BIOLOGICAL RESOURCES ASSESSMENT

HUENEME ROAD WIDENING PROJECT

VENTURA COUNTY, CALIFORNIA

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1.0 INTRODUCTION

The County of Ventura (County) proposes to widen an approximate 1.93-mile portion of Hueneme Road, between Edison Drive and Rice Avenue, from a two-lane roadway to a 4-lane roadway with buffered bike lanes, a paved median, and turn lanes (see **Figure 1**, Regional Location and **Figure 2**, Project Location). The purpose of this project is to improve vehicle and bicycle travel and safety between the Cities of Oxnard and Camarillo. The project is listed in the Southern California Association of Governments (SCAG) 2023 Federal Transportation Improvement Program (FTIP) for the fiscal years 2022/2023-2025/2026.

This report presents the findings of a general biological resource assessment for the Hueneme Road Widening Project (project). The purpose of this assessment is to describe the existing biological resources in the Biological Study Area (BSA) and assess the potential impacts associated with implementation of the project, as required by the California Environmental Quality Act (CEQA). This report incorporates the findings of a literature review and biological reconnaissance surveys conducted by GPA biologists Manju Venkat, Lizbeth Pliego Guzman, and Victoria Masjuan on May 3, 4, and 5, 2023.

1.1 Project Description

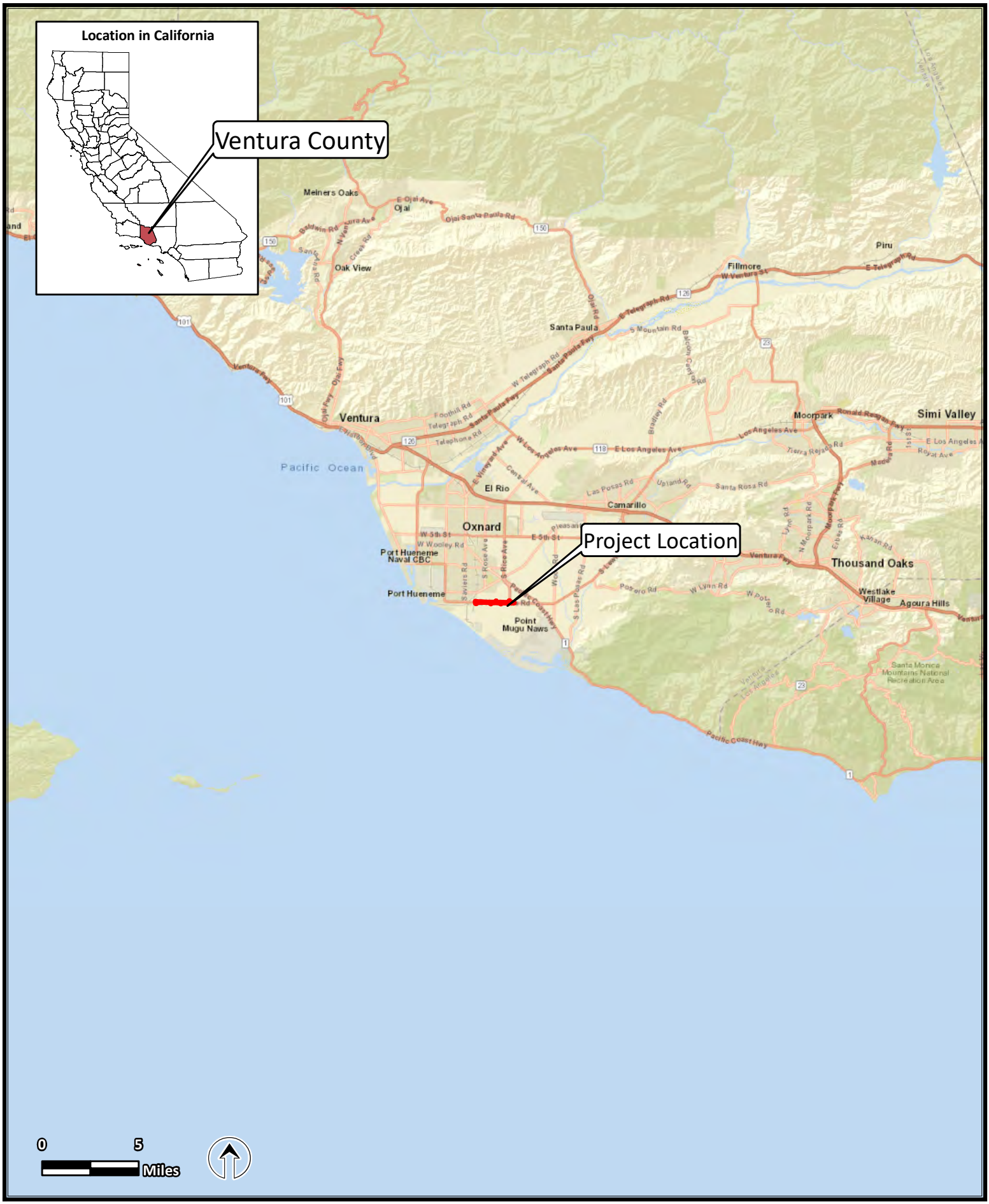
Existing Facility

According to the County's General Plan (General Plan), Hueneme Road is identified as an Other Principal Arterial and Major Collector and a City of Port Hueneme and City of Oxnard Commercial Vehicle Route within the project area (County of Ventura, 2020). Between Edison Drive and Rice Avenue, Hueneme Road includes two vehicle travel lanes, one in the eastbound direction and one in the westbound direction. At the western terminus of the project, Hueneme Road intersects with Edison Drive; the current configuration includes four vehicle travel lanes on Hueneme Road west of Edison Drive, two vehicle travel lanes on Hueneme Road east of Edison Drive, and two vehicle travel lanes on Edison Drive to the north and south of Hueneme Road. There are dedicated left-turn lanes in each direction at the intersection of Hueneme Road and Edison Drive. At the eastern terminus of the project, Hueneme Road intersects with Rice Avenue, creating a "T" intersection, where Rice Avenue dead-ends at Hueneme Road and the existing through lanes turn into a left- and right-turn lane. The current configuration includes four vehicle travel lanes on Rice Avenue, north of the "T" intersection, two vehicle travel lanes on Hueneme Road west of Rice Avenue, and two vehicle travel lanes of Hueneme Road east of Rice Avenue.

There is an existing non-contiguous drainage ditch located on the north side of Hueneme Road, as well as several utility poles on the north and south sides of the roadway. There are several trees adjacent to the roadway, and row crops/buildings located on parcels adjacent to the project area.

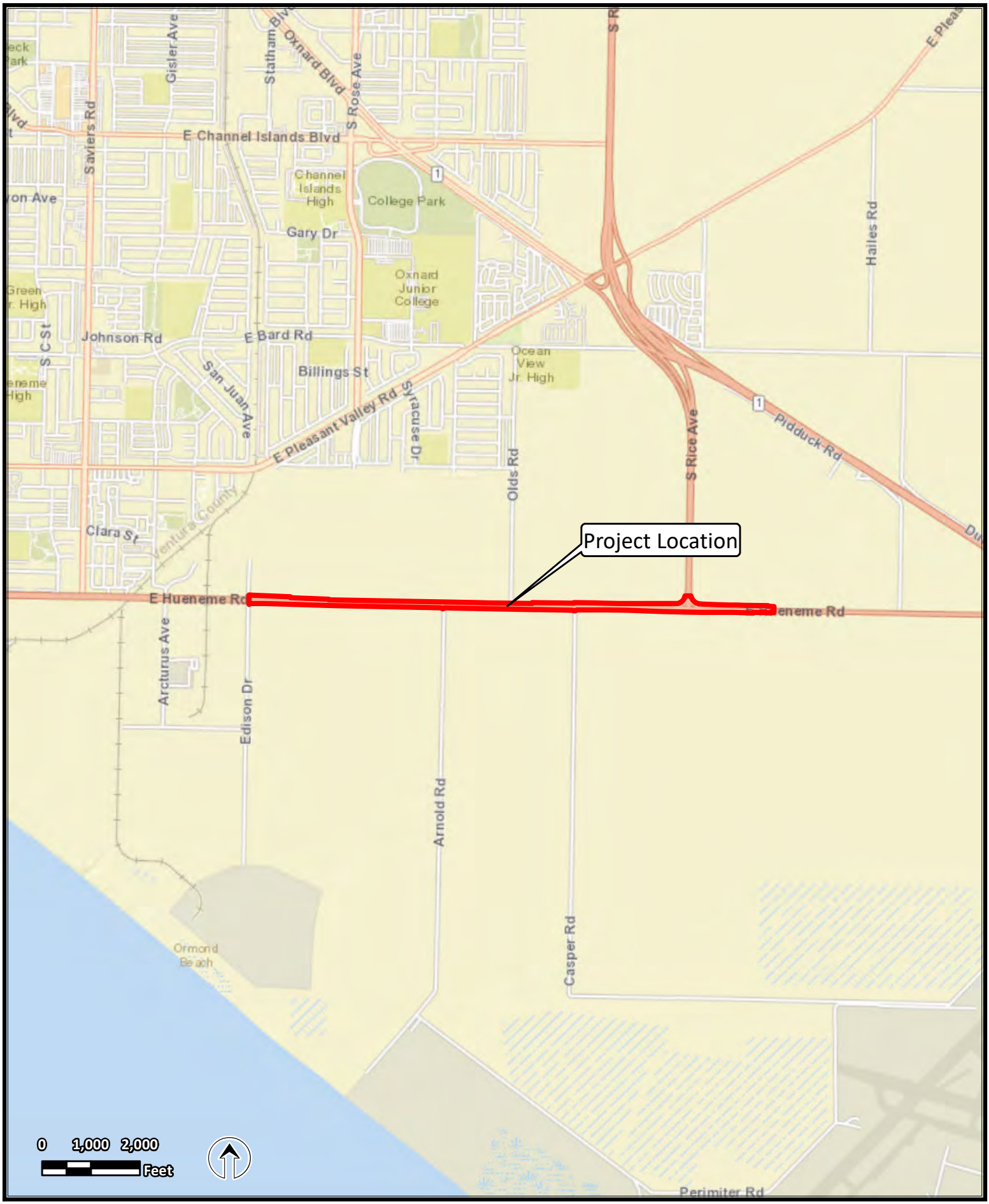
The project would include four 12-foot through lanes (two in the eastbound direction and two westbound direction), a 14-foot paved median, two 6-foot bike lanes on either side of the roadway with a two-foot buffer between the bicycle lanes and the traffic lanes, and two 4-foot shoulders on either side of Hueneme Road between Edison Drive and Rice Avenue.

All existing left-turn lanes would be retained as part of the project. The total width of the new roadway would vary between 63 to 72 feet. The widened roadway would taper to the existing configuration of one travel lane in each direction approximately 1,200 feet east of Rice Avenue.



Source: ESRI 2023

FIGURE 1. REGIONAL LOCATION
Hueneme Road Widening Project



Source: ESRI 2023

FIGURE 2. PROJECT LOCATION
Hueneme Road Widening Project

The existing centerline of the road would be shifted as part of the roadway widening and the roadway would be sloped from the crown at a 2:1 maximum slope. Construction of the widened roadway would require a maximum ground disturbance of approximately 12-14 inches to install the new roadbed. Widening of the roadway would result in approximately 339,000 square feet of increased impervious surface area. The surface runoff resulting from increased impervious surface would be directed toward existing and relocated roadside drainage. It is anticipated that the existing drainage ditch on the north side of the roadway would be shifted north to accommodate the widening of the road. The limits of the relocated ditch would not extend beyond the new County right-of-way (ROW) line.

The project would require three traffic signal modifications, drainage pipe and drainage inlet relocations, culvert extensions and relocations, 41 power pole relocations, and 10 irrigation and water facility relocations. The power poles along Hueneme Road are located within County ROW; however, coordination and preplanning would be needed with Southern California Edison (SCE) to relocate the poles prior to widening the roadway. Additionally, Frontier Communications (Telecommunications) are located on the SCE overhead poles and have underground lines along Hueneme Road. Sempra Utilities (Gas Company) has gas transmission mains along Hueneme Road near Edison Drive; the existing gas main may be impacted where drainage and/or water facilities are relocated. Signal pole relocations would require ground disturbance at a maximum depth of 16 feet. The project would not include the relocation of any water lines, recycled water lines, or sewer mains.

