O NORTH OCEAN AVENUE, CAYUCOS, CALIFORNIA

(APN 064-481-009)

SAN LUIS OBISPO COUNTY, CALIFORNIA

BIOLOGICAL RESOURCES ASSESSMENT



Prepared for:

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May 3, 2019



AUTHENTICITY AND SIGNATURE PAGE

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visits associated with this report.

Kevin Merk

Principal Biologist

KeuenMerle

5/3/19 Date



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EXECUTIVE SUMMARY

Kevin Merk Associates, LLC (KMA) prepared this biological resources assessment for the proposed hotel project at 0 North Ocean Avenue, Cayucos, San Luis Obispo County, California (Assessor's Parcel Number 064-481-009). The project proposes a one-story boutique hotel consisting of ten rooms and associated parking and infrastructure. The purpose of this report is to evaluate the potential for the project site to support special-status biological resources (plants, animals, sensitive natural communities, and designated critical habitat), Environmentally Sensitive Habitat Areas for the California Environmental Quality Act (CEQA) and Coastal Act review being conducted by the County of San Luis Obispo (County) for the project. This assessment evaluated the site's existing natural conditions to determine whether special-status biological resources may be present onsite and could be adversely affected by the proposed project.

The study area occurs in the northwestern end of coastal urban development within the community of Cayucos. To the east of the property is a parking lot associated with the Cayucos Pier. The study area is bordered to the north by North Ocean Avenue and there is a mobile home park beyond directly to the north and undeveloped grassland to the northwest. A cluster of condominiums are along the western boundary of the property. Sandy beach forms the southern extent, with the Pacific Ocean beyond. The property contains the mouth of Cayucos Creek.

The primary project components are planned to occur on the flat terrace composed of disturbed annual grassland. Little Cayucos Creek is present, but no other wetland habitats, topographic depressions, swales, or pools of standing water were observed in the proposed development area. Several special-status plant species with California Rare Plant Ranks of 1B.1, 1B.2 or 1B.3 were identified as having potential to occur within project impact areas, and March and April surveys were conducted that confirmed no special status plants are within the proposed project disturbance footprint.

Special-status animals were evaluated to determine if any had the potential to occur onsite and be affected by the proposed project. No special status wildlife were observed or determined to occur within the project footprint, but a number of species could occur in the Cayucos Creek corridor and associated sandy beach.

Species-specific mitigation prescribed include scheduling the initiation of construction outside of the bird nesting season, or having a qualified biologist conduct a nesting bird survey and designate non-disturbance buffers around active nests; wildlife pre-construction survey; biological monitoring during initial vegetation removal and site grading; Worker Environmental Awareness Program; construction standard operating and Best Management Practices; and, erosion controls and revegetation of disturbed areas outside the disturbance footprint. With the incorporation of the mitigation measures described herein, project impacts on special-status biological resources will be reduced to a level below significance under CEQA.



1.0 INTRODUCTION

Kevin Merk Associates, LLC (KMA) prepared this biological resources assessment for a proposed boutique hotel project to be developed at 0 North Ocean Avenue, Cayucos, San Luis Obispo County, California (Figures 1 and 2). The proposed project is located on a small portion of an approximately 1.82-acre property identified by Assessor's Parcel Number 064-481-009. The site is located near the northern end of the community of Cayucos, and is on the United States Geological Survey (USGS) Cayucos 7.5-minute topographic quadrangle (R10E, T28S). The property is located to the south of Ocean Avenue, and contains and a coastal bluff area composed of disturbed annual grassland on a terrace to the west of the Cayucos Creek mouth and beach interface. The mouth of Cayucos Creek and sandy beach area are also included in the property, as well as a small section of rip rap associated with a parking lot near the Cayucos Pier.

This report was prepared at the request of Mr. Jay Cobb to support an application for a development permit from the County of San Luis Obispo (County). Since development is only proposed on the grassy terrace area, and would not extend onto the beach or within the creek corridor, a study area was developed to focus the analysis to areas of potential disturbance and immediate surrounding areas. This report evaluates the potential for the project site to support special-status biological resources (plants, animals, sensitive natural communities, designated critical habitat and Environmentally Sensitive Habitat Areas [ESHA]) for the California Environmental Quality Act (CEQA) review to be conducted by the County for the project. This assessment evaluated the site's existing natural conditions to determine whether special-status biological resources may be present onsite and could be adversely affected by the proposed project. This investigation followed the County's (2016) *Draft Guidelines for Biological Resources Assessments*.

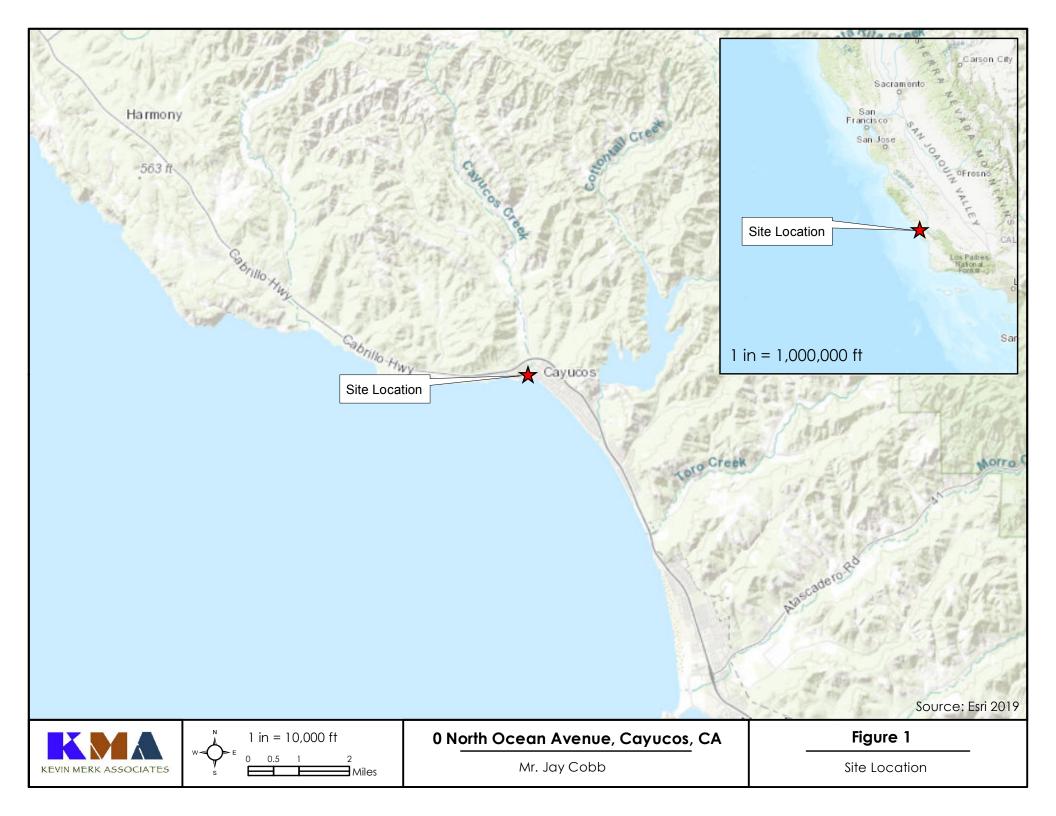
1.1 Project Description

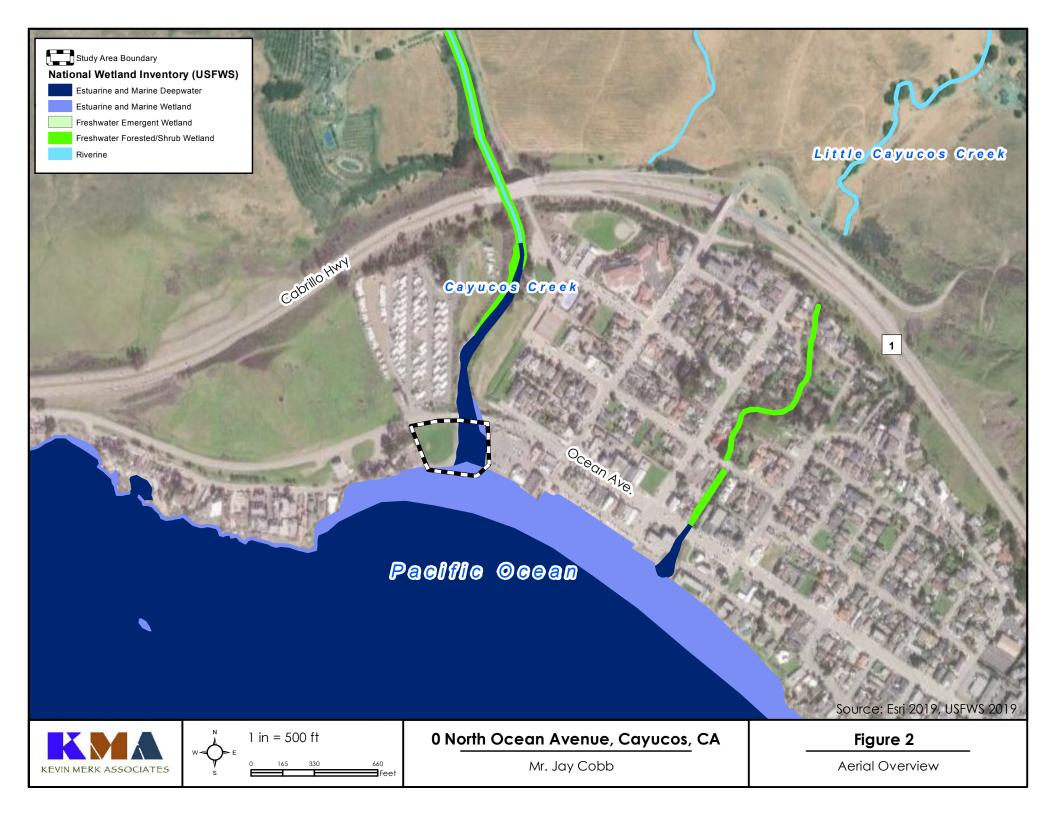
The project proposes to construct a one-story, ten-room ocean view hotel (Appendix A) along North Ocean Avenue. It includes a parking lot with 26 spaces and other associated infrastructure. Between the hotel and the coastal bluff would be a gazebo, building for amenities, hot tub and bocce ball field. All of these facilities would be located on the grassland terrace with a setback from the coastal bluff edge and no encroachment onto the beach or into Cayucos Creek.

1.2 Regulatory Overview

For the purpose of this report, special-status species are those plants and animals listed, or Candidates for listing, as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (FESA); those listed as Threatened or Endangered under the California Endangered Species Act (CESA); and, animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the California Department of Fish and Wildlife (CDFW; 2018a).

FESA provisions protect federally listed species and their habitats from unlawful take, which is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." Under these regulations, "harm" may include significant habitat modification or degradation that kills or injures wildlife. Candidate species are not afforded legal protection under FESA; however, Candidate species typically receive special attention during the CEQA environmental review process. CESA provides for the







protection and preservation of native species of plants and animals that are experiencing a significant decline which if not halted would lead to a threatened or endangered designation. Habitat degradation or modification is not expressly included in the definition of take under CESA.

CDFW maintains a list of Species of Special Concern for those species in which declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as special concern is to halt or reverse their decline early enough to secure their long-term viability. Species of Special Concern may receive special attention during environmental review, but do not have statutory protection. FESA and CESA emphasize early consultation to avoid impacts on Threatened and Endangered species. As part of the consultation process, project proponents are directed to develop appropriate mitigation plans to offset project effects on listed species and their habitats.

Critical habitat is designated for species listed under FESA, and are areas that contain the physical or biological features which are essential to the conservation of those species and may need special management or protection. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Activities by private landowners are not affected if there is no federal nexus.

Rare plants are those defined as occurring on California Rare Plant Rank (CRPR) 1, 2, 3 and 4 developed by the CDFW working in concert with the California Native Plant Society (CNPS; CDFW 2018b). Rank 4 species are a watch list, and typically do not meet CEQA's rarity definition (Section 15380), but are included here because they may be of local concern. The CRPR definitions are as follows:

- Rank 1A = Presumed extirpated in California and either rare or extinct elsewhere;
- Rank 1B.1 = Rare or endangered in California and elsewhere; seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- Rank 1B.2 = Rare or endangered in California and elsewhere; moderately threatened in California (20-80% occurrences threatened);
- Rank 1B.3 = Rare or endangered in California and elsewhere, not very threatened in California (<20% of occurrences threatened or no current threats known);
- Rank 2A = Presumed extirpated in California, but more common elsewhere;
- Rank 2B = Rare or endangered in California, but more common elsewhere;
- Rank 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); and
- Rank 4.2 = Plants of limited distribution (watch list), fairly threatened in California (20-80% occurrences threatened).
- Rank 4.3= Plants of limited distribution (watch list), not very threatened in California.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. Birds of prey are protected in California under the California Fish and Game Code Section 3503.5. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by CDFW. Eagles are protected under the Bald and Golden Eagle Protection Act. The federal Migratory Bird Treaty Act (MBTA) applies to many bird species, including common species, and prohibits killing, possessing, or trading in migratory birds, including whole birds, parts of birds, bird nests, and eggs. The act restricts construction disturbance during the nesting



season that could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

Sensitive natural communities are those native plant communities listed in the California Natural Diversity Database (CNDDB; CDFW 2019a) as rare or of limited distribution. They are evaluated using NatureServe's Heritage Methodology to assign global and state ranks based on rarity and threat, and these ranks are reviewed and adopted by CDFW's (2019b) Vegetation Classification and Mapping Program (VegCAMP). Evaluation with the state (S) level results in ranks ranging from 1 (very rare or threatened) to 5 (demonstrably secure). Those with ranks of S1 to S3 are to be addressed in the environmental review process under CEQA (CDFW 2019b).

Environmentally Sensitive Habitat Areas (ESHA) are designated pursuant to the California Coastal Act. A variety of plant communities within the Coastal Zone meet the definition of ESHA (Coastal Act Section 30107.5), including riparian areas, wetlands, maritime chaparral and special-status species habitat. The California Coastal Commission (CCC), with technical assistance from the CDFW, is responsible for protecting ESHA within the Coastal Zone, and have required local agencies such as the County of San Luis Obispo to develop policies aimed at protecting and preserving these areas. The County's (2009) Estero Area Plan is a long-range planning document that guides development consistent with the policies of the California Coastal Act and the San Luis Obispo County Local Coastal Program. The County's (2018) Coastal Zone Land Use Ordinance also describes requirements for projects within or adjacent to (within 100 feet of) Environmentally Sensitive Habitat, which include wetlands, coastal streams, riparian vegetation, terrestrial and marine habitats that are mapped as land use elements combining designations.

