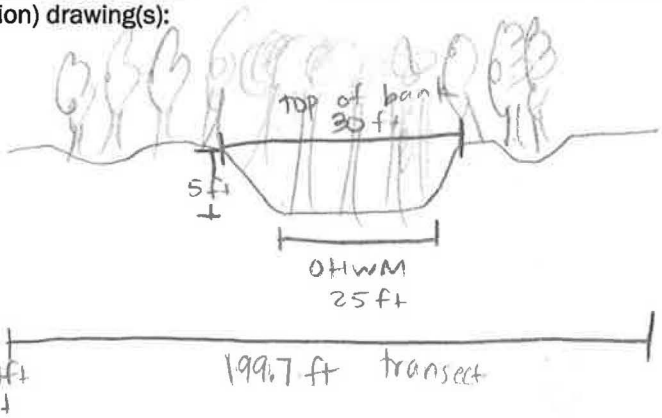
Project: Sandpiper Date: May 11, 2022 Feature ID: NWVV-HLM-06

Investigator(s): H. Moine, R. Swick Transect ID: transect-NWVV-HLM-06

Site Location: Sandpiper golf course
Devereux Creek - middle/upper

Feature Type: ☒ Ephemeral ☐ Intermittent ☐ Perennial ☐ Other

Transect (cross-section) drawing(s): View Facing: S



☒ Transect length 199.7 ft
☒ OHWM width 25 ft
☒ Channel depth 5 ft
☐ Photo

RIP-RFS-03

OHWM Indicators (at OHWM; primary indicators indicated with *)

- ☐ Natural line impressed on the bank
- ☐ Shelving
- ☐ Changes in the character of soil (texture)*
- ☐ Destruction of terrestrial vegetation
- ☐ Presence of litter and debris
- ☒ Wracking
- ☐ Vegetation matted down, bent, or absent
- ☐ Sediment sorting
- ☐ Leaf litter disturbed or washed away
- ☒ Scour
- ☒ Deposition
- ☒ Bed and banks
- ☐ Water staining
- ☐ Change in plant community and/or cover*

☒ Break in Slope at OHWM*: ☒ Sharp (>60°) ☐ Moderate (30-60°) ☐ Gentle (<30°)

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X				

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	80	20	15	5
Below OHWM	10	35	20	40

Veg Stage: ☐ Early (herbs & seedlings) ☐ Mid (herbs, shrubs, saplings) ☒ Late (herbs, shrubs, mature trees)

Upland Species:	*Bank Species:*	*Emergent Species:*
Salix lasiolepis	Salix lasiolepis	Salix lasiolepis
Toxicodendron diversilobum	Delairea odorata	Stipa millacea
Pittosporum undulatum	Toxicodendron diversilobum	Euphorbia peplus
		Verbena lasiostachys
		Cyperus eragrostis
		Toxicodendron diversilobum

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- culvert at upstream - from under golf course
- upstream, downstream, and along edges - regular maintenance / mowing

Hydrology

☐ Flowing water	Avg. depth: —	Min. depth:
☐ Standing water	Temp: —	Max. depth: —
☐ Saturated		
☒ Dry - at upstream culvert area 3ft x 1ft w/ standing H2O 3inch max depth		

Checklist of resources (if available):

☒ Aerial photography	☒ Vegetation maps	☒ GPS unit
☐ Remotely-sensed images	☒ Soil maps	☐ Stream gage data
☐ Topographic maps	☐ Rainfall/precipitation data	☐ Other studies:
☐ Geologic maps	☐ Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: ☐ Yes ☒ No

☐ Terrace, fringe, or floodplain wetland (wetland datasheet)

☐ Low flow channel or other representative section (OHWM datasheet)

Appendix D-2

Environmentally Sensitive Habitat Areas Memorandum

DUDEK
621 CHAPALA STREET
SANTA BARBARA, CALIFORNIA 93101
T 805.963.0651 F 805.963.2074

MEMORANDUM

To:	City of Goleta, Planning and Environmental Review Department
From:	Dave Compton, Senior Wildlife Biologist, Dudek John Davis IV, Principal/Senior Coastal Ecologist, Dudek
Subject:	Memorandum Describing Environmentally Sensitive Habitat Areas (ESHAs) for the Sandpiper Golf Club Project
Date:	August 7, 2023 Revised October 26, 2023, March 25, 2025
cc:	Steve Welton, SEPPS Chip Wullbrandt, Price, Postel, and Parma, LLP Bill Medel
Attachment(s):	A: Figures 1. Project Location Figure 2. General Plan (Figure 4-1) Special-Status Species and ESHA Figure 3. Sensitive Resources Identified during Surveys, 2021-2022 Figure 4. ESHA Comparison B: Photographic Documentation

This revised memorandum reviews existing and new Environmentally Sensitive Habitat Areas (ESHAs) that Dudek identified in Biological Resources Assessment Report for the Sandpiper Golf Club Project (BRAR; Dudek 2023; revised 2025). Following preparation of the original memo in August 2023, ~~In addition,~~ Dudek ~~has~~ expanded the ESHA discussion to incorporate responses to comments raised in the Notice of Application Incompleteness (2nd Submittal) dated September 6, 2023, and a follow up meeting with the City of Goleta (City) regarding the letter on October 3, 2023. The responses are generally found in Section 3 of the memo. Finally, in this update of the memo, Dudek responds to comments from Rincon, the City of Goleta's (City's) consultant for preparation of the Environmental Impact Report.

The Project site occurs in the western portion of the City of Goleta, within the Coastal Zone (Attachment A: Figure 1, Project Location). The City's General Plan/Coastal Land Use Plan (CLUP; City of Goleta 2006) includes Figure 4-1 Special-Status Species and Environmentally Sensitive Habitat Areas, updated through 2016 (City of Goleta 2016; Attachment A; Figure 2, General Plan (Figure 4-1) Special-Status Species and ESHA). In addition, Chapter 17.30 of the Goleta Code of Ordinances codifies ESHA requirements in the General Plan/CLUP. Based on Dudek's observations of habitats in the field, this memorandum seeks revisions to mapping of ESHA on the Project Site, consistent with the General Plan/CLUP and Chapter 17.30 of the Code or Ordinances. ~~As part of the Project, the Sandpiper Golf Club Trust is seeking an amendment to the General Plan/CLUP that would result in revisions to ESHA as depicted on Figure 4-1.~~

1 ESHA in the City of Goleta

Figure 4.1 of the ~~in the~~ General Plan/CLUP depicts sensitive biological resources throughout the City of Goleta (Attachment A: Figure 2). These resources include occurrences of special-status plants and wildlife and various ESHAs that have previously been identified. Figure 4-1 is not considered a comprehensive map of ESHAs occurring in the City of Goleta. In addition to the map provided in Figure 4-1, Policy CE 1.2 provides a list of habitat types that are considered ESHA, including:

a. Creek and riparian areas.

b. Wetlands, such as vernal pools.

c. Coastal dunes, lagoons, or estuaries, and coastal bluffs/coastal bluff scrub.

d. Beach and shoreline habitats.

e. Marine habitats.

f. Coastal sage scrub and chaparral.

g. Native woodlands and savannahs, including oak woodlands.

h. Native grassland.

i. Monarch butterfly aggregation sites, including autumnal and winter roost sites, and related habitats.

j. Beach and dune areas that are nesting and foraging locations for the western snowy plover.

k. Nesting and roosting sites and related habitat areas for various species of raptors.

l. Other habitat areas for species of wildlife or plants designated as rare, threatened, or endangered under state or federal law.

m. Any other habitat areas that are rare or especially valuable from a local, regional, or statewide perspective.

The Conservation Element of the General Plan/CLUP includes Policy CE 1.3 with regard to site-specific studies and unmapped ESHAs. In addition, the General Plan/CLUP includes a policy (CE 1.5) requiring corrections to ESHA as depicted in Figure 4-1, and the amendment of Figure 4-1 based on these changes. These policies are as follows:

CE 1.3 Site-Specific Studies and Unmapped ESHAs. [GP/CP] Any area not designated on the ESHA map in Figure 4-1 that meets the ESHA criteria for the resources specified in CE 1.1 shall be granted the same protections as if the area was shown on the map. Proposals for development on sites where ESHAs are shown on the map or where there is probable cause to believe that ESHAs may exist shall be required to provide the City with a site-specific biological study that includes the following information:

a. A base map that delineates topographic lines, parcel boundaries, and adjacent roads.

b. A vegetation map that identifies species that may be indicators of ESHAs.

c. A soils map that delineates hydric and nonhydric soils, if applicable.

d. A census of animal species that indicates the potential existence of ESHAs.

e. A detailed map that shows the conclusions regarding the boundary, precise location and extent, or current status of the ESHA based on substantial evidence provided in the biological studies.

CE 1.5 Corrections to Map of ESHAs. [GP/CP] ***[as amended November 19, 2024]*** If a site-specific biological study, prepared consistent with subpolicy CE 1.3, contains substantial evidence that an area previously shown as an ESHA on Figure 4-1 (and Figure 3-5) does not contain habitat that meets the definition of an ESHA for reasons other than that set forth in CE 1.4, or an area not shown as ESHA on Figure 4-1 (and Figure 3-5) that meets the definition of ESHA, the Planning Commission, or the City Council if it is otherwise the Review Authority for the underlying project under Title 17 of the Goleta Municipal Code, shall make a finding based on substantial evidence as part of the project approval regarding the physical extent of the ESHA and detailed justification for revisions at the project site~~the City biologist and the Planning Commission shall review all available information and determine if the area in question should no longer be considered an ESHA and therefore not be subject to the ESHA protection policies of this plan~~. If the ~~final decision making body~~Planning Commission, or the City Council if it is otherwise the Review Authority for the underlying project under Title 17 of the Goleta Municipal Code, finds~~ determines~~ that a change in the mapped~~the area is not an~~ ESHA is warranted, a map revision~~modification~~ shall be included in the next General Plan/Coastal Land Use Plan ESHA map amendment as detailed below. In cases of removal of mapped ESHA, the General Plan/Coastal Land Use Plan~~; however, Local Coastal Program~~ policies and standards for protection of ESHAs shall not apply, and approval of development consistent with all other requirements of the General Plan/Coastal Land Use Plan ~~this plan~~ may be considered prior to the map revision.

At minimum, Figure 4-1 (and Figure 3-5) shall be reviewed and updated every five years to reflect currently available information, including up-to-date information on locations of rare, threatened, or endangered species or habitat; changes made in project approval decisions; and changes due to rising sea level.

In addition, the General Plan/LCP includes policies applying to creeks as ESHA, and to Streamside Protection Areas, including Policy CE 2.1 Policy, Designation of Protected Creeks; Policy CE 2.2, Streamside Protection Areas; Policy CD 2.3, Allowable Uses and Activities in Streamside Protection Areas; and Policy CE 2.6, Restoration of Degraded Creeks. These policies specifically refer to creeks depicted on Figure 4-1, as follows:

CE 2.1 Designation of Protected Creeks. [GP/CP] The provisions of this policy shall apply to creeks shown in Figure 4-1. These watercourses and their associated riparian areas are defined as ESHAs. They serve as habitat for fish and wildlife, provide wildlife movement corridors, provide for the flow of stormwater runoff and floodwaters, and furnish open space and passive recreational areas for city residents.

CE 2.2 Streamside Protection Areas. [GP/CP] A Streamside Protection Area (SPA) is hereby established along both sides of the creeks identified in Figure 4-1. The purpose of the designation shall be to preserve the SPA in a natural state in order to protect the associated riparian habitats and ecosystems. The SPA shall include

the creek channel, wetlands and/or riparian vegetation related to the creek hydrology, and an adjacent upland buffer area. The width of the SPA upland buffer shall be as follows:

a. The SPA upland buffer shall be 100 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater. The City may consider increasing or decreasing the width of the SPA upland buffer on a case-by-case basis at the time of environmental review. The City may allow portions of a SPA upland buffer to be less than 100 feet wide, but not less than 25 feet wide, based on a site specific assessment if (1) there is no feasible alternative siting for development that will avoid the SPA upland buffer; and (2) the project's impacts will not have significant adverse effects on streamside vegetation or the biotic quality of the stream.

b. If the provisions above would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the landuse plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel, subject to approval of a conditional use permit.

CE 2.3 **Allowable Uses and Activities in Streamside Protection Areas**. [GP/CP] The following compatible land uses and activities may be allowed in SPAs, subject to all other policies of this plan, including those requiring avoidance or mitigation of impacts:

a. Agricultural operations, provided they are compatible with preservation of riparian resources.

b. Fencing and other access barriers along property boundaries and along SPA boundaries.

c. Maintenance of existing roads, driveways, utilities, structures, and drainage improvements.

d. Construction of public road crossings and utilities, provided that there is no feasible, less environmentally damaging alternative.

e. Construction and maintenance of foot trails, bicycle paths, and similar low-impact facilities for public access.

f. Resource restoration or enhancement projects.

g. Nature education and research activities.

h. Low-impact interpretive and public access signage.

i. Other such Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives

CE 2.5 **Maintenance of Creeks as Natural Drainage Systems**. [GP/CP] Creek banks, creek channels, and associated riparian areas shall be maintained or restored to their natural condition wherever such conditions or opportunities exist. Creeks carry a significant amount of Goleta's stormwater flows. The following standards shall apply:

a. The capacity of natural drainage courses shall not be diminished by development or other activities.

b. Drainage controls and improvements shall be accomplished with the minimum vegetation removal and disruption of the creek and riparian ecosystem that is necessary to accomplish the drainage objective.

c. Measures to stabilize creek banks, improve flow capacity, and reduce flooding are allowed but shall not include installation of new concrete channels, culverts, or pipes except at street crossings, unless it is demonstrated that there is no feasible alternative for improving capacity.

d. Drainage controls in new development shall be required to minimize erosion, sedimentation, and flood impacts to creeks. Onsite treatment of stormwater through retention basins, infiltration, vegetated swales, and other best management practices (BMPs) shall be required in order to protect water quality and the biological functions of creek ecosystems.

e. Alteration of creeks for the purpose of road or driveway crossings shall be prohibited except where the alteration is not substantial and there is no other feasible alternative to provide access to new development on an existing legal parcel. Creek crossings shall be accomplished by bridging and shall be designed to allow the passage of fish and wildlife. Bridge abutments or piers shall be located outside creek beds and banks, unless an environmentally superior alternative exists.

CE 2.6 **Restoration of Degraded Creeks**. [GP/CP] Segments of several creeks in Goleta have been covered or channelized by concrete culverts, causing degradation of the creek ecosystem. Restoration activities for improving degraded creek resources shall include the following:

f. Channelized creek segments and culverts shall be evaluated and removed to restore natural channel bed and bank, where feasible.

g. Creek courses in public rights-of-way shall be uncovered as part of public works improvement projects.

h. Barriers that prevent migration of fish such as anadromous salmonids from reaching their critical habitat shall be removed or modified.

i. Restoration of native riparian vegetation and removal of exotic plant species shall be implemented, unless such plants provide critical habitat for monarch butterflies, raptors, or other protected animals.

j. Creek rehabilitation projects shall be designed to maintain or improve flow capacity, trap sediments and other pollutants that decrease water quality, minimize channel erosion, prevent new sources of pollutants from entering the creek, and enhance in-creek and riparian habitat.

k. The use of closed-pipe drainage systems for fish-bearing creeks shall be prohibited unless there is no feasible, less environmentally damaging alternative. When the use of culverts is necessary, the culverts shall be oversized and have gravel bottoms that maintain the channel's width and grade.

One additional policy in the Land Use Element of the General Plan, LCP, Policy US 9.3, pertains specifically to Sandpiper Golf Club, and includes a requirement pertaining to ESHA:

I. Any rerouting or alteration of the golf course shall be designed in a manner that protects and enhances environmental resources, including adjacent monarch butterfly habitat areas, Devereux Creek, and other drainages, and that protects safety on the beach.

Dudek conducted site-specific studies for the Sandpiper Golf Club Project in 2021 and 2022 and presented results of its ESHA determinations in the BRAR (Attachment A: Figure 3, Sensitive Resources Identified during Surveys, 2021-2022). The BRAR refined mapping of several ESHAs depicted in Figure 4-1 of the General Plan/CLUP, mapped several new ESHAs, and determined one area depicted as ESHA on Figure 4-1 did not qualify as ESHA.

2 Survey Methods

Several surveys described in the BRAR identified ESHA on the Sandpiper Golf Club Project Site (Attachment A: Figure 1). These included surveys that confirmed the presence of previously known ESHA, identified previously unidentified ESHA, or resulted in refinement of ESHA boundaries. Special-status plant surveys and several focused surveys for special-status wildlife species (monarch butterfly surveys, raptor surveys, California red-legged frog surveys) provided information pertinent to ESHA determinations, but focused on known habitat areas (monarch butterfly, California red-legged frog) and did not affect determination of boundaries of these areas. Identification of potential ESHA raptor habitat was based on the location of raptor nests observed during surveys. Methods of other surveys that identified ESHA require more explanation to clarify how ESHA was determined.

2.1 Vegetation Mapping

Many ESHAs are based on sensitive vegetation communities or sensitive vegetation types, such as riparian vegetation and coastal sage scrub. A Dudek biologist performed vegetation mapping on the Project Site consistent with the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and vegetation communities were identified using the Manual of California Vegetation Online (MCV) (CNPS 2023). Vegetation communities were classified based on site factors, descriptions, membership rules, distribution, and characteristic species present in the area. Information such as dominant species and associated cover classes were recorded. In some areas, the vegetation communities observed in the field did not match those described in MCV (CNPS 2023) or included on the California Natural Community List (NCL; CDFW 2022). In these instances, Dudek generated additional site-specific vegetation community or land cover classifications. Additionally, Bell Canyon vegetation had been mapped as part of the City of Goleta Creek & Watershed Management Plan (City of Goleta 2020); therefore, the vegetation mapping included in this plan was incorporated into the vegetation map.

Vegetation communities were generally mapped to the alliance level, except where mapping to the finer-scale association level was necessary to determine sensitivity in accordance with the NCL (CDFW 2022). Since the Project Site is in the coastal zone, no minimum mapping units apply to sensitive vegetation communities and riparian and wetland vegetation communities; therefore, all sensitive vegetation communities observed were mapped.

Dudek biologists mapped vegetation communities on the Project Site while in the field using an Esri ArcGIS mobile application. A Dudek geographic information system (GIS) technician transferred the vegetation boundaries into an ArcGIS file and created a GIS coverage for vegetation communities. Once major line work and community designations

were completed, a geodatabase was created to verify that these data were topologically correct and met final quality control and assurance procedures.

2.2 Native Grassland Mapping

In accordance with Policy CE 5.1 and CE 5.2, native grasslands in Goleta are ESHA. During initial vegetation mapping and identification of biological constraints, the Dudek botanist noted the presence of native grasses. As a result, during the April 2022 special-status plant species survey pass, prior to conducting an assessment of potential native grasslands, the Dudek botanist recorded the general locations of native grasses on the Project Site using an ESRI ArcGIS Field Maps application on a handheld iOS device. In May 2022, the Dudek botanist conducted the native grassland assessment by walking areas with native grasses providing 100% visual survey coverage. When native grasses were observed, pin flags were placed adjacent to native grass individuals to the outside of the polygon, ensuring the whole native grass plant was included in the polygon. Once an entire polygon was delineated with pin flags, the polygon was assigned a unique identifier and mapped using ESRI ArcGIS Field Maps application on a handheld iOS device boosted with a Trimble R1 by following the pin flag boundary. After mapping the polygon boundaries in the field using global positioning system (GPS) technology, the botanist determined which assessment method of the two described below was most appropriate based on the polygon size.