The project may include minor work related to 23 driveways located within the project area; this work would be limited to conforming the driveway to the new roadway configuration. Construction would be staged to provide continuous access to each private parcel. In addition, at least one lane would be open to provide continuous access for vehicles through the project area and no detours to adjacent roadways would be required. Due to traffic volumes in the area, night work is anticipated to avoid traffic impacts during construction.

The proposed improvements would require ROW and temporary construction easements (TCE). The project would require permanent ROW of approximately 9.3 acres from 30 properties. This would include 4.7 acres of Farmland of Statewide Importance, 4.5 acres of Prime Farmland, and 0.13 acres of Urban and Built-Up Land and Other Land. Additionally, the project would require TCE from 3.53 acres of Prime Farmland, 3.73 Acres of Farmland of Statewide Importance, and 0.14 acres of Urban and Built-Up Land and Other Land.

Permanent ROW acquisition required to complete the project would include sliver takes from parcels adjacent to the project area; no full acquisitions are anticipated. The roadway widening would require removal of four buildings, including two fruit stands, one residence, and one garage. Vegetation removal would be required to accommodate the widening, and approximately 329 trees would also need to be removed. Tree removal would result in a vertical ground disturbance of approximately two feet below existing grade; a stump grinder would be used to remove the trunk and roots.

2.0 REGULATORY SETTING

The following discussion provides a summary of federal, state, and local laws and regulations that pertain to sensitive and/or protected species, their habitats, and waterways within or near the BSA.

2.1 Federal Regulations

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into water of the United States (U.S.) to maintain water quality standards for surface waters.

Clean Water Act Section 404

The USACE Regulatory Program regulates activities within federal wetlands and waters of the U.S. pursuant to Section 404 of the CWA. In recent years, the definition of waters of the U.S. has been in flux. The Environmental Protection Agency (EPA) and the Department of the Army issued a revised definition of waters of the U.S in January 2023. However, the U.S. Supreme Court ruled in *Sackett v. Environmental Protection Agency* on May 25, 2023 that only wetlands and permanent bodies of water with a "continuous surface connection" to "traditional interstate navigable waters" are covered by the Clean Water Act, thus revoking the "significant nexus" standard and invalidating portions of the January 2023 rule. To conform with the *Sackett* decision, the EPA and Department of the Army issued a final revised rule on August 29, 2023 amending the January 2023 definition of waters of the U.S.

Under the August 2023 rule, waters of the U.S. include: 1) traditional navigable waters (i.e. waters that are subject to the ebb and flow of the tide and/or are presently used, have been used in the past, or may be susceptible for use for interstate or foreign commerce), the territorial seas, and interstate waters (collectively "qualifying waters"); 2) impoundments (e.g. reservoirs, retention ponds) of qualifying waters 3) tributaries to qualifying waters that are relatively permanent, standing, or continuously flowing bodies of water; 4) wetlands with a continuous surface connection to qualifying waters; and 5) intrastate lakes and ponds that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to qualifying waters (CFR 33 Section 328.3 and 40 CFR 120.2).

In streams and rivers where adjacent wetlands are absent, the USACE jurisdiction extends to the ordinary high water mark (OHWM). The OHWM is defined as "the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." {33 CFR Section 328.3[c(3)]}. If the OHWM is not readily distinguishable, the USACE jurisdiction within streams extends to the "bankfull discharge" elevation, which is the level at which water begins to leave the channel and move into the floodplain (Rosgen, 1996). This level is reached at a discharge which generally has a recurrence interval of approximately 1.5 to two years on the annual flood series (Leopold, 1994).

Federal wetlands are transitional areas between well-drained upland habitats and permanently flooded (deepwater) aquatic habitats and are defined differently by different resource agencies. The USACE and the U.S. EPA define wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" {33 CFR Section 328.3[c(1)]}.

Clean Water Act Section 402

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. The CWA establishes the basic structure for regulating discharges of pollutants into waters of the United States. At the federal level, the U.S. Environmental Protection Agency regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, pursuant to Section 402 of the federal CWA. Section 402 of the CWA requires that all construction sites disturbing one acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source (a pipe, ditch or channel) into a surface water of the U.S. (a lake, river, and/or ocean) must obtain permission under the NPDES permit. All NPDES permits are written to ensure the Nation's receiving waters will achieve specified Water Quality Standards.

Clean Water Act Section 401

The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) are responsible for the administration of Section 401 of the CWA in the state of California. Under Section 401 of the CWA, applicants for federal licenses or permits must provide a Water Quality Certification that any discharges from a project will comply with the CWA, including state-established water quality standard requirements. For all work subject to an USACE Section 404 permit, project proponents must obtain a Water Quality Certification from the applicable RWQCB under CWA Section 401 stating that the project would comply with applicable water quality regulations.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) was established in 1973 to provide a framework to conserve and protect endangered and threatened species and their habitat. Section 7 of the FESA requires federal agencies to ensure that actions they engage in, permit, or fund, do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat for these species. Section 7 consultation provides for the “incidental take” of endangered and threatened wildlife species by federal entities if adverse effects to species cannot be avoided. Incidental take is defined by the FESA as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Magnuson-Stevens Fishery Conservation and Management Act of 1976

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas. In the Pacific Region, National Marine Fisheries Service (NMFS) provides regulatory oversight over all Essential Fish Habitat (EFH) for Pacific salmon.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (50 CFR Part 10 and Part 21) protects migratory birds, their occupied nests, and their eggs from disturbance and/or destruction. "Migratory birds" under the MBTA include all bird species listed in 50 CFR Part 10.13, as updated in December 2013 (United States Fish and Wildlife Service, 2013). In accordance with the Migratory Bird Treaty Reform Act of 2004 the United States Fish and Wildlife Service (USFWS) included all species native to the U.S. (or U.S. territories) that are known to be present as a result of natural biological or ecological processes. In addition, the USFWS provided clarification that the MBTA does not apply to any nonnative species whose presence in the U.S. are solely the result of intentional or unintentional human-assisted introduction (United States Fish and Wildlife Service, 2018). Nonnative bird species not protected by the MBTA include, but are not limited to, the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and rock pigeon (*Columba livia*).

Executive Order 13112 – Invasive Species

Executive Order 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. This order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species.

2.2 State Regulations

Porter-Cologne Act

The RWQCB also asserts authority over waters of the state under the Porter-Cologne Act, which establishes a regulatory program to protect water quality and to protect beneficial uses of state waters. The Porter-Cologne Act empowers the RWQCB to formulate and adopt a Water Quality Control Plan that designates beneficial uses and establishes such water quality objectives that in its judgment will ensure reasonable protection of beneficial uses. Each RWQCB establishes water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of water quality degradation. Dredge or fill activities with the potential to affect water quality in these waters must comply with Waste Discharge Requirements (WDR) issued by the RWQCB.

The term "waters of the state," under jurisdiction of the RWQCB, is defined by California Water Code as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050(e)).

California Fish and Game Code

Under the California Fish and Game Code Section 1602, the limits of California Department of Fish and Wildlife's (CDFW) jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Under Section 1602, a Streambed Alteration Agreement must be issued by the CDFW prior to the initiation of construction activities that may substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank, of any river, stream, or lake;

or deposit debris, waste, or other materials that could pass into any river, stream, or lake under CDFW's jurisdiction.

Section 2126 of the California Fish and Game Code states that it is unlawful for any person to take any mammal that are identified within Section 2118, including all species of bats.

Sections 3503, 3513, and 3800 of the California Fish and Game Code prohibit the take of birds protected under the MBTA and protects their occupied nests. In addition, Section 3503.5 of the California Fish and Game Code prohibits the take of any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) and protects their occupied nests. Pursuant to Section 3801 and 3800, the only species authorized for take without prior authorization from the CDFW are the house sparrow and European starling.

State-listed species and those petitioned for listing by the CDFW are fully protected under the California Endangered Species Act (CESA). Under Section 2080.1 of the California Fish and Game Code, if a project would result in take of a species that is both federally and state listed, a consistency determination may be completed in lieu of undergoing a separate CESA consultation. Under Section 2081, if a project would result in take of a species that is state-only listed as threatened or endangered, then an incidental take permit from the CDFW is required.

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit the take or possession of 37 fully protected bird, mammal, reptile, amphibian, and fish species. Each of the statutes states that no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species, and states that no previously issued permit or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFW will not authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

California Environmental Quality Act

Section 15380 of the CEQA Guidelines requires that species of special concern be included in an analysis of project impacts. California Species of Special Concern include species that are native to California and are experiencing population declines but are not currently listed as threatened or endangered, all state and federally protected and candidate species, Bureau of Land Management, and United States Forest Service sensitive species. Species considered declining or rare by the California Native Plant Society (CNPS) or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing, are also included under species of special concern.

2.3 Local Regulations

The County of Ventura established the Non-Coastal Zoning Ordinance (NCZO) in Division 8, Chapter 1 of the Ventura County Ordinance Code (Ventura County Planning Division, 2023). Section 8107-25 of the NCZO establishes the Tree Protection Regulations for the non-coastal zone for certain tree species within applicable areas in the non-Coastal zone (County of Ventura Resource Management Agency, 2010). The non-coastal zone is further divided into overlay zones for the purpose of establishing additional regulations and either reducing or extending permitted uses within the overlay zones. Additional tree protections apply to trees within a scenic resource protection (SRP) overlay zone (County of Ventura Resource Management Agency, 2010).

Trees protected only in SRP zones include alder (*Alnus*, all species), ash (*Fraxinus dipetala*), bay (*Umbellularia californica*), cottonwood (*Populus*, all species), elderberry (*Sambucus*, all species), big cone Douglas fir (*Pseudotsuga macrocarpa*), white fir (*Abies concolor*), juniper (*Juniperus californica*), maple (*Acer macrophyllum*), pine (*Pinus*, all species), and walnut (*Juglans californica*). Trees protected throughout the entire non-coastal zone include oak (*Quercus*, all species), sycamore (*Platanus*, all species), historical trees (any species), and heritage trees (any species).

Most trees must meet a girth standard of 9.5 inches to qualify for protection. The exceptions are multi-trunk oaks, each trunk of which must measure 6.25 inches in diameter; heritage trees, which must measure 90 inches in diameter; and historical trees, which may be any size. Historical trees must be identified by the County or a city as a landmark or identified on the Federal or California Historic Resources Inventory to be of historical or cultural significance or identified as contributing to a site or structure of historical or cultural significance.

Per the NCZO, no person shall alter, fell, or remove a healthy protected tree without a tree permit. Exemptions to the provisions of Section 8107-25 include trees:

1) planted, grown, or held for sale by lawfully established nurseries and tree farms or removed from, or transplanted from, such a nursery as part of its operation;

2) located and planted in a tree row presently serving commercial agriculture; and

3) planted, grown, and presently harvested for commercial agricultural purposes, or removed from, or transplanted from, a ranch or farm as part of its operation. This does not include the managed production of protected trees or the transplanting or harvesting of naturally growing protected trees or their limbs.

3.0 METHODS OF STUDY

3.1 Delineation of the Biological Study Area

The biological study area (BSA) includes areas that could be directly or indirectly impacted by the project, either temporarily or permanently (see **Figure 3**, Biological Study Area). The BSA comprises approximately 210.5 acres and an approximately 300-foot buffer around the project footprint. The BSA begins west of the Hueneme Road/Edison Drive intersection and extends east to just east of the Hueneme Road/Nauman Road intersection.

The BSA is in the Oxnard United States Geological Survey (USGS) 7.5-minute quadrangle (quad) and spans portions of San Bernardino Meridian Township 1 North, Range 22 West, Section 22; Township 1 North, Range 22 West, Section 27; Township 1 North, Range 22 West, Section 23; Township 1 North, Range 22 West, Section 26; Township 1 North, Range 22 West, Section 24; Township 1 North, Range 22 West, Section 25; Township 1 North, Range 22 West, Section 19, and Township 1 North, Range 22 West, Section 30. Adjacent land uses consist of Agriculture, Industrial, Commercial and Services, Transportation, Communications and Utilities, and Single-Family Residential.