California Fish and Game Code Section 1602 requires that CDFW be notified of any proposed activity that may affect any river, stream or lake by: 1) substantially diverting or obstructing the natural flow; 2) substantially changing or using any material from the bed, channel or bank; or, 3) depositing or disposing of debris, waste, or other materials. The notification requirement applies to ephemeral and perennial drainages, including streams, desert washes, and watercourses with subsurface flow, and may apply to projects conducted within flood plains of a regulated water body. The CDFW jurisdictional limits are generally the outer edge of riparian vegetation, or the top of bank, which ever is farther. Projects that would impact CDFW jurisdictional areas are required to complete a notification form and submit a fee, in order to obtain a Lake and Streambed Alteration Agreement (LSAA).

The State Water Resources Control Board regulates discharges of fill and dredged material under the Clean Water Act Section 401, the Porter-Cologne Water Quality Control Act, and the state and federal "No Net Loss" policies for wetlands. The 401 Water Quality Certification and Wetlands Program protects "waters of the state", including wetlands, riparian areas, and headwaters. Most projects are regulated by the Regional Water Quality Control Board (RWQCB) which oversees the area in which the project is located. Although originally described as "dredge and fill" regulations, subsequent rules extended regulation to any activities that would disturb any surface waters or wetlands. Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 130509(e)), and includes both natural and artificial channels, all "waters of the United States" and all non-jurisdictional wetlands, including areas regulated by CDFW under the Lake and Streambed Alteration program.

Section 404 of the Clean Water Act established a program to regulate the discharge of dredged and fill material into "waters of the United States", which includes such waters as rivers, lakes, streams, and most wetlands. Specifically, waters of the United States include traditional navigable waters (TNWs); wetlands; tributaries to navigable waters of the United States, including adjacent



wetlands, lakes and ponds; interstate waters and their tributaries; and, other features such as intermittent streams or tributaries that are not part of interstate or navigable waters where effects to these waters could affect interstate or foreign commerce. U.S. Army Corps of Engineers (USACE) defines wetlands as having three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. In 2017 President Donald Trump directed the Environmental Protection Agency (EPA) to rescind the waters of the United States rule, and the EPA responded by suspending the rule. Subsequently, and injunction was issued that continued the waters of the United States rule in California as well as several other states.

In tidal waters of the United States, USACE jurisdiction is defined as the landward limit of the high tide line. In nontidal waters of the United States, USACE jurisdiction extends to the Ordinary High Water Mark (OHWM), which is defined as "the 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 the soil, destruction of terrestrial vegetation or the presence of litter and debris." Identification of the OHWM is conducted by examining physical evidence of surface flow in the stream channel.

USACE jurisdiction under the Clean Water Act extends to the tributaries of navigable waters. Jurisdiction is recognized even when a tributary flows for a significant distance before reaching a navigable water; is several times removed (i.e., is tributary to more tributaries); or flows some distance through artificial features such as ditches, culverts, pipes, storm sewers, or ponds—waters with artificial features can be considered jurisdictional. In addition, "other waters" could be determined to be waters of the United States on a case-specific basis by showing that, either alone or in combination with similarly situated other waters in the region, they have a significant nexus to a TNW, interstate water, or the territorial seas. A "significant nexus" is a chemical, physical, or biological connection between tributaries and downstream other waters. Hydrologic connection alone may not suffice in all cases to establish USACE jurisdiction, and there must be ecological significance of the connection such as influence on downstream water quality; transport of wood, sediment, nutrients, pesticides, or metals; functions such as storing and cleansing water; movement of organisms or their seeds or eggs; or hydrologic or biogeochemical interactions among surface or groundwater flows.

Projects within the boundaries of jurisdictional wetlands or waters would require a Lake and Streambed Alteration Agreement from CDFW, a Section 401 Water Quality Certification or Waste Discharge Requirements (WDR) from the appropriate Regional Water Quality Control Board, and/or a Section 404 permit from the USACE, depending on the location of project impacts within each agency's jurisdiction. Any projects requiring a Section 404 permit must first obtain a Section 401 permit. Impacts to waters of the state that do not require a Section 404 permit may require a WDR. Additionally, if any species protected under FESA may be present in the project area, the Section 404 permitting pursuant to Fish and Wildlife Coordination Act requires authorization under the USFWS and National Marine Fisheries Service (NOAA Fisheries), as appropriate.

CEQA defines a *significant effect on the environment* as "a substantial, or potentially substantial, adverse change in the environment." Projects that may have significant effects are required to be analyzed in an Environmental Impact Report (EIR). Under CEQA, a project's effects on biotic resources are deemed significant where the project would do any of the following:

- Potentially substantially degrade the quality of the environment
- Substantially reduce the habitat of a fish or wildlife species
- Cause a fish or wildlife population to drop below self-sustaining levels
- Threaten to eliminate a plant or animal community



- Substantially reduce the number or restrict the range of an endangered, threatened, or rare species
- Have possible environmental effects that are individually limited but cumulatively considerable

In addition to the criteria above that trigger mandatory findings of significance, Appendix G of the CEQA Guidelines includes six additional impacts to consider when analyzing the significance of project effects, which may or may not be significant, depending on the level of impact. A project's effects on biological resources could be deemed significant if the project would do the following:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

If the project proponent agrees to mitigation measures or project modifications that would avoid all significant effects or would mitigate the significant effect(s) to a point below the level of significance, an EIR would not be required. The project proponent would be bound to implement the mitigation measures to reduce the project effects to below a level of significance. Mitigation is not required for effects that are less than significant.

2.0 METHODS

Google Earth aerial imagery was employed in coordination with a field survey to define the current extent of onsite plant communities and assist in identifying potential habitat for special-status species. The "project impact areas" were defined as the area that would be occupied by the hotel, parking lot and other amenities, as shown on the project plans (Appendix A). The "study area" included the impact area plus a buffer to the midline of the Cayucos Creek channel; the coastal bluff on the property; and, the sandy beach area below the proposed hotel. Kevin Merk conducted a site visit to assess onsite conditions on March 21, 2019, from 1600 to 1800 hours. A follow-up survey for rare plant species was conducted on April 18, 2019 from 1000 to 1200 hours.

The site was accessed from North Ocean Avenue and surveyed by walking through and visually surveying all areas on the property. A list was made of dominant plant species in each plant community, and all plant and animal species observed were noted (Appendix B). Plant taxonomy followed the Jepson Flora Project (2019), and nomenclature for animals is reported as it appears in the CNDDB (CDFW 2019a) or as updates are available (California Herps 2019). Plant communities and dominant vegetative features were mapped on ESRI (2019) aerial imagery. Classification of the onsite plant communities was based on the CDFW's (2019b) *Vegetation Classification and Mapping Program* which generally follows Sawyer et al.'s (2009) *Manual of*



California Vegetation. Holland's (1986) Preliminary Descriptions of the Terrestrial Natural Communities of California was also referenced as the sensitive natural communities listed in the CNDDB follows the Holland community names. A Guide to Wildlife Habitats in California, which is updated through the California Wildlife Habitat Relations System (CDFW 2019c), was also cross-referenced. Representative photos of each of the habitat types onsite and the proposed project area were taken, and a photo plate is included as Appendix C.

The Web Soil Survey was used to identify the soil mapping units present within the project site (Natural Resources Conservation Service 2019). The National Wetlands Inventory (NWI) was reviewed to evaluate the extent of identified wetlands on the site and in the vicinity (USFWS 2019a). USGS topographic maps were also reviewed for information on hydrologic features. Designated critical habitat for species listed under FESA was mapped according to information provided in USFWS (2019b).

The CNDDB (CDFW 2019a) was queried for special-status plant and animal species occurrences and sensitive natural communities within the following USGS 7.5-minute quadrangles: Cayucos, Cambria, Cypress Mountain, York Mountain, and Morro Bay North. CNDDB records of special-status plant and animal occurrences and sensitive natural communities within and slightly outside of a five-mile buffer of the study area were mapped. From the list of all special-status species in the CNDDB search, local distribution and ecological information was obtained from a variety of online and published sources (Hoover 1970, Jennings and Hayes 1994, Bolster 1998, Moyle et al. 2015, Calflora 2019, California Native Plant Society 2019, California Herps 2019, The Cornell Lab of Ornithology 2019a, 2019b; CDFW 2019c). Those species that occur in coastal habitats along the Estero Bay were considered to be within the project vicinity (Appendix D). Species that are restricted to other biogeographical settings, such as mountainous areas of the Santa Lucia Range, were excluded. Based upon our knowledge of the local area, we included additional special-status biological resources that have been documented in the project vicinity.

From the list of all special-status species known from the project vicinity, an evaluation of those with potential to occur onsite was conducted based upon the suitability of habitat conditions on the property, and the local distribution (geographical and elevational ranges) and specific requirements (plant communities and soils) of the species considered. Definitive surveys for the presence or absence of special-status animal species were not conducted. We relied on existing information and known occurrence records in the region coupled with our site-specific observations to make determinations for the probability of occurrence of special-status species in the study area. Any special-status species that were observed during the site survey, or were recorded in the CNDDB from the immediate vicinity of the lower reaches of Cayucos Creek, were listed as "Present" in Appendix D. Those species listed as "Potential" met the following requirements: records in the site vicinity, appropriate plant community and/or soil associations onsite, and within the elevational range of the species. If any one of these elements was not met or considered to be marginal for the site, but the other elements were present, that species was considered "Unlikely". If onsite environmental conditions were clearly inappropriate, or the species has a limited distribution that does not overlap the site, those species were considered "Not Expected". If any lifestage or particular life history use (i.e., foraging) fit the requirements of the onsite conditions, even while other aspects were inappropriate for certain functions (i.e., breeding), these species were still considered to have potential to occur onsite, but the likelihood of occurring onsite along with a description is provided in the special-status species table (Appendix D) as well as a more in-depth analysis in the text.

We determined whether special-status plant and animal species, sensitive natural communities, wetlands or other waters under state or federal jurisdiction, designated critical habitat and ESHA



could occur on the site or nearby. We then evaluated the potential impacts of the proposed project on each of these biological resource issues, including the six additional impacts in CEQA Appendix G. An evaluation of significance as defined under CEQA is provided for each potential impact, and mitigation is proposed to reduce impacts to a level below the significance threshold.

3.0 RESULTS

The project plans prepared by AAC (March 11, 2018) are provided in Appendix A. A list of plants and animals observed during the survey is included as Appendix B. Appendix C is a photo plate of photographs taken during the site visit to characterize the onsite conditions. Appendix D includes a list of all special-status species and plant communities identified in the CNDDB within the site vicinity, and an evaluation as to their potential presence onsite. Figure 2 shows the wetland habitats recorded in the NWI in the site vicinity, and a map illustrating the habitat types onsite is included as Figure 3. Figure 4 shows the soil types in the study area. Figures 5 and 6 are the CNDDB maps showing the locations of special-status plants and animals, respectively, recorded within five miles of the study area. Figure 7 shows the locations of designated critical habitat.

3.1 Existing Conditions

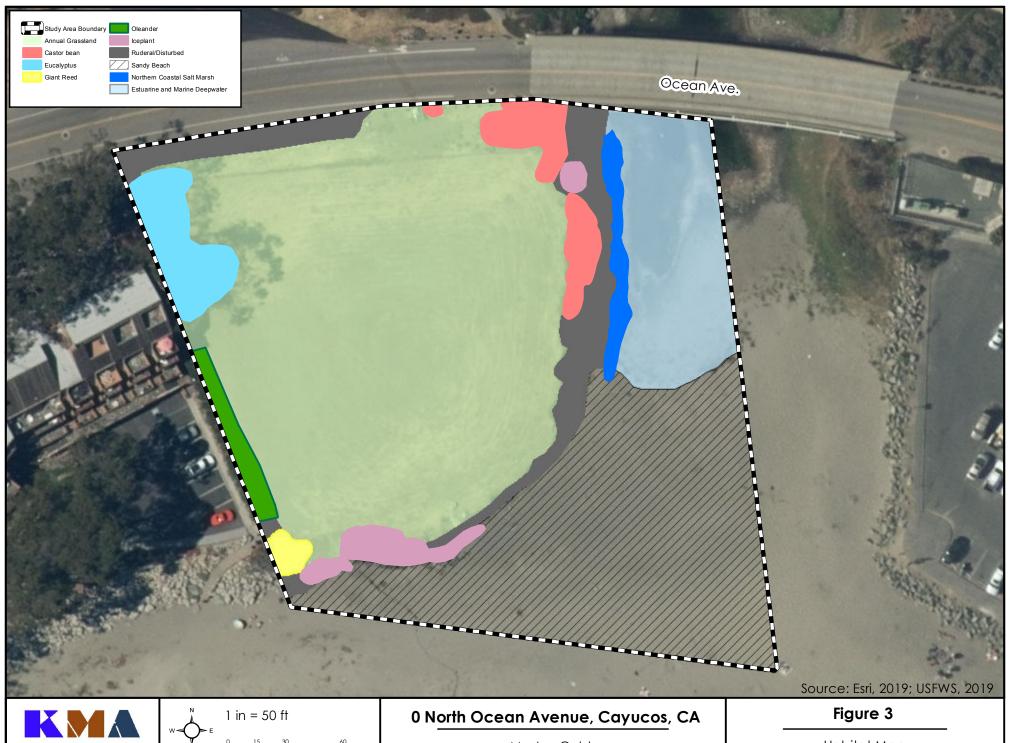
The study area occurs in the northwestern end of coastal urban development within the community of Cayucos. To the east of the property is a parking lot associated with the Cayucos Pier. The study area is bordered to the north by North Ocean Avenue and there is a mobile home park beyond directly to the north and undeveloped grassland to the northwest. A cluster of condominiums are along the western boundary of the property. Sandy beach forms the southern extent, with the Pacific Ocean beyond.