Quantitative Method

For polygons of native grasses where it was feasible to establish a transect and 1-meter-square quadrats, the quantitative method was applied. Transect locations were chosen using a non-random design that allowed for the greatest coverage of the polygon and varied in length, depending on the size of the polygon being assessed. For larger, more irregularly shaped polygons, multiple transects were established. Transect start and end points were recorded when the transect was established. Starting at the zero end of the transect tape, the botanist placed a 1-meter-square quadrat on alternating sides of the transect at 2-meter intervals. Within each 1-meter-square quadrat, the botanist estimated the percent cover of native grasses relative to plant cover and counted the number of native grass individuals. For grass species that were difficult to count, such as salt grass (*Distichlis spicata*), the total number of individuals was not recorded.

Qualitative Method

For polygons of native grasses where it was infeasible to establish a transect and 1-meter-square quadrats (polygons that were too small), the percent cover of native grasses relative to plant cover was visually estimated and the number of native grass individuals was recorded. For grass species that were difficult to count, such as salt grass, the total number of individuals was not recorded.

Upon completing the native grassland field survey, Dudek performed a desktop assessment of the native grass relative plant cover percent and size of each polygon to determine whether polygons met the City defined thresholds for a native grassland (see Goleta General Plan/Coastal Land Use Plan – Policy CE 5: Protection of Other Terrestrial Habitat Areas [GP/CP]). Under the Goleta General Plan/CLUP (City of Goleta 2006), native grasslands are areas were where native grassland species comprise 10% or more of the total relative plant cover. Additionally, the Goleta General Plan/CLUP (City of Goleta 2006) further defines native grasslands by size and includes that removal or disturbance to native grass patches less than 0.25 acres that are clearly isolated and not part of a significant native grassland or an integral component of a larger ecosystem may be allowed.

Dudek biologists calculated the mean native grassland species relative plant cover for the 1-meter-square quadrats for each polygon to determine the coverage of native grassland species for each polygon containing native grasses. For polygons assessed using the qualitative method, the visually estimated relative percent cover of native grassland species was noted for each polygon. Dudek biologists then assessed the size of individual polygons containing native grasses and clusters of polygons containing native grasses to determine if the City defined thresholds for native grasslands was met. Areas identified as native grasslands were then incorporated into the vegetation map.

2.3 Aquatic Resources Delineation

Riparian habitats, creeks, and wetlands are considered ESHA under the General Plan/CLUP. Dudek conducted a field delineation of aquatic resources of the Project Site in accordance with the procedures of the Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2) (USACE 2008a). The instruction guidelines for jurisdictional determinations (USACE 2007) present regulation responsibilities of USACE under the CWA: USACE regulates traditional, navigable waters of the United States, adjacent wetlands, and relatively permanent waters tributary to TNW and adjacent wetlands. Wetland vegetation was classified using CNPS (2023). Wetland areas under the jurisdiction of USACE were delineated based on the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. Non-wetland waters of the United States under the jurisdiction of USACE were delineated based on the presence of an ordinary high water mark (OHWM) and nexus to a TNW of the United States. Identification of the OHWM followed the A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b), where present. The aquatic resources delineation also included the collection of CDFW jurisdictional boundaries subject to Section 1600-1616 of the California Fish and Game Code, which extend to the top of bank or the outermost edge of riparian vegetation, whichever is greater, associated with a stream channel or waterway. Additionally, the aquatic resources delineation included waters of the state under the jurisdiction of the RWQCB, pursuant to Section 401 of the federal CWA and the Porter-Cologne Act as wetlands or drainages. The aquatic resources delineation included an evaluation of the survey area for features meeting the definition of a coastal wetland under Section 30121 of the CCA. City of Goleta defines wetlands as the most protective of USFWS, CDFW (formerly California Department of Fish and Game), and CCC wetland definitions using indicators of a single parameter (plants, soil, or hydrology) to determine the boundary of a wetland. Lastly, City of Goleta identifies watercourses and their associated riparian areas as Environmentally Sensitive Habitat Areas (ESHAs) and have associated protection policies.

Hydrophytic Vegetation

During the aquatic resources delineation, a “sampling point” was considered positive for hydrophytic vegetation if it passed the basic dominance test (Indicator 1), meaning that more than 50% of the dominant species sampled were characterized as either obligate, facultative wetland, and/or facultative per the National Wetland Plant List (USACE 2020). A description of the hydrophytic vegetation categories is provided in Table 1 (Lichvar et al. 2012). In those cases where the dominance test failed but there were positive indicators of hydric soils and/or hydrology, the vegetation parameter was re-evaluated using the prevalence index (Indicator 2), which takes into account all plant species in the community, not just dominants. All plant species observed during the surveys were identified and recorded.

Table 1. National Indicator Status Ratings and Their Rating Categories

Indicator Status (abbreviation)	Percent Occurrence in Wetlands
Obligate (OBL). Occur almost always under natural conditions in wetlands.	99
Facultative Wetland (FACW). Usually occur in wetlands but occasionally found in non-wetlands.	67–99
Facultative (FAC). Equally likely to occur in wetlands and non-wetlands.	34–66
Facultative Upland (FACU). Usually occur in non-wetlands but occasionally found in wetlands.	1–33
Upland (UPL). Occur in wetlands in another region, but occur almost always under natural conditions in non-wetlands in the region specified.	1

Source: Lichvar et al. 2012
Note: The three facultative categories are subdivided by (+) and (−) modifiers.

Soils

According to the National Technical Committee for Hydric Soils, hydric soils are "soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA 1994). Soil pits were prepared using a shovel to determine if hydric soils were present. The presence of hydric soils was determined through consultations with the 1987 Manual, as well as Field Indicators of Hydric Soils in the United States v. 7.0 (USDA-NRCS 2010) and the USACE's Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Munsell Soil Color Charts were used to determine soil chroma and value. Where feasible, soil pits were prepared to depths as deep as 16 inches. Dry soils were moistened to obtain the most accurate color.

Hydrology

Per the guidelines prescribed in the Arid West Supplement (USACE 2008a), wetland hydrology indicators are separated into four major groups: A, B, C, and D. Group A indicators are based on direct observations of surface flow, ponding, and soil saturation/groundwater. Group B indicators consist of evidence that the site has been or is currently subjected to ponding including, but not limited to, water marks, drift deposits, and sediment deposits. Group C indicators include signs of previous and/or current saturation including oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur, both of which are indicative of extended periods of soil saturation. Group D indicators consist of "vegetation and soil features that are indicative of current rather than historic wet conditions and include a shallow aquitard and results of the FAC-Neutral test" (USACE 2008a). Each group is subdivided into primary and secondary categories based on their frequency and reliability to occur in the Arid West region. Signs of hydrology were investigated on site by intensive field review.

3 ESHAs Present on the Project Site

Figure 4-1 of the General Plan/CLUP (City of Goleta 2016) identified several ESHAs on and adjacent to the Sandpiper Golf Club Project Site. Dudek's field investigations resulted in confirmation of several of these ESHAs, revisions of boundaries elsewhere, and identification of previously unrecorded ESHAs. In addition, streams

occurring on or adjacent to the Project Site would serve as the basis for streamside protection areas, in accordance with Policy CE 2.2.

3.1 City-Mapped ESHA

ESHA depicted on the Project Site in Figure 4-1 of the General Plan/CLUP includes Open Water (the golf course pond), Riparian/Marsh/Vernal Pool (along Devereux Creek and Bell Canyon Creek), Sage Scrub/Dune/Bluff Scrub (along the bluffs), and Monarch Butterfly and/or Raptor Roosting Habitat (along the eastern boundary and in Bell Creek Canyon in the west) (Attachment A: Figure 2, General Plan (Figure 4-1) Special-Status Species and ESHA). The City requested that, "the ESHA mapping needs to include Devereaux Creek (in Figures 2 and 3) for purposes of analyzing Streamside Protection Areas." Please see Section 3.2.6. Additionally, the City requested that ESHA mapping include special-status species location on site (such as [California] red-legged frog) and ESHA and special-status species adjacent to the project site. Please see Attachment A: Figures 2 and 5 and an explanation for the California red-legged frog habitat in Section 3.2.5. Lastly, the City requested that, "…the General Plan consistency analysis should include how the project is consistent with CE 2.6(a)." Habitat restoration is addressed in Section 3.2.6.1.

3.2 Dudek-Identified ESHA

Dudek identified the above features, but revised the mapping of several and determined that the open water associated with the golf course pond may not meet the City's definition of ESHA (Attachment A: Figure 3, Table 2). Dudek also identified previously undocumented ESHA in several locations on the Project Site. This section describes areas Dudek identified as ESHA, including newly identified ESHAs, describes differences between Dudek's ESHA mapping and the City's, and provides Dudek's rationale for ESHA boundaries that differ from the City's. Table 2 provides a list of all ESHA types identified on the Project Site, whether Dudek's mapping or ESHA determination differed from the City's, buffers suggested in the General Plan/CLUP, and potential buffer reductions, based on General Plan/CLUP policies. ~~All~~ ESHAs (referred to as "ESH"), setbacks (buffers), and special-status species discussed below are included on the Preliminary Landscape Layout Plan (Earthform 2023). In general, the Preliminary Landscape Plan includes only the standard (maximum) buffers, and does not include potential minimum buffers shown in Table 2. In addition, the extent of coastal sage scrub/coastal bluff scrub vegetation as shown in the Preliminary Landscape Layout Plan includes non-sensitive coyote brush scrub not included in Figure 3.

Table 2. ESHAs Occurring on the Sandpiper Golf Course Project Site

ESHA Type	Dudek Revisions	General Plan/CLUP Buffer (ft)	Potential Buffer Reduction (minimum ft)
Vegetation Communities and Land Covers			
Coast live oak woodland (riparian)	Newly identified along Bell Canyon Creek, outside riparian	100	25
Coastal sage scrub/coastal bluff scrub*	Minor boundary revisions	25	N.A.

Needlegrass-melic grass grassland (native grassland)	Newly identified	10	N.A.
Beach	Dudek assumed all beach could be ESHA	N.A.	N.A.
Open Water	Determined not ESHA	100	N.A.
Riparian and Wetland Habitats			
Riparian**	Boundary revisions (additions and subtractions)	100	25
Coastal wetlands	Confirmed and newly identified	100	50
Rare Plant Habitat			
Habitats supporting cliff malacothrix, red sand-verbena, Santa Barbara honeysuckle, Southern California black walnut, and woolly seablite	Newly identified (all within ESHA vegetation communities or wildlife habitats, or within buffers)	N.A.	N.A.
Wildlife Habitat			
Monarch roost	Confirmed	100	50
Raptor nest	Newly identified	100 300 ft for disturbance when occupied	N.A.

Note: Table note example.
* Coastal sage scrub/coastal bluff scrub identified on the Project Site includes several distinct vegetation communities included in the CDFW Natural Communities List (CDFW 2022) and the Manual of California Vegetation Online (CNPS 2023): ~~coyote brush scrub, *Baccharis pilularis – Toxicodendron diversilobum* association,~~ quailbush scrub alliance, California brittle bush scrub alliance, and coastal sage scrub.
** Riparian habitats identified as ESHA included arroyo willow thickets and a riparian form of eucalyptus woodland along Devereux Creek.
† Includes both areas depicted in Figure 4-1 of the General Plan/CLUP as "emergent wetland" and previously unmapped ESHAs near the ocean bluff.

3.2.1 Coast Live Oak Woodland

Dudek mapped coast live oak woodland on the east side of Bell Canyon Creek (Attachment A, Figure 3). The General Plan/CLUP Figure 4-1 includes ESHAs designated as Native Upland Woodlands/Savannahs, but it shows no such areas occurring on the Project Site. However, a portion of the coast live oak woodland Dudek mapped was within Riparian/Marsh/Vernal Pool along Bell Canyon Creek in Figure 4-1 (Attachment A; Figure 4, ESHA Comparison). Dudek identified coast live oak woodland extending farther eastward, based on field observations. The entire coast live oak woodland should be considered riparian oak woodland associated with Bell Canyon Creek, and both the ESHA and buffer should be considered part of the streamside protection area (SPA) for this area.

The General Plan specifies a buffer of 100 feet for riparian habitat, and a potential buffer reduction to 25 feet (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts riparian ESHA and the 100-foot setback that would provide the limits of the upland buffer for the Bell Creek SPA.

3.2.3 Coastal Sage Scrub/Coastal Bluff Scrub

Coastal sage scrub and coastal bluff scrub vegetation communities along the ocean bluff at the south edge of the Project Site include ~~*Baccharis pilularis – Toxicodendron diversilobum* association, coyote brush scrub alliance, and~~ quailbush scrub alliance and California brittle brush scrub – ashy buckwheat scrub alliance. Differences from City-mapped vegetation along the bluff were minor, and based on field observations made according to methods described in Section 2.1 above~~. Dudek also mapped a small area of coyote brush scrub alliance on the south side of Devereux Creek near the western edge of the site that had previously been identified~~ (Attachment A: Figure 4).

The General Plan (Policy CE 5.3) and the City of Goleta Municipal Code (17.30.140) specify~~ies~~ a buffer of 25 feet for coastal sage scrub and coastal bluff scrub habitat (Table 2). It includes no provision for reducing this buffer. The Preliminary Landscape Layout Plan (Earthform 2023) depicts both coastal sage scrub and coastal bluff scrub ESHA and the setback for sensitive scrub; however, non-sensitive coyote brush scrub alliance included in an earlier version of the coastal sage scrub habitat is included in the location shown in the Preliminary Landscape Plan. Earlier mapping also erroneously included a sand trap associated with Hole 14 within coastal bluff scrub, and this is included in the ESHA mapping in the Preliminary Landscape Plan.

3.2.3 Native Grassland

Although the City mapping includes native grassland east of the Project Site, on the Ellwood Bluffs, it includes none on the Project Site itself. Dudek observed several species of native grasses in unmaintained parts of the golf course, including purple needlegrass (*Stipa pulchra*), which was recorded in sufficient density and over a sufficient area in the southeastern part of the Project Site to be considered a native grassland (Attachment A: Figure 3).

The General Plan (Policy CE 5.2) and City of Goleta Municipal Code (17.30.160) specify~~ies~~ a buffer of 10 feet for native grassland (Table 2). It includes no provision for reducing this buffer. The Preliminary Landscape Layout Plan (Earthform 2023) depicts native grassland ESHA and the 10-foot setback.

3.2.4 Beach

The General Plan/CLUP Figure 4-1 identifies ESHA for "Beach and Shoreline" in the southwestern extreme of the Project Site (near the mouth of Bell Canyon Creek) and in a stretch of beach in the south-central part of the site. Dudek mapped "beach" as a land cover all along the southern edge of the Project Site. But, since no Project activities would occur on or near the beach, Dudek did not distinguish between beach ESHA and beach that may not be ESHA. Dudek assumes the entire beach within the Project Site could be ESHA, but only City-mapped Beach and Shoreline ESHA is shown on Figure 2. The General Plan and the City of Goleta Municipal Code (17.30.170) do~~es~~ not specify a buffer distance for Beach and Shoreline. The Preliminary Landscape Layout Plan (Earthform 2023) does not depict~~s~~ City-mapped Beach and Shoreline ESHA, but this ESHA occurs outside the golf course boundary.

3.2.5 Open Water and California Red-legged Frog Habitat

Although Figure 4-1 of the General Plan/CLUP displays an area of Open Water, the golf course pond, just southwest of the clubhouse, as ESHA, Dudek observations and historical information related to the seasonally maintained pond indicate this location should not be considered ESHA. Bell Canyon Lagoon, Tecolote Creek Lagoon, and Lake

Los Carneros are provided as examples of lagoons and open water habitats that are considered ESHA in Table 4-2 of the General Plan/CLUP. The Sandpiper Golf Course pond, or more correctly termed "water hazard," however, is a water feature that is regularly managed and treated and drained annually for maintenance (Sandpiper Golf Course, pers. comm. and Rathburn 2004). It is void of emergent or other suitable vegetation, thereby reducing its habitat quality for breeding, refugia/shelter, prey, and other essential habitat characteristics of the California red-legged frog (*Rana draytonii*), Contaminants such as mineral fertilizers used throughout the range of the California red-legged frog on crops, household lawns, and golf courses negatively affect CRLF habitat (USFWS 2006). Marco et al. (1999) found increased mortality of northern red-legged frog larvae when exposed to nitrite below the levels allowed for drinking water. During aquatic resources surveys, Dudek confirmed and mapped the extent of open water associated with Bell Canyon Lagoon. However, the Sandpiper Golf Course pond is listed as an example of special-status species habitat, not as an open water habitat, as listed in Table 4-2 and displayed on Figure 4-1 in the City's General Plan. In the General Plan, ESHA is defined under CE 8.1 ESHA Designation for the CRLF under *d. Habitat capable of supporting special-status amphibians and reptiles such as the red-legged frog* (Rana aurora draytonii) *and western pond turtle* (Clemmys marmorata pallida). Under the optimal conditions, the Sandpiper Golf Course Pond is only suitable as a temporary summer aquatic refuge but is not able to support a CRLF population. Currently, the pond is unoccupied by the CRLF, and, therefore, doesn't meet the definition of ESHA. In addition, no other special-status amphibians or reptiles, including southwestern pond turtle (*Actinemys pallida*), have been recorded using the pond during any biological surveys.

California red-legged frog (*Rana draytonii*) was originally observed in the golf course pond in 2001, 2002, and 2003, however, Rathbun (2004), in an assessment of the frog population of the golf course area, believed that the pond was not a breeding location, and that instead it provided stopover habitat for frogs that "move seasonally and intermittently between water bodies in order to find favorable habitat during adverse conditions." Dudek conducted eight focused CRLF surveys according to USFWS (2005) protocol between April and July 2022 and observed no California red-legged frogs in the golf course pond or in any of the other aquatic habitats in the vicinity (Dudek 2023). The golf course pond is an artificial pond surrounded my well-maintained "golf course" grasses. It is up to fifteen feet deep and has no overhanging or emergent wetland vegetation. Despite the suitable depth, given the lack of overhanging vegetation and any adjacent vegetation other than maintained turf grass, habitat is not optimal as a breeding site, although the site may still be used as a dispersal site. In addition, this pond is periodically drained. Also, Rathbun (2004) noted that "given the relatively small number of [CRLF] frogs in limited wetland habitats in the vicinity of the Sandpiper Golf Course, the [CRLF] frogs are probably susceptible to local extinction." In addition to poor quality habitat, the California's most recent drought (2011 to 2021, interrupted by 2017) may have contributed to the absence of CRLF on the property during the 2022 surveys. As mentioned above, the Sandpiper Golf Course Pond is currently considered unoccupied by the CRLF and, therefore, is not deserving of an ESHA designation. The General Plan specifies a buffer of 100 feet for open water (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts open water habitats and the 100-foot setback.

Opportunities for habitat restoration related to Devereux Creek are introduced in 3.2.6.1.

3.2.6 Streamside Protection Areas and Riparian Habitat

In accordance with Policy CE 2.1. the General Plan/CLUP has designated two creeks occurring on the Project site as "protected streams": Bell Canyon Creek and Devereux Creek. In accordance with Policy CE 2.2, streamside protection areas (SPAs) occur along both creeks. As protected creeks and SPAs are only those designated in Figure 4-1 of the General Plan/CLUP, no other protected creeks or SPAs occur on the Project site.

Dudek largely confirmed mapping of riparian habitat and wetland vegetation along Bell Canyon Creek. In accordance with Policy CE 2.2, the outer edge of the riparian and wetland vegetation associated with the creek would serve as the outer extent of ESHA and as basis for the 100-foot setback that would define the extent of the ~~streamside protection area (~~SPA~~)~~. Elsewhere on the Project site, Dudek made substantial changes to the mapping of riparian ESHA along Devereux Creek. The City-mapped ESHA along this creek is of relatively even width, the length of the creek where it occurs on the golf course. However, the creek course is underground in three locations, crossing the Hole 1, 2, 3, and 5 fairways, so that these areas are completely devoid of riparian vegetation, indications of surface flows, or defined banks. A swale that follows the course of the historic creek likely conducts local surface local flows across the Hole 2, 3, and 5 during storms (Stantec 2023), but Dudek observed no indications of surface hydrology here, and this swale is generally poorly defined throughout (Attachment B: Photographic Documentation). The hole 1 fairway, where Dudek (2023) identified culverts at either side, is level through this area, and no evidence is present of above ground flows. East of the Hole 5 fairway, on the east side of an Arizona crossing paralleling the fairway, signs of hydrology and of a bed and bank resume as the creek flows offsite to Santa Barbara Shores Park.