E HUENEME ROAD

HUENEME ROAD

EDISON DRIVE

Biological Study Area

Area of Direct Impacts

N

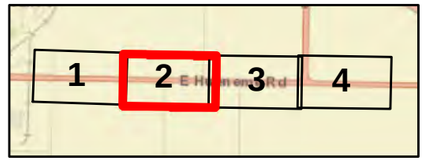
0 50 100 200 Feet

FIGURE 3. BIOLOGICAL STUDY AREA
Hueneme Road Widening Project
Ventura County

OLDS ROAD

HUENEME ROAD

ARNOLD ROAD



Biological Study Area

Area of Direct Impacts

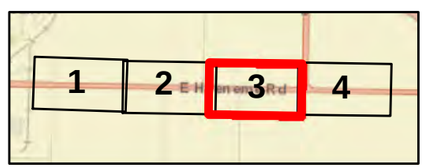
N

0 50 100 200 Feet

FIGURE 3. BIOLOGICAL STUDY AREA
Hueneme Road Widening Project
Ventura County
Sheet 2 of 4

HUENEME ROAD

CASPER ROAD



Biological Study Area

Area of Direct Impacts

N

0 50 100 200 Feet

FIGURE 3. BIOLOGICAL STUDY AREA
Hueneme Road Widening Project
Ventura County
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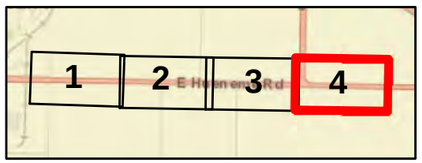
RICE AVENUE

HUENEME ROAD

ALLEY



Biological Study Area

Area of Direct Impacts

N

0 50 100 200

Feet

FIGURE 3. BIOLOGICAL STUDY AREA
Hueneme Road Widening Project
Ventura County
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3.2 Literature Review

Prior to conducting the biological surveys, available literature was reviewed to identify any special-status plants, wildlife, and/or sensitive habitats previously recorded within or near the BSA. Sources used to identify special-status species and/or habitats with potential to be in or near the BSA include the following:

- CDFW's California Natural Diversity Database Search (CNDDB) for the Oxnard, Point Mugu, Camarillo, Santa Paula, Saticoy, and Ventura 7.5-minute series topographic quadrangles (California Department of Fish and Wildlife, 2023a) (see **Appendix A**);
- CNPS Online Inventory of Rare and Endangered Plants for the Oxnard, Point Mugu, Camarillo, Santa Paula, Saticoy, and Ventura 7.5-minute series topographic quadrangles (California Native Plant Society, 2023a) (see **Appendix A**);
- CDFW Biogeographic Information and Observation System (BIOS) Habitat Connectivity Viewer (California Department of Fish and Wildlife, 2023b);
- Natural Resources Conservation Service (NRCS) Web Soils Survey for Ventura Area, California (United States Department of Agriculture Natural Resources Conservation Service, 2023);
- USFWS Information for Planning and Conservation (IPaC) Database (United States Fish and Wildlife Service, 2023a) (see **Appendix A**);
- USFWS Critical Habitat online mapper (United States Fish and Wildlife, 2023a);
- USFWS National Wetlands Inventory Mapper (NWI) (United States Fish and Wildlife Service, 2023c).; and
- National Marine Fisheries Service (NMFS) for the Oxnard and Camarillo 7.5-minute series topographic quadrangles (National Oceanic and Atmospheric Administration, 2023).

3.3 Field Investigation

The BSA was surveyed on May 3, May 4, and May 5, 2023, by GPA biologists Manju Venkat, Victoria Masjuan, and Lizbeth Pliego. The purpose of these surveys was to perform a general biological assessment of the BSA; map vegetation communities and land cover classes; investigate waterways and drainage features within the BSA; and inventory vegetation communities, plant, and wildlife species within the BSA (see **Appendix B**). The entire BSA was visually surveyed on foot where feasible by walking along Hueneme Road from west to east in the public right-of-way. Vegetation communities observed within the BSA were classified according to the CNPS Manual of California Vegetation (California Native Plant Society, 2023). Vertebrate wildlife species were identified by direct observation, vocalization, or sign (e.g. tracks, scat, burrows). Existing drainages and other aquatic features were qualitatively assessed and delineated. Photographs of the BSA are provided in **Appendix C**.

4.0 EXISTING CONDITIONS

4.1 Physical Conditions

Topography

The topography of the BSA is relatively flat with an elevation of approximately 15 to 34 feet above mean sea level.

Climate

The BSA is in unincorporated Ventura County. The average annual temperature ranges from a low of approximately 53.1 degrees Fahrenheit to a high of approximately 72.3 degrees Fahrenheit, and a minimum of 35 degrees Fahrenheit to a maximum of 101 degrees Fahrenheit (National Oceanic and Atmospheric Administration, 2022). Average annual precipitation from 2017 to 2022 in total liquid content was approximately 13.7 inches.

Soils

According to the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Soils Report, there are four soil units mapped within the BSA: Camarillo Sandy Loam, 0 to 2 Percent Slopes (7.9 acres, 3.7 percent of BSA); Camarillo Loam, 0 to 2 Percent Slopes (64.8 acres, 30.8 percent of BSA); Camarillo Loam, Loamy Substratum, 0 to 2 Percent Slopes (36.8 acres, 17.5 percent of BSA); Hueneme Loamy Fine Sand, 0 to 2 Percent Slopes (101.0 acres, 48 percent of BSA) (United States Department of Agriculture Natural Resources Conservation Service, 2023).

Camarillo Sandy Loam, 0 to 2 Percent Slopes

The Camarillo Sandy Loam, 0 to 2 Percent Slopes soil unit belongs to the Camarillo soil series. Camarillo soils are very deep, somewhat poorly drained soils found on flood plains and formed in alluvium derived from sedimentary rocks. The capacity of the most limiting layer in this soil unit to transmit water is moderately high to high. Depth to water table in this unit averages about 16 to 28 inches. Soils in this unit are considered nonsaline to very slightly saline and are not considered hydric. Within the BSA, the Camarillo Sandy Loam, 0 to 2 Percent Slopes soils are comprised of 85 percent Camarillo and similar soils, 10 percent Hueneme soils, three percent Pacheco soils, and two percent Mocho soils.

Camarillo Loam, 0 to 2 Percent Slopes

The Camarillo Loam, 0 to 2 Percent Slopes soil unit also belongs to the Camarillo soil series. The capacity of the most limiting layer in this soil unit to transmit water is moderately high. Depth to water table in this unit averages about 20 to 35 inches. Soils in this unit are considered very slightly saline to moderately saline and are not considered hydric. Within the BSA, the Camarillo Loam, 0 to 2 Percent Slopes soil unit is comprised of 80 percent Camarillo and similar soils, 10 percent Camarillo sandy loam, five percent Hueneme soils, three percent Pacheco soils, and two percent Mocho soils.

Camarillo Loam, Loamy Substratum, 0 to 2 Percent Slopes

The Camarillo Loam, Loamy Substratum, 0 to 2 Percent Slopes soil unit also belongs to the Camarillo soil series. The capacity of the most limiting layer in this soil unit to transmit water is moderately high to high. Depth to water table in this unit averages about 28 to 39 inches. Soils in this unit are considered nonsaline to very slightly saline and are not considered hydric. Within the BSA, the Camarillo Loam, Loamy Substratum, 0 to 2 Percent Slopes soil unit is comprised of 85 percent Camarillo and similar soils, 10 percent Hueneme soils, three percent Pacheco soils, and two percent Mocho soils.

Hueneme Loamy Fine Sand, 0 to 2 Percent Slopes

The Hueneme Loamy Fine Sand, 0 to 2 Percent Slopes soil unit belongs to the Hueneme soil series. Hueneme soils are somewhat poorly drained, although many areas have been artificially drained. These soils are in nearly level alluvial plains and basins in stratified alluvium derived from alkaline sedimentary sources. The capacity of the most limiting layer in this soil unit to transmit water is moderately high to high. Depth to water table in this unit averages about 24 to 35 inches. Soils in this unit are considered nonsaline to very slightly saline and are not considered hydric. Within the BSA, the Hueneme loamy Fine Sand, 0 to 2 Percent Slopes soil unit is comprised of 95 percent Hueneme and similar soils; one percent Anacapa soils; one percent Metz soils; one percent Hueneme, loamy substratum soils; one percent Pico soils; and one percent Camarillo, sandy loam soils.

4.2 Hydrology

The project area is within the Mugu Lagoon subwatershed (HUC 180701030201), itself part of the greater Calleguas Creek watershed (HUC 18070103). Major tributaries to Calleguas Creek include Revolon Slough, Arroyo Las Posas, Arroyo Conejo, Conejo Creek, Arroyo Santa Rosa, and Arroyo Simi (Ventura County Public Works Agency Watershed Protection District, 2003). The Santa Susana Mountains, South Mountain, and Oak Ridge Mountains form the northern boundary of the watershed, and the Simi Hills and Santa Monica Mountains mark the southern boundary. The watershed, which drains 343 square miles in southern Ventura County and a small portion of western Los Angeles County, outlets into the Pacific Ocean through Mugu Lagoon, one of the few remaining significant saltwater wetland habitats in southern California (California Regional Water Quality Control Board, Los Angeles Region, 2002).

The Oxnard Plain, in which the BSA is situated, supports a large variety of agricultural fields that drain into ditches. These agricultural ditches either enter the Mugu Lagoon directly, through Calleguas Creek and its tributaries, or drain into tile drain systems which then discharge to drains or creeks. A general assessment of the agricultural drainages adjacent to Hueneme Road included visual surveys and documentation of drainage features. Physical characteristics of drainage features such as width, flow conditions, and vegetation within the features were noted. Locations of structures associated with drainages, such as culverts, were noted, photographed, and recorded using sub-meter GPS. Bed and bank measurements of the observed drainage features were estimated, and GPS coordinates of culverts were recorded. Eleven drainage features and one freshwater marsh (Cattail Marsh) were observed within the BSA.

Connectivity of the 11 drainage features in the BSA to a traditional navigable waterway was inferred using data from the literature review and field surveys as well as consultation with a hydrology engineer. The roadside drainages/ditches within the BSA convey flows to one of four culverts, which discharge into the

stormwater conveyance system (Kasraie Consulting, 2023). The four culverts within the BSA include one at Edison Drive which directs flow west towards Hueneme Road, one at Arnold Road which directs flow south towards Arnold Road, one at Olds Road which directs flow south, then west towards Arnold Road, and one east of Rice Road which directs flow to Mugu Drain.

The culvert at Edison Drive undergrounds beneath Edison Drive and appears to continue west, eventually connecting to the Oxnard Industrial Drain, which terminates in the Ormond Beach wetlands. The culverts at Arnold Road and Olds Road underground beneath Hueneme Road, daylighting south of Hueneme Road. From there, the drainage appears to connect to a mapped intermittent riverine system terminating at the Pacific Ocean. The culvert east of Rice Road, which connects to the Mugu Drain, eventually discharges into the western arm of Mugu Lagoon.

The Cattail Marsh observed north of Hueneme Road appeared to receive runoff from nearby agricultural fields and did not appear to convey flows.

Drainage Feature 1

Drainage Feature 1 is a box culvert west of East Farms, a private business at 1850 Hueneme Road, and south of Hueneme Road. The drainage flows north to south on Arnold Road. A pump was observed on Hueneme Road which pumps water south to a pipe and into Drainage Feature 1. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 1 likely does not convey relatively permanent flows.

Drainage Feature 2

Drainage Feature 2 is a concrete pipe culvert at the intersection south of Olds Road and Hueneme Road. This drainage feature appears to flow east to west for approximately 80 feet, before curving south into an agricultural field along a row of Lombardy poplars. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 2 likely does not convey relatively permanent flows.

Drainage Feature 3

Drainage Feature 3 is an unlined agricultural drainage near mile marker 266 adjacent to 3250 Hueneme Road and east of Rice Avenue. This drainage feature originates north of the BSA, traverses under Hueneme Road and daylights south of Hueneme Road, flows underground again within private property for approximately 30 feet south, then daylights again. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 3 likely does not convey relatively permanent flows.

Drainage Feature 4

Drainage Feature 4 is an unlined roadside drainage at the eastern end of the BSA, north of Hueneme Road, and flows east to west, parallel to Hueneme Road. This drainage feature connects to Drainage Feature 3. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 4 likely does not convey relatively permanent flows.