The property contains the mouth of Cayucos Creek, which is described in further detail in Section 3.2.6 below. North Ocean Avenue spans Cayucos Creek with a series of abutments within the channel, which are reinforced along the bank with concrete bag stacks. Along the toe of the coastal bluff and above the high water line is a small wetland area dominated by fleshy jamuea (Jamuea carnosa) and described in Section 3.2.5 below. Other than this area, there was no estuarine or marine wetland habitat along the edges of the creek mouth downstream of the North Ocean Avenue bridge at the time of the site visits. The slope on the western side of the channel has a high percentage of bare soil and rock, and is dominated by weedy, non-native vegetation. Patches of highway iceplant (Carpobrotus edulis) have been planted on the slope of the coastal bluff. A small area of the westernmost bluff had granite rip rap, and the rip rap extends across the bluff below the property to the west.

The project impact area would be located entirely on a terrace to the west of the creek channel, which consists of disturbed annual grassland. This area has been graded in the past and is regularly disturbed by mowing (as seen on historic aerial photography). Non-climb fencing extends along the northern border of the property setback from the shoulder of North Ocean Avenue. An oleander (*Nerium oleander*) hedgerow marks the western border of the property. Elevations in the study area range from 7 to 27 feet (2 to 8 meters) above mean sea level.

3.2 Habitat Types

Six plant communities or habitat types were observed in the study area and included: 1) Annual Grassland; 2) Eucalyptus; 3) Ruderal/disturbed; 4) Sandy Beach; 5) Northern Coastal Salt Marsh; and 6) Estuarine and Marine Deepwater (Figure 3). These habitat types are described below.





Mr. Jay Cobb

Habitat Map



3.2.1 Annual Grassland

The terrace above the coastal bluff is vegetated by the Annual Grassland community, and has been regularly disturbed. It has been graded at some point in the past and may contain fill. Historical aerial photography on shows that it is regularly mowed, and it had recently been mowed at the time of the site visit. Due to its disturbed nature, it was dominated by weedy, non-native species and did not have many native forbs or grass species that can be found in less disturbed grassland habitats or the coastal terrace prairie community. Dominant species included ripgut brome (*Bromus diandrus*), big heron bill (*Erodium botrys*), redstem filaree (*Erodium cicutarium*), hare barley (*Hordeum murinum* ssp. *leporinum*), and pineapple weed (*Medicago polymorpha*). Purple needlegrass (*Stipa pulchra*), which is a native grass species, was found only as a few clumps. It corresponds to the Non-native Grassland community described by Holland (1986).

3.2.2 <u>Eucalyptus</u>

There are several mature blue gum eucalyptus (*Eucalyptus globulus*) trees on the adjacent property that overhang the site (Figure 3). As eucalyptus is non-native, this is not a natural plant community, but since it is naturalized, it is considered a semi-natural alliance by Sawyer et al. (2009). The eucalyptus canopy was not dense and it appeared to have been trimmed and maintained given its proximity to existing buildings next door.

3.2.3 Ruderal/Disturbed

The coastal bluff in the study area is considered to be Ruderal due to a high percentage of bare and eroding soil and slope stabilization by rocks, rip rap and concrete bag stacks. Plant species in the more sparsely vegetated areas consists of non-native species that occur in the disturbed annual grassland habitat. Additionally, patches of highway iceplant, giant reed (*Arundo donax*), and castor bean (*Ricinus communis*) are present in the Ruderal coastal bluff habitat. A strip of ruderal habitat also runs along the northern edge of the study area (Figure 3) along the shoulder of North Ocean Avenue. The oleander hedgerow could also be considered to be Ruderal since it is a planted and nonnative. Ruderal areas that are sparsely vegetated or are dominated by non-native species are not natural plant communities.

3.2.4 Sandy Beach

The Sandy Beach habitat is open sand with scattered rocks, driftwood, and flotsam that is regularly disturbed by the tides. It extends along the southern portion of the study area and in the areas of the Cayucos Creek channel when the water recedes into a closed lagoon (Figure 3). It is part of the Marine System, Intertidal Subsystem, Class Unconsolidated Bottom as described by Cowardin et al. (1992). Unconsolidated Bottoms lack stable surfaces large enough for the attachment of plants. Since it lacks vegetation it is not considered to be a plant community; however, the NWI considers this habitat to be Estuarine and Marine Wetland (Figure 2). Later in the summer season, the sandy beach may support scattered occurrences of plants such as sea rocket (*Cakile maritima*) and other ephemeral species that are moved around by high tides and large swell in the winter months.

3.2.5 Northern Coastal Salt Marsh

The Northern Coastal Salt Marsh habitat onsite is dominated by fleshy jamuea and also has salt grass (*Distichlis spicata*), both of which are salt tolerant species (Holland 1986). This plant community corresponds to the *Distichlis spicata-Jaumea carnosa* alliance described by Sawyer et al. (2009).



This habitat occurs in a narrow band along the high water line of the Cayucos Creek lagoon, and occurring at the toe of the coastal bluff. Although not mapped at the exact same location, the NWI would consider this habitat to be Estuarine and Marine Wetland (USFWS 2019a). It is a tidal-influenced wetland habitat within the Estuarine System and Class Unconsolidated Bottom, as described by Cowardin et al. (1992).

3.2.6 Estuarine and Marine Deepwater

Estuarine Systems are coastal embayments that have periodic access to the ocean, and Marine Systems are the open ocean overlying the continental shelf and adjacent coastline (Ferren et al. 1996). Deepwater habitats are permanently flooded lands lying below the boundary of wetlands (Federal Geographic Data Committee [FGDC] 2013). The Estuarine and Marine Deepwater habitat type in the vicinity of the project includes both open water estuaries as well as ocean deepwater habitat (Figure 2). In the study area, this habitat is the limits of the open water in the Cayucos Creek lagoon, and the extent it fluctuates seasonally. When a sandbar forms blocking flows from the creek from reaching the ocean, water levels rise to fill the entire channel (Figure 2). During high tides, waves may break over the sandbar, contributing to the amount of water in the lagoon and increasing salinities. During winter peak streamflow, the sandbar is washed out and the stream flows directly into the ocean. At this time, it is shallow and mostly freshwater within the study area. As streamflow lessens in the late spring or summer, the stream no longer directly flows into the ocean and depths in the lagoon rise (Figure 3). The boundary between deepwater habitats and wetlands is determined by the elevation of the extreme low water of the spring tide (FGDC 2013). Estuarine habitats are considered a type of wetland even when they are non-vegetated due to the presence of hydric soils and saturation or flooding.

3.3 Soils

The Natural Resources Conservation Service (2019) identified one soil type on the property — Cropley clay, 2 to 9 percent slopes (Figure 4). This clay soil occurs on alluvial fans and terraces, and is alluvium derived from calcareous shale. Inspection of the bluff face showed what appeared to be old fill layers where the site was graded and various fill materials from the region were placed. No native outcrops of serpentine are present in the study area, but serpentine rocks mixed with clay soils were visible in the bluff face, and larger serpentine boulders were used for bluff protection. Although the creek channel is included within the Cropley clay soil type in the mapping unit, the substrate below the Ordinary High Water Mark is sand, which extends out along the sandy beach.

3.4 Wetland and Hydrologic Features

Wetland habitat is present in the study area along the seasonally inundated edges of the Cayucos Creek lagoon as well as the sandy beach areas that fall below the high tide line. The NWI depicts the sandy beach and a small area in the northeast end of the Cayucos Creek lagoon as Estuarine and Marine Wetland (Figure 2). Estuarine habitats are tidal wetlands that have deepwater semienclosed by land with open or sporadic access to the open ocean, in which freshwater flows from terrestrial habitats are mixed with saline ocean water (Cowardin et al. 1992). Marine habitats are exposed to the waves, currents of the open ocean, and ebb and flow of the oceanic tides (Cowardin et al. 1992). The wetted areas within the creek channel are considered Estuarine and Marine Deepwater (Figures 2 and 3). Deepwater habitats are permanently flooded lands of sufficient depth where the principal medium in which organisms live is water, and is defined as areas





below the extreme low water of spring tide (Cowardin et al. 1992). Areas upstream from the study area along the Cayucos Creek channel have Freshwater Forested/Shrub Wetland (otherwise known as riparian) habitat (Figure 2), but no willows or other shrubs characteristic of this habitat are present on the property likely as a result of high salinity.

The Northern Coastal Salt Marsh habitat as shown on Figure 3 indicates saline wetland conditions, and is too limited in extent to be shown on the NWI or otherwise was omitted. The NWI shows a patch of Estuarine and Marine Wetland in the northeast corner of the study area that extends upstream from the North Ocean Avenue Bridge (Figure 2), but no wetland habitat was seen within the study area on the eastern perimeter of the lagoon within the study area.

The Cayucos Creek subwatershed lies within the Cayucos Creek-Whale Rock Area Watershed, which comprises 54,974 acres. Under the CalWater HUC 10 grouping scale, the watershed area contains four major drainages that independently reach the Pacific Ocean, of which Cayucos Creek is one of these drainages. It falls within the Estero Bay 10 Hydrologic Unit, and CalWater/DWR Number 3310.160000 (Upper Salinas-Las Tablas Resources Conservation District 2019). The portion of Cayucos Creek within the study area is shown as a permanent water, coastal lagoon feature on the USGS Cayucos 7.5-minute quadrangle. None of the tributaries of Cayucos Creek are named, and the longest has its headwaters just over five miles from the Pacific Ocean.

Cayucos Creek is expected to be a waters of the United States and waters of the state, as well as under the jurisdiction of CDFW. The boundaries of waters of the United States in tidal waters such as these extend to the high tide line and the ordinary high water mark along the toe of the bluff, and RWQCB and CDFW jurisdiction is expected to extend to this same general area. Along the ocean side.