Elsewhere along Devereux Creek, Dudek mapped riparian vegetation based on conditions observed in the field. Two areas of arroyo willow scrub, which occurs in a well-defined community amid maintained areas of the golf course, were identified as riparian vegetation. In addition, Dudek identified two areas of eucalyptus woodland as riparian, due to the association of trees in these two locations with Devereux Creek. Trees considered shading the creek in these two areas, one of which is just south of Hollister Avenue and one of which is on the western edge of the Project Site, were mapped as riparian (Attachment A: Figure 4). Dudek's mapping resulted in an increase in the area of riparian vegetation in these two areas. Because no riparian vegetation, defined bed and bank, or indicators of surface flows occur in the vicinity of the Hole 1, 2, 3, and 5 fairways, these areas do not meet the definition of ESHA.

Because no riparian vegetation or defined banks occur in areas where the creek is underground or otherwise absent, there is also no basis for establishing an upland buffer, in accordance with General Plan policy. Policy CE 2.2 (see Section 1 above) states that the streamside protection area (SPA) "upland buffer shall be 100 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater." It further provides that the upland buffer may be as little as 25 feet on either side of the creek, based on a site-specific assessment. The purpose of the upland buffer and the SPA "shall be to preserve the SPA in a natural state in order to protect the associated riparian habitats and ecosystems." However, under existing conditions, the portions of the historic Devereux Creek that do not support riparian vegetation also do not support stream banks, observable signs of surface flows, or any other resource to protect (Attachment B: Photographic Documentation; Dudek 2023). Therefore, Figure 4 (Attachment A) shows the SPA as including only the areas supporting surface flows and riparian vegetation, plus the upland buffer for these areas.

As noted above, the General Plan specifies a buffer of 100 feet for stream resources, including riparian habitat, and a potential buffer reduction to 25 feet (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts riparian ESHA and the setback that would provide the limits of the upland buffer for the Devereux Creek SPA, as mapped by Dudek.

3.2.6.1 Devereux Creek Restoration

Although, in their altered conditions, these segments of the historic Devereux Creek do not support surface flows, a defined bank, or riparian vegetation, several General Plan policies, including Policy LU 9.3 (h) and Policy CE 2.6 refer to the protection, enhancement, and restoration of creeks, and of Devereux Creek specifically (Section 1, above). Policy LU 9.3(h) states that design for rerouting or alteration of the golf course "shall be . . . in a manner that protects and enhances environmental resources," including Devereux Creek. Policy CE 2.6 states that "channelized sections of creek and culverts shall be evaluated and removed to restore natural channel bed and bank, where feasible" and further states that "rehabilitation project shall be designed to maintain or improve flow capacity."

The Project, as currently proposed, provides enhancement to Devereux Creek that addresses these requirements. An Arizona crossing along the east edge of the Hole 5 fairway (Attachment B: Photo Documentation) would be removed along with the culvert that crosses under it. Surface flows would be restored to this area, and the cart path would be moved farther west, where a bridge would span the swale marking the historic course of Devereux Creek, rather than disturbing the surface of the historic creek course. Additional improvements are in development in the vicinity of the Holes 2, 3, and 5 fairways. The current landscape plan proposes a more natural, dry creek design in these areas (Earthform Design 2023). Specifics of this design are forthcoming, after project approval.

3.2.7 Emergent Wetlands

Dudek confirmed mapping of emergent wetland in Bell Canyon Creek, and mapped additional emergent wetland at a location not identified as ESHA in the City's map, along the ocean bluff (Attachment A: Figure ~~4~~3). This location is one that had previously been identified as supporting aquatic habitat, and where Dudek and previous consultants conducted surveys for California red-legged frog. No other emergent wetlands were identified.

The General Plan (Policy CE 3.4) and the City of Goleta Municipal Code (17.30.090) specify a buffer of 100 feet for coastal wetlands, and a potential buffer reduction to 50 feet (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts the coastal wetland ESHA and the 100-foot setback.

3.2.8 Rare Plant Habitats

Dudek identified five rare plant species during surveys, none of which had been identified in City data, including: cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*), which possesses a California Rare Plant Rank (CRPR) of 4.2; red sand-verbena (*Abronia maritima*), a perennial herb with a CRPR of 4.2; Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), a perennial evergreen shrub with a CRPR of 1B.2; Southern California black walnut (*Juglans californica*), a tree with a CRPR of 4.2; and woolly seablite (*Suaeda taxifolia*), also a CRPR 4.2 species. Of these, cliff malacothrix, Southern California black walnut, and woolly seablite all occur within areas considered ESHA based on vegetation community. Red sand-verbena occurs in an area of beach mapped as ESHA in the General Plan/CLUP and far from golf course and any proposed re-design. Santa Barbara honeysuckle occurs partly within an area protected as monarch butterfly roosting habitat and as riparian habitat associated with Devereux Creek. A portion of the area where Santa Barbara honeysuckle occurs is outside these ESHAs but well within the 100-foot buffer. No additional buffers are required to protect any of these species.

The General Plan (Policies CE 8.1 and CE 8.2) and the City of Goleta Municipal Code (17.30.090) do~~es~~ not specify a buffer for habitats supporting rare plants. As all rare plants on the Project Site occur within ESHA vegetation communities or wildlife habitat with designated buffers, or within the buffers for such habitats, these species will be protected under policies protecting these habitats. The Preliminary Landscape Layout Plan (Earthform 2023) includes the location of all rare plants.

3.2.9 Monarch Butterfly Roosting Habitat

Dudek generally confirmed the location and boundary of monarch butterfly roosting habitat. It also confirmed eucalyptus woodland along the western boundary as potential raptor habitat. Figure 3 shows the location of two historic raptor nest sites within eucalyptus in this area.

The General Plan (Policy CE 4.5) and the City of Goleta Municipal Code (17.30.180) specify a buffer of 100 feet for monarch butterfly roosting habitat, and a potential buffer reduction to 50 feet (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts monarch butterfly roost ESHA and the 100-foot setback.

3.2.10 Raptor Nests

In addition to historic nests of Cooper's hawk (*Accipiter cooperii*) and white-tailed kite (*Elanus leucurus*) included in City data in Figure 4-1 of the General Plan/CLUP, Dudek identified two locations where red-tailed hawks (*Buteo jamaicensis*) nested, one in 2021 and one in 2022, and a location of an unsuccessful nesting attempt by red-shouldered hawks (*Buteo lineatus*) in 2022 (Figure 3).

The General Plan (Policy CE 8.4) specifies a buffer of 100 feet for ~~raptor~~ nests of sensitive raptor species, when feasible. This would include any nest of white-tailed kite or Cooper's hawk. This buffer increases to 300 feet for disturbance conducted near a nest that is occupied (Table 2). The Preliminary Landscape Layout Plan (Earthform 2023) depicts all raptor nests identified during surveys in 2021-2022 and previously.

4 References

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Attachment A

Figures 1–4

SOURCE: USGS National Map

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

ESHA Memo for the Sandpiper Golf Club Project

Project Boundary

Environmentally Sensitive Habitat Areas

- Beach and Shoreline
- Monarch butterfly and/or Raptor Roosting
- Open Water
- Riparian/Marsh/Vernal Pool
- Sage Scrub/Dune/Bluff Scrub
- Unvegetated Open Creek Channel

Special-Status Species

- Cooper's Hawk Nest
- White-tailed Kite Nest
- California Red-Legged Frog
- Tidewater Goby
- Monarch Butterfly Aggregation

SOURCE: Aerial: Sanborn 2020

DUDEK

0 200 400 Feet

FIGURE 2

General Plan (Figure 4-1) Special-Status Species and ESHA

ESHA Memo for the Sandpiper Golf Club Project

SOURCE: Aerial: Sanborn 2020

DUDEK 0 200 400 Feet

FIGURE 3

Sensitive Resources Identified during Surveys, 2021-2022

ESHA Memo for the Sandpiper Golf Club Project

Project Boundary

ESHA Comparison

ESHA Addition (2.6 acres)

ESHA Loss (7.6 acres)

U.S. Army Corps of Engineers

Non-Wetland Waters/Streambed

Dudek Mapped ESHA

Sensitive Communities

Coastal Bluff Scrub/Coastal Sage Scrub

Purple Needle Grass Grassland

Riparian and Wetland ESHA

Riparian

Coastal Wetland

Open Water

Raptor Nests

Red-tailed hawk Nest (2021, 2022)

Red-shouldered hawk Nest (2022)

Monarch Butterfly

Monarch Butterfly Roosting Habitat

City of Goleta ESHA

Habitat Type

Beach and Shoreline

Monarch butterfly and/or Raptor Roosting Habitat

Open Water

Riparian/Marsh/Vernal Pool

Sage Scrub/Dune/Bluff Scrub

Special-Status Species

California Red-Legged Frog

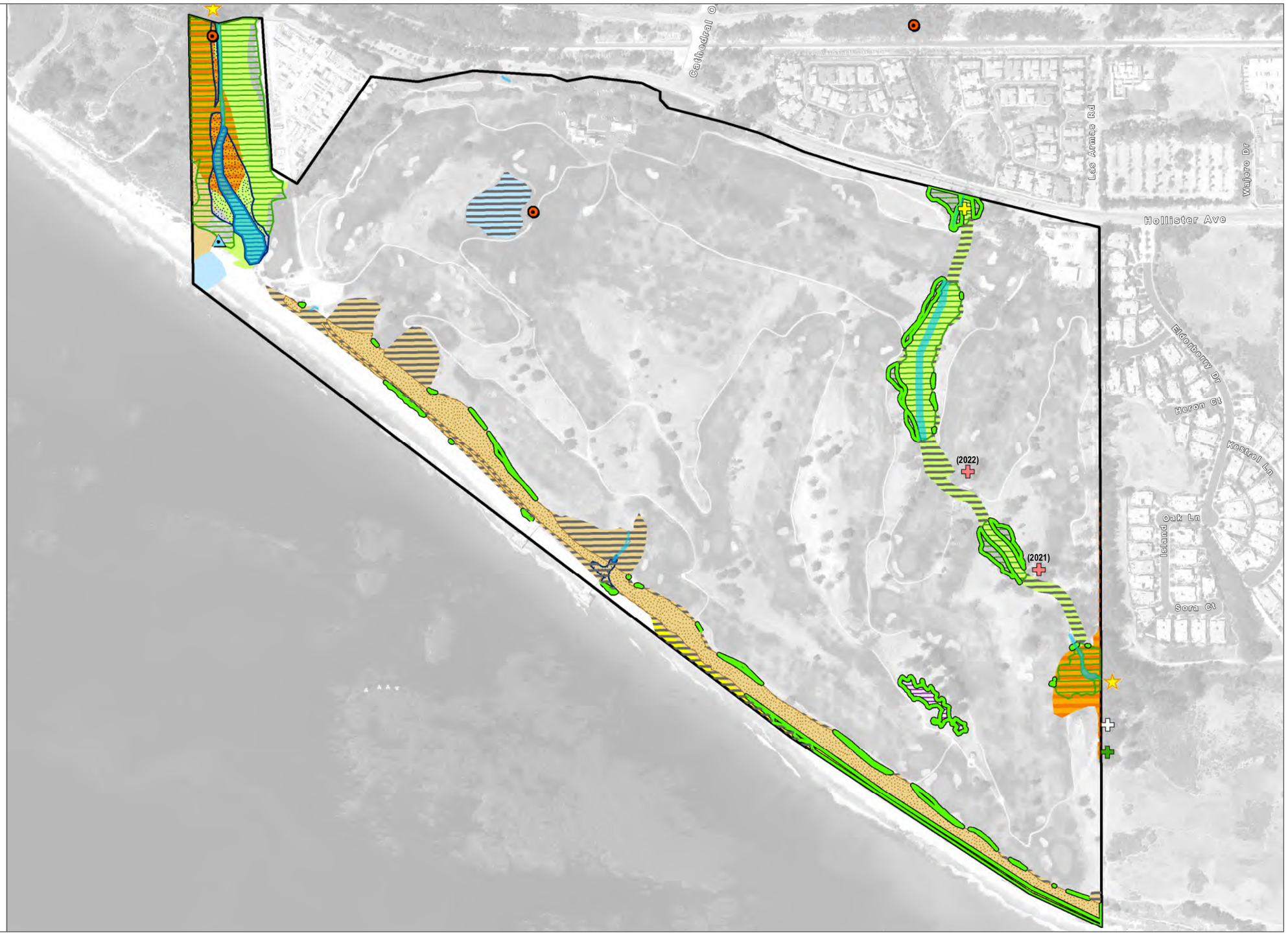
Tidewater Goby

Monarch Butterfly Aggregation Site

Raptor Nests

Cooper's hawk Nest (City, historic)

White-tailed kite Nest (City, historic)



SOURCE: Aerial: Sanborn 2020

DUDEK

0 200 400 Feet

FIGURE 4

ESHA Comparison

ESHA Memo for the Sandpiper Golf Club Project

Attachment B
Photos

Photo 1. Grill above culvert opening adjacent to Arizona crossing of historic Devereux Creek at Hole 5 fairway, looking southwest. May 10, 2022.

Photo 2. Looking northwest along historic Devereux Creek course and Hole 5 fairway. May 10, 2022.

Photo 3. Looking northwest along historic Devereux Creek course, across Hole 3 fairway. May 10, 2022.

Photo 4. Looking northwest from near existing bridge over historic Devereux Creek, across Hole 2 fairway. May 10, 2022.

Photo 5. Looking north to proposed riparian ESHA along Devereux Creek, immediately west of Hole 2 fairway. April 2, 2021.

Photo 6. Looking south over Hole 1 Fairway toward proposed Devereux Creek riparian and along approximate route of existing creek culvert under the fairway. May 10, 2022.

Photo 7. Looking south toward Aquatic Resource F, a Coastal wetland along the bluffs, near Hole 14. May 11, 2022.

Photo 8. Looking southwest along the eastern side of Aquatic Resource F, a Coastal wetland along the bluffs, near Hole 14. May 11, 2022.

Photo 9. Looking southwest along the west side of Aquatic Resource F, a Coastal wetland along the bluffs, near Hole 14. May 11, 2022.

Photo 10. Looking north northeast over the golf course pond, toward the clubhouse. April 2, 2021.

Photo 11. Looking northeast over the eastern half of the golf course pond. April 2, 2021.

Photo 12. Looking north northwest across the western side of the golf course pond. April 25, 2022.

Photo 13. Looking southwest along the west edge of the golf course pond. April 25, 2022.

Appendix D-3

Arborist Reports

Duke McPherson, Arborist

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November 16, 2022

Sandpiper Golf Trust LLC
Ty Inc.
280 Chestnut Avenue
Westmont, Illinois, 60559
Attn: Cathy Hwang, CFO
chwang@tymail.com

Arborist Report

Introduction

This report accompanies a spreadsheet form tree inventory and full property site plan both of which were prepared from my tree survey of the entire property known as the Sandpiper Golf Club, 7925 Hollister Avenue in the city of Goleta, California.
I have included below a key to the naming of the tree varieties, their common names and their past and present genus and species names.

Key to Tree Names

Common Name	**Current Scientific Name Used in this Report**	**Old Scientific Name**
Monterey Cypress	*Hesperocyparis macrocarpa*	*Cupressus macrocarpa*
Tasmanian Blue Gum	*Eucalyptus globulus*	Same
Lemon Scented Eucalyptus	*Corymbia citriodora*	*Eucalyptus citriodora*
Aleppo Pine	*Pinus halepensis*	Same
Black Acacia	*Acacia melanoxylon*	Same
Shamel Ash	*Fraxinus uhdei*	Same
Silver Dollar Eucalyptus	*Eucalyptus polyanthemos*	Same
Italian Stone Pine	*Pinus pinea*	Same
Red Ironbark Eucalyptus	*Eucalyptus sideroxylon*	Same
Yellow Box Eucalyptus	*Eucalyptus melliodora*	Same

Key to Tree Names (continued)

Common Name	Current Scientific Name Used in this Report	Old Scientific Name
Weeping Willow	*Salix babylonica*	Same
Arroyo Willow	*Salix lasiolepis*	Same
Western Sycamore	*Plantanus racemosa*	Same
Red Flowering Gum	*Corymbia ficifolia*	*Eucalyptus ficifolia*
Paperbark Melaleuca	*Melaleuca quinquinervia*	Same
Canary Island Pine	*Pinus halepensis*	Same
Snowy Fleece Tree	*Melaleuca decora*	Same

Tree Health Designations

In general, the trees along the fairways and in the rough zones between them have been maintained in good health. As a result, in the tree inventory almost all trees have been designated as having good health. I made notes regarding branch die back, sap oozing, trunk decay, etc. but these symptoms, though in some cases point to other factors contributing to them, are not compromising the systemic functioning of the tree. Visual inspection was used only: I looked for good foliar color, good tip growth in branch ends, the presence or absence of fungal organisms and insects in large numbers, and any die out in canopies.

Areas and Trees Covered in this Report and Tree Inventory

I include in the numbered tree survey, all trees within fairways and between them in the 'rough' zones. I have included in this report plans with numbered trees courtesy of Earthform Design. An aerial photograph of the full course with trees numbered is shown in Appendix A, Figure 1 on page 6.

I have sectioned the golf course into three areas in Appendices B-F, pages 7-9.

Native, Non-Native, and Invasive Trees

The property is populated entirely with non-native trees. A distinction should be made between trees native to California but not locally, for instance, the Monterey Cypress. It is not a local native. There is only one naturally growing (not planted) Coast Live Oak present. It is located in the Willows in the lower creek area. There is a planted Western Sycamore (# 199) at the north side of fairway #1 along Hollister Avenue. The most well represented native tree is the Arroyo Willow which follows two sections of Devereux Creek.

In general, the fairways and rough zones are not threatened by non-native invasive trees. Where invasive trees are becoming a major threat is in the creek corridor. Species such as Black Acacia, Shamel Ash, Pittosporum, Palm, Brazilian Pepper, and Eucalyptus varieties are slowly moving in and will displace the Willows in time.

Recommended Tree Care Corrective Action

1.) Tree Health and Structure

Some specimens in the group of Lemon Scented Eucalyptus bordering the hole at fairway 1 on the north side, numbers 16-22, appear to be suffering from water logged soil originating from sod irrigation. The amount of irrigation needs to be regulated or removed from a wide area of tree root zones to help correct the problem.

A group of Lemon Scented Eucalyptus located immediately south of the old Barnsdall service station needs to be cleaned out of dead wood and generally thinned and selectively removed. This will help preserve the proper structural development of the more mature specimens. Some of the large Blue Gum Eucalyptus and Snowy Fleece Trees (*Melaleuca decora*) need to be cleaned up. One Lemon Scented Eucalyptus leans through the south wall of the gas station area and should be removed.

I did not see the need for any other adjustments in general tree care throughout the golf course. The Weeping Willow at the pond edge needs to have its decayed base cleaned out and exposed to air to curtail further decay and possible toppling.

2.) Invasive Trees

In my view, it is important to protect the integrity of the native Willow population inhabiting Devereux Creek. The trees which are moving in will in time displace it and should be removed. Refer to numbers 4 and 5 in the section titled Tree Groups Not Covered in the full Golf Course Inventory on page 5 for further details.

Proposed Golf Course Tree Removals

Taken from the Tree Inventory Spreadsheet. All mature specimens will be mitigated for with replacement by appropriately sized new nursery trees.