Drainage Feature 5

Drainage Feature 5 is an unlined roadside drainage that begins west of Rice Avenue, undergrounds below Rice Avenue, and continue to flow west to east parallel to Hueneme Road. Drainage 5 terminates where

it joins Drainage Feature 3. its purpose is to convey runoff from agricultural irrigation, Drainage Feature 5 likely does not convey relatively permanent flows.

Drainage Feature 6

Drainage Feature 6 is an unlined agricultural drainage located east of Rice Avenue and north of Hueneme Road. This drainage feature flows north to south and drains into Drainage Feature 5. Drainage Feature 6 is west of 3121 Hueneme Road. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 6 likely does not convey relatively permanent flows.

Drainage Feature 7

Drainage Feature 7 is an unlined agricultural drainage northeast of Casper Road and Hueneme Road. Drainage Feature 7 appears to flow east to west and terminates near Laubacher Berry Farms. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 7 likely does not convey relatively permanent flows.

Drainage Feature 8

Drainage Feature 8 is an unlined roadside drainage on the northeast corner of the Olds Road and Hueneme Road intersection. This drainage feature flows north to south and passes beneath Hueneme Road to connect with Drainage Feature 2 on the south side of Hueneme Road. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 8 likely does not convey relatively permanent flows.

Drainage Feature 9

Drainage Feature 9 is an unlined roadside drainage on the northwest corner of the Olds Road and Hueneme Road intersection. This drainage feature flows east to west and connects to Drainage Feature 1 north of Arnold Road. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 9 likely does not convey relatively permanent flows.

Drainage Feature 10

Drainage Feature 10 is an unlined agricultural drainage approximately 0.25 mile west of Drainage Feature 1. This drainage feature flows north to south. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 10 likely does not convey relatively permanent flows.

Drainage Feature 11

Drainage Feature 11 is an unlined roadside drainage northeast of the Edison Drive and Hueneme Road intersection, with flows running east to west. As its purpose is to convey runoff from agricultural irrigation, Drainage Feature 11 likely does not convey relatively permanent flows.

Cattail Marsh

There is a small Cattail Marsh just east of Teto's Produce stand at 1531 East Hueneme Road. A pipe was located east of this marsh that appears to contribute flows to the area. This feature is wholly constructed in uplands and would likely revert to upland if irrigation ceased.

4.3 Vegetation and Cover Classes

Vegetation within the BSA includes a mix of native and non-native species (see **Appendix B**). Six vegetation communities and 1 cover class were identified within the BSA (see **Figure 4,** Vegetation Communities and Cover Classes). Vegetation communities observed within the BSA were classified according to the CNPS Manual of California Vegetation and the National Vegetation Classification System, and include Cattail Marshes, Woody Agricultural Vegetation, Herbaceous Horticultural Crop, Row and Close Grain Crop, Tropical and Temperate Fruit Orchard, and Herbaceous and Woody Developed Vegetation (California Native Plant Society, 2023; Federal Geographic Data Committee, Vegetation Subcommittee, 2023). One cover class, Developed, was observed in the BSA. Each of these habitat types are described below.

Vegetation Communities

***Typha* (*Angustifolia*, *Domingensis*, *Latifolia*) Herbaceous Alliance (Cattail Marshes)**

In this alliance, narrow leaf cattail (*Typha angustifolia*), southern cattail (*Typha domingensis*) or broadleaf cattail is dominant or codominant in the herbaceous layer with redtop (*Agrostis stolonifera*), silverweed (*Potentilla anserina* ssp. *pacifica*), flatsedge (*Cyperus* spp.), saltgrass (*Distichlis spicata*), barnyard grass (*Echinochloa crus-galli*), spike rush (*Eleocharis macrostachya*), giant horsetail (*Equisetum telmateia*), rushes (*Juncus* spp.), least duckweed (*Lemna minuta*), perennial pepperweed (*Lepidium latifolium*), water parsley (*Oenanthe sarmentosa*), common knotweed (*Persicaria lapathifolia*), dotted knotweed (*Persicaria punctata*), common reed (*Phragmites australis*), chairmaker's bulrush (*Schoenoplectus americanus*), California bulrush (*Schoenoplectus californicus*), hybrid cattail (*Typha* × *glauca*) and cocklebur (*Xanthium strumarium*). Emergent trees may be present at low cover, including willows (*Salix* spp.). Herbs are generally less than five feet tall, and cover is intermittent to continuous. Within the BSA, the Cattail Marshes community is north of Hueneme Road, near 1531 East Hueneme Road.

Woody Agricultural Vegetation

Woody Agricultural Vegetation communities comprise agricultural crops dominated by shrub and tree vegetation, including orchards, vineyards, woody berry crops, intensive (often short-rotation) forest plantations, various agroforestry woody crops, and woody wetland crops, such as cranberries. Within the BSA, Woody Agricultural Vegetation is in the windbreaks along Hueneme Road and Casper Road.

Herbaceous Horticultural Crop

Herbaceous Horticultural Crop communities comprise agricultural vegetation, including horticultural crops (such as commercial flower operations). Within the BSA, the Herbaceous Horticultural Crop community is in A&C Nursery, north of Hueneme Road.

Row and Close Grain Crop

Row and Close Grain Crop communities comprise agricultural vegetation, including row crops, such as corn, soybeans, cotton, tobacco, sunflowers, a wide variety of vegetables, and some planted grain crops (annual rye, wheat). Within the BSA, the Row and Close Grain Crop community is along both sides of Hueneme Road.

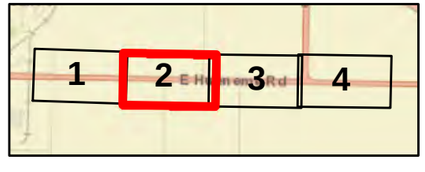
Biological Study Area

Cover Classes
- Bare Ground
- Developed

Vegetation Communities
- Row and Close Grain Crop
- Herbaceous Horticultural Crop
- Herbaceous and Woody Developed Vegetation
- Cattail Marsh

Trees
- Lombardy poplar
- Coral tree
- Mexican fan palm
- New Zealand Christmas tree
- Queen palm

FIGURE 4. VEGETATION COMMUNITIES AND COVER CLASSES
Hueneme Road Widening Project
Ventura County



Biological Study Area

Cover Classes

Developed

Vegetation Communities

Row and Close Grain Crop

Tropical and Temperate Fruit Orchard

Woody Agricultural Vegetation

Trees

Lombardy poplar

Coral tree

Mexican fan palm

New Zealand Christmas tree

Queen palm

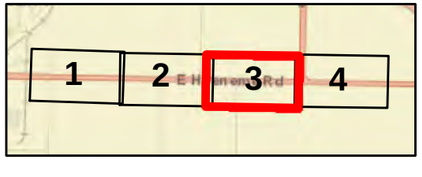
FIGURE 4. VEGETATION COMMUNITIES AND COVER CLASSES
Hueneme Road Widening Project
Ventura County

HUENEME ROAD

CASPER ROAD

0 50 100 200
Feet

N



Biological Study Area

Cover Classes

Developed

Vegetation Communities

Row and Close Grain Crop

Tropical and Temperate Fruit Orchard

Woody Agricultural Vegetation

Trees

Lombardy poplar

Coral tree

Mexican fan palm

New Zealand Christmas tree

Queen palm

FIGURE 4. VEGETATION COMMUNITIES AND COVER CLASSES
Hueneme Road Widening Project
Ventura County

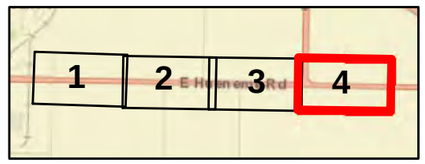
RICE AVENUE

HUENEME ROAD

ALLEY

0 50 100 200 Feet

N



Biological Study Area

Cover Classes

Developed

Vegetation Communities

Row and Close Grain Crop

Herbaceous and Woody Developed Vegetation

Trees

- Lombardy poplar
- Coral tree
- Mexican fan palm
- New Zealand Christmas tree
- Queen palm

FIGURE 4. VEGETATION COMMUNITIES AND COVER CLASSES
Hueneme Road Widening Project
Ventura County

Tropical and Temperate Fruit Orchard

Tropical and Temperate Fruit Orchard communities comprise agricultural crops dominated by shrub and tree vegetation, including orchards, vineyards, and woody berry crops. Within the BSA, the Tropical and Temperate Fruit Orchard is east of the intersection of Hueneme Road and Olds Road.

Herbaceous and Woody Developed Vegetation

Herbaceous and Woody Developed Vegetation communities comprise closely-cropped vegetation such as lawns, gardens, sports fields, and golf courses, as well as vegetation growing in urban materials, such as pavement, from dry lands to emergent wetlands. Tree canopy varies from zero to 100 percent (e.g., open to shaded lawns and gardens). Within the BSA, the Herbaceous and Woody Developed Vegetation community is west of Edison Road and surrounding some of the commercial and residential buildings along Hueneme Road.

Cover Classes

Developed

Developed areas are where human disturbance has resulted in permanent impacts on natural communities. These include paved areas, buildings, bridges, sidewalks, roadways, and other structures. Within the BSA, the Developed area includes Hueneme Road and the residences and businesses located along the length of Hueneme Road.

4.4 Wildlife Populations

Trees within the BSA could provide nesting habitat for migratory birds and roosting habitat for bats (see **Appendix C**). Additionally, the Cattail Marsh near 1531 East Hueneme Road could provide habitat for invertebrates and foraging habitat for birds and other wildlife. Wildlife species observed during the biological surveys include American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), barn swallow (*Hirundo rustica*), cliff swallow (*Petrochelidon pyrrhonota*), Anna's hummingbird (*Calypte anna*), lark sparrow (*Chondestes grammacus*), Lincoln's sparrow (*Melospiza lincolnii*), mourning dove (*Zenaida macroura*), mallard (*Anas platyrhynchos*), northern rough-winged swallow (*Stelgidopteryx serripennis*), Brewer's blackbird (*Euphagus cyanocephalus*), and brown-headed cowbird (*Molothrus ater*).

4.5 Regional Connectivity/Wildlife Movement Corridor Assessment

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. A functional wildlife corridor allows for ease of movement between habitat patches. Corridors are important in preventing habitat fragmentation. Habitat fragmentation is typically caused by human development and can isolate wildlife populations, which leads to a decrease in genetic diversity and increases the risk of extirpations. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife movement. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations.

According to CDFW's Areas of Conservation Emphasis - Terrestrial Connectivity dataset, the BSA is located

entirely within an area with limited connectivity opportunity (California Department of Fish and Wildlife, 2019). The agricultural land on the south side of Hueneme Road appears as though it could be used by wildlife to access the waterfront, however, in actuality access is blocked by the fences surrounding Naval Air Station Point Mugu and the Ormond Beach Generating Station. The agricultural land on the north side of Hueneme Road ultimately leads to wildlife movement barriers in the form of Tierra Vista neighborhood and Pacific Coast Highway. Thus, the BSA and the land surrounding the BSA does not function as a wildlife movement corridor nor as a hub of regional connectivity.

5.0 SENSITIVE RESOURCES WITH POTENTIAL TO BE IN THE BIOLOGICAL STUDY AREA

The following discussion describes the special-status plant and wildlife species with potential to be in the BSA based on their geographical range. Also discussed are habitats of relatively limited distribution or of value to wildlife. Determinations on whether special-status and other sensitive resources could be in the BSA are based on (1) a record reported in the CNDDB, CNPS, NMFS, and/or USFWS species lists, (2) the presence of suitable habitat, and (3) survey results.

5.1 Jurisdictional Resources

United States Army Corps of Engineers

The August 2023 Rule clarified that drainage ditches like the features present within the BSA, that are wholly constructed in uplands; not created from prior wetlands; not connected to other traditional navigable waters; do not convey 'relatively permanent' flows; artificially irrigated areas that would revert to uplands if artificial irrigation ceases; and/or constructed for the purposes of conveying irrigation water and recirculation of such waters are not likely to be waters of the U.S., subject to CWA Section 404 regulations. Therefore, the 11 drainages and Cattail Marsh in the BSA are not expected to fall under USACE jurisdiction as waters of the U.S. (see **Table 1**).