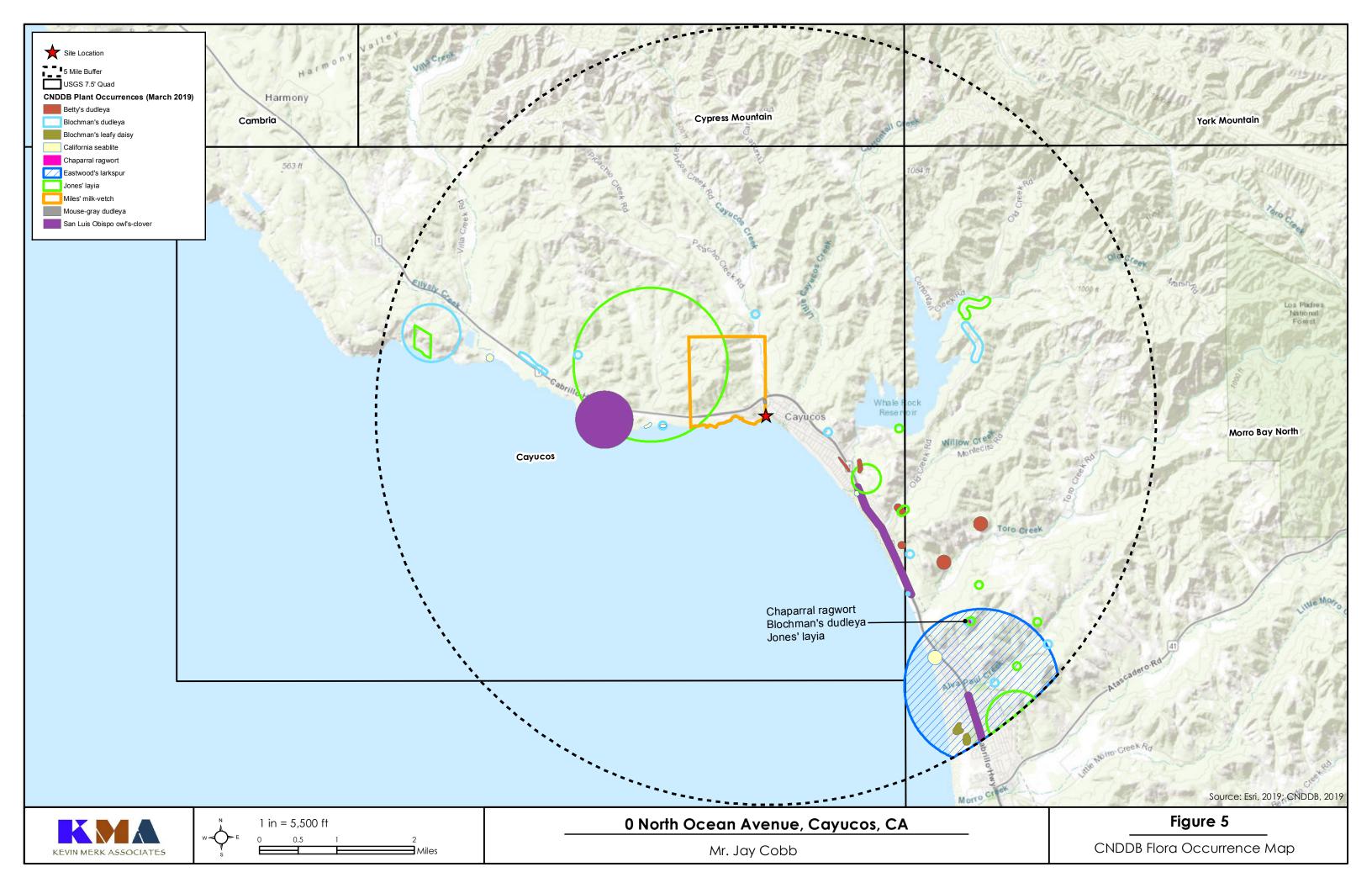
3.5 Special-status Biological Resources

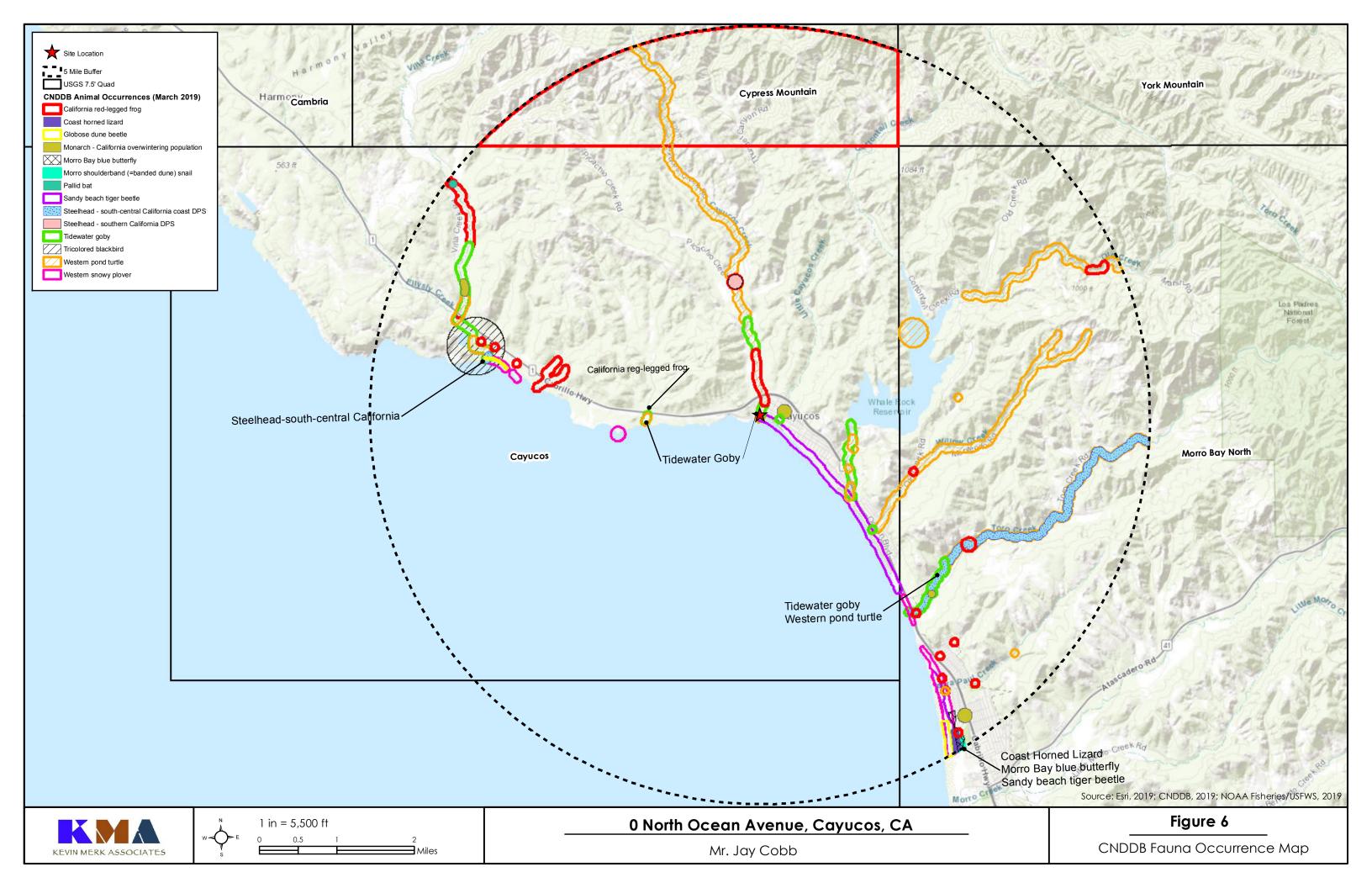
Figures 5 and 6 illustrate the CNDDB-documented occurrences of special-status plants and animals, respectively. No sensitive natural communities were reported in the CNDDB within five miles of the site. Designated critical habitat is shown on Figure 7. Appendix D provides a list of special-status biological resources recorded from the site vicinity, their listing status, habitat associations, and our assessment as to whether these resources have potential to occur onsite. Those resources with potential to occur on the project site are described in further detail below.

3.5.1 *Plants*

Six special-status plant species were determined to have potential to occur within the study area due to plant community and soils affiliations, documented elevational range, and records in the site vicinity (see Appendix D for a summary of ecological information). None of these species are federally or state listed as Threatened or Endangered or are Candidates for listing, but instead are California Rare Plants. The disturbed nature of the grassland habitat onsite reduces the chance that these species may be present, but based on ecological requirements, these six species (described below) could occur in similar habitats within the project vicinity.

No special-status plant species were observed during the surveys, which were conducted during the blooming period of each of the annual plants analyzed in this study. The perennial species would have been identifiable at the time of the surveys, as well. These species would have been observed if they were present because the entire study area was visually surveyed. However, species such as California seablight (*Suaeda californica*), which is a CRPR 1B.1 species, could occur







seasonally along the margins of the Cayucos Creek lagoon. This species is regularly removed from an area by high surf or flows within the creek, and its propagules are repositioned at other suitable locations. It has been known to occur in a given area and then vanish, and not be seen for multiple years (Merk personal observation).

3.5.2 <u>Sensitive Natural Communities</u>

A narrow strip of Northern Coastal Salt Marsh, which is dominated by fleshy jamuea and salt grass, occurred along the western shore of the Cayucos Creek mouth just downstream from the North Ocean Avenue bridge (Figure 3). This community is composed of salt-tolerant hydrophytes and occurs along the inland margins of bays, lagoons and estuaries (Holland 1986). This community is considered sensitive by the CNDDB (CDFW 2019a). Additionally, the *Distichlis spicata-Jaumea carnosa* alliance described by Sawyer et al. (2009) is considered to be a sensitive alliance (CDFW 2019b).

Coastal Brackish Marsh or Coastal and Valley Freshwater Marsh are not present onsite because perennial, emergent monocots such as sedges (*Carex* sp.), rushes (*Juncus* sp.), tules (*Scirpus* sp.) and cattails (*Typha* sp.) are not present. There is no emergent vegetation present along Cayucos Creek downstream from the North Ocean Avenue bridge.

Valley Needlegrass Grassland is not present on the site because the grassland habitat is almost predominantly vegetated by non-native species adapted to disturbance. There were a few clumps of purple needlegrass (*Stipa pulchra*), which is the primary species in Valley Needlegrass Grassland, but the occurrence was insufficient to classify the grassland habitat as this community. Annual Grassland is not a sensitive natural community.

3.5.3 Animals

Based upon our background review of special-status species records, two fish, one reptile, and eight bird species were considered to be present within the study area due to relatively recent records from lower Cayucos Creek. Although these species may not be present continuously on the site, because they have been documented on or very near to the site in the past, they would be considered to have potential to occur at any point in time. Additionally, species that have been recorded nearby and could occur in the habitats present in the study area, and therefore were considered to have potential to occur include one special-status invertebrate, two amphibian or reptile species, three bird species, and four mammal species to occur within the study area (Appendix D). While the listing status, habitat associations and evaluation of occurrence are summarized in Appendix D, these 21 species are described in further detail below. Also see Figure 6 for a map of CNDDB wildlife records within the project area.

The **monarch butterfly** (*Danaus plexippus* population 1) does not have a specific listing status but is considered a sensitive species for overwintering colonies by the CNDDB and could be a species of local concern. Overwintering colonies/wintering roosting have been documented at Little Cayucos Creek and Villa Creek (CDFW 2019a). The eucalyptus that has been planted adjacent to the property to the west which slightly overhangs the study area does not provide suitable structure as an overwintering site. Individuals could occur at the study site periodically while foraging or migrating.

The south-central California coast steelhead Distinct Population Segment (DPS)

(*Oncorhynchus mykiss irideus* population 9) is a federally Threatened species and a CDFW Species of Special Concern. This DPS is distributed from coastal drainages from the Pajaro River south to,



but not including, the Santa Maria River. The southern California DPS occurs in coastal drainages from the Santa Maria River south to the U.S./Mexican border. Although the CNDDB contains a record of southern steelhead from Cayucos Creek, any steelhead present in this area would belong to the south-central California coast DPS. Assuming the source of the record correctly identified steelhead as occurring, they can be presumed present in Cayucos Creek. NOAA Fisheries (2013) considers the DPS to occur in Cayucos Creek. This anadromous species would migrate through the lagoon in the study area to spawning habitat farther upstream. Juveniles may rear in the lagoon until the sand berm is breached and they have undergone the physiological adaptations for saltwater tolerance, after which they inhabit the ocean and return through the lagoon when sexually mature. Cayucos Creek is considered to be a Core 3 population with regard to recovery, which is of the lowest priority for the occupied streams ranked, but may be important in providing connectivity between populations and genetic diversity across the region (NOAA Fisheries 2013).

The **tidewater goby** (*Eucyclogobius newberryi*) is a federally Endangered species and a CDFW Species of Special Concern. There are several records from the lower 1.5 miles of Cayucos Creek, with the most recent being from 2008 in which they were "common" (CDFW 2019a). This species could be present in the lagoon within the study area throughout the year, but in the past the population has been extirpated and then recolonized (USFWS 2005). Although Cayucos Creek does not fall within designated critical habitat for this species, it is considered to be Central Coast Recovery Sub-unit CC 3c (USFWS 2005).

The **California red-legged frog** (*Rana draytonii*) is a federally Threatened species and a CDFW Species of Special Concern. This species has been observed in Cayucos Creek from 0.1 mile south of the Highway 1 crossing upstream to the Picachio Road Crossing (CDFW 2019a). Because the mouth of the creek in the study area lacks shoreline vegetation and would have saline conditions when waves overtop the sandbar at the mouth, there is low potential for this species to occur. However, this species does occasionally occur in areas with no vegetation and in the lowermost reaches of Central Coast streams in lagoon habitats (Rathbun et al. 1993). During winter periods that they occupy upland habitats, there is a low potential that they would use grassland onsite due to the steep bluff along the channel and the maintained low vegetation, but there is a slight chance that they could move through this area during the rain season.

The **southwestern pond turtle** (*Actinemys pallida*) is a CDFW Species of Special Concern that is considered present throughout Cayucos Creek to its mouth (CDFW 2019a). Several individuals were observed south of Highway 1 in 2005 (CDFW 2019a). This species has been observed in the lowermost reaches other Central Coast streams in lagoon habitats (Rathbun et al. 1993). This species uses upland habitats in winter and for nesting, and although there is a steep bank between the creek and grassland habitat onsite, they can climb steep slopes. They have been found to nest in grassy meadows with little or sparse cover by annual grasses and herbs that had good solar exposure (Rathbun et al. 1993). Therefore, there is a chance that they could move through the grassland habitat onsite, however, there is a low potential that this species could nest there given the regular cycle of disturbance from mowing and human presence.

The **two-striped gartersnake** (*Thamnophis hammondii*) is a CDFW Species of Special Concern that has not been recorded at Cayucos Creek, but there is an historic record from Cayucos (Christopher 2006) and it has been recorded in several streams in the vicinity (Rathbun et al. 1993, CDFW 2019a). They occur in lagoon reaches of other coastal streams during summer and while foraging, and scrub or grassland habitats in winter where they occupy rodent burrows (Rathbun et al. 1993). This species could occur in the portion of Cayucos Creek onsite or in the grassland habitat.



The **Cooper's hawk** (*Accipiter cooperii*), **golden eagle** (*Aquila chrysaetos*), **northern harrier** (*Circus cyaneus*), **prairie falcon** (*Falco mexicanus*), and **white-tailed kite** (*Elanus leucurus*) generally occur in forested or more expansive open grassland habitats, but there have been sightings along beaches in the near vicinity, and all except the prairie falcon have been reported in the general vicinity of the Cayucos Creek lagoon (The Cornell Lab of Ornithology 2019a). These species could fly over the site, or while unlikely, potentially forage in the small disturbed grassland habitat. It is more possible for species such as Cooper's hawk to forage and hunt birds in the creek corridor. Large raptors such as the golden eagle, northern harrier and white tailed kite are unlikely to occur in the grassland area where the project is proposed. No nesting habitat is present. Each of these species is considered sensitive by CDFW for nesting habitat; therefore, effects to an insignificant amount of foraging habitat would not be considered to be significant.

The **grasshopper sparrow** (*Ammodramus savannarum*) is a CDFW Species of Special Concern that specializes in grassland habitats, and could occur in grassland onsite. It has been recorded at several locations in Cayucos and along Cayucos Creek (The Cornell Lab of Ornithology 2019a). Mowing of the site reduces the foraging value of the grassland area, but they could still be an uncommon forager across the site because they prefer some bare ground. This species is unlikely to nest onsite because nesting is in areas with tall grasses.

The **great blue heron** (*Ardea herodias*), **great egret** (*Ardea alba*), and **snowy egret** (*Egretta thula*) are considered sensitive species for nesting colonies in the CNDDB but have no specific listing status. Each of these species is highly associated with wetland and lagoon habitats, but individuals can occasionally be found foraging in upland habitats. Each of these species has been observed in the mouth of Cayucos Creek (The Cornell Lab of Ornithology 2019a), and a great egret was observed during the survey. Individuals of these three species could occur in the study area, but suitable habitat to support nesting colonies is not present and the great egret and snowy egret only occur in this area during the non-breeding season.