Tree Number or Letter	Name	Location	Disposition	Comments
1	Lemon Scented Eucalyptus, *Corymbia citriodora*	Single specimen east of the clubhouse parking.	To be removed for course reconfiguration.	
2	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of three trees just to the northeast of hole # 9.	To be removed for course reconfiguration	
3	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of three trees just to the northeast of hole # 9.	To be removed for course reconfiguration	
4	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of three trees just to the northeast of hole # 9.	To be removed for course reconfiguration	

Proposed Golf Course Tree Removals (continued)

Tree Number or Letter	Name	Location	Disposition	Comments
24	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of 5 others along the outer south edge of the maintenance yard.	To be removed for course reconfiguration	
25	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of 5 others along the outer south edge of the maintenance yard.	To be removed for course reconfiguration	
26	Lemon Scented Eucalyptus, *Corymbia citriodora*	In a group of 5 others along the outer south edge of the maintenance yard.	To be removed for course reconfiguration	
117	Monterey Cypress, *Hesperocyparis macrophylla*	Located in the rough between fairways 15 and 16.	To be removed for course reconfiguration	
130-133(4 trees)	Monterey Cypress, *Hesperocyparis macrophylla*	Located in the rough between fairways 13 and 17.	To be removed for course reconfiguration	
147-148(2 trees)	Monterey Cypress, *Hesperocyparis macrophylla*	Located in the rough between fairways 14 and 15.	To be removed for course reconfiguration	
172-195(24 trees)	Red Iron Bark Eucalyptus, *Eucalyptus sideroxylon*	Located in clubhouse parking lot.	To be removed and replaced	
H	Lemon Scented Eucalyptus, *Corymbia citriodora*	Immediately south of the Barnsdall service station wall.	It is to be removed as it has broken the wall and is tilted horizontally.	

Proposed Golf Course Tree Removals (continued)

Tree Number or Letter	Name	Location	Disposition	Comments
T	Chinese Arbor-vitae, *Thuja orientalis*	Within the maintenance yard.	To be removed. New trees to be planted here.	
U	Peruvian Pepper, *Schinus terebinthifolius*	Within the maintenance yard.	To be removed. New trees to be planted here.	
V	Norfolk Island Pine, *Araucaria heterophylla*	Within the maintenance yard.	To be removed. New trees to be planted here.	
X	Tasmanian Blue Gum, *Eucalyptus globulus*	Within the maintenance yard.	To be removed. New trees to be planted here.	
Total tree number: 43				

Tree Groups Not Covered in the Full Golf Course Inventory

The following is a list of tree groups which will be covered in more detail in a forthcoming report. Recommendations for tree removal have been noted:

1. A group of trees of three Eucalyptus varieties located east of the parking lot along Hollister Avenue:

Nine medium to large *Eucalyptus cladocalyx*, one medium *E. polyanthemos*, two medium *E. melliodora* (rare). All in good health. The last *E. cladocalyx* is part of a pair of trees. One has a large trunk scar. **It may be a candidate for removal**.

2. Another group further east but before (west of) the old Barnall service station:

This a massive tree thicket measuring 244' from east to west of un-maintained, largely small to large sized *Eucalyptus globulus* trees with a mix of small to medium sized Aleppo pines, Myoporum, Pittosporum, and Peruvian Pepper. It straddles Devereux Creek. **A large amount of brushy material and tree debris make this a top priority for cleanup in terms of fire prevention**. If the Barnall station is being considered for restoration, it will be of paramount importance that this messy grove of fire prone trees be cleaned up.

3. A long strip of trees (mainly *Eucalyptus globulus* and *E. cladocalyx*) spreads along the eastern property line from north (at the edge of the maintenance yard) to south. On the property aerial photograph, I measured the total length of this survey as 1874'. I divided it up into sections which show a variation in tree density and type in each area. **Two trees have been marked with red tape for removal.**

4. A group of mainly native Arroyo Willows lining upper Devereux Creek between fairways 2 and 8. A group of non-native trees are located in the northern tip of this section. **They are invading the creek corridor and should be removed.**

Tree Groups Not Covered in the Full Golf Course Inventory (continued)

5. A group of mainly native Arroyo Willows lining lower Devereux Creek between the southern ends of fairways 2 and the south end of number 4. A Monterey pine, Coast Redwood (both trees are not native to this area), and the only Coast Live Oak on the property can all be found in this section of the creek.

Appendix A
Full Property Aerial Photo with Trees Numbered

Figure 1. All trees located within the golf course have been numbered 1-202. Each plan is scaled 1”=400’.

Appendix B
Northeastern Plan Section

Figure 2. A scanned close up of the full property photo shows trees in the eastern section of the golf course. Also, a cluster of lettered trees can be seen surrounding the old Barnsdall service station with a few specimens in the course maintenance yard.

Appendix C
Southern eastern Plan Section

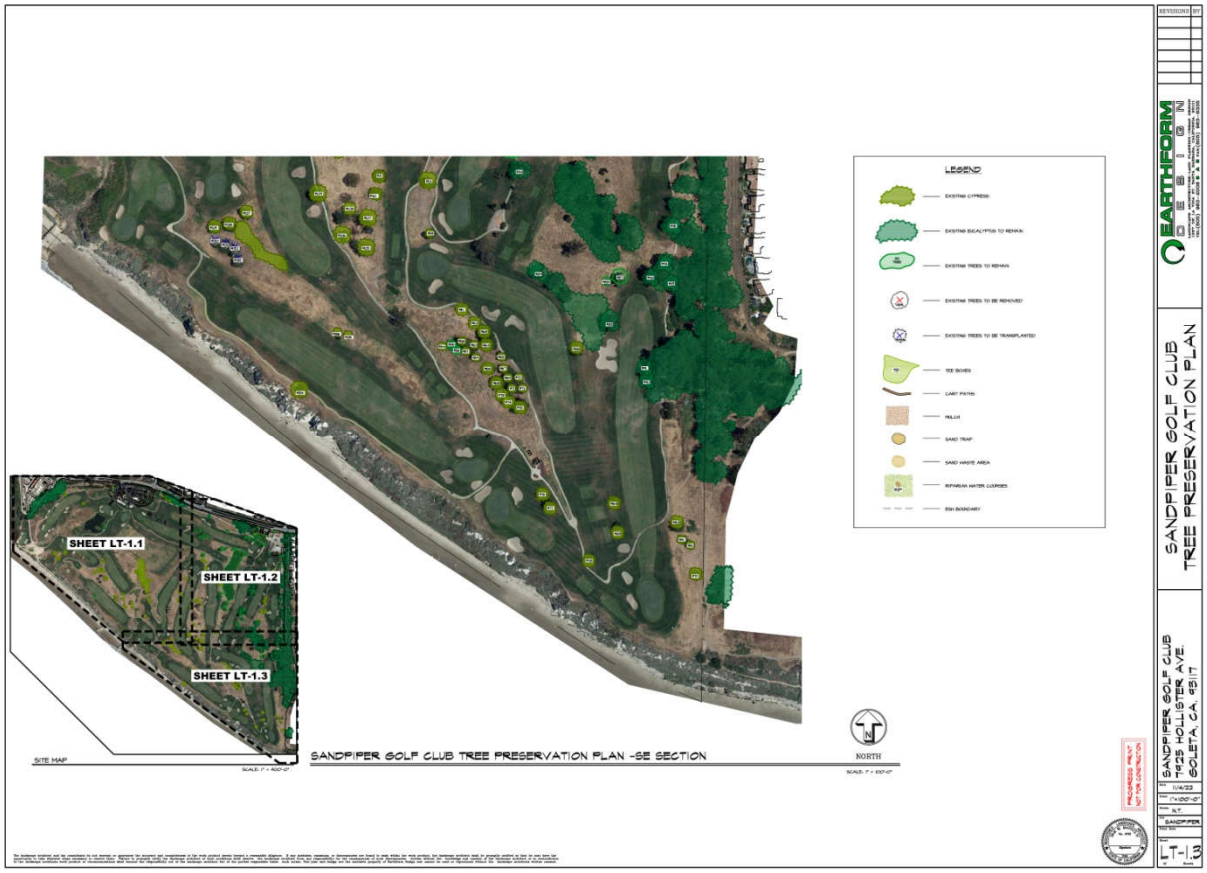


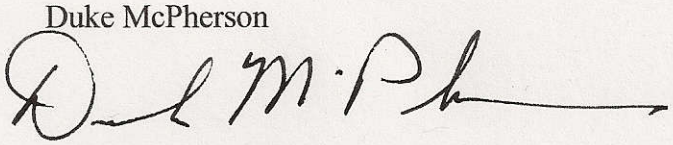
Figure 3. A scanned close up of the full property photo shows numbered trees in the southeastern section of the golf course.

Appendix D
Western Section of the Golf Course

Figure 4. . A cropped section of the full golf course shows the trees in the clubhouse parking area numbered 172-195.

Report prepared by:

Duke McPherson



Certified Arborist with the
International Society of Arboriculture
Certification # WE-0690A

TREE #	Tree Name	Trunk Diameter at 4.5' up (DBH) in inches		Health Level	Comments/ Disposition
1	Corymbia citriodora	34	Immediately east of the clubhouse parking near #1 tee	"	**Proposed for removal for course re-configuration**
2	Corymbia citriodora	37	In a group of 2 other Corymbia, west end of #9	Good. Oozing sap at trunk base	**Proposed for removal for course re-configuration**
3	Corymbia citriodora	20	In a group of 2 other Corymbia, west end of #9	Good. Some weed cutter damage	**Proposed for removal for course re-configuration**
4	Corymbia citriodora	30	In a group of 2 other Corymbia, west end of #9	Good. Some oozing of sap.	**Proposed for removal for course re-configuration**
5	Fraxinus uhdei	32	In a group of 8 trees between fairway 1 and 9	Good. Some dead branches	Dead branches could be caused by salt air
6	Fraxinus uhdei	24	In a group of 8 trees between fairway 1 and 9	"	
7	Fraxinus uhdei	32	In a group of 8 trees between fairway 1 and 9	Good. Some dead branches	Dead branches could be caused by salt air in
8	Fraxinus uhdei	24	In a group of 8 trees between fairway 1 and 9	Good. Some dead branches	
9	Fraxinus uhdei	34	In a group of 8 trees between fairway 1 and 9	"	
10	Fraxinus uhdei	32	In a group of 8 trees between fairway 1 and 9	"	
11	Fraxinus uhdei	34	In a group of 8 trees between fairway 1 and 9	"	
12	Acacia melanoxylon	13	In a group of 3 trees between fairway 1 and 9 east end	"	
13	Acacia melanoxylon	14	In a group of 3 trees between fairway 1 and 9 east end	"	
14	Acacia melanoxylon		In a group of 3 trees between fairway 1 and 9 east end	"	
15	Pinus halapensis	22	Single specimen north side of path to #1 hole	Good.	Some decay at the trunk base.
16	Corymbia citriodora	28	A line of trees north and east of #1 hole	"	
17	Corymbia citriodora	18	A line of trees north and east of #1 hole	"	
18	Corymbia citriodora	22	A line of trees north and east of #1 hole	Fair	Streak of dieout of bark on south side
19	Corymbia citriodora	19	A line of trees north and east of #1 hole	Good	
20	Corymbia citriodora	23+28	A line of trees north and east of #1 hole	Fair	Die out in trunk west side
21	Corymbia citriodora	30	A line of trees north and east of #1 hole	"	
22	Corymbia citriodora	13	A line of trees north and east of #1 hole	"	Small indentatiions in trunk
23	Corymbia citriodora	16	Westernmost tree in a line paralleling south side of maintence yard	"	
24	Corymbia citriodora	18	Second tree in row	"	**To be removed and replaced**
25	Corymbia citriodora	22	Third tre in row	"	**To be removed and replaced**
26	Corymbia citriodora	20	Forth tree in row	"	**To be removed and replaced**
27	Corymbia citriodora	21	Fifth tree in row	"	
28	Fraxinus uhdei	22	Single specimen at the east end of above line of trees	"	
29	Corymbia citriodora	18	SW of #2 tee	"	
30	Eucalyptus polyanthemos	30	In a group between fairway 3 and 2	"	Large old limb break at base of trunk
31	Eucalyptus polyanthemos	26	In a group between fairway 3 and 2	"	
32	Eucalyptus polyanthemos	30	In a group between fairway 3 and 2	"	
33	Eucalyptus polyanthemos	Stump	In a group between fairway 3 and 2	"	
34	Corymbia citriodora	28	In a group between fairway 3 and 2	"	
35	Eucalyptus polyanthemos	28	In a group between fairway 3 and 2	"	
36	Eucalyptus polyanthemos	26	In a group of Eucs. South end of fairway #2	"	Reclines from a previous partial toppling
37	Tasmanian Blue Gum	32	In a group of Eucs. South end of fairway #2	"	
38	Eucalyptus polyanthemos	16	In a group of Eucs. South end of fairway #2	"	
39	Eucalyptus polyanthemos	24	In a group of Eucs. South end of fairway #2	"	
40	Tasmanian Blue Gum	30	In a group of Eucs. South end of fairway #2	"	
41	Tasmanian Blue Gum	24	In a group of Eucs. South end of fairway #2	"	
42	Tasmanian Blue Gum	12+12	In a group of Eucs. South end of fairway #2	"	
43	Tasmanian Blue Gum	40	In a group of Eucs. South end of fairway #2	"	
44	Corymbia citriodora	11	In a group of Eucs. South end of fairway #2	"	
45	Eucalyptus polyanthemos	36	In rough between fairway #2 and 8	"	
46	Tasmanian Blue Gum	50	In rough between fairway #2 and 8	"	
47	Tasmanian Blue Gum	28	In rough between fairway #2 and 8	"	
48	Tasmanian Blue Gum	23	In rough between fairway #2 and 8	"	
49	Eucalyptus polyanthemos	26	In rough between fairway #2 and 8	"	
50	Corymbia citriodora	12	In rough between fairway #2 and 8	"	
51	Corymbia citriodora	14	In rough between fairway #2 and 8	"	
52	Hesperocyparis macrocarpa	30	In rough between fairway #2 and 8	"	
53	Hesperocyparis macrocarpa	40	In rough between fairway #2 and 8	"	
54	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
55	Hesperocyparis macrocarpa	10	In rough between fairway # 7and 14	"	
56	Pinus pinea	8+14+14	In rough between fairway # 7and 14	"	
57	Pinus torreyana	Dead	In rough between fairway # 7and 14	"	
58	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
59	Hesperocyparis macrocarpa	25	In rough between fairway # 7and 14	"	
60	Hesperocyparis macrocarpa	26	In rough between fairway # 7and 14	"	
61	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
62	Hesperocyparis macrocarpa	12+12+13+13+15	In rough between fairway # 7and 14	"	
63	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	

64	Hesperocyparis macrocarpa	42	In rough between fairway # 7and 14	"	
65	Hesperocyparis macrocarpa	36	In rough between fairway # 7and 14	"	
66	Hesperocyparis macrocarpa	32	In rough between fairway # 7and 14	"	
67	Hesperocyparis macrocarpa	30	In rough between fairway # 7and 14	"	
68	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
69	Hesperocyparis macrocarpa	32	In rough between fairway # 7and 14	"	
70	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
71	Hesperocyparis macrocarpa	36	In rough between fairway # 7and 14	"	
72	Hesperocyparis macrocarpa	36	In rough between fairway # 7and 14	"	
73	Hesperocyparis macrocarpa	18+22+23+32	In rough between fairway # 7and 14	"	
74	Hesperocyparis macrocarpa	33	In rough between fairway # 7and 14	"	
75	Hesperocyparis macrocarpa	28	In rough between fairway # 7and 14	"	
76	Hesperocyparis macrocarpa	25	Located just east of hole #6	"	
77	Hesperocyparis macrocarpa	13	Just SE of comfort station	"	
78	Hesperocyparis macrocarpa	34	Just SE of comfort station	"	
79	Hesperocyparis macrocarpa	25+30	Immediately east of hole # 5	"	
80	Hesperocyparis macrocarpa	26	Group of 4 trees in rough immediately east of #5 hole	"	
81	Hesperocyparis macrocarpa	24	Group of 4 trees in rough immediately east of #5 hole	"	
82	Hesperocyparis macrocarpa	24	Group of 4 trees in rough immediately east of #5 hole	"	
83	Hesperocyparis macrocarpa	29	Paired with #84	"	
84	Hesperocyparis macrocarpa	15	Paired with #83	"	
85	Eucalyptus globulus	27	With #89 near irrigularly shaped trap between fairways #5 and #7	"	
86	Hesperocyparis macrocarpa	26	With #88 near irrigularly shaped trap between fairways #5 and #7	"	
87	Pinus canariensis	25	Paired with #91 at north end of a section of fairway #5	"	
88	Pinus canariensis	11	Paired with #90 at north end of a section of fairway #5	"	
89	Eucalyptus sideroxylon	30	In the rough north of a large bend in fairway #7	"	
90	Eucalyptus globulus	30	Paired with tree #91 at eastern border of fairway #5	"	
91	Eucalyptus globulus	30	Paired with tree #90 at eastern border of fairway #5		
92	Eucalyptus globulus	28	In a loose group of 4 trees in rough at east side of #5	"	
93	Eucalyptus globulus	50	In a loose group of 4 trees in rough at east side of #5	"	
94	Eucalyptus globulus	50	In a loose group of 4 trees in rough at east side of #5	"	
95	Eucalyptus melliodora	28	In a loose group of 4 trees in rough at east side of #5	"	
96	Eucalyptus melliodora	28	In a loose group of 4 trees in rough at east side of #5	"	
97	Eucalyptus globulus	30	In a line of trees between fairways # 3 and 4	"	
98	Hesperocyparis macrocarpa	33	In a line of trees between fairways # 3 and 4	"	
99	Hesperocyparis macrocarpa	30	In a line of trees between fairways # 3 and 4	"	
100	Hesperocyparis macrocarpa	26	In a line of trees between fairways # 3 and 4	"	
101	Hesperocyparis macrocarpa	28	In a line of trees between fairways # 3 and 4	"	
102	Hesperocyparis macrocarpa	28	In a line of trees between fairways # 3 and 4	"	
103	Meleuca quinquinervia	28	In the rough immediately to the east of #4 tee	"	
104	Hesperocyparis macrocarpa	Small diameter trees	A group of 4 young trees newly planted	"	
105	Hesperocyparis macrocarpa	26	In a group of trees in the rough between fairways #8 &15	"	
106	Hesperocyparis macrocarpa	26	In a group of trees in the rough between fairways #8 &15	"	
107	Hesperocyparis macrocarpa	29	In a group of trees in the rough between fairways #8 &15	"	
108	Hesperocyparis macrocarpa	25	In a group of trees in the rough between fairways #8 &15	"	
109	Hesperocyparis macrocarpa	32	In a group of trees in the rough between fairways #8 &15	"	
110	Hesperocyparis macrocarpa	42	In a group of trees in the rough between fairways #8 &15	"	
111	Hesperocyparis macrocarpa	10+18+25	In a group of trees in the rough between fairways #8 &15	"	
112	Hesperocyparis macrocarpa	43	In a group of trees in the rough between fairways #8 &15	"	
113	Hesperocyparis macrocarpa	13	In a group of trees in the rough between fairways #8 &15	"	
114	Hesperocyparis macrocarpa	9+11+18+20+20	In a group of 4 trees in the rough between fairways #8 & 15	"	
115	Hesperocyparis macrocarpa	7+24	In a group of 4 trees in the rough between fairways #8 & 15	"	
116	Hesperocyparis macrocarpa	23	In a group of 4 trees in the rough between fairways #8 & 15	"	
117	**Hesperocyparis macrocarpa**	**36**	**In the rough between fairways #8 & 15 south of tree #118**	"	**Proposed for removal due to course reconfiguration**
118	Hesperocyparis macrocarpa	29	In the rough between fairways #8&15	"	
119	Hesperocyparis macrocarpa	11+13+19	One of 3 trees in the rough near #8 and 15 holes	"	
120	Hesperocyparis macrocarpa	13	One of 3 trees in the rough near #8 and 15 holes	"	
121	Fraxinus uhdei	22	One of 3 trees in the rough near #8 and 15 holes	"	
122	Hesperocyparis macrocarpa	13	One of 5 trees in a loose group between fairways 15 and 16	"	
123	Hesperocyparis macrocarpa	10	One of 5 trees in a loose group between fairways 15 and 16	"	
124	Hesperocyparis macrocarpa	37	One of 5 trees in a loose group between fairways 15 and 16	"	
125	Hesperocyparis macrocarpa	30	One of 5 trees in a loose group between fairways 15 and 16	"	
126	Hesperocyparis macrocarpa	50	One of 5 trees in a loose group between fairways 15 and 16	"	
127	Hesperocyparis macrocarpa	30	One of 7 trees in a group between fairways 15 and 16 Tee	"	
128	Hesperocyparis macrocarpa	37	One of 7 trees in a group between fairways 15 and 16 Tee	"	