Table 1. Potential Jurisdictional Wetlands and Waters Approximated within the BSA

Regulatory Agency	Jurisdictional Wetlands within BSA (acres)	Jurisdictional Non-Wetland Waters within BSA (acres)	Total Jurisdiction within BSA (acres)
United States Army Corps of Engineers	-	-	-
Regional Water Quality Control Board	-	0.46	0.46
California Department of Fish and Wildlife	--	1.54	1.54

Regional Water Quality Control Board

According to the State Water Resources Control Board *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, an artificially constructed wetland less than an acre in size, the Cattail Marsh within the BSA is not considered a water of the state (State Water Resources Control Board, 2021). Therefore, the Cattail Marsh feature is not expected to fall under RWQCB jurisdiction. However, the 11 drainages do carry surface waters and are expected to fall under the jurisdiction of the RWQCB. Approximately 0.46 acres of waters within the

BSA may be under jurisdiction of the RWQCB (see **Table 1** and **Figure 5,** Potential Regional Water Quality Control Board Jurisdiction).

California Department of Fish and Wildlife

Approximately 1.54 acres of waters within the BSA may potentially be subject to CDFW jurisdiction (see **Table 1** and **Figure 6,** Potential California Department of Fish and Wildlife Jurisdiction), Potential California Department of Fish and Wildlife Jurisdiction). All drainages within the BSA, as well as the Cattail Marsh, supported vegetation at the time of the surveys. Additionally, the drainages had defined beds and banks. Therefore, it is likely that they would fall under CDFW jurisdiction.

5.2 Special-Status Natural Communities

According to CNDDB data, five special-status natural communities have potential to be in the BSA based on geographical distribution (see **Appendix A**). Of these five, one special-status community was observed in the BSA: Coastal and Valley Freshwater Marsh (Holland, 1986). Coastal and Valley Freshwater Marsh communities, as described in Holland, are equivalent to the Cattail Marsh community, as described in the CNPS California Manual of Vegetation. A full species list with a discussion on the potential for the natural communities to be in the BSA is provided in **Appendix D.**

5.3 Trees

The BSA is within the County's non-coastal zone, but not within an SRP overlay zone, and none of the species protected by the NCZO are present within the BSA. Therefore, no local tree protection regulations apply to trees within the BSA.

5.4 Special-Status Plant Species

According to the CNDDB, CNPS, and USFWS searches, 23 special-status plant species have the potential to be in the BSA based on recorded geographical distribution (see **Appendix A**). Special-status plant species either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. For the purposes of this report, special-status plant species are those plants listed, proposed for listing, or candidates for listing as Threatened or Endangered by USFWS under FESA; those listed or proposed for listing as Rare, Threatened, or Endangered by CDFW under the California Endangered Species Act (CESA); and plants on the CNPS Inventory of Rare and Endangered Vascular Plants with a California Rare Plant Rank (CRPR) of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants considered to be rare, threatened, or endangered species in California and elsewhere), 2A (plants presumed extirpated in California, but more common elsewhere), 2B (plants considered rare, threatened, or endangered in California, but more common elsewhere), and 3 (plants about which more information is needed to make a rarity determination).

Based on habitat requirements, no special-status plant species have potential to be in the BSA. No special-status plant species were observed during the field survey, which was conducted during the typical blooming period for the majority of the species. A full species list with a discussion on the potential for the special-status plant species to be in the BSA is provided in **Appendix D.**

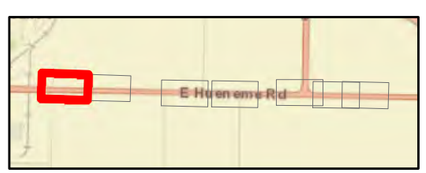
EDISON DRIVE

E HUENEME ROAD

HUENEME ROAD

Drainage 11

Drainage 11



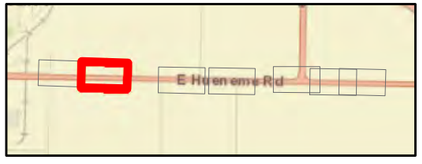
0 50 100 Feet

N

Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County



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Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

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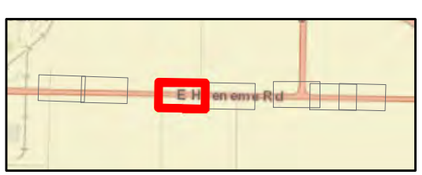
Hueneme Road Widening Project
Ventura County



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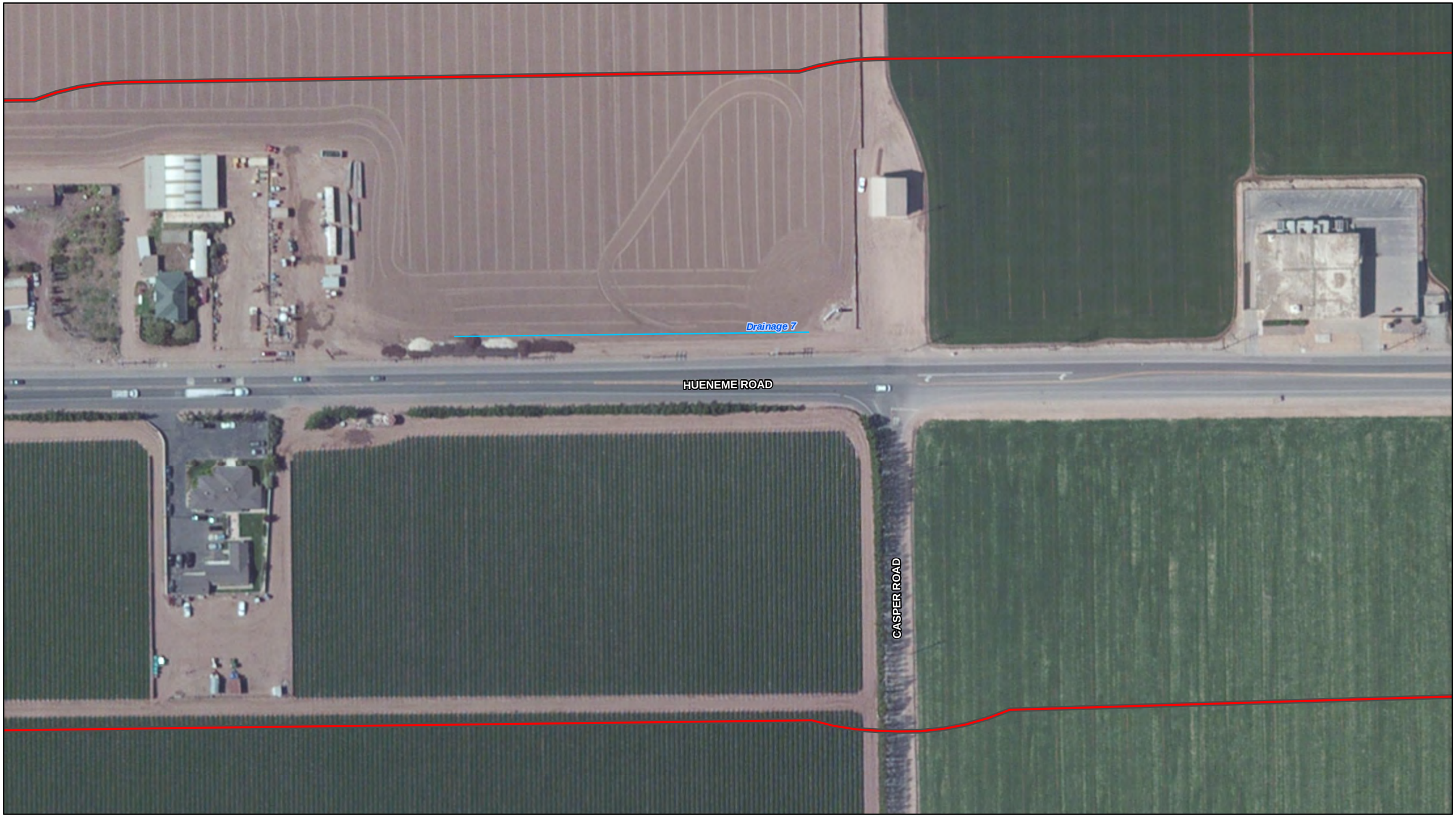
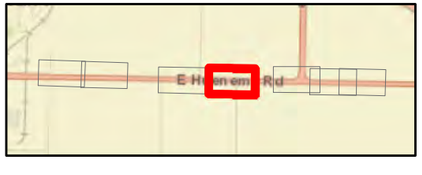
Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County





0 50 100 Feet

N

Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

RICE AVENUE

HUENEME ROAD

ALLEY

Drainage 5

Drainage 5

0 50 100 Feet

N

Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Drainage 6

Drainage 3

Drainage 5

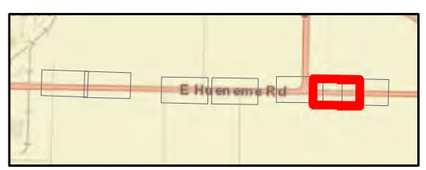
Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3

ALLEY



0 50 100 Feet

N

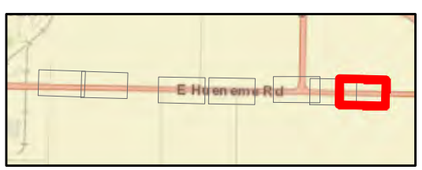
Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 6 of 7

Drainage 3
Drainage 4
Drainage 4
Drainage 4
HUENEME ROAD
Drainage 3
Drainage 3



0 50 100 Feet

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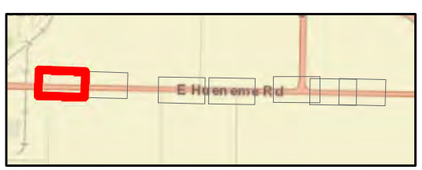
Biological Study Area

Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)

FIGURE 5. REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Projectl
Ventura County



0 50 100 Feet

N

Biological Study Area

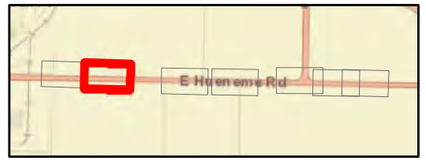
Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Cattail Marsh