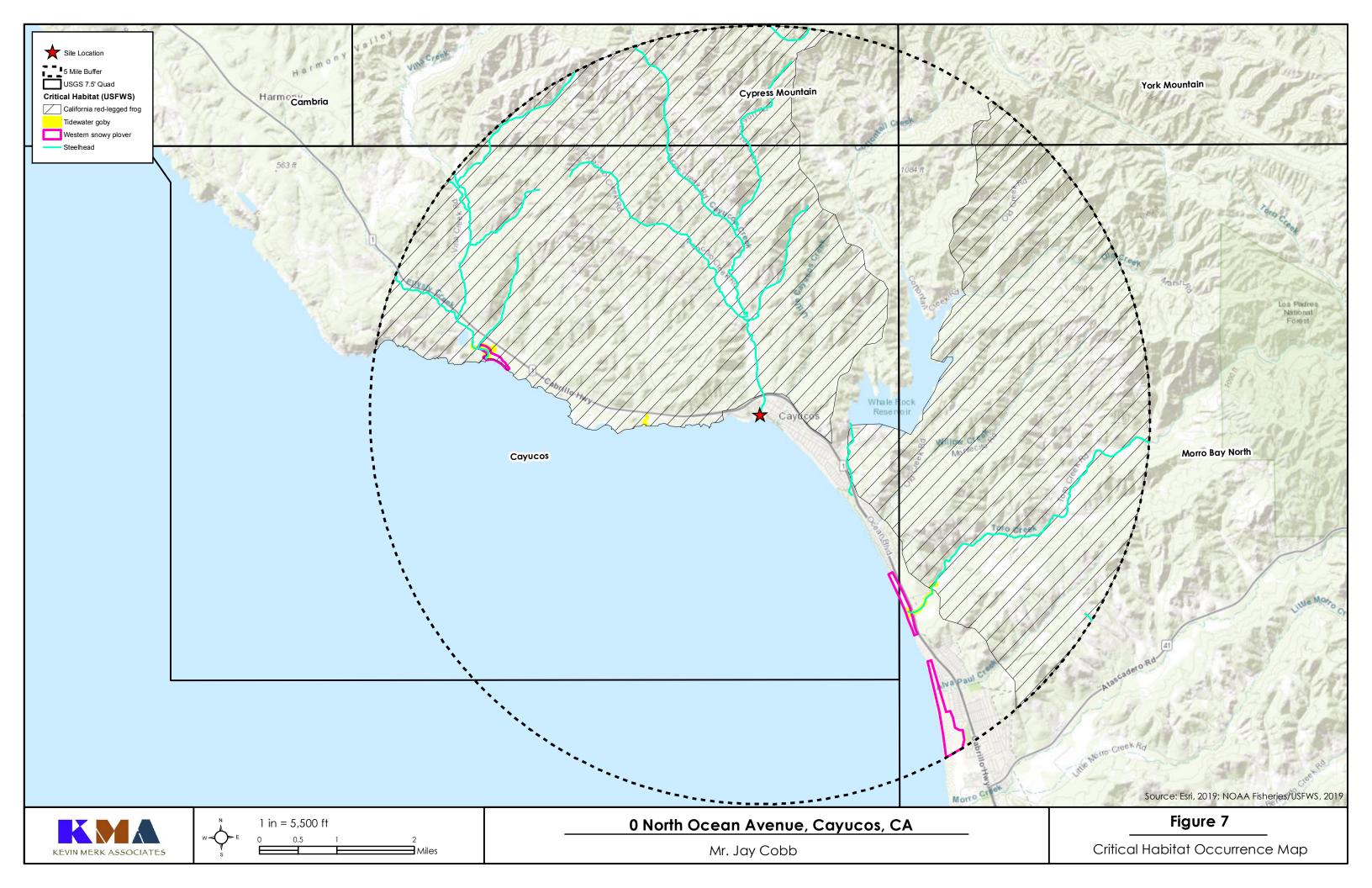
The **tri-colored blackbird** (*Agelaius tricolor*) is a CDFW Species of Special Concern for nesting colonies, and also is a candidate for state Endangered status. There are numerous sightings in the project vicinity, including along the immediate coastline (The Cornell Lab of Ornithology 2019a, CDFW 2019a). This species generally prefers freshwater marshes with dense emergent vegetation and they require this type of habitat for nesting. However, they forage in a wide variety of habitats and could occur onsite periodically. No nesting habitat is present in the study area.

The **western snowy plover** (*Charadrius alexandrinus nivosus*) is federally Threatened and is a CDFW Species of Special Concern for nesting. This species has been recorded at several locations on beaches in the vicinity of the study area (CDFW 2019a; Figure 6), as well as at the mouth of Cayucos Creek (The Cornell Lab of Ornithology 2019a). This species would occur in sandy beach habitat within and adjacent to the study area, but is unlikely to occur in the grassland terrace area.

The **fringed myotis** (*Myotis thysanodes*), **pallid bat** (*Antrozous pallidus*), **Townsend's big-eared bat** (*Corynorhinus townsendii*), and **Yuma myotis** (*Myotis yumanensis*) have been recorded in the site vicinity. They forage in a variety of habitats, including grassland areas and over open water, and could be present at the study site during foraging. No suitable roosting habitat is present on the site, but they could roost under the North Ocean Avenue bridge.

3.5.4 <u>Designated Critical Habitat</u>

The study area falls just outside the boundary of designated critical habitat for the California red-legged frog (Figure 7). California red-legged frog critical habitat unit SLO-2 Piedras Blancas to





Cayucos Creek includes the watershed of Cayucos Creek upstream from Highway 1, but does not include the project site (USFWS 2010, 2019b). The study area falls within designated critical habitat for the south-central California coast DPS steelhead, Cayucos Hydrologic Sub-area 331036 (Figure 7; NOAA Fisheries 2005). The lateral extent of critical habitat is the width of the stream channel defined by the OHWM (NOAA Fisheries 2005). Cayucos Creek is not designated as critical habitat for the tidewater goby, although other streams in the immediate vicinity are contained within critical habitat units, and tidewater gobies are known to occur in the Cayucos Creek lagoon. The study area is located between, but outside of, designated critical habitat for the western snowy plover (Figure 7). These units are CA 27 Villa Creek Beach to the northwest and CA 28 Toro Creek to the southeast (USFWS 2012).

3.5.5 Migratory Birds and Raptors

There are numerous species of birds with potential to occur onsite that build nests in trees and shrubs and could occur in proximity to project impact areas. Nesting areas are limited onsite to areas around the perimeter of the grassland terrace, where there are eucalyptus, oleander hedgerow, and possibly the stand of giant reed. In addition to the special-status bird species described above, avian species that could nest onsite also include raptors protected under California Fish and Game Code and common species that are protected under the MBTA. Although some bird species can nest on the ground in grassland habitats, nesting is not expected to occur in the study area due to frequent disturbance by mowing, which reduces the height of vegetation and thereby eliminates protective cover required by these species.

3.5.6 Wetlands and Jurisdictional Areas

The Cayucos Creek lagoon, which is shown as Estuarine and Marine Deepwater or Wetland habitat by the NWI (Figure 2), would be considered to be protected wetland habitat although only a small area of wetland plants actually occurs (as described in Section 3.2.6). Jurisdictional areas include the Cayucos Creek lagoon and the Sandy Beach habitat below the high tide line.

4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION

The following impact analysis and recommended mitigation measures are intended to help guide project planning efforts and support the CEQA review process. The impact discussion addresses the range of impacts that could result from implementation of the proposed project. Direct effects (or impacts), as defined under CEQA, are caused by a project and occur at the same time and place. Indirect effects are caused by a project, but occur at a different time or place. Cumulative effects are those that result from when the effects of the subject project combine with effects from other unrelated projects to compound environmental harm. The proposed site plan prepared by AAC (Appendix A), along with the observations of onsite conditions from the site visit and evaluation of special-status biological resources provided the basis for this analysis.

4.1 Direct and Indirect Effects

A) Adverse Effects on Candidate, Sensitive or Special-status Species

Six rare plant species and 21 special-status animal species have been observed in the site vicinity and were evaluated to determine their potential presence in the study area. Many of these species are associated with lagoon, sandy beach, or stream habitats and are not expected to occur in the disturbed grassland on the terrace proposed for project development. Several of the species would only move through the grassland habitat onsite due to its proximity to Cayucos Creek or



forage onsite periodically. Frequent disturbance of the grassland area via mowing has maintained grasses to a low structural level; increased the percentage of non-native plant species; and, prevented a natural grassland community from occurring. Designated critical habitat for one animal species, the south-central California coast steelhead DPS, is present within the study area but does not occur in project impact areas. Nesting birds and raptors could potentially occur near the project impact area. Impacts of the proposed project could occur on a portion of these species, as described below, and mitigation measures are proposed to bring these impacts to a level below significance.

Loss of disturbed annual grassland and ruderal habitats mapped on the flat terrace and along Ocean Avenue would not be considered significant from a biological resources perspective because these areas are common in the region and do not support special status species. Based on review of the site plan provided by the applicant, the project would be set back from the edge of coastal bluff and would not impact the bluff, sandy beach or Cayucos Creek wetland areas. The spring surveys determined that no rare plants were present in the project disturbance footprint and only California seablight could potentially occur along the sandy beach and Cayucos Creek wetland zone. The analysis identified a suite of special status wildlife that are either known to occur on the sandy beach or within the Cayucos Creek aquatic habitat, and the following mitigation measures are provided to reduce potential project-related impacts to a less than significant level pursuant to CEQA. In addition, standard mitigation measures (BIO-1c-e) are recommended to reduce a broad range of impacts on plant and animal species and their habitats.

Impact Bio-1. Construction of the project could potentially directly impact special-status wildlife species. This a significant but mitigable impact.

No nesting habitat for the special-status bird species that have potential to occur in the area (see description below) is present in or adjacent to project impact areas, but nesting birds and raptors protected under the MBTA and/or California Fish and Game Code could nest in the eucalyptus or oleander hedgerow along the edges of the impact area. If construction activities took place during the nesting season (February 1 to August 31), nesting behavior could be disrupted, active nests containing eggs or young could be killed, or construction disturbance could cause adults to abandon the nests.

Other wildlife species that have potential to occur in the study area, but which would not occur within the project impact areas or otherwise be significantly affected by the project, include: monarch butterfly, south-central California coast steelhead, tidewater goby, California red-legged frog, southwestern pond turtle, two-striped gartersnake, Cooper's hawk, golden eagle, grasshopper sparrow, great blue heron, great egret, northern harrier, prairie falcon, snowy egret, tricolored blackbird, snowy plover, white-tailed kite, fringed myotis, pallid bat, Townsend's bigeared bat, and Yuma myotis. The fish, amphibian and reptile species are tied closely to aquatic habitats. Although the frog, turtle and gartersnake use upland habitats, the impact area lacks sufficient vegetative structure to be used by these species as refugia. If individuals moved through the area, it is highly unlikely that they would remain there due to lack of cover. No nesting habitat is present for these bird and raptor species that could occur in the area, and therefore there would be no effects on protected nests of these species. No roosting habitat of the special-status bat species would be affected, and construction activities that would take place during the day would not affect foraging behavior. Project impacts would be set back from the edge of the coastal bluff which looks over designated critical habitat for the south-central California coast steelhead, and with the implementation of the standard mitigation measures (BIO-1c-e), would bring indirect effects to a less than significant level.



For nesting bird species that could potentially be affected, the following mitigation measures are required.

<u>Mitigation Measure BIO-1a</u>: Conduct the initiation of construction activities outside of the nesting season. All initial site disturbance should be limited to the time period between September 1 and January 31, if feasible. If initial site disturbance such as vegetation removal, grading, and trenching cannot be conducted during this time period, implementation of Mitigation Measure BIO-1b is required.

Mitigation Measure BIO-1b: Conduct a pre-construction nesting bird survey. If it is not possible to schedule the initiation of construction between September 1 and January 31, a qualified biologist shall conduct a pre-construction survey for nesting birds within 250 feet of project impact areas. The pre-construction survey shall be conducted within seven days before the initiation of construction activities in any given area of the project site, and repeated prior to start of construction in a new area of the site. During this survey, the qualified biologist shall inspect all potential nest substrates in the impact and buffer areas, and any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 50 feet (250 feet for raptors and possibly more for snowy plover) of the construction area, the biologist, in consultation with CDFW, shall determine the extent of a buffer to be established around the nest. The buffer will be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist.

Standard Biological Mitigation Measures

In addition to the special-status species mitigation measures described above, implementation of the following general mitigation measures will reduce impacts on all protected biological resources during construction.

<u>Mitigation Measure BIO-1c</u>: Prepare and present a Worker Environmental Awareness Program. A qualified biologist shall prepare a Worker Environmental Awareness Program that will be presented to all construction personnel and employees before any ground-disturbing activities commence at the project site. This program shall detail the measures undertaken during project implementation to avoid and minimize impacts on biological resources. It shall include a description of special-status species potentially occurring on the project site and their natural history; the status of the species and their protection under the FESA, CESA, Bald and Golden Eagle Protection Act, MBTA, and California Fish and Game Code; and the penalties for take. All attendees of the Worker Environmental Awareness Program shall sign an attendance form.

<u>Mitigation Measure BIO-1d</u>: Observe construction standard operating and Best Management *Practices (BMPs)*. The following standard practices are recommended to reduce various project impacts on biological resources.

- a. Prior to the start of construction, the limits of disturbance shall be clearly delineated by stakes, construction fencing, flags, or another clearly identifiable system.
- b. All pipes, metal tubing, or similar materials stored or stacked on the project site for one or more overnight periods shall be either securely capped before storage or thoroughly inspected for wildlife before the materials are moved, buried, capped, or otherwise used. In addition, materials such as lumber, plywood, and rolls of silt fence stored on site shall be thoroughly inspected before use. Materials that could provide shelter/nesting habitat for birds shall be covered with netting or other exclusion methods during the nesting season, where feasible and appropriate, to prevent birds from building nests. If encountered,



- wildlife shall be allowed to escape unimpeded, or relocated by a qualified biologist to a designated appropriate habitat area away from construction activities. Any wildlife relocations shall be authorized as necessary by CDFW and/or USFWS.
- c. To prevent entrapment of wildlife, all excavations (e.g., steep-walled holes or trenches) more than 6 inches deep shall be covered with plywood or similar materials when not in use or contain escape ramps constructed of dirt fill, wooden planks, or other material that wildlife could ascend. The amount of time trenches or other excavations are left open shall be minimized. All excavations more than 6 inches deep shall be inspected daily prior to the start of construction and immediately before being covered or filled. Any wildlife discovered shall be allowed to escape unimpeded before construction activities resume or shall be relocated by an authorized biologist in accordance with CDFW and/or USFWS regulations.
- d. Dust suppression shall occur during construction activities when necessary to meet air quality standards and protect biological resources. Dust control is an important component to minimize impacts on native vegetation growing on or adjacent to the site. BMPs for dust abatement shall be a component of the project's construction documents.
- e. To minimize disturbance, all vehicle traffic shall be restricted to established roads, construction areas, and other designated areas.
- f. No vehicles or equipment shall be refueled within 100 feet of wetlands or streams (including offsite areas) unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. Spill kits shall be maintained on the site, and a spill response plan shall be in place.
- g. No concrete washout shall be conducted on the site outside of an appropriate containment system.
- h. The use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation.
- i. All food-related trash items (e.g., wrappers, cans, bottles, food scraps), small construction debris (e.g., nails, bits of metal and plastic), and other human-generated debris (e.g., cigarette butts) shall be stored in animal-proof containers and/or removed from the site on a weekly basis. No deliberate feeding of wildlife shall be allowed.