129	Hesperocyparis macrocarpa	35	One of 7 trees in a group between fairways 15 and 16 Tee	"	
130	Hesperocyparis macrocarpa	26	One of 7 trees in a group between fairways 15 and 16 Tee	"	**Proposed for removal and replacement**
131	Hesperocyparis macrocarpa	32	One of 7 trees in a group between fairways 15 and 16 Tee	"	**Proposed for removal and replacement**
132	Hesperocyparis macrocarpa	30	One of 7 trees in a group between fairways 15 and 16 Tee	"	**Proposed for removal and replacement**
133	Hesperocyparis macrocarpa	18	One of 7 trees in a group between fairways 15 and 16 Tee	"	**Proposed for removal and replacement**
134	Hesperocyparis macrocarpa	30	On cliff edge immediately south of fairway 14	"	
135	Hesperocyparis macrocarpa	12	Paired with tree # 139 directly south across fairway 14	"	
136	Hesperocyparis macrocarpa	12	Paired with tree # 138 directly south across fairway 14	"	
137	Hesperocyparis macrocarpa	32	Single tree on slope immediately south of 17 Tee	"	
138	Hesperocyparis macrocarpa	11+12	In a loose group of 7 trees in rough between fairways 13 and 17	"	
139	Hesperocyparis macrocarpa	30	In a loose group of 7 trees in rough between fairways 13 and 17	"	
140	Hesperocyparis macrocarpa	6+8+10+10+10+12	In a loose group of 7 trees in rough between fairways 13 and 17	"	
141	Hesperocyparis macrocarpa	12	In a loose group of 7 trees in rough between fairways 13 and 17	"	
142	Hesperocyparis macrocarpa	16	In a loose group of 7 trees in rough between fairways 13 and 17	"	
143	Hesperocyparis macrocarpa	28	In a loose group of 7 trees in rough between fairways 13 and 17	"	
144	Hesperocyparis macrocarpa	40	In a loose group of 7 trees in rough between fairways 13 and 17	"	
145	Hesperocyparis macrocarpa	36	In a loose group of 7 trees in rough between fairways 13 and 17	"	
146	Pinus pinea	18	Single tree near cliff edge edging fairway #14	"	
147	Hesperocyparis macrocarpa	30	In a group of six trees in the rough between fairways 13 and 17	"	**Proposed for removal and replacement**
148	Hesperocyparis macrocarpa	28	In a group of six trees in the rough between fairways 13 and 17	"	**Proposed for removal and replacement**
149	Hesperocyparis macrocarpa	32	In a group of six trees in the rough between fairways 13 and 17	"	
150	Hesperocyparis macrocarpa	30	In a group of six trees in the rough between fairways 13 and 17	"	
151	Hesperocyparis macrocarpa	28	In a group of six trees in the rough between fairways 13 and 17	"	
152	Hesperocyparis macrocarpa	35	In a group of six trees in the rough between fairways 13 and 17	"	
153	Hesperocyparis macrocarpa	30	Paired with tree # 157 immediately north of # 12 hole	"	Root decay on south side of trunk
154	Hesperocyparis macrocarpa	10	Paired with tree # 156 immediately north of # 12 hole	"	
155	Hesperocyparis macrocarpa	30	In a triangle of trees with #156 and 157 immediately south of fairway #12	"	
156	Hesperocyparis macrocarpa	32	In a triangle of trees with #155 and 157 immediately south of fairway #12	"	
157	Hesperocyparis macrocarpa	34	In a triangle of trees with #155 and 156 immediately south of fairway #12	"	
158	Hesperocyparis macrocarpa	50	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
159	Hesperocyparis macrocarpa	24+24	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
160	Hesperocyparis macrocarpa	15	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
161	Hesperocyparis macrocarpa	8	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
162	Hesperocyparis macrocarpa	12+12	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
163	Hesperocyparis macrocarpa	50	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
164	Hesperocyparis macrocarpa	32	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
165	Hesperocyparis macrocarpa	30	In a loose group of 9 trees between the practice tee and fairways 16 &17	"	
166	Hesperocyparis macrocarpa	42	Paired with tree # 170 in rough north side of fairway 10	"	
167	Piinus canariensis	26	Paired with tree # 169 in rough north side of fairway 10	"	
168	Hesperocyparis macrocarpa	40	Single tree on slope west of #18 hole	"	
169	Salix babylonica		Single tree at eastern edge of pond	"	
170	Acacia longifolia	8 6	Two rangy specimens beside tree # 174	"	Decayed hollow on west side. Must be cleaned out
171	Hesperocyparis macrocarpa	24	Outside the western fence of the clubhouse parking	Poor	
172	Eucalyptus sideroxylon	32	Western end of second tree row back from road, third tree in the row	Fair	**All E. sideroxylon in parking area to be removed and replaced**
173	Eucalyptus sideroxylon	22	Eight trees lining Hollister Ave. going west to east	Good	**All E. sideroxylon in parking area to be removed and replaced**
174	Eucalyptus sideroxylon	22	Eight trees lining Hollister Ave. going west to east	"	**All E. sideroxylon in parking area to be removed and replaced**
175	Eucalyptus sideroxylon	24	Eight trees lining Hollister Ave. going west to east	"	**All E. sideroxylon in parking area to be removed and replaced**
176	Eucalyptus sideroxylon	11	Eight trees lining Hollister Ave. going west to east	"	**All E. sideroxylon in parking area to be removed and replaced**
177	Eucalyptus sideroxylon	23	Eight trees lining Hollister Ave. going west to east	Fair	**All E. sideroxylon in parking area to be removed and replaced**
178	Corymbia ficifolia	9	Eight trees lining Hollister Ave. going west to east	Good	**All E. sideroxylon in parking area to be removed and replaced**
179	Eucalyptus sideroxylon	28	Eight trees lining Hollister Ave. going west to east	"	**All E. sideroxylon in parking area to be removed and replaced**
180	Corymbia ficifolia	9	Eight trees lining Hollister Ave. going west to east	"	**All E. sideroxylon in parking area to be removed and replaced**
181	Eucalyptus sideroxylon	24 28 36	Large tree east end of second tree row back from Hollister Ave.	"	**All E. sideroxylon in parking area to be removed and replaced**
182	Eucalyptus sideroxylon	16	Middle tree of 3 trees second row back from road. Trees numbered 185 and	"	**All E. sideroxylon in parking area to be removed and replaced**
183	Eucalyptus polyanthemos	32	Western most of 11 trees in third row back from road	"	**All E. sideroxylon in parking area to be removed and replaced**
184	Eucalyptus sideroxylon	32	Tree is just north of western end of clubhouse maintenance	"	**All E. sideroxylon in parking area to be removed and replaced**
185	Eucalyptus sideroxylon	30	Second tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
186	Eucalyptus sideroxylon	33	Third tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
187	Eucalyptus polyanthemos	33	Forth tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
188	Eucalyptus polyanthemos	30	Fifth tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
189	Eucalyptus sideroxylon	40	Sixth tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
190	Eucalyptus polyanthemos	22	Seventh tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
191	Eucalyptus sideroxylon	36	Eight tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
192	Eucalyptus sideroxylon	14	Ninth tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**
193	Eucalyptus sideroxylon	30	Tenth tree going east in third row back from road.	"	**All E. sideroxylon in parking area to be removed and replaced**

194	Eucalyptus sideroxylon	35	Paired with tree # 198 at east end of clubhouse parking	"	**All E. sideroxylon in parking area to be removed and replaced**
195	Eucalyptus sideroxylon	27	Paired with tree # 197 at east end of clubhouse parking	"	**All E. sideroxylon in parking area to be removed and replaced**
196	Platanus racemosa	12	Young tree approx. 100' east of the east end of clubhouse parking	"	**A total of 24 trees to be removed**
197	Hesperocyparis macrocarpa	7	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	"	
198	Hesperocyparis macrocarpa	7	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	Fair	
199	Hesperocyparis macrocarpa	6	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	Good	
200	Hesperocyparis macrocarpa	8	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	"	
201	Hesperocyparis macrocarpa	6	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	"	
202	Hesperocyparis macrocarpa	7	Young tree in a row of 8 trees lining the north side of fairway #1 near tee	"	
				"	
A	Eucalyptus polyanthemos	12	Just to the west of the group of Corymbia N-S		
B	Eucalyptus globulus	38	Roadside west of main group of trees.	Good	
C	Corymbia citriodora		Immediately east of tree B	Good	
D	Melaleuca sp.	Multi trunked	Between trees C and E	Good	
E	Schinus terebinthifolius	11	Edges western entrance to Barnsdall station at roadside.	Good	
F	Corymbia citriodora	7	Next to tree D.	Good	
G	Melaleuca sp.	Lg. multi	At SW corner of Barnsdall wall	Good	Will look good with pruning and cleaning.
H	Corymbia citriodora	12	Leans through south Barnsdall wall.	Good	Remove tree
I	Corymbia citriodora	12+20+20	West of maintence gate on south side of dirt access road.	Good	
J	Corymbia citriodora	18	Against west side of maintenance fence (gate just to the south of it)	Good	Many dead branches to clean out.
K	Corymbia citriodora	12+16	Near M at outer south facing fencing to maintenance yard.	Good	
L	Melaleuca sp.	Lg. multi	at SE corner of Barnell wall		
M	Corymbia citriodora	8	Just outside south side of maintenance fence near corner.	Good	
N	Thick grove of Corymbia			Good	
O	"			Good	**Grove needs maintenance. Some small trees should be removed**
P	"			"	"
Q	"			"	"
R	"			"	"
S	"			"	"
T	Arbor-vitae	Small specimen	Western side of yard against a building	"	**Proposed for removal**
U	Schinus terebinthifolius	28	Paired with tree V on north side of main building	Good	**Proposed for removal**
V	Acaucaria heterophylla	13	Paired with tree U	Good	**Proposed for removal**
W	Eucalyptus globulus	Large tree	At eastern side of maintenance yard.	Good	
X	Eucalyptus globulus	Large tree	Middle of three Eucalyptus at eastern edge of yard	Good	**Proposed for removal**
Y	Eucalyptus globulus	Large tree	Northernmost of the three trees at eastern edge of yard	Good	

Duke McPherson, Arborist

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February 28, 2025

Tennessee McBroom
Course Agronomist for
Sandpiper Golf Club
7925 Hollister Avenue
Goleta, California

Arborist Report

I have examined a landscape plan drawn up by Earthform Design (refer to the plan in Figure 2, page 2) showing the position on the Sandpiper Golf Club where a mitigation Coast Live Oak is proposed to be located. It will be replacing a young specimen located in the center divider on Hollister Avenue to be removed for the repositioning of the west entrance to the Clubhouse service entry (see photograph below). The tree will be a generous size, a 72" on side boxed nursery specimen, more than enough in compensation for the loss of the existing tree.
I would recommend that the new tree be planted high, as much as 3' higher than the surrounding grade to maximize effective root soil drainage and help speed its establishment. This tree is to be included as the last item in the total course tree inventory and arborist report dated July 27, 2023 as # 207.

Figure 1. The subject oak can be seen in the Hollister Road center divider to the left. Photo is looking east with golf course property on the right. The entrance to the golf course is to the rear of the view. It is a planted specimen and has an 18" trunk diameter at 4.5' up.

Figure 1. A plan section shows the proposed location of the new mitigation oak in orange.

Report prepared by:

Duke McPherson

Certified Arborist with the

International Society of

Arboriculture

Certification Number

WE-0690A

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September 28, 2025

Sandpiper Golf Club
7925 Hollister Avenue
Goleta, CA 93117

Arborist Report

Introduction

This report is concerned with tree protection and health along the northern border of the golf club property noted above during a bus stop relocation and the re-routing of a roadside pathway and substituting concrete for the present decomposed granite. The trees focused on are all locally non native. I have been working closely with Sam Maphis of Earthform Design to lay out the proposed changes as they affect nearby trees.

The Site and Trees

In the two diagrams shown below, all trees which are located in proximity to development have been noted with their names and trunk diameters at 4.5' up from grade (Diameter at Breast Height or DBH). In addition, selected trees have been shown with red X's to represent proposed removals. Mitigation suggestions for each live tree removal (a total of seven trees) can be found in the Mitigation Recommendations section on page 2.

West End of Project

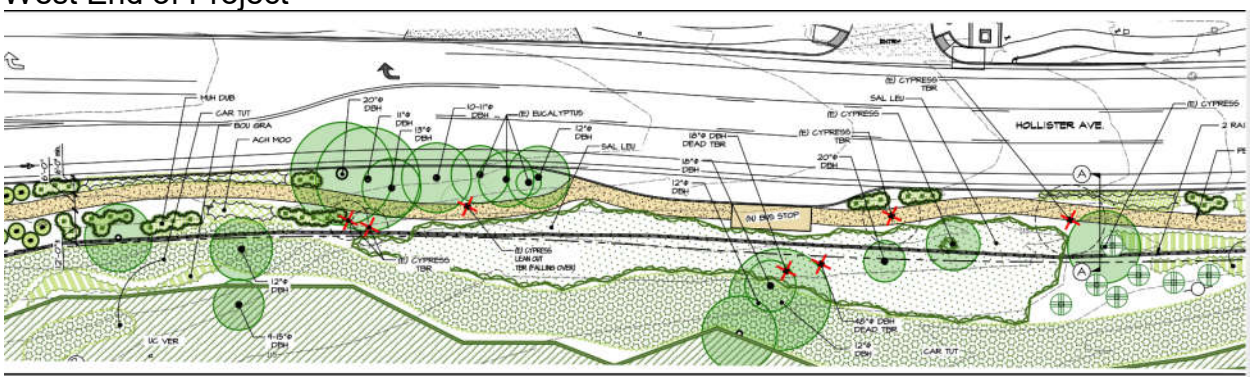


Figure 1. Note that the red X's shown here apply to five live young Monterey Cypress spread out along the newly configured pathway (one specimen with the note that it has toppled, will not receive mitigation attention). The other trees to be removed are the two dead and hazardous Sugar Gums, *Eucalyptus cladocalyx* immediately south of the future bus stop (these also will not be required to receive mitigation consideration).

East End of Project

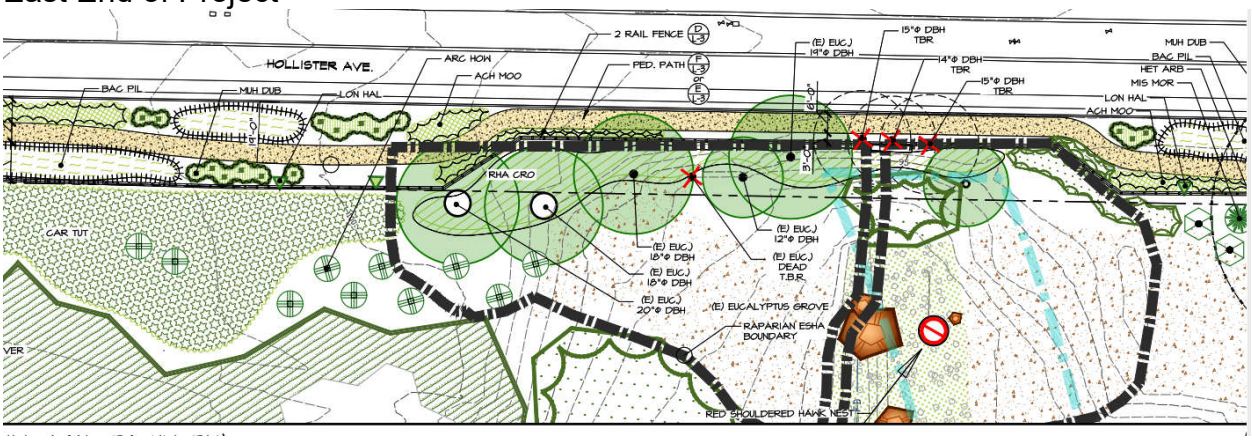


Figure 2. Shown here are four Tasmanian Blue Gums, *Eucalyptus globulus* which are proposed for removal (one is a dead specimen). The group of three straddle the under the road culvert for Devereux Creek (see photograph in Appendix B, page 4).

Mitigation Recommendations

Three tree species have been suggested by Mr. Maphis: Monterey Cypress, *Hesperocyparis macrocarpa* Coast Live Oak, *Quercus agrifolia* and Torrey Pine, *Pinus torreyana.* Live trees removed would be compensated for on a 1:1 basis using boxed 24" nursery stock. The resulting mitigation number for the west section will be four and for the east section three nursery trees selected from the above noted species suggestions. Planting locations on the golf course property will be shown on a subsequent landscape plan drawn up by Earthform Design. No mitigation will be required for any dead trees removed on the site.

This report accounts for the overhead utility undergrounding along the length of the project area covered in this report. This plan will protect and preserve as many exiting trees as possible.

Appendix A

Photograph of the West End of the Project

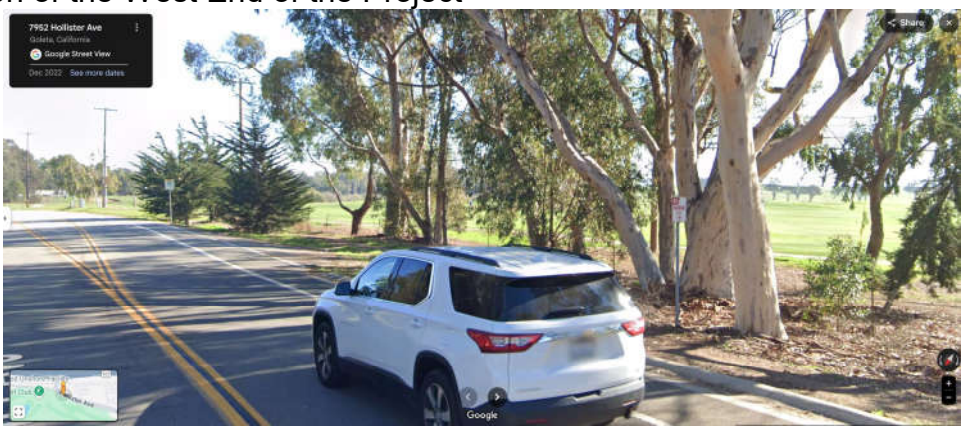


Figure 3. A Google Street View photograph looking east shows the Sugar Gum Eucalyptus grove and, in the distance, a number of Monterey Cypress trees. The new bus stop location will be immediately this side of the Cypress. The new pathway will be routed to the right (south) of the grove.

Appendix B

Photographs of the East End of the Project

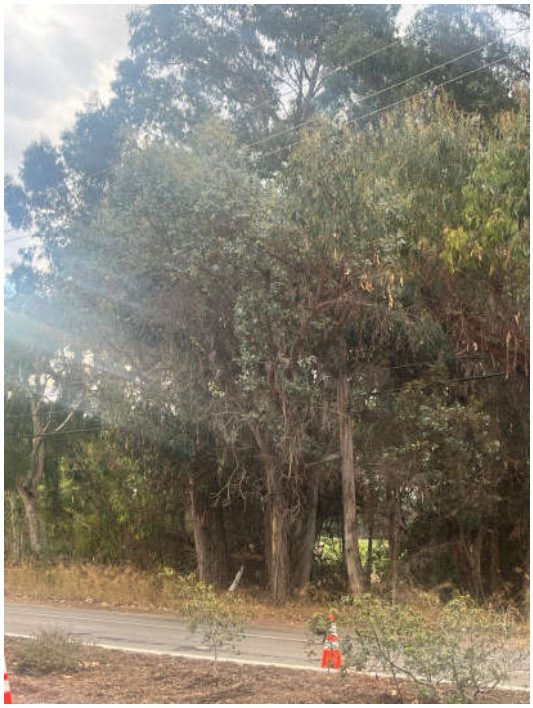
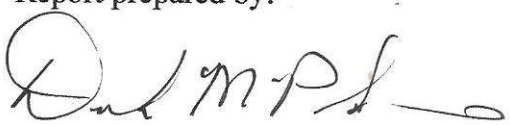


Figure 4. Shown here is a group of Blue Gums straddling the Devereux Creek culvert. They have been topped over the years to avoid contact with the overhead high tension electrical lines.