Drainage 10

HUENEME ROAD



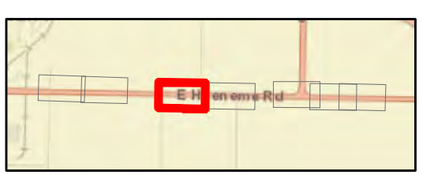
0 50 100 Feet

N

Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County



0 50 100 Feet

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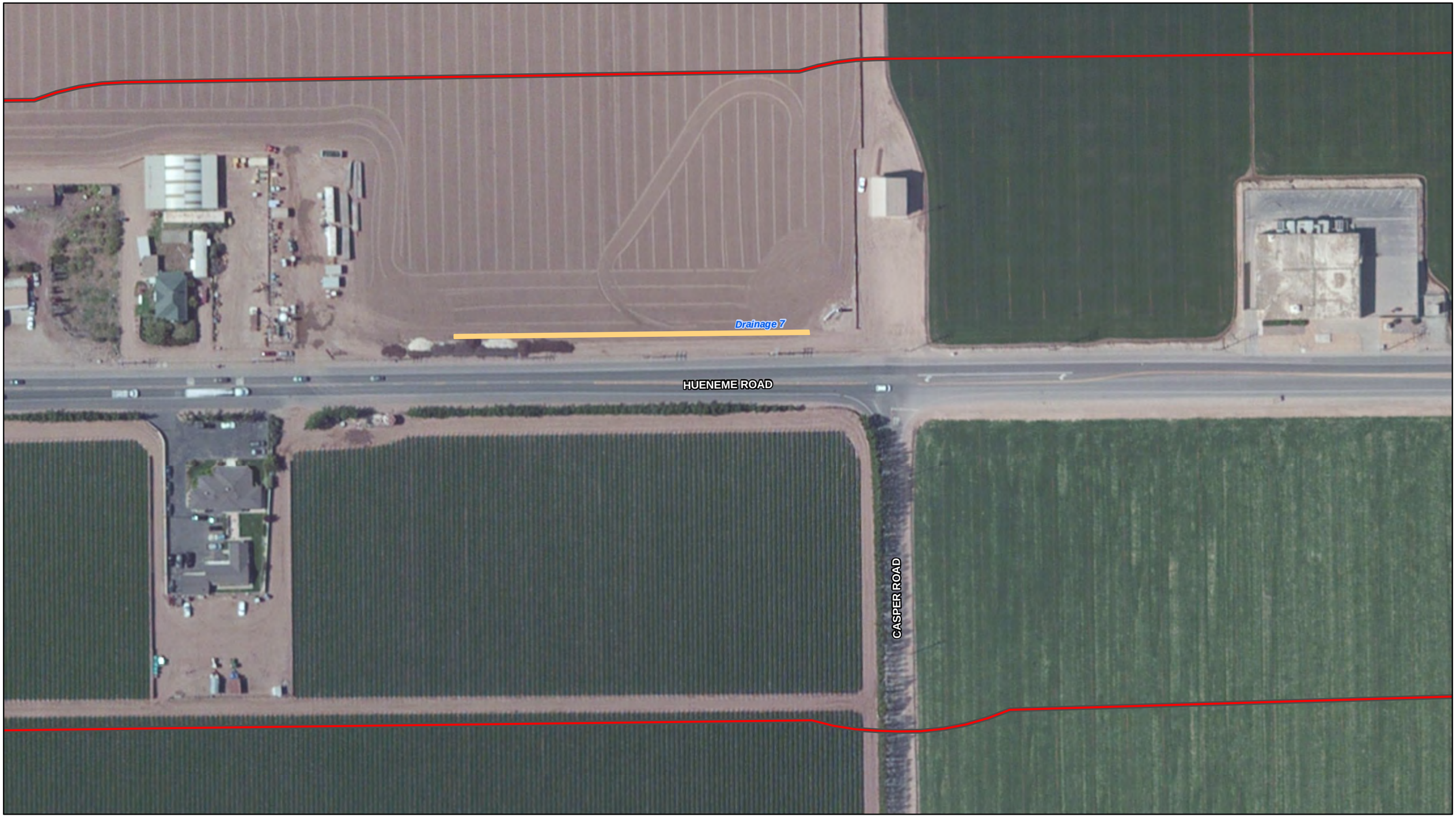
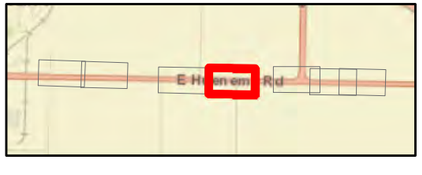
Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County





0 50 100 Feet

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Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

0 50 100 Feet

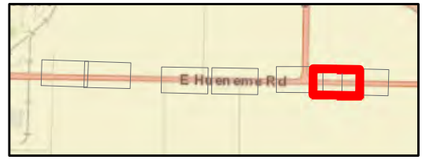
N

Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 5 of 7



0 50 100 Feet

N

Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Drainage 3

Drainage 4

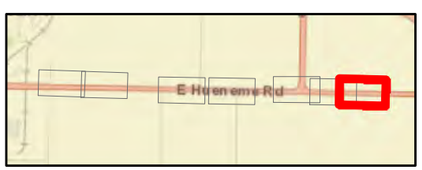
Drainage 4

Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3



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N

Biological Study Area

Potential CDFW Jurisdiction (1.54 acres)

FIGURE 6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 7 of 7

5.5 Special-Status Wildlife Species

According to the CNDDB, NMFS, and USFWS searches 49 special-status wildlife species have the potential to be in the BSA based on recorded geographical distribution (see **Appendix A**). Special-status species include 1) wildlife species listed, proposed for listing, or candidates for listing as threatened or endangered under FESA or CESA; 2) wildlife species considered "Species of Special Concern" in California; and/or 3) species classified as "Fully Protected" by the California Fish and Game Code.

Based on habitat requirements, nine special-status wildlife species have potential to be in the BSA, including American bumble bee (*Bombus pensylvanicus*), California legless lizard (*Anniellas* spp.), burrowing owl (*Athene cunicularia*), tricolored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), American peregrine falcon (*Falco peregrinus anatum*), pallid bat (*Antrozous pallidus*), and western mastiff bat (*Eumops perotis californicus*). None of these species were observed during the field surveys. A full species list with a discussion on the potential for the special-status wildlife to be in the BSA is provided in **Appendix D.**

6.0 PROJECT IMPACTS

6.1 Jurisdictional Resources

Based on survey results, there are 11 drainages and one Cattail Marsh that may be under the jurisdiction of the RWQCB, and/or the CDFW. The project would require relocation of two drainages, drainage pipe and drainage inlet relocation, and culvert extensions and relocation, which would result in direct impacts on these features. Construction materials, dust, and/or debris could also enter into flowing waters and temporarily impact water quality, resulting in indirect impacts. The project would be expected to result in approximately 0.16 acre of non-wetland waters potentially under RWQCB jurisdiction and approximately 0.64 acre potentially under CDFW jurisdiction (see **Figure 7,** Impacts on Potential Regional Water Quality Control Board Jurisdiction and **Figure 8,** Impacts on Potential California Department of Fish and Wildlife Jurisdiction).

Relocation of irrigation and water facilities would result in permanent impacts on approximately less than 0.01 acre of non-wetland waters potentially under RWQCB jurisdiction and approximately 0.02 acre potentially under CDFW jurisdiction. In addition, widening of the roadway would result in approximately 339,000 square feet of increased impervious surface area, which would result in additional surface runoff directed toward existing and relocated roadside drainages. However, with implementation of the proposed avoidance and minimization measures listed in Section 7.0, impacts on potential RWQCB and CDFW jurisdictional features would be substantially minimized.

6.2 Special-Status Natural Communities

Based on survey results, the Cattail Marsh community is present within the BSA. Project activities, including culvert extension, culvert relocation, irrigation facility relocation, grading, paving, staging, and construction access would result in approximately 0.02 acre of temporary impacts on this community (see **Figure 9**, Impacts on Special-Status Natural Communities), which overlaps with impacts on potential CDFW jurisdiction. Additionally, construction activities could result in the production of dust, which could travel onto adjacent areas and result in indirect impacts on special-status natural communities.

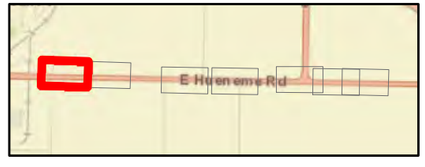
EDISON DRIVE

E HUENEME ROAD

HUENEME ROAD

Drainage 11

Drainage 11

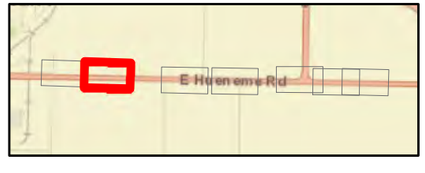


0 50 100 Feet

N

- Biological Study Area
- Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)
- Permanent Impacts on Potential Regional Water Quality Control Board Jurisdiction (<0.01 acre non-wetland waters)
- Temporary Impacts on Potential Regional Water Quality Control Board Jurisdiction (0.16 acre non-wetland waters)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County



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- Biological Study Area
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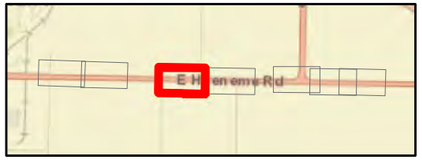
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 2 of 7



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N

- Biological Study Area
- Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)
- Permanent Impacts on Potential Regional Water Quality Control Board Jurisdiction (<0.01 acre non-wetland waters)
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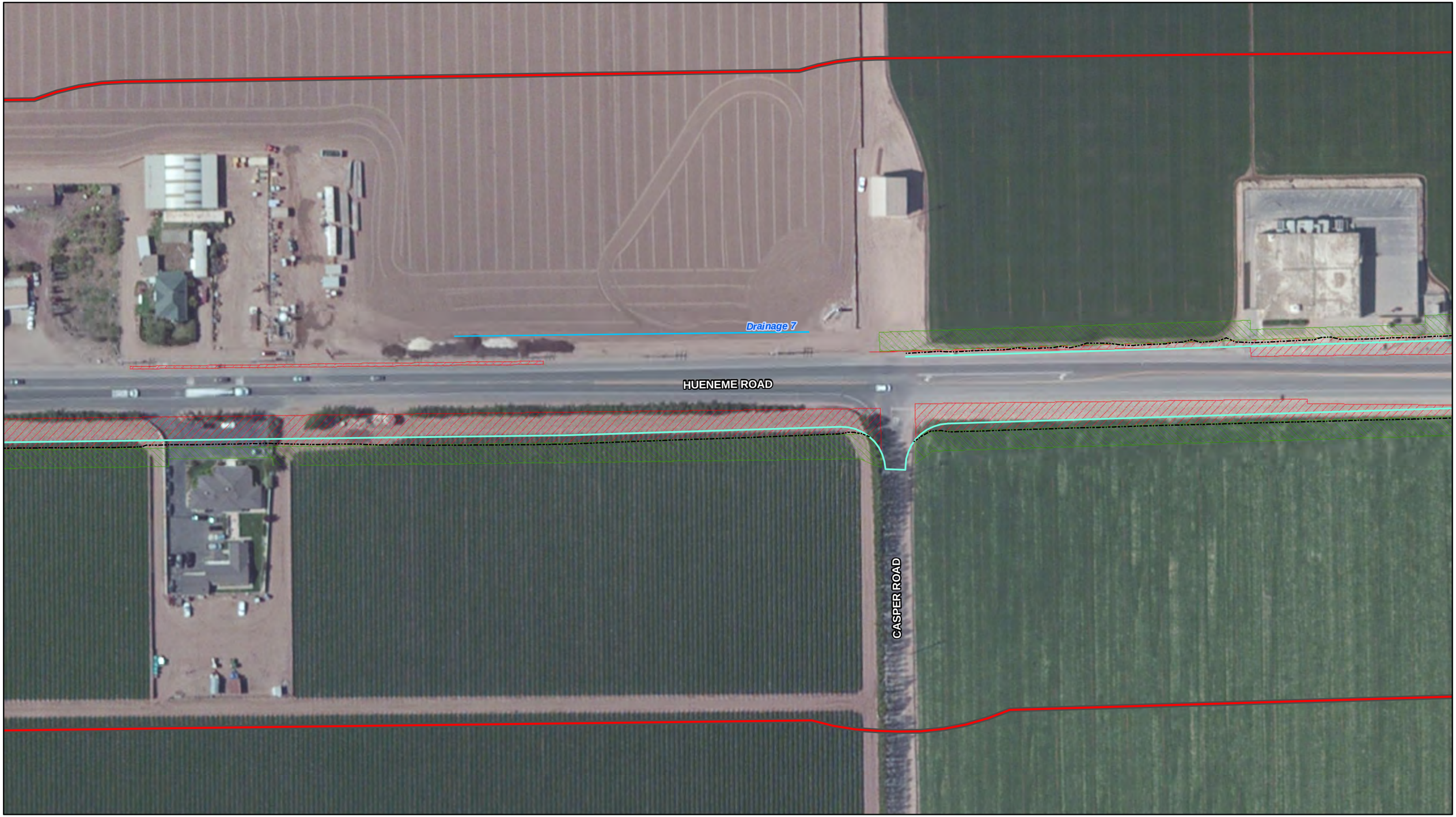
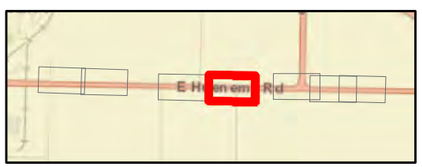
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County





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- Biological Study Area
- Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)
- Permanent Impacts on Potential Regional Water Quality Control Board Jurisdiction (<0.01 acre non-wetland waters)
- Temporary Impacts on Potential Regional Water Quality Control Board Jurisdiction (0.16 acre non-wetland waters)
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- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 4 of 7

RICE AVENUE

HUENEME ROAD

ALLEY

Drainage 5

Drainage 5

0 50 100 Feet

N

- Biological Study Area
- Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)
- Permanent Impacts on Potential Regional Water Quality Control Board Jurisdiction (<0.01 acre non-wetland waters)
- Temporary Impacts on Potential Regional Water Quality Control Board Jurisdiction (0.16 acre non-wetland waters)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 5 of 7

Drainage 6

Drainage 3

Drainage 5

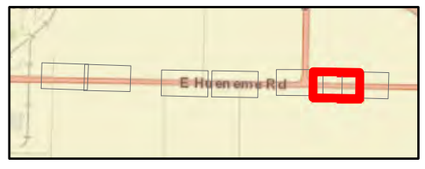
Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3