Mitigation Measure BIO-1e: Install appropriate erosion controls and revegetate temporarily disturbed areas. All areas where temporary construction-related impacts have taken place shall have appropriate erosion controls and other stormwater protection BMPs installed to prevent erosion potential. As part of the local approval process, a Sediment and Erosion Control Plan shall be prepared by a qualified individual that specifically seeks to protect Cayucos Creek, the beach and wetland habitat adjacent to the construction area. Silt fencing, straw bales, sand bags, fiber rolls and/or other types of materials shall be prescribed in the plan to prevent erosion and sedimentation. Biotechnical approaches using native vegetation shall be used as feasible. Areas with disturbed soils shall be restored under the direction of a qualified restoration ecologist. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the site, and/or applying the native seed mix described in Table 1 to the graded areas through either direct hand seeding or hydroseeding methods.



Table 1	Native	Frosion	Control	Seed Mix
Table 1.	Mauve	LI OSIOII	COHUO	JCCU MIA

Species	Application Rate (lbs/acre)
Bromus carinatus (California brome)	5
Hordeum brachyantherum (meadow barley)	5
Vulpia microstachys (six weeks fescue)	3
Stipa pulchra (purple needle grass)	10
Trifolium wildenovii (tomcat clover)	5
Total	28

B) Adverse Effects on Riparian Habitat or Sensitive Natural Communities

No riparian habitat is present within the study area. Northern Coastal Salt Marsh is a sensitive natural community and occurs in a small patch along the western edge of the Cayucos Creek lagoon, and is located outside of project impact areas. There would be no indirect effects from the project on this habitat because it is located at the bottom of the bluff and far enough away from any site grading or other construction activities. No significant effects would occur on riparian habitat or sensitive natural communities.

C) Federally Protected Wetlands

The Cayucos Creek lagoon is shown as Estuarine and Marine Deepwater or Wetland habitat by the NWI (Figure 2). The Northern Coastal Salt Marsh present in the study area would be considered to be a federally protected wetland. All areas in the Cayucos Creek channel would be under jurisdiction of CDFW, RWQCB, USACE, and California Coastal Commission. The Sandy Beach habitat is also expected to fall under these agencies jurisdiction. The project would be conducted entirely outside of these jurisdictional areas, and would not require permits from the USACE, RWQCB and CDFW for alteration of the bed or banks of Cayucos Creek. Additionally, there would be no significant effects on federally protected wetlands as determined under CEQA.

<u>D) Interference with Movement of Native Fish or Wildlife, Wildlife Corridors, and Wildlife Nursery Sites</u>

The proposed project would not affect the movement of native fish because all work will be conducted outside of the stream channel. No equipment or materials will enter or be placed in the channel that could affect fish.

The movement of wildlife or use of wildlife corridors would not be affected by construction of the project. The patch of grassland habitat where the project would be located is surrounded on three sides by urban development. Species that use Sandy Beach or stream habitats for movement will be unimpeded, and linkage to adjacent areas will remain.

No wildlife nursery sites would occur within project impact areas because the site is a frequently disturbed patch of non-native grassland that is surrounded by urban development and is not suitable for reproduction of any wildlife species. Aquatic species (such as the tidewater goby) could breed in Cayucos Creek, but there will be no direct or indirect impacts on this habitat.

Because there would be no project impacts on the movement of native fish or wildlife, wildlife corridors or wildlife nursery sites, no mitigation is required.



E) Conflicts with Local Policies or Ordinances, Such as Tree Preservation

The project site falls within the Estero Area Plan (County 2009). This plan defines and maps ESHA in the planning area, and contains several combining designations. ESHA described by the plan include riparian, oak woodland, coastal sage scrub, dune scrub, coastal strand, and maritime chaparral. While coastal strand occurs within the study area, it will not be affected by the project. None of the other ESHA occur within the study area. The study area does not fall within any of the three Sensitive Resource Areas or the Highway 1 Critical Viewshed within the Cayucos area described within the Estero Area Plan. The plan requires a 25-foot setback from the coastal bluff and Cayucos Creek, and the project will be required to adhere to that setback. Although outside of the scope of this document on biological resource issues, it should be noted that the Estero Area Plan has limitations on use and standards for recreational access specific to the subject property.

The Coastal Land Use Ordinance (County 2018) describes Sensitive Resource Area combining designations and Environmentally Sensitive Habitats, which include wetlands, coastal streams, riparian vegetation, terrestrial and marine habitats. A land use permit application for a project located within or adjacent to one or more of these habitats must be accompanied by a report prepared by an approved biologist that: evaluates the impacts the project may have on the habitat; the significance of these impacts; measures to avoid possible impacts; mitigation measures required to reduce impacts to less than significant levels when impacts cannot be avoided; measures for the restoration of damaged habitats; long-term protection of the habitats; and, a program for monitoring and evaluating the effectiveness of such measures. The proposed project occurs adjacent to an environmentally sensitive coastal stream and marine habitat. This Biological Resources Assessment, prepared by a firm on the County's Qualified Biologist list, satisfies each of these requirements.

The project has been designed to minimize or avoid effects to the extent possible and mitigation detailed herein will reduce impacts to a level below significance. Because there would be no conflicts with local policies or ordinances, no mitigation is required.

F) Conflicts with Local, Regional or State Conservation Plans

No conservation plans have been prepared for the Cayucos area. Because there would be no conflicts with local, regional or state conservation plans, no mitigation is required.

4.2 Cumulative Effects

Because there would be no effects of the project in the context of the site's importance in the overall area, the project would not contribute to cumulative effects of other non-federal projects planned in the area.

5.0 CONCLUSIONS

The proposed project involves the construction of a boutique hotel on an ocean front terrace that has been regularly disturbed and is vegetated by annual grassland that is maintained by mowing to a low level that is unsuitable for sensitive plant and animal species. This type of land use, which serves tourism, would likely be consistent with the Estero Area Plan. Although a large number of special-status plant and animal species have been recorded near the project site and potentially could occur in the Cayucos Creek and sandy beach parts of the study area, they would not be expected to occur on the disturbed grassland terrace. Two rare plant surveys have been conducted in project impact areas during the blooming period of species with potential to occur onsite, and no rare plant species have been found. The only wildlife issue that requires mitigation is nesting birds and raptors



that could use eucalyptus or the oleander hedgerow along the western boundary of the property, and avoidance construction during the nesting bird season and/or nesting bird surveys and establishment of appropriate buffers around active nests are prescribed. Other mitigation measures are also prescribed to protect stream habitats during construction, including designated critical habitat for the south-central California coast steelhead.

6.0 REFERENCES

- Bolster, B.C. (editor). 1998. Draft Terrestrial Mammal Species of Special Concern in California. Contributing authors: P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Prepared for California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Conservation Program. Contract FG3146WM.
- Calflora. 2019. Information on wild California plants for conservation, education, and appreciation. Berkeley, CA. Accessed via http://www.calflora.org/ in March 2019.
- California Department of Fish and Game (CDFG). 2001. Fish and Game Code of California, Section 3503.5. Gould Publications, Altamonte Springs, FL.
- California Department of Fish and Game. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24, 2009.
- California Department of Fish and Wildlife (CDFW). 2018a (August). Special Animals. Biogeographic Data Branch, California Natural Diversity Database.
- California Department of Fish and Wildlife (CDFW). 2018b (August). Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. Natural Diversity Database.
- California Department of Fish and Wildlife (CDFW). 2019a. California Natural Diversity Database (CNDDB). Commercial version dated September 30, 2018. Accessed in March 2019.
- California Department of Fish and Wildlife (CDFW). 2019b. Vegetation Classification and Mapping Program (VegCAMP). Accessed via: https://www.wildlife.ca.gov/Data/VegCAMP in March 2019.
- California Department of Fish and Wildlife (CDFW). 2019c. California Wildlife Habitat Relationships System. Accessed via: https://www.wildlife.ca.gov/data/cwhr in March 2019.
- California Herps. 2019. A Guide to the Amphibians and Reptiles of California. Accessed via: http://www.californiaherps.com in March 2019.
- California Native Plant Society. 2019. Inventory of Rare and Endangered Plants of California. Online edition V8-03 0.39. Accessed via: http://www.rareplants.cnps.org in March 2019.
- Christopher, S.V. 2006. Amphibians and Reptiles of the Estero Bay Area. Prepared for California State Parks and Morro Bay National Estuary Program.
- The Cornell Lab of Ornithology. 2019a. eBird. Accessed via: https://ebird.org in March 2019.
- The Cornell Lab of Ornithology. 2019b. All About Birds. Accessed via: https://www.allaboutbirds.org in March 2019.
- County of San Luis Obispo (County). 2009 (January). Estero Area Plan. Land Use Element and Local Coastal Plan of the San Luis Obispo County General Plan. Certified by the California Coastal Commission on February 25, 1988 and revised January 2009.
- County of San Luis Obispo (County). 2016. Draft Guidelines for Biological Resources Assessments, Guidelines for Biological Consultants. Department of Planning and Building.



- County of San Luis Obispo (County). 2018 (September). Coastal Zone Land Use Ordinance. Local Coastal Program, Department of Planning and Building. Title 23 of the San Luis Obispo County Code. Certified by the California Coastal Commission on October 7, 1986 and revised September 2018.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1992. Classification of Wetlands and Deepwater Habitats of the United States. Prepared for U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-79/31.
- Federal Geographic Data Committee (FGDC). 2013. Classification of Wetlands and Deepwater Habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommitte, Federal Geographic Data Committee and the U.S. Fish and Wildlife Service, Washington, DC.
- Ferren, W.R., Jr., P.L. Fiedler, and R.A. Leidy. 1996. Wetlands of the Central and Southern California Coast and Coastal Watersheds. Prepared for U.S. Environmental Protection Agency.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento.
- Hoover, R.F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press, Berkeley, CA.
- Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California, 1 November 1994. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pp.
- Jepson Flora Project (editors). 2019. Jepson eFlora. The Jepson Herbarium, University of California, Berkeley. Accessed via: http://ucjeps.berkeley.edu/eflora/ in March 2019.
- Moyle, P.B., R.M. Quinones, J.V. Katz, and J. Weaver. 2015. Fish Species of Special Concern in California, Third Edition. California Department of Fish and Wildlife, Sacramento.
- National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries). 2005 (September). 50 CFR Part 226. Endangered and Threatened Species; Designation of Critical Habitat for Seven Evolutionary Significant Units of Pacific Salmon and Steelhead in California. United States Department of Commerce. Federal Register 70(170):54288-52627.
- National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries). 2013 (December). South-central California Steelhead Recovery Plan. West Coast Region, Long Beach, California.
- Natural Resources Conservation Service. 2019. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: http://websoilsurvey.nrcs.usda.gov/in March 2019.
- Rathbun, G.B, M.R. Jennings, T.G. Murphey, and N.R. Siepel. 1993. Status and Ecology of Sensitive Aquatic Vertebrates in Lower San Simeon and Pico Creeks, San Luis Obispo County, California. Final Report under Cooperative Agreement 14-16-0009-91-1909 between U.S. Fish and Wildlife Service and California Department of Parks and Recreation. Publication No. PB93-230779, National Technical Information Service, Springfield, Virginia.
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.
- United States Fish and Wildlife Service (USFWS). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. January 2000.



- United States Fish and Wildlife Service (USFWS). 2005. Recovery Plan for the Tidewater Goby (*Eucyclogobius newberryi*). Pacific Region, Portland, Oregon.
- United States Fish and Wildlife Service (USFWS). 2010. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-legged Frog; Final Rule. Federal Register 75(51):12816-12959.
- United States Fish and Wildlife Service (USFWS). 2012. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. Federal Register 77(118):36728-36869.
- United States Fish and Wildlife Service (USFWS). 2013. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for Tidewater Goby; Final Rule. Federal Register 78(25):8746-8819.
- United States Fish and Wildlife Service (USFWS). 2019a. National Wetlands Inventory. U.S. Department of the Interior, Washington, D.C. Accessed via: http://www.fws.gov/wetlands/in March 2019.
- United States Fish and Wildlife Service (USFWS). 2019b. Threatened and Endangered Species Active Critical Habitat Report. ECOS Environmental Conservation Online System. Accessed via: https://ecos.fws.gov in March 2019.
- Upper Salinas-Las Tablas Resources Conservation District. 2019. Cayucos Creek Watershed. Accessed via: slowatershedproject.org in March 2019.

APPENDIX A

Site Plans









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project number 07-14 1/8"=1'-0"

SITE PLAN

drawing

APPENDIX B

List of Plants and Animals Observed During Surveys





Appendix B - List of Plants and Animals Observed Onsite During the Site Visits

Scientific Name	Common Name				
	Plants				
Ambrosia chamissonis	Silver beachweed				
Arundo donax*	Giant reed				
Bromus diandrus*	Ripgut brome				
Bromus hordeacous*	Soft chess				
Cakile maritima*	Sea rocket				
Carpobrotus edulis*	Freeway iceplant				
Distichlis spicata	Salt grass				
Erodium botrys*	Big heron bill				
Erodium cicutarium*	Redstem filaree				
Eucalyptus globulus*#	Blue gum eucalyptus				
Festuca perennis*	Italian rye grass				
Hedypnois cretica*	Crete weed				
Hordeum murinum ssp. leporinum*	Hare barley				
Hypochaeris glabra*	Smooth cat's-ear				
Jaumea carnosa	Fleshy jaumea				
Lupinus succulentus	Succulent lupine				
Malva neglecta*	Dwarf mallow				
Matricaria discoidea*	Pineapple weed				
Medicago polymorpha*	California burclover				
Nerium oleander*#	Oleander				
Oxalis pes-caprae*	Bermuda buttercup				
Plantago lanceolata*	English plantain				
Ricinus communis*	Castor bean				
Silybum marianum*	Milk thistle				
Stipa pulchra	Purple needle grass				
	Animals				
Agelaius phoeniceus	Red-winged blackbird				
Anas platyrhynchos	Mallard				
Ardea alba	Great egret Great egret				
Euphagus cyanocephalus	Brewer's blackbird				
Larus californicus	California gull				
Larus occidentalis	Western gull				
Sturnus vulgaris	European starling				
Thomomys bottae	Botta's pocket gopher				

^{*}Non-native species #Planted along property line

APPENDIX C

Photo Plate





Appendix C. Photo Plate



Photo 1. View from the west edge of the property looking northeast across the terrace, which is composed of disturbed annual grassland habitat.