Photographs of the East End of the Project (continued)

Figure 5. Photo shows the root crown one of the Blue Gums in figure 2 causing damage to the Creek culvert. Its removal will help preserve the concrete structure

Report prepared by:



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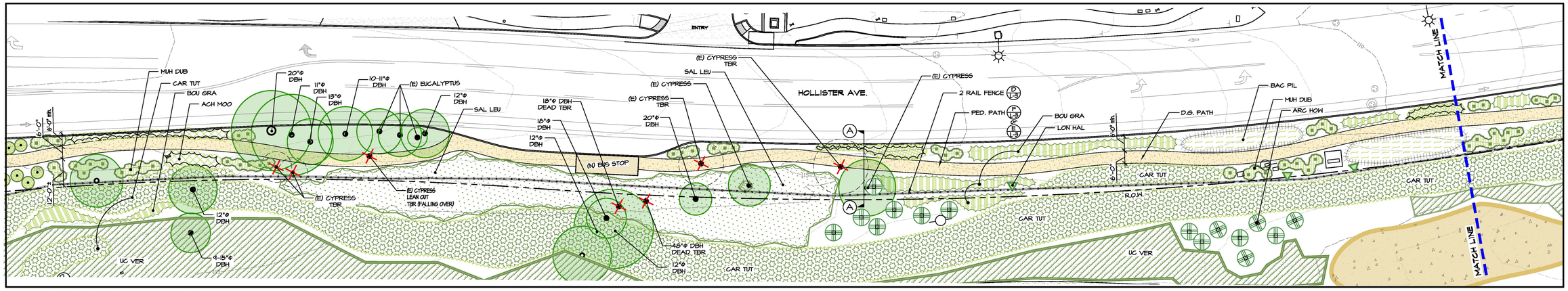
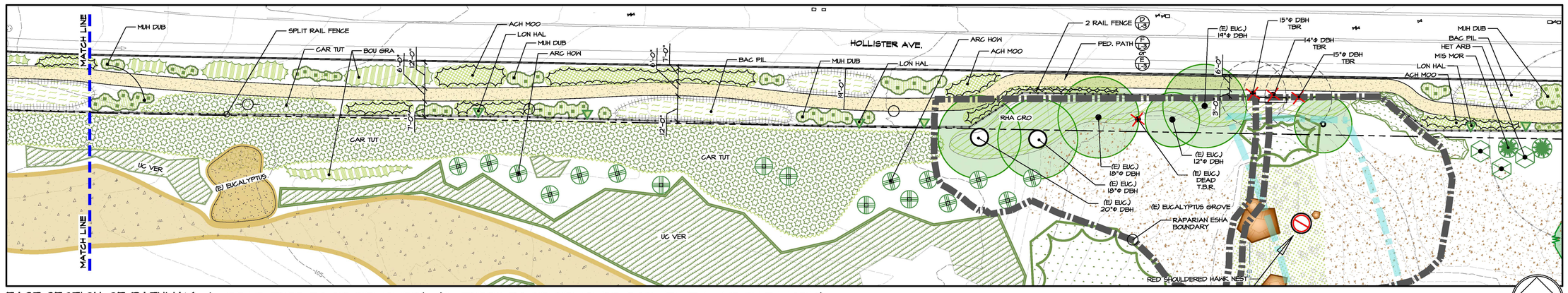


WEST SECTION OF PATHWAY: (3- DEAD OR HAZARD TREES TO BE REMOVED) (4- CYPRESS TREES TO BE REMOVED FOR UTILITIES AND MITIGATED FOR 1:1)



EAST SECTION OF PATHWAY: (1- DEAD TREE TO BE REMOVED) (3- TREES TO BE REMOVED FOR UTILITY AND PATHWORK)

SANDPIPER GOLF CLUB -HOLLISTER AVE PRELIMINARY PLANTING PLAN - WEST & EAST PORTIONS

SCALE: 1" = 20'-0"

BUTTERFLY HABITAT @ HOLLISTER AVE. FRONTAGE

Symb.	Qty.	Code	Size	WUCOLS PLANT FACTORS	Botanical Name	Common Name	Notes
	1502	ACH MOO	-	L	ACHILLEA 'MOONSHINE'	YARROW	-DRIP
		EPI CAN	-	VL	EPILOBIUM CANUM	CALIFORNIA FUCHSIA	-DRIP
		ERI GLA	-	L	ERIGERON GLAUCUS	BEACH ASTER	-DRIP
		ERI UMB	-	L	ERIOGONUM UMBELLATUM	SULPHUR-FLOWER BUCKWHEAT	-DRIP
		ERI STA	-	L	ERIOPHILLUM STAECHADIFOLIUM	SEASIDE WOOLY SUNFLOWER	-DRIP
		GRI CAM	-	VL	GRINDELIA CAMPORUM	GREAT VALLEY GUM PLANT	-DRIP
		MON ODO	-	L	MONARDELLA ODORATISSIMA	MOUNTAIN MONARDELLA	-DRIP
		MUH RIG	-	L	MUHLENBERGIA RIGENS	DEERGRASS	-DRIP
		PEN HET	-	L	PENSTEMON HETEROPHYLLS	FOOTHILL PENSTEMON	-DRIP
	1548	SAL LEU	-	VL	SALVIA LEUCOPHYLLA	PURPLE SAGE	-DRIP
		SOL VEL	-	L	SOLIDAGO VELUTINA	CALIFORNIA GOLDENROD	-DRIP
		VER LAS	-	L	VERBENA LASIOSTACHYS	WESTERN VERVAIN VERBENA	-DRIP

MITIGATION NOTE:

TREES TO BE REMOVED AND REPLACED AT 1:1 RATIO (TYP) WITH:

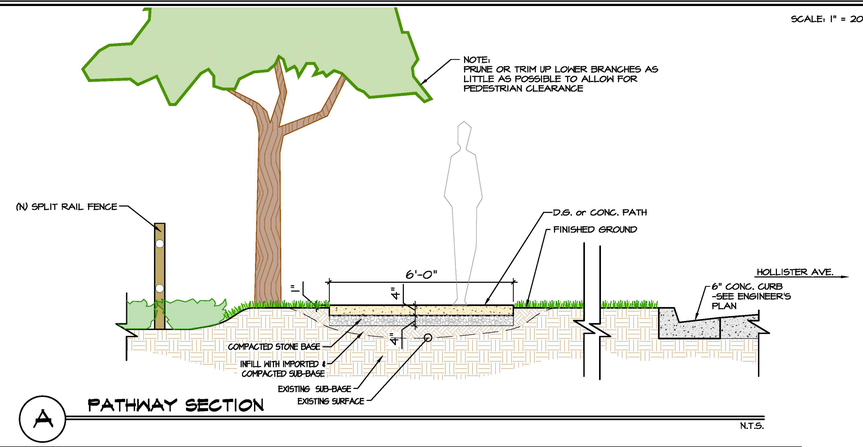
QUERCUS AGRIFOLIA -COAST LIVE OAK
HESPEROCYPARIS MACROCARPA -MONTERY CYPRESS
PINUS TORREYANA -TORREY PINE

(SIZE AND LOCATION TO BE DETERMINED)

ROW TREE LEGEND:

TREE CONDITION SUMMARY:

- 4- DEAD or HAZARD TREES
- 7- TREES IMPACTED BY PROPOSED WORK TO BE MITIGATED FOR 1:1 TYPICAL
- (E) TREES TO REMAIN



A PATHWAY SECTION

N.T.S.

HOLLISTER AVE. FRONTAGE PLANT LIST

NOTE:
PLANT QUANTITIES FOR CONVENIENCE OF CONTRACTOR. PLAN SHALL PREVAIL.

Symb.	Qty.	Code	Size	WUCOLS PLANT FACTORS	Botanical Name	Common Name	Notes
TREES:							
		HES MAC	48"-60+	M	HESPEROCYPARIS MACROCARPA	MONTEREY CYPRESS	-DRIP
		MET EXC	36"-48"	L	METROSIDEROS EXCELSA	NEW ZEALAND CHRISTMAS TREE	-DRIP
		ACA STE	36"-48"	L	ACACIA STENOPHYLLA	SHOESTRING ACACIA	-DRIP
SCREEN SHRUBS:							
	3	HET ARB	5g	VL	HETEROMELES ARBUTIFOLIA	TOYON	-DRIP
		ILE AQU	5g	M	ILEX AQUIFOLIUM	ENGLISH HOLLY	
		LAU NOB	15g	L	LAURUS NOBILIS 'SARATOGA'	SWEET BAY LAUREL @ 5' o.c. -screen hedge	-DRIP
	9	LON HAL	5g	L	LONICERA JAPONICA 'HALLIANA'	JAPANESE HONEYSUCKLE	-on fence -DRIP
		PYR VAR	5g	L	PYRACANTHA VARIETIES	FIRETHORN BUSH	-on fence -DRIP
	345	RHA CRO	1g	VL	RHAMNUS CROCCA	REDBERRY BUCKTHORN	
SHRUBS & GROUND COVERS:							
		ACA COG	5g	L	ACACIA COGNATA 'COUSIN IT'	LITTLE RIVER WATTLE	-DRIP
use Butterfly plant list		ACH MOO	1g	L	ACHILLEA 'MOONSHINE'	YARROW	-DRIP
		ACA RED		VL	ACACIA REDOLENS 'LOW BOY'	PROSTRATE ACACIA	
		ARC VAR	1g	L	ARCTOSTAPHYLOS VARIETIES	PACIFIC MIST, EMERALD CARPET	-DRIP
		ARC INS		VL	ARCTOSTAPHYLOS INSULARIS 'CANYON SPARKLES'	ISLAND MANZANITA	-DRIP
	7	ARC HOW	5g	L	ARCTOSTAPHYLOS 'HOWARD McMINN'	MANZANITA VAR.	-DRIP
	824	BAC PIL	5g	L	BACCHARIS PILULARIS 'PIGEON POINT'-'THIN PEAKS'	DWARF COYOTE BRUSH	-DRIP
	468	CAR TUT	5g	L	CARISSA 'TUTTLEI' & 'GREEN CARPET'	DWARF NATAL PLUM	-DRIP
	7	CIS VAR	5g	L	CISTUS VARIETIES	ROCKROSE	-DRIP
		COR TOR	5g	L	CORDYLINE AUSTRALIS 'TORBY DAZZLER'	TORBAY DAZZLER GRASS PALM	-DRIP
GRASSES- LOW GROWING:							
	142	BOU GRA	1g	L	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION BLUE GRAMA	-SPRAY
		BOU GRA	1g	L	BOUTELOUA GRACILIS	BLUE GRAMA GRASS	-SPRAY
		CAR DIV	1g	L	CAREX DIVULSA	EUROPEAN GRAY SEDGE	
		CAR PAN	1g	M	CAREX PANSA	SAND DUNE SEDGE	-DRIP / SPRAY
		CAR PRA	1g	M	CAREX PRAEGRACILIS	CALIFORNIA FIELD SEDGE	-DRIP / SPRAY
		SES SPP	1g	M	SESLERIA SPECIES	GREENIEE HYBRID	-DRIP / SPRAY
		UC VER	1g	L	UC VERDE	BUFFALOGRASS	-SPRAY
GRASSES- TALLER GROWING:							
		LOM PLA	1g	L	LOMANDRA 'PLATINUM BEAUTY'	PLATINUM BEAUTY LOMANDRA	-DRIP
	2	MIS MOR	5g	M	MISCANTHUS SINENSIS 'MORNING LIGHT'	EULALIA GRASS	-DRIP
	5	MUH CAP	1g	L	MUHLENBERGIA CAPILLARIS	HAIRY AWN MUHLY	-DRIP
	102	MUH DUB	1g	L	MUHLENBERGIA DUBIA	PINE MUHLY	-DRIP
		PEN FAI		M	PENNISETUM 'FAIRY TAILS'	EVERGREEN FOUNTAIN GRASS	-DRIP
		PEN SPA	1g	L	PENNISETUM SPATHIOLATUM	SLENDER VELDT GRASS	-SPRAY

PROGRESS PRINT NOT FOR CONSTRUCTION

REGISTERED LANDSCAPE ARCHITECT SAM G. MAPES No. 2703 Signature Date STATE OF CALIFORNIA

The landscape architect and his consultants do not warrant or guarantee the accuracy and completeness of the work product herein beyond a reasonable diligence. If any mistakes, omissions, or discrepancies are found to exist within the work product, the landscape architect shall be promptly notified so that he may have the opportunity to take whatever steps necessary to resolve them. Failure to promptly notify the landscape architect of such conditions shall absolve the landscape architect from any responsibility for the consequences of such discrepancies. Actions without the knowledge and consent of the landscape architect or in contradiction to the landscape architects work product or recommendations shall become the responsibility not of the landscape architect but of the parties responsible taken such action. This plan and design are the exclusive property of Earthform Design and cannot be used or reproduced without the landscape architects written consent.

REVISIONS BY

EARTHFORM DESIGN
LANDSCAPE ARCHITECTURE-LAND PLANNING-URBAN DESIGN
1329 STATE STREET, SUITE 301, SANTA BARBARA, CA 93101
TEL/(805) 963-2006 ● FAX/(805) 963-8335

SANDPIPER GOLF CLUB -HOLLISTER AVE.
PRELIMINARY PLANTING PLAN

SANDPIPER GOLF CLUB
7925 HOLLISTER AVE.
GOLETA, CA. 93117

Date 09/26/25
Scale 1"=20'-0"
Drawn N.T.
Job SANDPIPER
Print Date
Sheet
EXHIBIT
Of Sheets

Appendix D-4

Memorandum Concerning Preliminary Results for Crotch's Bumble Bee Surveys

DUDEK
3760 STATE STREET, SUITE 101
SANTA BARBARA, CALIFORNIA 93105
T 805.963.0651

MEMORANDUM

To:	Bill Medel, Sandpiper Golf Club
From:	Anna Cassady, Dudek
Subject:	Preliminary Results for Crotch's Bumble Bee Surveys, Sandpiper Golf Club Renovation Project, Goleta, California
Date:	August 25, 2025
cc:	Steve Welton, SEPPS Nicole Biergiel, SEPPS John Davis IV, Dudek Dave Compton, Dudek
Attachment(s):	A: Figures 1 and 2 B: Survey Plan C: Photos

This memorandum provides preliminary results of focused Crotch's bumble bee (*Bombus crotchii*) surveys conducted in support of the Sandpiper Golf Club Renovation Project (Project) in Goleta, Santa Barbara County, California, in the spring and summer 2025. Dudek prepared a Biological Resources Assessment Report (BRAR) in 2022, based on surveys and desktop analysis conducted in 2021 and 2022 on the Project site (Attachment A: Figure 1, Project Site). Dudek subsequently updated the BRAR in 2023, based on updated project information, but did not conduct any additional surveys at this time (Dudek 2023). Rincon Consultants (Rincon) is currently preparing a Draft Environmental Impact Report (DEIR) for the Project, and Dudek further updated the BRAR in 2025 based on comments from Rincon (Dudek 2025). Crotch's bumble bee (CBB) had been a candidate for listing under the California Endangered Species Act (CESA). Its candidacy was temporarily suspended in 2020, due to a ruling in the California Superior Court, in *Almond Alliance of California et al.* v. *Fish and Game Commission et al.,* that invertebrates could not be listed under CESA. But this ruling was reversed in May 2022, by a California Court of Appeals, Third District, ruling, whose decision was later upheld by the California Supreme Court. At this time, no guidelines were available for addressing impacts to CBB, and it was too late to develop and implement surveys for the 2022 field season. The lack of data from focused surveys was identified later, and Dudek was asked to conduct surveys for CBB in 2025. This memorandum describes survey methods and provides preliminary results, so that data from these results are available prior to finalization of the DEIR.

Methods

Prior to conducting focused surveys for CBB, Dudek biologist Anna Cassady, who holds Memorandum of Understanding and Scientific Collecting Permit S-233100001-23310-001 with the California Department of Fish

and Wildlife (CDFW), notified CDFW that she would be conducting the surveys, and she provided CDFW with a survey plan (Cassady 2025; Attachment B). The plan was described as follows:

a) The purpose of this survey is to document bumble bees on site. The permitted biologist will arrive at the Project site when temperatures are predicted to reach 65 degrees F [Fahrenheit] with sunshine. Once appropriate weather conditions are present for bumble bee activity, the permitted biologist will begin surveys per the June 2023 Survey Considerations for CESA Candidate Bumble Bee Species [*Survey Considerations*; CDFW 2023]. CBBs will be subject to visual observation, possible temporary collection, and photography for confirmation of identification.

b) June (1 survey pass)

c) See lat/long on form – various locations near here.

d) See lat/long on form – various locations near here.

e) Anna Cassady (permitted to temporarily capture) and possibly other individuals training to temporarily capture under Anna Cassady's supervision [will conduct surveys].

Dudek conducted three surveys for Crotch's bumble bee, a minimum of two weeks apart, in accordance with the *Survey Considerations* (CDFW 2023). Surveys included one capture survey, in which bumble bees were temporarily collected for detailed photographic documentation and identification (for which a permitted biologist was required), and two in which bumble bees were not captured, but were photographed in the field for subsequent confirmation of identification by the permitted biologist (Table 1, Survey Dates, Personnel, and Conditions). Ms. Cassady (the permitted biologist) and Dudek biologist Steven Neumann conducted the initial survey, which included capture of bumble bees, on June 9, 2025. Mr. Neumann and Dudek senior biologist Dave Compton conducted the second and third surveys on June 25 and July 16, 2025. A habitat assessment was conducted in conjunction with the initial survey. The habitat assessment included driving the entire site and identifying areas where plant species were blooming that could provide floral resources for bumble bees, including Crotch's bumble bees. It was conducted within the golf course boundary and in publicly accessible areas within 150 feet that were also south of Hollister Avenue and east of Bell Canyon Creek.

Surveys were conducted in areas supporting suitable floral resources. Biologists drove a golf cart around the golf course to identify and access the areas with suitable floral resources. They then walked through the identified areas searching for bumble bees that were collecting pollen or nectaring on the floral resources; biologists also watched for evidence of potential sites for bumble bee nests (e.g., small mammal burrows, log piles, thatch). Bumble bees encountered during the capture surveys were netted and then placed in vials to cool and immobilize the bees for detailed photography, in accordance with methods described in the *Survey Considerations*. Photographs were taken with an iPhone fitted with macro lens for closeup photography. Bumble bees were released after the biologists obtained photographs sufficient for identification. During the photography-only surveys, biologists used Cannon Rebel DSLR cameras with 75-300mm zoom lenses. Biologists photographed foraging bumble bees and recorded data for each individual recorded. For both survey types, the biologists recorded the date of the survey, the location where the bumble bee was recorded, the species of plant on which the bumble bee was foraging, and the caste of

the individual (queen, gyne,[1] worker, male). Biologists also recorded all available floral resources encountered during each survey.

Following surveys, Ms. Cassady reviewed all photographs, to confirm identifications assigned in the field and, to the extent possible, to identify any bumble bees photographed but not identified in the field. In addition, and in accordance with her scientific collecting permit, she consulted bumble bee taxonomist Dr. Jaymee Marty for additional confirmation of Ms. Cassady's identifications of bumble bees temporarily collected and photographed.