ALLEY



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- Biological Study Area
- Potential Regional Water Quality Control Board Jurisdiction (0.46 acre non-wetland waters)
- Permanent Impacts on Potential Regional Water Quality Control Board Jurisdiction (<0.01 acre non-wetland waters)
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- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 6 of 7

Drainage 3

Drainage 4

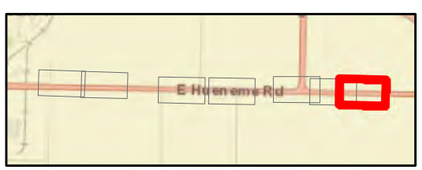
Drainage 4

Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3



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- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 7. IMPACTS ON POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 7 of 7

EDISON DRIVE

E HUENEME ROAD

HUENEME ROAD

Drainage 11

Drainage 11

0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
- Temporary Impacts on Potential CDFW Jurisdiction (0.64 acre)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

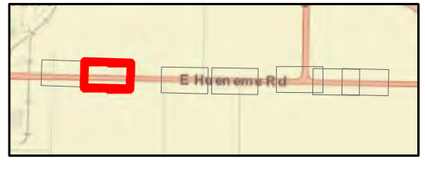
FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 1 of 7

Cattail Marsh

Drainage 10

HUENEME ROAD



0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
- Temporary Impacts on Potential CDFW Jurisdiction (0.64 acre)
- Edge of Pavement
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- Proposed ROW
- Proposed TCE

FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

HUENEME ROAD

OLDS ROAD

ARNOLD ROAD

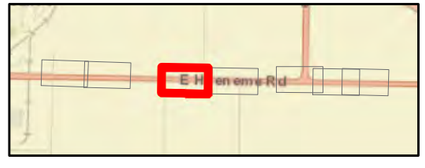
Drainage 1

Drainage 2

Drainage 8

Drainage 9

Drainage 9



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N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
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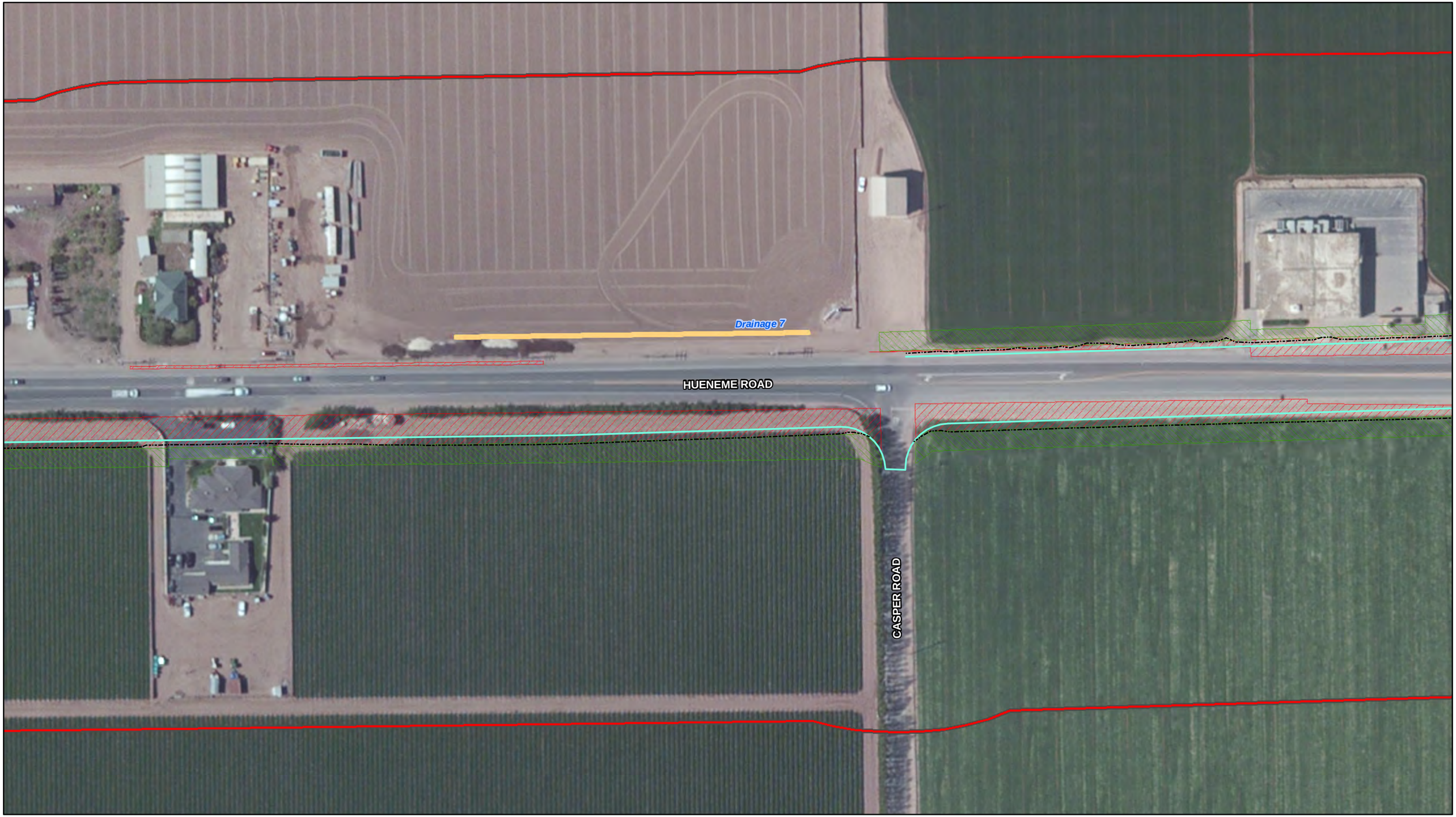
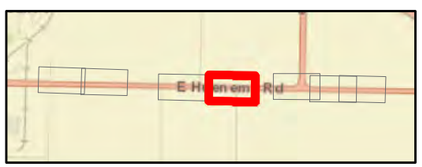
- Proposed TCE

FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 3 of 7





0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
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- Edge of Pavement
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- Proposed TCE

FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
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FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 5 of 7

Drainage 6

Drainage 3

Drainage 5

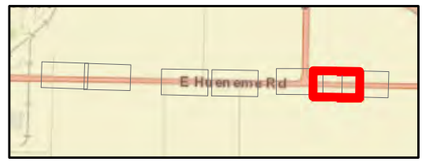
Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3

ALLEY



0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
- Temporary Impacts on Potential CDFW Jurisdiction (0.64 acre)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
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FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

Sheet 6 of 7

Drainage 3

Drainage 4

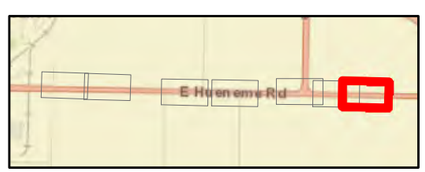
Drainage 4

Drainage 4

HUENEME ROAD

Drainage 3

Drainage 3



0 50 100 Feet

N

- Biological Study Area
- Potential CDFW Jurisdiction (2.00 acres)
- Permanent Impacts on Potential CDFW Jurisdiction (0.02 acre)
- Temporary Impacts on Potential CDFW Jurisdiction (0.64 acre)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 8. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Hueneme Road Widening Project
Ventura County

HUENEME ROAD

0 25 50 Feet

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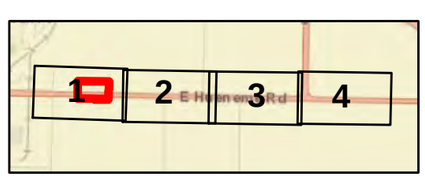


- Biological Study Area
- Cattail Marsh
- Potential Impacts on Cattail Marsh (0.02 acre)
- Edge of Pavement
- Grading Limits
- Drainage Improvements
- Proposed ROW
- Proposed TCE

FIGURE 9. POTENTIAL IMPACTS ON SPECIAL-STATUS NATURAL COMMUNITIES
Hueneme Road Widening Project
Ventura County

However, with the implementation of the proposed avoidance, minimization, and mitigation measures discussed in Section 7.0, significant impacts on special-status natural communities would be substantially minimized.

6.3 Trees

Approximately 329 non-native trees would be removed during project construction, most of which function as a windbreak between Olds Road and Casper Road on the south side of Hueneme Road (see **Figure 4**). However, none of the trees that would be impacted are protected under County regulations, and significant impacts are not expected. These trees are not expected to be replaced.

6.4 Special-Status Plant Species

No special status plants were observed during field surveys and are not expected to be present in the construction area. Therefore, the project would have no impacts on special-status plants.

6.5 Special-Status Wildlife Species

Invertebrates

No American bumble bees were observed during field surveys; however, the American bumble bee is known to nest in open farmland, mostly on the surface of the ground among tall grass. Construction could result in direct and indirect impacts on American bumble bee if individuals were to be present during construction. Ground-disturbing activities could result in disturbance, injury, or mortality, and widening of the roadway could result in reduction of nesting and foraging habitat for American bumble bee. Noise and vibration could also result in disturbance to foraging patterns and habitat for American bumble bee. However, with implementation of proposed avoidance and minimization measures listed in Section 7.0, significant impacts on American bumble bee are not anticipated.

Reptiles

Although no legless lizards were observed during the field surveys, the BSA contains loose, loamy, moist soils that legless lizards prefer. These soils are found in the agricultural fields that occasionally lie fallow, which could provide suitable habitat for legless lizards. Construction activities, including vegetation/tree removal and trimming, staging, pedestrian and vehicle movement, and grading could result in direct and indirect impacts on legless lizards if they were to be present in construction areas. Indirect impacts on legless lizards could result from increased construction noise and vibration. However, with implementation of avoidance and minimization measures discussed below, significant impacts on California legless lizards are not anticipated.

Mammals

Based on survey results, there is potential for pallid bat and western red bat to be in the BSA. Construction activities, including vegetation/tree removal and trimming, staging, pedestrian and vehicle movement, and grading could result in direct and indirect impacts on bats if they were to be roosting in trees to be removed during construction. Indirect impacts on bats may include roost abandonment resulting from increased construction noise and vibration. However, with implementation of avoidance and minimization measures discussed below, significant impacts on bats are not anticipated.

Birds and Raptors

Project construction could result in direct and indirect impacts on migratory birds and raptors if individuals were to be present during construction. The project would include removing approximately 329 trees at the southern shoulder of Hueneme Road, east of Olds Road and west of Casper Road; the northern shoulder of Hueneme Road at the Southland Sod Farms offices; and the northern shoulder of Hueneme Road near 3121 Hueneme Road. Tree and vegetation removal and/or trimming could result in disturbance, injury, or mortality on nesting and/or foraging migratory birds and raptors and reduce the available nesting and/or habitat. Noise and vibration could also result in disturbance and nest abandonment. However, with the implementation of the proposed avoidance and minimization measures listed in Section 7.0, significant impacts on migratory birds and raptors are not anticipated.

6.6 Regional Connectivity/Wildlife Movement Corridors

Neither the BSA nor the land surrounding the BSA currently function as wildlife movement corridors or as regional connectivity hubs. Therefore, the project is not expected to impact wildlife movement in the area.

7.0 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

7.1 Jurisdictional Resources

Avoidance and Minimization Measures

BIO-1. Work areas would be reduced to the maximum extent feasible, and staging areas would be located a minimum of 25 feet from jurisdictional features.

BIO-2. Prior to the initiation of any work, including installation of Environmentally Sensitive Area (ESA) fencing or clearing and grubbing activities, a qualified biologist would conduct an environmental worker awareness training for all project personnel. The training would include a summary of sensitive habitats and special-status species with the potential to be within the construction area, required avoidance and minimization measures, and permitting conditions associated with biological resources.

BIO-3. Best management practices (BMP), such as silt fencing, fiber rolls, straw bales, or other measures would be implemented during construction to minimize dust, dirt, and construction debris from entering the slough and/or leaving the construction area. Silt fencing would be placed along the boundary of the work area and between the temporary impact area and the slough, and in other areas as appropriate to minimize impacts on the slough.

BIO-4. Appropriate hazardous material BMPs would be implemented to reduce the potential for chemical spills or contaminant releases into the slough including any non-stormwater discharge.