Photo 2. View from the northern edge of the property looking south across the terrace, with evidence of mowing throughout the annual grassland.





Photo 3. View along the western property line, looking south, across disturbed annual grassland. A hedgerow of oleander (*Nerium oleander*) is along the western border.



Photo 4. View from the northern property line looking east from the terrace across the Cayucos Creek channel. Castor bean is visible to the left. The property extends to the opposite side of the channel.





Photo 5. View from the southeastern corner of the terrace looking across the Cayucos Creek channel with the North Ocean Avenue bridge spanning the channel just off the property. The habitat in the channel is classified as estuarine and marine deepwater.



Photo 6. Representative view of the bluff face below the terrace, showing disturbance and low vegetative cover. The bluff face onsite was considered to be ruderal due to apparent fill soils, past disturbance and lack of native vegetation.





Photo 7. Additional view of the coastal bluff below the terrace, showing displaced rock that had been used to stabilize the bluff, and cover by iceplant (*Carpobrotus edulis*). Note the sandy beach habitat in the foreground with Cayucos Creek to the right.



Photo 8. A narrow band of northern coastal salt marsh habitat dominated by fleshy jaumea (*Jaumea carnosa*) was present along the toe of the bluff on the west side of the Cayucos Creek channel just downstream of the bridge and street outfall pipe.



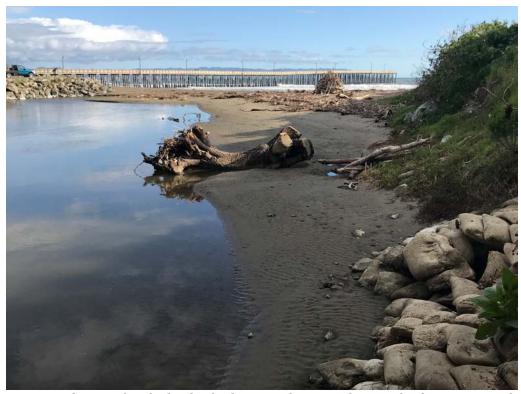


Photo 9. View from under the bridge looking south across the mouth of Cayucos Creek. The concrete bag stacks in the right foreground stabilize the bank near the bridge abutment.



Photo 10. View of the southwestern corner of the property where the bluff was stabilized by rip rap and invasive giant reed (*Arundo donax*) and iceplant are growing.





Photo 11. View from the sandy beach in the southern portion of the property at low tide looking north at the bluff face, with Cayucos Creek out of view to the right.



Photo 12. View from the Cayucos Creek lagoon along the southern edge of the property looking northwest at the bluff face with castor bean shrubs. Evidence of water level fluctuations is seen by the line of woody debris and flotsam.

APPENDIX D

Special-status Biological Resources Summary





Appendix D. Special-status Biological Resources Summary

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records						
	PLANTS											
Adobe sanicle	Sanicula maritima	_	R	1B.1	Perennial herb; chaparral, coastal prairie, meadows and seeps, valley and foothill grassland on clay and serpentine soils; 30-240 meters in elevation; blooms February to May.	Not expected. Study area is outside the elevational range and local distribution of the species.						
Arroyo de la Cruz manzanita	Arctostaphylos cruzensis		_	1B.2	Perennial evergreen shrub; broadleaved upland forest, coastal bluff scrub, closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland in sandy soils; 60-310 meters in elevation; blooms December to March.	Not expected. No suitable habitat, the site is outside the elevational range of the species, and this shrub would have been seen during the survey.						
Betty's dudleya	Dudleya abramsii ssp. bettinae			1B.2	Perennial herb; chaparral, coastal scrub and valley and foothill grassland on rocky, serpentine soils; 20-180 meters in elevation; blooms May to July.	Not expected. No native serpentine outcrops are present, although some serpentine rock is present in bluff area from fill and slope protection. Several records are from Cayucos, and the species was searched for during March and April surveys and it was not observed.						
Blochman's dudleya	Dudleya blochmaniae ssp. blochmaniae	_	_	1B.1	Perennial herb; coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland on rocky, often clay or serpentine soils and sandstone rock outcrops; 5 - 450 meters in elevation; blooms April to June.	Not expected. No native serpentine outcrops are present, although some serpentine rock is present in bluff area from fill and slope protection. Several records are from Cayucos, and the species was searched for during March and April surveys and it was not observed.						
Blochman's leafy daisy	Erigeron blochmaniae	_	_	1B.2	Perennial rhizomatous herb; stabilized coastal dunes and coastal scrub; 3-45 meters in elevation; blooms June to August.	Not expected. No suitable habitat is present and the site is outside the species' local distribution. Active beach is not suitable for this species.						



Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
California seablite	Suaeda californica	Е	_	1B.1	Perennial evergreen shrub; coastal salt marshes and swamps; 0-15 meters in elevation; blooms July to October.	Potential. Suitable habitat is present along the margins of the Cayucos Creek lagoon, and there are records close to the study area. Not observed during surveys, but could occur at some point in the future along the sandy beach and lagoon interface given its dynamic conditions.
Cambria morning- glory	Calystegia subacaulis ssp. episcopalis	_	_	4.2	Perennial herb; grassland, chaparral, coastal prairie and cismontane woodland in open areas usually with clay soils; 30-500 meters in elevation; blooms April to May.	Not expected. The grassland areas have frequently been disturbed and the site is regularly mowed and disturbed from past grading. Not observed during surveys conducted in the bloom period.
Chaparral ragwort	Senecio aphanactis		_	2B.2	Annual herb; chaparral, cismontane woodland, coastal scrub in drying alkaline flats; 15-800 meters in elevation; blooms January to April.	Not expected. No suitable habitat is present.
Coastal marsh milk-vetch	Astragalus pycnostachyus var. pycnostachyus			1B.2	Perennial herb; mesic coastal dunes, coastal scrub, marshes, swamps, and streamsides; 0-30 meters in elevation; blooms April to June.	Unlikely. Suitable habitat is present along the margins of the lagoon, but the site is slightly outside of the species' local distribution.
Compact cobwebby thistle	Cirsium occidentale var. compactum	_	_	1B.2	Perennial herb; chaparral, coastal scrub, coastal dunes, and coastal prairie; 5-150 meters in elevation; blooms April to July.	Not expected. No suitable habitat is present and the site is outside of the species' local distribution.
Cone Peak bedstraw	Galium californicum ssp. luciense	_	_	1B.3	Perennial herb; broad-leaved upland forest, chaparral, cismontane woodland lower montane coniferous forest often on rocky soils and sometimes serpentine; 400-1525 feet in elevation; blooms March to September.	Not expected. No suitable habitat or soils are present, and the site is greatly outside the species' elevational range and local distribution.
Cook's triteleia	Triteleia ixioides ssp. cookii	_	_	1B.3	Perennial bulbiferous herb; cismontane woodland, closed-cone coniferous forest in moist places with serpentine soils; 150-700 meters in elevation; blooms May to June.	Not expected. No suitable habitat or soils are present, and the site is greatly outside the species' elevational range and local distribution.



Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Eastwood's larkspur	Delphinium parryi ssp. eastwoodiae	_	_	1B.2	Perennial herb; chaparral, valley & foothill grassland generally in serpentine soils; 75-500 meters in elevation; blooms February to March.	Not expected. No suitable soils are present, and the site is outside the species' elevational range.
Hardham's bedstraw	Galium hardhamiae	_	_	1B.3	Perennial herb; closed-cone coniferous forest and chaparral in serpentine soils; 395-975 meters in elevation; blooms April to October.	Not expected. No suitable habitat or soils are present, and the site is greatly outside the species' elevational range and local distribution.
Hoover's button- celery	Eryngium aristulatum var. hooveri	_	_	1B.1	Herb that can occur as either an annual or a perennial; vernal pools, seasonally wet grasslands, and roadside ditches; 3-45 meters in elevation; blooms June to August.	Not expected. No suitable mesic conditions in the grassland habitat onsite occur, and there are no records near the site.
Jones' layia	Layia jonesii	_	_	1B.2	Annual herb; chaparral and valley and foothill grassland on clay or serpentine soils; 5-400 meters in elevation; blooms March to May.	Not expected. No native serpentine outcrops are present, although some serpentine rock is present in bluff area from fill and slope protection. Several records of species in the region, but it was not observed during March and April surveys when it would have been in bloom and identifiable.
Kellogg's horkelia	Horkelia cuneata var. sericea	_		1B.1	Perennial herb; closed-cone coniferous forest, maritime chaparral, and coastal scrub on sandy or gravelly soils often in open areas; 10-200 meters in elevation; blooms April through September.	Not expected. No suitable habitat or soils are present and there are no records near the site.
Mesa horkelia	Horkelia cuneata var. puberula	_	_	1B.1	Perennial herb; chaparral, cismontane woodland, coastal scrub; sandy or gravelly soils; 70-810 meters elevation; blooms February to September.	Not expected. No suitable habitat or soils are present, there are no records near the site, and the site is outside of the species' elevational range.
Miles' milk-vetch	Astragalus didymocarpus var. milesianus	_	_	1B.2	Annual herb; coastal scrub on clay soils; 20-90 meters in elevation; blooms March to June.	Not expected. Grassland habitat searched during March and April surveys and it was not observed.
Monterey pine	Pinus radiata			1B.1	Perennial evergreen tree; closed-cone coniferous forest and cismontane woodland; 25-185 meters in elevation.	Not expected. No suitable habitat is present and this tree species would have been seen during the survey.



Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Most beautiful jewelflower	Streptanthus albidus ssp. peramoenus	_		1B.2	Annual herb; chaparral, cismontane woodland, valley & foothill grassland in serpentine soils; 94-1000 meters in elevation; blooms March to October.	Not expected. No suitable soils are present and the site is greatly outside of the species' elevational range.
Mouse-gray dudleya	Dudleya abramsii ssp. murina	_	ı	1B.3	Perennial leaf succulent; chaparral, cismontane woodland and valley and foothill grassland on serpentine soils; 50-525 meters in elevation; blooms May to June.	Not expected. No suitable soils are present and the site is outside of the species' elevational range and local distribution. The CNDDB record nearby has questionable subspecies identification.
Ojai fritillary	Fritillaria ojaiensis	_		1B.2	Perennial bulbiferous herb; broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest on rocky soils; 225-998 meters in elevation; blooms February to May.	Not expected. No suitable habitat or soils are present, there are no records near the site, and the site is greatly outside of the species' elevational range.
Oregon meconella	Meconella oregana	_	_	1B.1	Annual herb; coastal prairie and coastal scrub; 250-620 meters in elevation; blooms March to April.	Not expected. No suitable habitat is present and the site is greatly outside of the species' elevational range and there are no records near the site.
Perennial goldfields	Lasthenia californica ssp. macrantha	_	I	1B.2	Perennial herb; coastal bluff scrub, coastal dunes and coastal scrub; 5-520 meters in elevation; blooms January to November.	Not expected. Site was searched during March and April when it would have been in identifiable condition and it was not observed. Site is disturbed and no native bluff scrub or other suitable habitat present.
San Benito fritillary	Fritillaria viridea	_	_	1B.2	Perennial bulbiferous herb; chaparral, cismontane woodland, streambanks and roadsides sometimes on rocky serpentine soils; 200-1525 meters in elevation; blooms March to May.	Not expected. No suitable habitat or soils are present and the site is greatly outside of the species' elevational range and local distribution.
San Luis Obispo owl's-clover	Castilleja densiflora var. obispoensis	_	_	1B.2	Annual herb; meadows, seeps, and valley and foothill grassland sometimes on serpentine; 10 to 400 meters in elevation; blooms March to May.	Not expected. Site was searched during March and April when it would have been in identifiable condition and it was not observed. Site is disturbed grassland with no suitable habitat present.



Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
San Luis Obispo sedge	Carex obispoensis		_	1B.2	Perennial herb; closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland, often on serpentine and clay soils in seeps; 10-820 meters in elevation; blooms April to June.	Unlikely. No mesic habitat is present on the site, although grassland habitat and clay soils are present, and the site is within the elevational and local distribution of the species.
Santa Lucia bush- mallow	Malacothamnus palmeri var. palmeri		_	1B.2	Perennial deciduous shrub; chaparral on rocky soils and slopes, but occasionally extending down canyons to near sea level; 3-670 meters in elevation; blooms May to July.	Not expected. No suitable habitat or soils are present and there are no records close to the site.
Santa Luicia manzanita	Arctostaphylos luciana		_	1B.2	Perennial evergreen shrub; chaparral and cismontane woodland on shale soils; 350-850 meters in elevation; blooms December to March.	Not expected. No suitable habitat or soils are present, the site is greatly outside of the species' elevational range, and this shrub would have been seen during the survey.
Umbrella larkspur	Delphinium umbraculorum	l	l	1B.3	Perennial herb; chaparral and cismontane woodland; 400-1600 meters in elevation; blooms April to June.	Not expected. No suitable habitat is present, the site is greatly outside of the species' elevational range, and no records are near the site.
Woodland woollythreads	Monolopia gracilens		_	1B.2	Annual herb; openings of broad-leaved upland forest, chaparral, cismontane woodland, north coast coniferous forest and valley and foothill grassland typically on serpentine; 100 to 1,200 meters in elevation; blooms February to July.	Not expected. No suitable soils are present and the site is outside of the species' elevational range and local distribution.

^{*}E = Endangered; T = Threatened; '—' = no status; CRPR: Rank 1B – Rare or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare or endangered in California, but more common elsewhere; Rank 4 – Limited distribution (Watch List). Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2019a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2018a); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2019); Information on Wild California Plants for Conservation, Education, and Appreciation (Californa 2019).



	NATURAL COMMUNITIES								
Central Coast Arroyo Willow Scrub	Absent. No arroyo willow trees or shrubs are present onsite.								
Central Dune Scrub	Absent. No dune habitat or vegetation characteristic of dunes are present.								
Central Maritime Chaparral	Absent. No chaparral species are present onsite.								
Coastal Brackish Marsh	Absent. Brackish water is present, but characteristic perennial emergent monocots characteristic of this community are absent.								
Coastal Valley and Freshwater Marsh	Absent. No freshwater wetland vegetation is present onsite.								
Monterey Pine Forest	Absent. No Monterey pine trees are present onsite.								
Northern Coastal Salt Marsh	Present. A narrow band of salt marsh habitat is present, and is dominated by fleshy jaumea (<i>Jaumea carnosa</i>), which is characteristic of this community.								
Valley Needlegrass Grassland	Absent. A few clumps of purple needlegrass (<i>Stipa pulchra</i>), which is the primary species in this community, were found in grassland areas onsite but the occurrence was insufficient to classify the grassland habitat as this community.								