Table 1. Survey Dates, Personnel, and Conditions

Date	Time	Personnel	Conditions
6/9/2025	1100–1435	AC, SN	65–70°F; 80–100% cc; 3–7 mph wind
6/25/2025	1045–1413	DC, SN	62–67°F; 0–100% cc; 1–8 mph wind
7/16/2025	1110–1346	DC, SN	65–70°F; 80–100% cc; 3–7 mph wind

Abbreviations: F = Fahrenheit; cc = cloud cover; mph = miles per hour.
Biologists' initials: AC = Anna Cassady; DC = Dave Compton' SN = Steven Neumann.

Survey Limitations

This memorandum is a preliminary report on results of the Sandpiper Golf Club 2025 CBB surveys. The final version of this memorandum will incorporate Dr. Marty's confirmation of the identification of bumble bees by Ms. Cassady, as well as additional details on survey results. Therefore, although identifications have been provided by a qualified, permitted individual, final verification by Dr. Marty is forthcoming and will be provided with the final version of this report.

Results

Two common species of bumble bee were confirmed during surveys: Vosnesenky bumble bee (B*ombus vosnesenskii*) and yellow bumble bee (*Bombus fervidus*) (Figure 2, Survey Results; Table 2, Bumble Bee Observations). Photographs of bumble bees are in Attachment C: Photos. No Crotch's bumble bees were captured, observed, or photographed during surveys. Occupied floral resources were located mostly in the western part of the survey area. Both Vosnesensky and yellow bumble bees were recorded during each survey, with a minimum combined total of 7 and a maximum of 17 of these two common bumble bees recorded per survey. Biologists recorded a minimum of 2 and a maximum of 14 Vosnesenky bumble bees per survey and a minimum of 1 and a maximum of 4 yellow bumble bees. Most bumble bees during the first survey (June 9, 2025; Table 1) were observed foraging in California brittle bush (*Encelia californica*) near the ocean bluff in the southwestern part of the golf course. Two male bumble bees captured on June 9, 2025, were not identified to species on this date (Figure 2). These individuals were either Vosnesenky bumble bee or obscure bumble bee (*Bombus caliginosus*). Most bumble bees during surveys 2 and 3 (June 25 and July 16, 2025) were observed foraging within a patch of California poppies (*Eschscholzia californica*) in the western part of the golf course, near Bell Creek Canyon. Bumble bees were

[1] A gyne is a reproductive female that is not yet a queen. Those identified as "gynes" during surveys were born during the year of surveys and will seek to mate during the current season, overwinter nearby, and establish their own colonies the following year.

also observed foraging in California figwort (*Scrophularia californica*), bristly ox-tongue (*Helminthotheca echioides*), coast morning glory (*Calystegia macrostegia*), greenspot nightshade (*Solanum douglasii*), and cliff malacothrix (*Malacothrix saxatalis* var. *saxatalis*). Although significant stands of black mustard (*Brassica nigra*), nasturtium (*Tropaeolum majus*), and California cudweed (*Pseudognaphalium californicum*) and several large flowering blue elderberry (*Sambucus mexicana*) shrubs were observed during surveys, no bumble bees were found using these resources. Other plants observed in flower during surveys where foraging bumble bees were not observed were poison hemlock (*Conium maculatum*), spiny sow thistle (*Sonchus asper*), fennel (*Foeniculum vulgare*), cheeseweed mallow (*Malva parviflorum*), and hottentot fig (*Carpobrotus edulis*).

Nesting resources were generally limited within the site, which is a maintained golf course. However, some more natural areas, especially along the southern and eastern edges of the site, have a relatively high potential to support nesting resources such as thatch and leaf litter. Some small mammal burrows were observed near the bluffs (southern part of the site). The results of these surveys are valid until the 2026 active season for Crotch's bumble bee begins (typically early February).

Table 2. Bumble Bee Observations

Survey No.	Date	Survey Type	Vosnesensky Bumble Bee	Yellow Bumble Bee	Vosnesensky/ Obscure Bumble Bee
1	6/9/2025	Capture	2	3	2
2	6/25/2025	Photographic	13	4	–
3	7/16/2025	Photographis	14	1	–

References

Cassady, A. 2023. RE: CESA Bumble Bee Survey Notification – Sandpiper. Email from Anna Cassady to the California Department of Fish and Wildlife, with attachment: Scientific Collecting, Notification of Field Work or Activity. June 6, 2025.

CDFW (California Department of Fish and Wildlife). 2023, *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. June 6, 2023.

Dudek. 2023. Biological Resources Assessment Report for the Sandpiper Golf Club Project. Prepared for the Sandpiper Golf Trust, LLC. November 2022, Revised August 2023.

Dudek. 2025. Biological Resources Assessment Report for the Sandpiper Golf Club Project. Prepared for the Sandpiper Golf Trust, LLC. November 2022, Revised August 2023. Revised March 2025.

Attachment A

Figures 1 and 2

SOURCE: Sanborn 2020

DUDEK

0 350 700 Feet

FIGURE 1

Project Site

Sandpiper Golf Club Project, Crotch's Bumble Bee Survey Preliminary Results

Project Boundary

Bumble Bee Observations (2025)

- Vosnesensky bumble bee *(Bombus vosnesenskii)*
- Yellow bumble bee *(Bombus fervidus)*
- *(Bombus sp.)*

Vegetation Communities

- AWT : Arroyo willow thickets Association
- UM : Upland mustards or star-thistle fields Semi-Natural Alliance
- BP-TD : Baccharis pilularis - *Toxicodendron diversilobum* Association
- CBB-ABS : California brittle bush - Ashy buckwheat scrub Alliance
- CLO : Coast live oak woodland Alliance
- CSS : Coastal sage scrub
- CTM : Cattail marshes Alliance
- CYS : Coyote brush scrub Alliance
- EM : Emergent Wetland
- EUC : Eucalyptus (*globulus, camaldulensis*) Provisional Semi-natural Association
- IPM : Ice plant mats Semi-Natural Alliance
- MC-MPS : Monterey cypress - Monterey pine stands Semi-Natural Alliance
- NG-MGG : Needle grass - Melic grass grassland Alliance
- PTMG : Pepper tree or Myoporum groves Semi-Natural Alliance
- QS : Quailbush scrub Alliance
- WOABG : Wild oats and annual brome grasslands Semi-Natural Alliance

Land Covers

- B : Beach
- DEV : Urban/Developed
- DH : Disturbed Habitat
- Golf Course : Golf Course - Developed
- ORN : Parks and ornamental plantings
- OW : Open water

SOURCE: Aerial: Sanborn 2020

DUDEK

0 250 500 Feet

FIGURE 2

Survey Results

Memorandum: Sandpiper Golf Club Project, Crotch's Bumble Bee Survey Preliminary Results

Attachment B

Survey Plan

David Compton

From: Anna Cassady
Sent: Friday, June 6, 2025 11:10 AM
To: 'Wildlife Terrestrial Wildlife SCPs'; 'WildlifeResearchPermits@wildlife.ca.gov'; 'AskRegion5@wildlife.ca.gov'; 'Laura.Vanvranken@wildlife.ca.gov'; 'R5ResearchPermits@wildlife.ca.gov'
Cc: 'Hillary.Sardinas@Wildlife.ca.gov'; 'Hirano, Chad@Wildlife'; 'justin.garcia@wildlife.ca.gov'
Subject: RE: CESA Bumble Bee Survey Notification - Sandpiper
Attachments: Sandpiper_DFW1379b_Notification_of_Field_Work_or_Activity_Cassady.pdf

Hi all, I apologize for the duplicate email. I wrote the wrong dates on this notification. Please disregard my previous email and use the following. Also, really sorry about all the emails I'm throwing your way.... Happy Friday 😊

Good morning,

Per my SCP (S-233100001-23310-001) condition, I am notifying you and the regional office contacts regarding a proposed survey for bumble bee in Santa Barbara County in June. Here is a summary of activities and methods:

a) The purpose of this survey is to document bumble bees on site. The permitted biologist will arrive at the Project site when temperatures are predicted to reach 65 degrees F with sunshine. Once appropriate weather conditions are present for bumble bee activity, the permitted biologist will begin surveys per the June 2023 Survey Considerations for CESA Candidate Bumble Bee Species. CBBs will be subject to visual observation, possible temporary collection, and photography for confirmation of identification.
b) June (1 survey pass)
c) See lat/long on form – various locations near here.
d) See lat/long on form – various locations near here.
e) Anna Cassady (permitted to temporarily capture) and possibly other individuals training to temporarily capture under Anna Cassady's supervision.

Thank you,
Anna

Anna Cassady (she/her)
Biologist

O: 951 300 1088 **C:** 760 846 8580
dudek.com

From: Anna Cassady
Sent: Friday, June 6, 2025 11:01 AM
To: Wildlife Terrestrial Wildlife SCPs <terrestrialwildlifescps@wildlife.ca.gov>; WildlifeResearchPermits@wildlife.ca.gov; 'AskRegion5@wildlife.ca.gov' <AskRegion5@wildlife.ca.gov>; Laura.Vanvranken@wildlife.ca.gov; 'R5ResearchPermits@wildlife.ca.gov' <R5ResearchPermits@wildlife.ca.gov>
Cc: Hillary.Sardinas@Wildlife.ca.gov; Hirano, Chad@Wildlife <chad.hirano@wildlife.ca.gov>; justin.garcia@wildlife.ca.gov
Subject: CESA Bumble Bee Survey Notification - Sandpiper

Good morning,

Per my SCP (S-233100001-23310-001) condition, I am notifying you and the regional office contacts regarding a proposed survey for bumble bee in Santa Barbara County in July. Here is a summary of activities and methods:

a) The purpose of this survey is to document bumble bees on site. The permitted biologist will arrive at the Project site when temperatures are predicted to reach 65 degrees F with sunshine. Once appropriate weather conditions are present for bumble bee activity, the permitted biologist will begin surveys per the June 2023 Survey Considerations for CESA Candidate Bumble Bee Species. CBBs will be subject to visual observation, possible temporary collection, and photography for confirmation of identification.
b) July (1 survey pass)
c) See lat/long on form – various locations near here.
d) See lat/long on form – various locations near here.
e) Anna Cassady (permitted to temporarily capture) and possibly other individuals training to temporarily capture under Anna Cassady's supervision.

Thank you,
Anna

Anna Cassady (she/her)
Biologist

DUDEK 45

45 Years of Impactful Projects

O: 951 300 1088 **C:** 760 846 8580
dudek.com

State of California – Department of Fish and Wildlife

SCIENTIFIC COLLECTING – NOTIFICATION OF FIELD WORK OR ACTIVITY

DFW 1379b (NEW 07/01/17) Page 1 of 1

Instructions: Student Permitholders, and Principal Investigators, or any Authorized Individual on an Entity or Individual permit shall notify the Department Law Enforcement offices and Department regional contacts at least 36 hours, but not more than 14 calendar days, prior to conducting permitted activity(ies) in the field, unless otherwise specified in the conditions of the permit. All fields on this form are required. **Refer to Title 14, subsection 650(o), CCR for additional details.**

SECTION 1. PERMITHOLDER/ PRINCIPAL INVESTIGATOR INFORMATION AND NOTIFICATION CONTACT

TODAY'S DATE: (MM/DD/YEAR)	06/06/2025	PERMANENT SC ID NUMBER	233100001-23310-001	PERMIT ID NUMBER	

FROM PERMITHOLDER (CHECK ONE): ☐ ENTITY - PRINCIPAL INVESTIGATOR ■ INDIVIDUAL - PRINCIPAL INVESTIGATOR ☐ STUDENT

FIRST NAME	LAST NAME	EMAIL ADDRESS
Anna	Cassady	acassady@dudek.com

AFFILIATION/ ENTITY NAME	PREFERRED TELEPHONE
Dudek	(760) 846-8580

TO DEPARTMENT: LAW ENFORCEMENT CONTACT NAME(s)	OTHER DEPARTMENT CONTACT NAME(s)
South Coast Region 5	Laura Van Vranken, Justin Garcia
ENTER ENFORCEMENT EMAIL(s) listed in your permit conditions	OTHER DEPARTMENT EMAIL(s) listed in your permit conditions
AskR5@wildlife.ca.gov	Laura Van Vranken, Laura.Vanvranken@wildlife.ca.gov, (858) 775-7608 Justin Garcia, Justin.Garcia@wildlife.ca.gov, (916) 207-4957

SECTION 2. NOTIFICATION PERIODS

You may provide details for up to THREE (3) notification periods for permitted activity(ies) (each period not exceeding 14 days), unless otherwise specified in the conditions of your permit. **Specific locations of planned activities may be described within one period if within the same county or marine area.** For example, if Authorized Individuals plan to sample in Alameda and Contra Costa counties during the same days, two periods should be filled out and submitted. Please complete additional form(s) for any additional notification periods, as necessary.

STARTDATE 06/09/2025	ENDDATE 06/13/2025	STARTDATE	ENDDATE	STARTDATE	ENDDATE
COUNTY AND/OR MARINE AREA Santa Barbara		COUNTY AND/OR MARINE AREA		COUNTY AND/OR MARINE AREA	
SPECIFIC LOCATION OF PLANNED ACTIVITIES (GPS coordinates where possible*) 34°25'48.8"N 119°54'22.7"W		SPECIFIC LOCATION OF PLANNED ACTIVITIES (GPS coordinates where possible*)		SPECIFIC LOCATION OF PLANNED ACTIVITIES(GPS coordinates where possible*)	
PLANNED TIME OF DAY FOR ACTIVITIES Afternoon - noon - 5pm		PLANNED TIME OF DAY FOR ACTIVITIES		PLANNED TIME OF DAY FOR ACTIVITIES	
VEHICLE YEAR/ MAKE/COLOR/ LICENSE PLATE #(s) of Authorized Individuals & Field Assistants TBD; 1 field assistant		VEHICLE YEAR/ MAKE/ COLOR/ LICENSE PLATE #(s) of Authorized Individuals & Field Assistants		VEHICLE YEAR/ MAKE/ COLOR/ LICENSE PLATE #(s) of Authorized Individuals & Field Assistants	
BOAT NAME/ CF #/ LENGTH		BOAT NAME/ CF #/ LENGTH		BOAT NAME/ CF #/ LENGTH	
PLANNED # IN PARTY: 2 ■ CHECK IF # INCLUDES FIELD ASSISTANTS		PLANNED # IN PARTY: ☐ CHECK IF # INCLUDES FIELD ASSISTANTS		PLANNED # IN PARTY: ☐ CHECK IF # INCLUDES FIELD ASSISTANTS	
PERMITTED TAKE ACTIVITY (LIST ALL THAT APPLY) Capture/ Release		PERMITTED TAKE ACTIVITY (LIST ALL THAT APPLY)		PERMITTED TAKE ACTIVITY (LIST ALL THAT APPLY)	
PERMITTED EQUIPMENT PLANNED FOR USE (e.g., sherman trap, trammel net, firearm, etc.) Binoculars, net, vial		PERMITTED EQUIPMENT PLANNED FOR USE (e.g., sherman trap, trammel net, firearm, etc.)		PERMITTED EQUIPMENT PLANNED FOR USE (e.g., sherman trap, trammel net, firearm, etc.)	
PERMITTED WILDLIFE GROUPS OR SPECIES PLANNED TO BE TAKEN Crotch's bumble bee		PERMITTED WILDLIFE GROUPS OR SPECIES PLANNED TO BE TAKEN		PERMITTED WILDLIFE GROUPS OR SPECIES PLANNED TO BE TAKEN	

* Or finest scale location description possible – nearest distance to a city/ town, road intersections, name of waterbody, land ownership, etc.
E.g., *"Stanislaus National Forest, approximately one mile North of Bumblebee, Hwy 108 where it crosses over Cow Creek"*

Attachment C

Photos

Photo Number. Vosnesenky bumble bee (*Bombus vosnesenskii*) worker. June 9, 2025.

Photo Number. Captured yellow bumble bee (*Bombus fervidus*) worker. June 9, 2025.

Photo Number. Captured male Vosnesenky bumble bee or obscure bumble bee (*Bombus caliginosus*). Jun 9, 2025

Photo Number. Vosnesensky bumble bee foraging on California poppy (*Eschscholzia californica*). July 16, 2025.

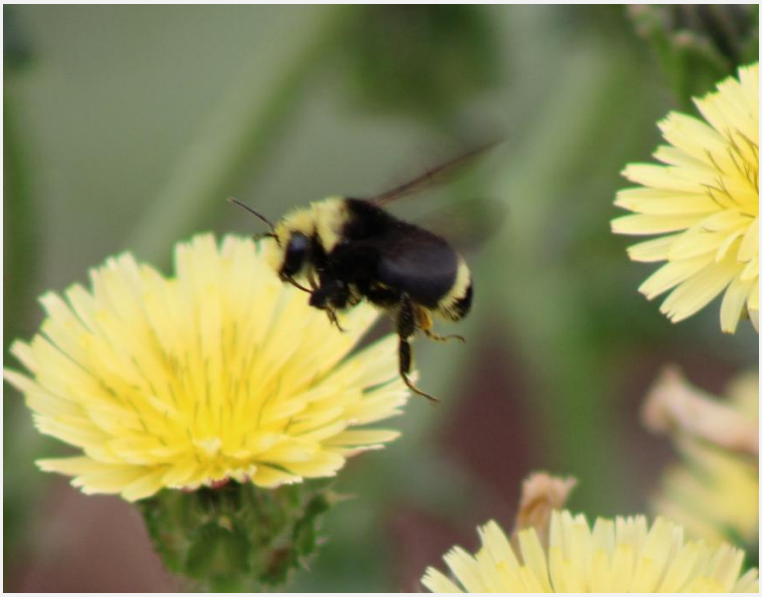


Photo Number. Vosnesensky bumble bee foraging on invasive bristly oxtongue (*Helminthotheca echioides*). June 25, 2025.

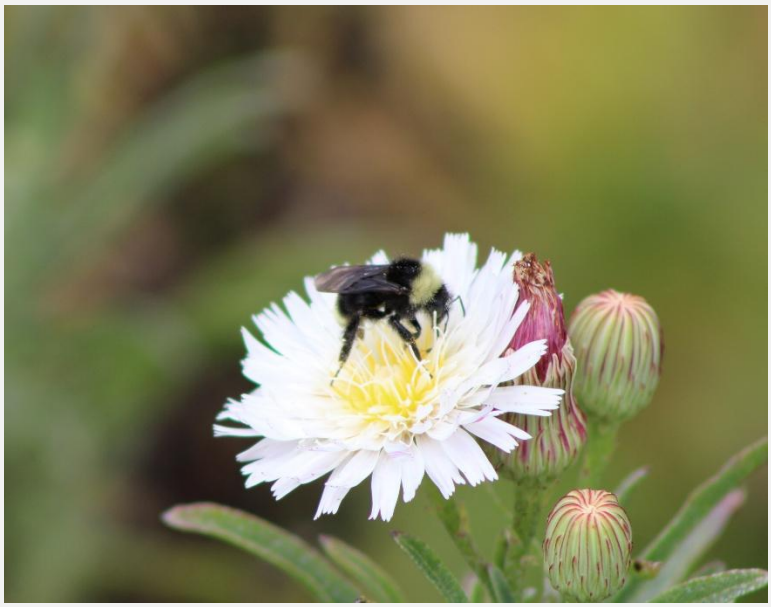


Photo Number. Yellow bumble bee foraging on cliff malacothrix (*Malacothrix saxatalis* var. *saxatalis*). June 25, 2025.