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records						
	INVERTEBRATES											
Globose dune beetle	Coelus globosus	_	_	_	Coastal sand dunes on foredunes and sand hummocks; burrows under the sand and is usually beneath dune vegetation.	Not expected. No dune vegetation or hummocky dunes are present as the habitat in the study area is open sandy beach that abruptly transitions into bluff. Records nearby are from foredunes habitat.						
Monarch butterfly	Danaus plexippus pop. 1	_	_	— (overwintering population)	Adults feed on the nectar of various blooming plants. During breeding can be found in fields, pastures, residential areas, grassland and scrub. Eggs are laid on and caterpillars feed on milkweed. Overwinters in wind-protected tree groves of eucalyptus, Monterey pine and cypress along the coast.	Overwintering habitat not present. Individuals may be present on a transitory basis, but no milkweed is present for reproductive stages. Eucalyptus adjacent to site is not a large or dense enough grove to support overwintering habitat						
Morro Bay blue butterfly	Plebejus icariodides moroensis	_	_	_	Stabilized sand dunes. Adults nectar on and larvae feed on dune lupine (<i>Lupinus chamissonis</i>). Restricted to Morro Bay and Los Osos.	Not expected. Species has a very limited distribution and the site is outside of its range, and no suitable host plants are present.						
Morro shoulderband snail	Helminthoglypta walkeriana	Е	_	_	Coastal scrub and dune scrub plant communities in the coastal strand area in and near Morro Bay and Los Osos.	Not expected. Species has a very limited distribution and the site is outside of its range, and no suitable habitat is present.						
Obscure bumble bee	Bombus caliginosus	_	_	_	Found in coastal areas on ceanothus, coyote brush, thistles, sweet peas, lupines, willows, clover, phacelia and blackberry. Queens emerge from hibernation in late January, workers appear in early March, and males emerge in April. Colonies dissolve in late October, with only the new queens surviving.	Unlikely. Site is within the range of the species, but there are no recent records from the area and none of the potential host plants were observed during the survey. Portion of site proposed for development is disturbed grassland comprised of non-native weeds.						



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
San Luis Obispo pyrg	Pyrgulopsis taylori	_	_	_	Freshwater snail with planktonic larvae.	Not expected. Brackish water conditions in the Cayucos Creek lagoon would be unsuitable and there is only one record in the vicinity.
Sandy beach tiger beetle	Cicindela hirticollis gravida	_	_	_	Beaches on clean sand just above wave action.	Unlikely. Suitable habitat is present on the sandy beach area, but the the record from Cayucos is from 1962 and the CNDDB considers the species extirpated from this locality.
					FISH	
South-central California coast DPS steelhead	Oncorhynchus mykiss irideus pop. 9	Т	_	_	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	Present. Steelhead have been recorded in Cayucos Creek but erroneously were reported in the CNDDB as Southern California steelhead. South-central California coast DPS steelhead occur in this area, thus any steelhead observed belong to this DPS. May use lagoon for adult migration and juvenile rearing.
Southern California DPS steelhead	Oncorhynchus mykiss irideus pop. 10	E		_	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	Not expected. This DPS occurs from the Santa Maria River south to the U.S./Mexican border. The CNDDB record in the site vicinity is an error.
Tidewater goby	Eucyclogobius newberryi	Е	_	SSC	Small, euryhaline, benthic fish that inhabits coastal lagoons, estuaries, stream mouths, and backwater marshes, rarely in open ocean. Usually in brackish lower reaches but can occur up to 7 miles upstream from the ocean. Requires shallow water with little to no flow and fine substrate.	Present. Recorded in the CNDDB in Cayucos Creek from mouth to 1.5 miles upstream. Would occur in lagoon yearround.



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records							
	AMPHIBIANS/REPTILES												
Blainville's (=coast) horned lizard	Phrynosoma blainvillii	_	_	SSC	Grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial. Preys on native species of ants and other small invertebrates.	Unlikely. Suitable habitat is present in grassland and sandy areas onsite, but there is low probability this species would occur because the site is surrounded by urban development. Argentine ants, prolific in developed areas, displace native ants required by the lizards.							
California red- legged frog	Rana draytonii	Т		SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	Potential. Documented from Cayucos Creek near Hwy. 1, but low probability to occur in the study area due to high salinities and lack of vegetation along the shore. Low probability to move through grassland due to steep bluff face and low, maintained vegetation with urban development on either side.							
Coast Range newt	Taricha torosa	_	_	SSC	Primarily terrestrial in forests, oak woodlands, chaparral, and rolling grassland. Breeds in ponds, reservoirs and pools of clear streams with rocky substrates and cascades.	Not expected. Species does not occur in brackish or saline water, and is restricted to upper areas of creeks. No records are from coastal areas near Cayucos.							
Lesser slender salamander	Batrachoseps minor	_	_	SSC	Forests composed of mixed oak, tanbark oak, sycamore and bay laurel with moist conditions. Found above 400 m elevation. Active above ground on warm, wet nights but otherwise is underground or under cover objects.	Not expected. This species has a very restricted distribution along the ridge of the Santa Lucia Range, and no suitable habitat is present.							
Northern California legless lizard	Anniella pulchra	_		SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	Unlikely. The margins of Cayucos Creek in the study area are devoid of the type of vegetation required by this species for cover, moisture and leaf litter, although sandy soils are present. Recorded on the coast in the vicinity.							



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Southwestern pond turtle (=western pond turtle)	Actinemys pallida (=Emys marmorata)	_	_	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	Present. The CNDDB considers this species to occur throughout Cayucos Creek to its mouth. Potentially could move through grassland habitat onsite or use the area for nesting.
Two-striped gartersnake	Thamnophis hammondii	_	_	SSC	Pools, creeks, and stock ponds in oak woodland, chaparral, scrub, and coniferous forest. Primarily aquatic, feeding on tadpoles, newt larvae, small frogs and toads, fish, earthworms and fish eggs. Occurs in upland habitats in rodent burrows or basking on the surface. Active from January to November, depending on weather.	Potential. Suitable aquatic habitat is present in Cayucos Creek and potentially could use grassland areas, and there is a historic record from Cayucos. Other records are from coastal streams from Cambria to Montana de Oro.
					BIRDS	
Cooper's hawk	Accipiter cooperii	_	_	WL (nesting)	Dense stands of live oak, riparian, and mixed coniferous forests usually near water. Nests are in trees within dense woodlands. Preys on birds and small mammals. Occurs in this area yearround.	Potential. No dense woodland habitat is present, but there are numerous sightings along the beaches in the vicinity as well as within the study area. Could occur as a transient. No nesting habitat is present.
Golden eagle	Aquila chrysaetos	_	_	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers Occurs in this area year-round.	Unlikely. Small disturbed grassland habitat onsite would not be suitable for this species. There are numerous records in the immediate area as well as lower Cayucos Creek, but are from the north and east sides of Highway 1 away from urban development. Nesting habitat is not present.



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Grasshopper sparrow	Ammodramus savannarum	_		SSC	Grasslands, prairies, hayfields, and open pastures with little scrub cover and some bare ground where they prey on grasshoppers and other invertebrates. Nests on the ground at the base of clumps of grass within a large patch of tall grass. Occurs in this area during breeding season.	Unlikely. Marginal foraging habitat is present in grassland habitat since it is regularly mowed and frequented by humans. There are numerous records in the immediate area but are from north and east sides of Highway 1 away from the site. Unlikely to nest due to frequent mowing.
Great blue heron	Ardea herodias	_		— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	Present. Suitable foraging habitat is present in the Cayucos Creek lagoon and also could forage periodically in the disturbed grassland habitat. Would not nest onsite due to high degree of human disturbance. There are numerous records in eBird from the lower reaches of Cayucos Creek.
Great egret	Ardea alba	_	_	_ (nesting colony)	Forages in marshes, swamps, streams, rivers, ponds, lakes, lagoons, tidal flats, canals, ditches, flooded fields, and sometimes in upland where they prey on fish, amphibians, reptiles, crustaceans, and invertebrates. Nesting colonies are on lakes, ponds, marshes, and estuaries. Nests are placed up to 100' above ground usually over water. Occurs in this area during non-breeding season.	Present. Was observed during the site visits and there are records in eBird from the lower reaches of Cayucos Creek. Suitable foraging habitat is present in the Cayucos Creek lagoon and also could forage periodically in the grassland habitat. No nesting habitat is present in the study area, and does not nest in this region.
Northern harrier	Circus cyaneus	_	_	SSC (nesting)	Large areas of wetlands and grasslands with low vegetation where they prey on small mammals, amphibians, reptiles and birds. Nesting is in marshes, grazed meadows, and desert shrubland where they nest on the ground in a dense clump of vegetation such as willows, grasses, sedge, bulrushes or cattails. Occurs year-round in this area.	Unlikely. Disturbed grassland does not provide suitable foraging habitat given its small size and proximity to urban development. Nesting is unlikely due to disturbance such as mowing and human activity in the creek mouth. Species could fly over the site given the extensive grassland habitat to the north and east surrounding the town.



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Prairie falcon	Falco mexicanus	_	_	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds. Nests on high cliff ledges, steep bluffs, trees, or on buildings or utility poles. Occurs yearround in this area.	Unlikely. Marginal foraging habitat is present in grassland habitat. No nesting habitat is present. Has been observed in the vicinity and could fly over the site at some point in time.
Snowy egret	Egretta thula	_	_	— (nesting colony)	Lagoons, freshwater wetlands, ponds, temporary pools, and wet fields where they prey on aquatic animals and insects. Nesting colonies are in dense vegetation of islands and marshes. Occurs in this area outside of the breeding season.	Potential. There are numerous records in eBird from the lower reaches of Cayucos Creek. Suitable foraging habitat is present in the Cayucos Creek lagoon and also could forage periodically in the grassland habitat. No nesting habitat is present in the study area, and does not nest in this region.
Tricolored blackbird	Agelaius tricolor	_	CE	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	Unlikely. Could occur onsite periodically while foraging in grassland or aquatic habitats, but no nesting habitat is present. Numerous sightings recorded in the vicinity.
Western snowy plover	Charadrius alexandrinus nivosus	Т		SSC (nesting)	Sand spits, beaches, creek and river mouths, salt flats at lagoons and estuaries, levees, river bars, edges of alkaline lakes and reservoirs where they feed on invertebrates. Nesting is on dry ground lacking vegetation. Occurs yearround in this area.	Present. Suitable habitat is present on the sandy beach habitat and the mouth of Cayucos Creek onsite, but very low probability to occur on the grassland terrace. Numerous sightings recorded in the vicinity and at the mouth of Cayucos Creek.



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records	
White-tailed kite	Elanus leucurus			FP (nesting)	Savannas, open woodlands, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in isolated trees. Occurs in this area year-round.	Unlikely. Marginal foraging habitat is present in the grassland or lagoon areas onsite. No nesting habitat is present. Numerous sightings recorded in the vicinity.	
	MAMMALS						
American badger	Taxidea taxus	_	_	SSC	Open grasslands, fields and the edge of scrub and woodland habitats; requires dry loose soils for burrowing and shelter and feeds on a variety of small mammals such as California ground squirrel and pocket gopher.	Unlikely. Suitable habitat is present in grassland onsite, but due to being surrounded by urban development there is low potential for this species to occur.	
Fringed myotis	Myotis thysanodes		_	_	Open habitats including pinyon-juniper, valley foothill hardwood, hardwood-conifer, streams, lakes and ponds. Ranges from sea level to 2850 meters in elevation and usually is above 1300 meters. Feeds on beetles, moths, spiders, and orthopterans. Roosts in caves, mines, buildings and crevices and may have separate night roosts.	Potential. Could forage over the study area and no roosting habitat is present in the study area but potentially could roost under the North Ocean Avenue bridge. Uncommon in coastal areas but has been recorded at lower San Simeon Creek.	
Pallid bat	Antrozous pallidus	_	_	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rocky outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings.	Potential. Could forage over the study area and no roosting habitat is present in the study area but potentially could roost under the North Ocean Avenue bridge. Uncommon in coastal areas but has been recorded at Villa Creek and Morro Bay.	
Townsend's big-eared bat	Corynorhinus townsendii	_	_	SSC	Desert scrub, sagebrush, chaparral, oak woodlands, riparian and coniferous forests; prefers mesic habitats and closely tied to rock cliffs with crevasses; roosts in caves, cliffs, mines, tunnels and bridges.	Potential. Could forage over the study area and no roosting habitat is present in the study area but potentially could roost under the North Ocean Avenue bridge. Has been recorded in the vicinity.	



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Yuma myotis	Myotis yumanensis	_	_	-	Open forests and woodlands with water sources such as ponds, streams, and stock tanks. Roosts in buildings, mines, caves, crevices and under bridges. Night roosts in more open areas.	Potential. Could forage over the study area and no roosting habitat is present in the study area but potentially could roost under the North Ocean Avenue bridge. Has been recorded in the vicinity.

*E = Endangered; T = Threatened; E = Candidate; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2019a); Special Animals List (California Department of Fish and Wildlife 2018b); California Wildlife Habitat Relationships System (CDFW 2019c); A Guide to the Amphibians and Reptiles of California (California Herps 2019); eBird (The Cornell Lab of Ornithology 2019a); All About Birds (The Cornell Lab of Ornithology 2019b).

CRITICAL HABITAT				
California Red-legged Frog	Absent. Critical habitat is present throughout the Cayucos Creek watershed upstream from Highway 1, but does not occur at the along the lower reaches.			
South-central California Coast DPS Steelhead	Present. The site falls within the Cayucos Hydrologic Sub-area 331016 that is within the Cayucos Creek corridor.			
Tidewater Goby	Absent. Cayucos Creek does not fall within any of the designated habitat units for this species.			
Western Snowy Plover	Absent. Not present in the study area.			

Source: Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service 2019b).