Appendix D-5

Memorandum Concerning Hollister Road Utility Line Installation and Tree Protection

DUDEK
3760 STATE STREET, SUITE 101
SANTA BARBARA, CALIFORNIA 93105
T 805.963.0651

MEMORANDUM

To:	Bill Medel, Sandpiper Golf Course
From:	John Davis IV, Dudek
Subject:	Hollister Road Utility Line Installation and Tree Protection, Sandpiper Golf Club Renovation Project, Goleta, California
Date:	September 3, 2025
cc:	Steve Welton, SEPPS Nicole Biergiel, SEPPS Geremy Salts, Stantec
Attachment:	Proposed Utility Plan (Stantec 2023)

This memorandum (memo) provides a review of the proposed sewage line route that will extend through the monarch butterfly overwinter roosting habitat at the proposed Sandpiper Golf Club Renovation Project (Project) in Goleta, Santa Barbara County, California. The eucalyptus grove occurs along the eastern project site boundary is known as monarch overwinter roost, Site #60 (Xerces Site No. 2747), and is considered an Environmentally Sensitive Habitat Area (ESHA) under the City of Goleta's General Plan. Potential impacts to the monarch butterfly overwinter roosting habitat (Monarch Butterfly ESHA) were originally addressed in the Biological Resources Assessment Report (BRAR) in (Dudek 2022), based on vegetation and monarch butterfly surveys conducted in 2021 and 2022 on the Project site. Dudek subsequently updated the BRAR in 2023, based on updated project information (Dudek 2023). Dudek further updated the BRAR in 2025 based on comments from Rincon (Dudek 2025). Dudek specifically included Mitigation Measure (MM) – 10 to reduce any potential impact to roosting trees (see below). This memo addresses City concerns of trenching the sewer line through the Monarch Butterfly ESHA and potential impacts to roost trees, all of which are Eucalyptus trees.

MM BIO-10 Tree Removal Prohibition. Removal of trees and encroachment within the critical root zone of protected trees is not permitted without prior assessment and impact analysis by a certified arborist. Removal of vegetation within monarch ESHA is prohibited, except for minor pruning of trees or removal of dead trees and debris which pose a threat to public safety as determined by the City of Goleta. Damage to trees within monarch ESHA is also prohibited.

Prior to any ground disturbance adjacent to trees and outside the identified grading footprint, including trenching or excavation for storm drains, storm drain outlets, retention basins, water mains, sewage lines, undergrounding existing utilities, and fence installation, a certified arborist shall provide an assessment of the trees and the potential for tree damage from these activities. The assessment will be provided to ensure no impacts occur to protected trees and that trees removed or potentially damaged (such as from critical root zone encroachment) are replaced at a

sufficient ratio and with appropriate species, depending on whether or not they are native species, species providing sensitive habitat, or protected non-native trees.

Should the arborist determine that any trees within monarch butterfly roosting habitat are subject to removal or critical root zone encroachment, a qualified biologist knowledgeable in monarch butterfly roosting habitat shall determine whether the loss of or damage to the trees, as determined by the certified arborist, may result in impacts to the monarch butterfly roosting habitat. Project activities shall not result in the loss of monarch roosting habitat identified within the Conservation Element of the Goleta General Plan/Coastal Land Use Plan.

The sewer line route was reviewed by Dudek principal coastal ecologist, John Davis IV, and Stantec's senior principal engineer, Geremy Salts. Stantec's preliminary site plan – proposed utility plan sheet C19 or C20 (attached, Stantec 2023) clearly displays the sewer route from its origin at the existing sewer manhole located within the easement and along the boundary of Sandpiper Golf Course and Santa Barbara Shores Park to the comfort station to the southwest. Only the beginning of the sewer line is located with the Monarch Butterfly ESHA and a clearing in the trees is evident to the southwest (see Photo 1 below). The trench itself will be shallow with enough depth to allow a flexible, pumped sewer lateral, approximately 2" diameter to transect through the Monarch Butterfly ESHA and golf course. It is unlikely that the sewer lateral will disturb any Eucalyptus trees or their root zones in the Monarch Butterfly ESHA. However, Dudek has included tree protection measures (i.e., elements of a Tree Protection Plan) for the City and Rincon Consultants, Inc., the EIR preparer, to consider and to ensure that any impacts to trees will be avoided. With the proper tree protection in place, Dudek considers impacts to trees within the Monarch Butterfly EHSA to be less than significant with mitigation.

Photo 1. Viewing southwest from the sewer manhole to the comfort station.

Tree Protection Measures

Dudek recommends the following measures to reduce impacts to the preserved protected trees and maintain their current health status.

Tree Protection Measures Prior to Construction

Prior to any grading activity, preserved trees within ESHA that fall within 100 feet of construction activity shall be protected by temporary fencing and signage. All contractors shall be made aware of the tree protection measures.

Fencing

Temporary fencing, not less than 4 feet high with tree protection signs shall be erected around all trees (or tree groups) to be preserved on site. The protective fence shall be installed at the Protected Zone boundary of each tree (or tree group), which is defined as five (5) feet beyond the tree canopy dripline. The intent of protection fencing is to prevent root damage and/or compaction by grading equipment. An International Society of Arboriculture (ISA) Certified Arborist may be required on-site if construction activities occur within the tree protected zone. Tree protection signs should be attached to every fourth post. The contractor shall maintain the fence to keep it upright, taut and aligned at all times. Fencing shall be in place and inspected by the City prior to commencement of any activity on the property. Fencing shall be removed only after all construction activities are complete.

Pre-construction Meeting

A pre-construction meeting shall be held between all contractors (including grading, tree removal/pruning, builders, etc.) and the project arborist. The meeting shall focus on instructing the contractors on tree protection practices and answer any questions. All equipment operators and spotters, assistants, or those directing operators from the ground shall provide written acknowledgement of their receiving tree protection training. This training shall include information on the location and marking of protected trees, the necessity of preventing damage, and the discussion of work practices that will accomplish such.

Protection and Maintenance During Construction

Once construction activities have begun, the protection measures provided below should be observed.

Equipment Operation and Storage

Contractors shall avoid heavy equipment operation around the protected tree. Operating heavy machinery around the root zones of trees increases soil compaction, which decreases soil aeration and subsequently reduces water penetration into the soil. All heavy equipment and vehicles should, at minimum, stay out of the fenced protected tree zone unless where specifically approved in writing and under the supervision of a Certified Arborist.

Storage and Disposal

Materials Storage and Disposal: Do not store or discard any supply or material, including paint, lumber, concrete overflow, etc. within the protected zone. Remove all foreign debris within the protected zone; it is important to leave

the duff, mulch, chips, and leaves around the retained trees for water retention and nutrient supply. Avoid draining or leakage of equipment fluids near retained trees. Fluids such as: gasoline, diesel, oils, hydraulics, brake and transmission fluids, paint, paint thinners, and glycol (anti-freeze) should be disposed of properly. Equipment should be parked at least 50 feet from the protected zone to avoid the possibility of leakage of equipment fluids into the soil. The effect of toxic equipment fluids on the retained trees could result in tree decline and/or mortality.

Grade Changes

Contractors shall ensure that grade changes, including adding fill, not be permitted within the protected zone without special written authorization and under supervision of a Certified Arborist. Lowering the grade within the protected zone would necessitate cutting main support and feeder roots, jeopardizing the health and structural integrity of the tree. Adding soil, even temporarily, on top of the existing grade would compact the soil further and decrease water and air availability to tree roots. Contractors shall ensure that grade changes made outside of the protected tree zone not create conditions that allow water to pond at the base of trees. Water trapped at the base of a tree could lead to root rot and other detrimental tree impacts.

Moving Construction Materials

Contractors shall ensure that care be exercised when moving construction equipment and supplies near the protected tree, especially overhead. Contractors shall ensure that damage to the tree be avoided when transporting or moving construction materials and working around the tree (even outside of the fenced protected zone). Contractors should flag aboveground tree parts with potential for damage (e.g., low limbs, scaffold branches, trunks) with high-visibility flagging, such as florescent red or orange. If contact with the tree crown is unavoidable, affected branches may be pruned by an ISA-Certified Tree Worker Climber Specialist under supervision of a Certified Arborist and should adhere to ISA standards.

Trenching

Except where specifically approved in writing beforehand, all trenching shall be done outside of the fenced protected zone. Roots primarily extend in a horizontal direction, forming a support base to the tree similar to the base of a wineglass. Where trenching is necessary in areas that contain roots from retained trees, contractors should use trenching techniques that include the use of either a root pruner or an Air-Spade to limit root impacts. A Certified Arborist should ensure that all pruning cuts be clean and sharp to minimize ripping, tearing, and fracturing of the root system. Root damage caused by backhoes, earthmovers, dozers, or graders is severe and may result in tree mortality. Use of both root-pruning and Air-Spade equipment should be accompanied only by hand tools to remove soil from trench locations. The trench should be made no deeper than necessary, and when possible, alternatives to trenching should be utilized.

Irrigation

Supplemental irrigation for trees adjacent to construction activity may be necessary during winter and/or spring months. Summer and fall irrigation may be necessary based on variable climatic and site conditions but should be conducted judiciously to avoid overwatering. One irrigation cycle should thoroughly soak the root zones of the trees to a depth of 2 feet. The soil should be allowed to dry out between watering to avoid keeping a consistently wet soil. The contractor should be responsible for irrigating (deep watering) the trees. Soil moisture should be checked with a soil probe before irrigating. Irrigation is best accomplished by installing a temporary aboveground micro-spray

system that would distribute water slowly (to avoid runoff) and evenly throughout the fenced protection zone. The area within 3 feet of the trunk should never be soaked, especially in summer months. Overwatering trees may promote the growth of tree-damaging agents, so proper soil moisture monitoring is critical to prolonged tree health. For any trees that have been substantially root pruned (30% or more of their root zone), irrigation should be required for the first 12 months. The first irrigation should occur within 48 hours of root pruning. The trees should be deep watered every 2 weeks during the summer and once a month during the winter (adjusted accordingly with rainfall).

Canopy Pruning

The contractor shall not prune the protected tree until all construction is completed unless standard pruning would reduce conflict between the canopy and equipment. This will help protect the tree's canopy from damage. All pruning should be conducted by an ISA-Certified Tree Worker Climber Specialist under the supervision of a Certified Arborist and should adhere to ISA pruning standards.

Inspection

A Certified Arborist/licensed pest control advisor or their representative should inspect the protected tree adjacent to grading and construction activity on a monthly basis for the duration of project construction. A report summarizing site conditions, observations, tree health, and recommendations for minimizing tree damage should be submitted by the Certified Arborist or their representative following each inspection. Photographs of the protected trees are to be included on a minimum annual basis.

Maintenance After Construction

After the completion of construction activities, tree protection fencing may be removed, and the following measures may be performed to sustain and enhance the vigor of the tree.

Mulch

The contractors shall ensure that a 6-to-8-inch layer of mulch is applied within the tree protection zone. This helps to stabilize soil temperatures in root zones, conserve soil moisture, and reduce erosion. The contractor shall ensure that the mulch is kept a minimum 1 foot away from the trunk base to avoid creating conditions favorable to the establishment and growth of decay-causing fungal pathogens. When adding organic mulch under retained trees, it should be certified free of pests and pathogens. Also, the use of redwood chips should be avoided because certain inhibitive chemicals may be present in the wood.

Pruning

Regular pruning of the protected tree is not required. An ISA-Certified Tree Worker Climber Specialist, under the supervision of a Certified Arborist, should only prune the tree to maintain clearance and remove broken, dead, or diseased branches. No more than 15% of the canopy should be removed at one time. All pruning should conform to ISA standards.

Watering

Once the project site's existing drainage is modified, soil probing will be necessary to accurately monitor moisture levels. Especially in years with low winter rainfall, supplemental irrigation for the trees that sustained root pruning or altered site drainage may be necessary. The protected tree should be infrequently watered with deep soaks, rather than frequent light irrigation, and the soil should be allowed to dry out between waterings. The soil should not be allowed to become saturated or stay continually wet, and drainage should not allow ponding of water beneath the canopy of the tree. Irrigation spray should not hit the trunk of any tree. A 30-inch dry zone around the tree trunk should be maintained. An aboveground micro-spray or in-line drip irrigation system should be used in lieu of typical pop-up sprays.

Chemical Applications

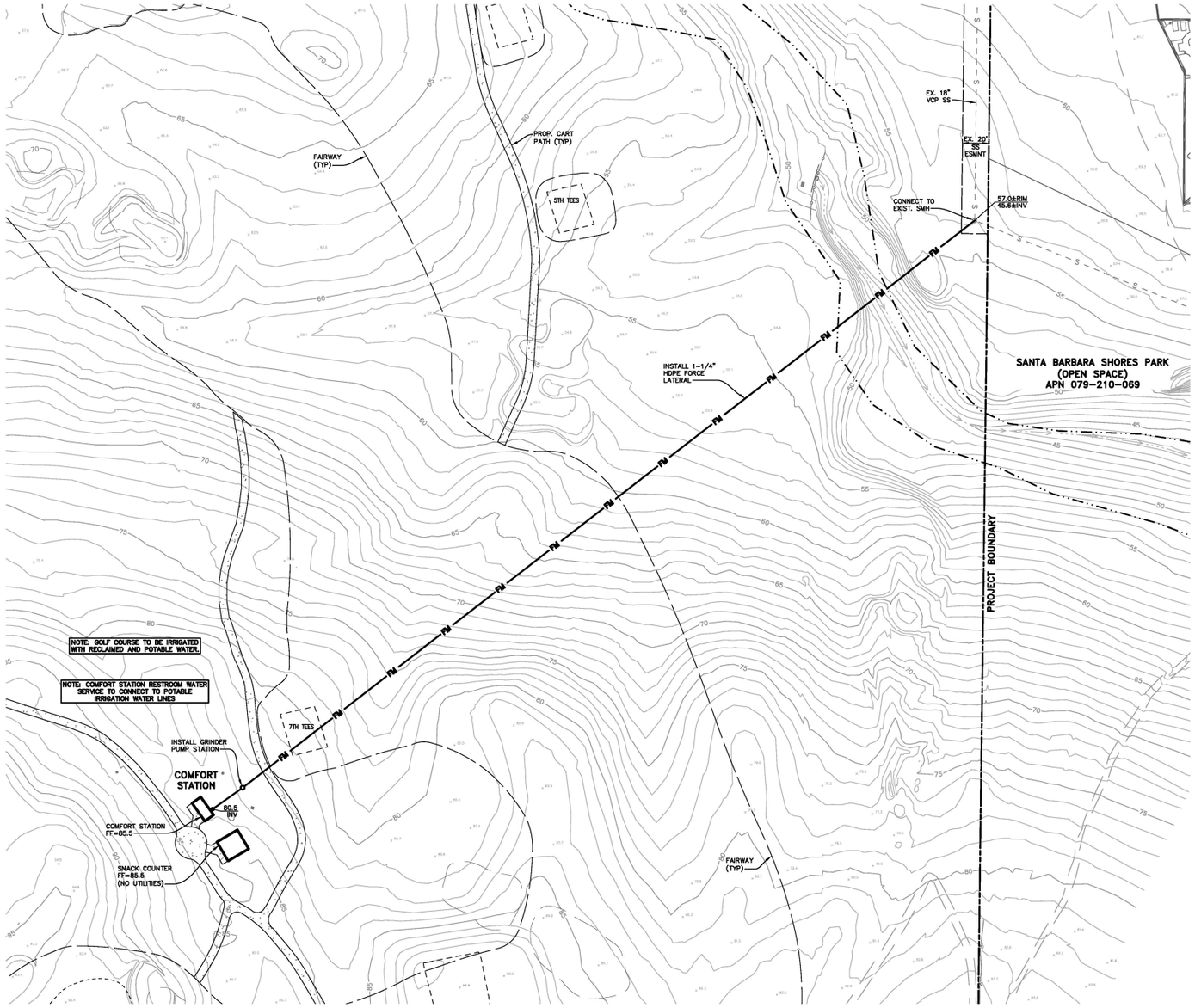
If the trees are maintained in a healthy state, regular spraying for insect or disease control is not necessary. If a problem does develop, a Certified Arborist should be consulted, as the trees may require application of insecticides to prevent the intrusion of bark-boring beetles and other invasive pests. All chemical spraying should be performed by a licensed applicator under the direction of a licensed pest control advisor.

References

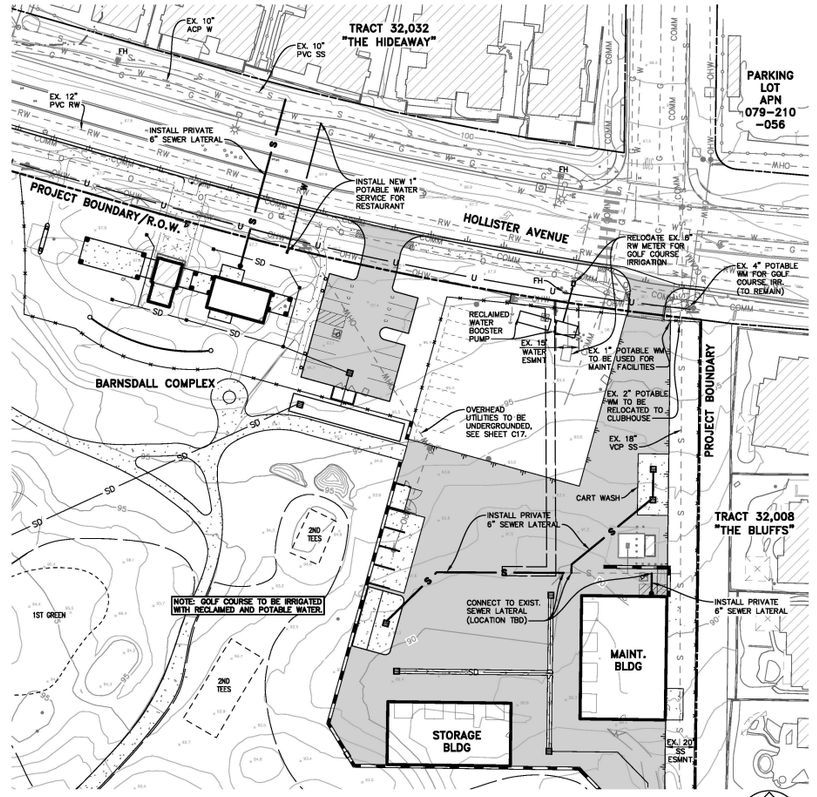
Dudek. 2023. Biological Resources Assessment Report for the Sandpiper Golf Club Project. Prepared for the Sandpiper Golf Trust, LLC. November 2022, Revised August 2023.

Dudek. 2025. Biological Resources Assessment Report for the Sandpiper Golf Club Project. Prepared for the Sandpiper Golf Trust, LLC. November 2022, Revised August 2023. Revised March 2025.

Stantec. 2023. Preliminary Improvement Plans Sandpiper Golf Course. Sheet C19 of C20. Proposed Utility Plan



COMFORT STATION UTILITY PLAN



BARNSDALL & MAINTENANCE UTILITY PLAN

PRELIMINARY

811 Know what's below. Call before you dig.

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES
0 1 2 3

SCALE: 1"=40'
0 40 80 120

NO.	DATE	REVISION BLOCK	APPD.

PREPARED FOR:
SANDPIPER GOLF TRUST, LLC
280 CHESTNUT AVENUE
WESTMONT, IL 60559

PREPARED BY:
Stantec
200 East Carrillo Street, Suite 101, Santa Barbara, CA 93101
Phone: (805) 963-9532
GUY GEREMY SALTS 60488 6/30/2024
PROJECT ENGINEER R.C.E. EXP. DATE

REGISTERED PROFESSIONAL ENGINEER GUY GEREMY SALTS NO 60488 CIVIL STATE OF CALIFORNIA

PROPOSED UTILITY PLAN

PRELIMINARY IMPROVEMENT PLANS
SANDPIPER GOLF CLUB
GOLETA, CA

STANTEC PROJECT NO. 2042588200
SHEET C19 OF C20
PLAN DATE 7/26/2023

DESIGN WFG CHECKED GGS
42-ENG SAVE DATE: 7/25/2023 1:02:22 PM PLOT BY:Sarnand, Waverly PLOT DATE:7/26/2023 6:36:08 AM
DRAWING:c:\projects\5882\drawing\prelim_eng\5882_prelim_util.dwg

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