BIO-5. All equipment refueling and maintenance would be conducted at least 100 feet away from jurisdictional features. In addition, construction vehicles and equipment would be checked daily for fluid and fuel leaks, and drip pans would be placed under all equipment that is parked and not in operation. Any leaking vehicle or equipment would not be operated in the project area until repaired. All workers would be informed of the importance of preventing spills and the

appropriate measures to take should a spill happen.

BIO-6. Any temporary erosion control implemented during construction would be completed using non-invasive species. At project completion, all temporarily disturbed areas would be recontoured to pre-construction conditions.

7.2 Special-Status Natural Communities

Avoidance and Minimization Measures

BIO-7. Pesticides, herbicides, and/or rodenticides would not be used as part of the project.

BIO-8. Prior to construction near the Coastal and Valley Freshwater Marsh (Cattail Marsh), high visibility Environmentally Sensitive Area (ESA) protective fencing or flagging would be installed at the limits of construction to protect adjacent resources.

7.3 Trees

Avoidance and Minimization Measures

The project would result in permanent impacts on approximately 329 trees within the BSA. However, the trees are not special-status, nor do they require protection under NCZO. Therefore, no avoidance and minimization measures are required.

7.4 Special-Status Plant Species

Avoidance and Minimization Measures

The project would not result in impacts on special-status plants; therefore, no avoidance and minimization measures are required.

7.5 Special-Status Wildlife Species

Avoidance and Minimization Measures

General Measures

BIO-9. Vegetation removal and excavation would be reduced to the extent feasible.

BIO-10. Pre-construction wildlife surveys would be conducted within 48 hours prior to start of construction by a qualified biologist.

BIO-11. No pets would be allowed in the construction area, to avoid and minimize the potential for harassment, injury, and death of wildlife.

BIO-12. Nighttime construction would only be authorized on a case-by-case basis in coordination with a qualified biologist.

BIO-13. If special-status species are found in the construction areas, work would be suspended until appropriate measures are developed and implemented under the direction of a qualified biologist, and under consultation with regulatory agencies if warranted, to ensure the species are not harmed.

BIO-14. All project-related vehicle traffic would be restricted to established roads and construction areas, which include equipment staging, storage, parking, and stockpile areas.

BIO-15. To prevent attracting wildlife to the construction area, all food trash would be kept in wildlife-proof containers and any non-natural food sources would not be left unattended.

Invertebrates

BIO-16. Within 48 hours prior to construction, a qualified biologist would survey all areas where vegetation removal would be conducted to confirm the presence/absence of the special-status invertebrates.

BIO-17. If a special-status invertebrate is identified within the BSA, areas temporarily impacted during construction would be restored using native species using one or more of the food plant genera, if appropriate for the region.

Reptiles

BIO-18. To prevent inadvertent entrapment of the special-status reptiles species or other animals during construction, all excavated, steep-walled holes or trenches more than six inches deep would be provided with one or more escape ramps constructed of earthen fill or wooden planks. Before such holes or trenches are filled, they would be thoroughly inspected for trapped animals by a qualified biologist.

BIO-19. A qualified biologist would complete pre-construction surveys no more than 48 hours prior to construction to determine the presence or absence of special-status reptile species in the project area. Surveys would be repeated if construction activities are suspended for five days or more. If these species are identified onsite, appropriate measures would be developed and implemented to avoid impacts on these wildlife species, in consultation with appropriate resource agencies as applicable. Measures may include relocating individuals to outside the project area, limiting construction within the project area to avoid impacting these species, or other measures as determined by a qualified biologist in coordination with CDFW.

Mammals

BIO-20. A qualified biologist would complete pre-construction surveys no more than 48 hours prior to construction to determine the presence or absence of special-status mammal species in the project area. Surveys would be repeated if construction activities are suspended for five days or more. If these species are identified onsite, appropriate measures would be developed and implemented to avoid impacts on these wildlife species, in consultation with appropriate resource agencies as applicable. Measures may include relocating individuals to outside the project area, limiting construction within the project area to avoid impacting these species, or other measures as determined by a qualified biologist in coordination with CDFW.

BIO-21. Tree removal and trimming, if any, would be conducted outside of the recognized bat maternity season (approximately April 1 through September 15), and non-active season (November 1 through February 28) season for bats where feasible.

BIO-22. Prior to construction, a qualified bat biologist would conduct a habitat assessment within the project area. Any trees that are determined to provide potentially suitable habitat would be marked "habitat trees" by the qualified biologist.

BIO-23. During the summer months (June 1 through August 31) prior to construction, visual and acoustic surveys would be conducted for at least two nights at all identified roosting habitat to assess the presence of roosting bats. If presence of a roost is detected, a count and species analysis would be completed to help assess the type of colony and usage.

BIO-24. If the presence or absence of bats cannot be confirmed in potential roosting habitat, a qualified biologist would be onsite during tree removal/trimming or disturbance of this area. If the biologist determines that bats are being disturbed during this work, work would be suspended until bats have left the vicinity on their own or can be safely excluded under direction of the biologist. Work would resume only once all bats have left the site and/or approval to resume work is given by a qualified biologist.

BIO-25. No less than a month prior to construction, and outside of the recognized bat maternity and inactive seasons (September 15-October 31), bats would be safely evicted from roosts impacted by the project under the direction of a qualified biologist. Exclusionary devices would be installed if feasible on the bridge and in trees to prevent bats from returning and roosting in these areas. Roosts that would not be impacted by the project would be left undisturbed.

BIO-26. All removal of trees with potential bat habitat would be conducted using a 2-step process over two consecutive days under the supervision of a qualified biologist. On the first day, any trees that do not contain crevice or cavity roosting habitat, as determined by a qualified biologist, would be trimmed or removed (only if necessary for project construction). In addition, limited trimming of trees (branches and small limbs with no potential roosting features) would be completed. Construction crews would only use hand tools (i.e. chainsaws or similar). On the calendar day immediately following the trimming, all of trees that were previously trimmed would be removed (only if necessary for project construction).

BIO-27. If a maternal colony of bats is found, no work would be conducted within 100 feet of the maternal roosting site until the maternal season is finished or the bats have left the site, or as otherwise directed by a qualified biologist. The site would be designated as a sensitive area and protected as such until the bats have left the site. No activities would be authorized adjacent to the roosting site. Combustion equipment, such as generators, pumps, and vehicles, would not be parked nor operated under or adjacent to the roosting site. Construction personnel would not be authorized to enter areas beneath the colony, especially during the evening exodus (typically between 15 minutes prior to sunset and one hour following sunset).

Birds and Raptors

BIO-28. Tree removal would be avoided during the breeding season (February 15 through August 1).

BIO-29. If trimming or removal of vegetation and/or initial ground disturbance must be conducted during the nesting season, nesting bird surveys would be completed within 500 feet of the construction

area (500 feet for raptors and 100 feet for other birds), as feasible, by a qualified biologist no more than 72 hours days prior to trimming or ground disturbance activities. Surveys would be repeated if construction activities are suspended for 14 days or more.

BIO-30. If nesting birds are found within 500 feet of the construction area, appropriate buffers (typically 100 feet for birds and 500 feet for raptors) consisting of orange flagging/fencing or similar would be installed and maintained until nesting activity has ended, as determined in coordination with the surveying biologist and regulatory agencies, as appropriate.

BIO-31. Pre-construction burrowing owl surveys will be conducted by a qualified biologist in accordance with the most current CDFW survey requirements and methodologies.

8.0 CONCLUSIONS

The project could result in direct and indirect impacts on waters potentially under the jurisdiction of USACE, RWQCB, and CDFW and special-status wildlife species. However, with implementation of avoidance, minimization, and mitigation measures listed above in Section 7.0, impacts would be substantially minimized and are not expected to be significant.

Because the project would not be expected to result in any effects on federally listed wildlife species, consultation with the USFWS under the Federal Endangered Species Act is not required. Because the project would not be expected to result in take of any state-listed species, consultation with CDFW under the California Endangered Species Act is not required.

The determination of potential agency jurisdiction within the drainage ditches in the BSA is preliminary, and the USACE, RWQCB, and CDFW will have the ultimate authority to make the final determinations regarding these areas. Additional consultation with these agencies regarding potential regulatory oversight or exemption from oversight will be required prior to construction. If it is determined that these drainages fall within the jurisdiction of the USACE, RWQCB, and/or CDFW, the project may require regulatory permits, including a Clean Water Act Section 404 Nationwide Permit Authorization, Clean Water Act Section 401 Water Quality Certification, Porter-Cologne Act Waste Discharge Requirements, and/or a Fish and Game Code Section 1602 Streambed Alteration Agreement.

9.0 REFERENCES

California Department of Fish and Wildlife. (2019, 08 21). *Terrestrial Connectivity - ACE [ds2734]*. Retrieved September 11, 2023, from California Department of Fish and Wildlife Geographic Information Systems (GIS) Services: https://map.dfg.ca.gov/metadata/ds2734.html

California Department of Fish and Wildlife. (2023a, August 7). *California Natural Diversity Database (CNDDB)*. Retrieved August 7, 2023, from California Natural Diversity Database: https://www.wildlife.ca.gov/data/cnddb/maps-and-data

California Department of Fish and Wildlife. (2023b, February 14). *Biogeographic Information and Observation System*. Retrieved October 31, 2018, from California Department of Fish and Wildlife: https://www.wildlife.ca.gov/Data/BIOS

California Department of Fish and Wildlife. (2023b, September 11). *Biogeographic Information and Observation System (BIOS)*. Retrieved September 11, 2023, from BIOS: https://wildlife.ca.gov/Data/BIOS

California Native Plant Society. (2023, July 27). *A Manual of California Vegetation*. Retrieved July 2023, 2023, from Vegetation CNPS: https://vegetation.cnps.org

California Native Plant Society. (2023a, January 18). *Inventory of Rare and Endangered Plants of California (online edition , v8-03 0.45)*. Retrieved January 18, 2023, from California Native Plant Society: www.rareplants.cnps.org/

California Regional Water Quality Control Board, Los Angeles Region. (2002). *Tissue, Sediment and Benthic Infauna Data Revolon Slough Main Branch: Mugu Lagoon to Central Avenue.* Retrieved September 11, 2023, from https://www.waterboards.ca.gov/losangeles/water_issues/programs/303d/2002/factsheet/revolon%20slough%20main%20branch-fact%20sheet.pdf

County of Ventura Resource Management Agency. (2010, November). *County of Ventura, Coastal and Non-Coastal Zones.* Retrieved September 28, 2023, from County of Ventura Resource Management Agency: https://docs.vcrma.org/images/pdf/planning/maps/Coastal-vs-Non-Coastal-Zone-Map.pdf

County of Ventura Resource Management Agency. (2010, April 6). *Resource Protection Map.* Retrieved September 27, 2023, from County of Ventura Resource Management Agency: https://docs.vcrma.org/images/pdf/planning/tree-permits/Resource_Protection_Map_South.pdf

Federal Geographic Data Committee, Vegetation Subcommittee. (2023, October 4). USNVC (United States National Vegetation Classification) Database Version 2.04. Washington D.C. Retrieved October 4, 2023, from https://usnvc.org/explore-classification/

Holland, R. F. (1986). *Preliminary Descriptions of the Terrestrial Natural Communities of California.* Sacramento, California: California Department of Fish and Game. Retrieved September 11, 2023, from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=75893

Kasraie Consulting. (2023). *Hueneme Road Widening - Phase 1 Hydrology Study.* Retrieved May 30, 2023

Leopold, L. B. (1994). *A View of the River.* Cambridge, MA: Harvard University Press.

National Oceanic and Atmospheric Administration. (2022). *Global Summary of the Year.* Retrieved September 11, 2023, from National Centers for Environmental Information: Climate Data Online: https://www.ncei.noaa.gov/maps/annual/

National Oceanic and Atmospheric Administration. (2023, October 4). NOAA Fisheries Species List: Hueneme Road Widening Project. Retrieved October 4, 2023

Natural Resources Conservation Service. (2023, January 5). *Custom Soil Report for the Western Riverside Area, California.* Retrieved from Web Soil Survey: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Rosgen, D. L. (1996). *Applied River Morphology.* Pagosa Springs, CO: Wildland Hydrology Books.

State Water Resources Control Board. (2021, April 6). State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

United States Army Corps of Engineers. (1987). *Corps of Engineers Wetlands Delineation Manual.* Environmental Laboratory. Vicksburg, MS: U.S. Army Corps of Engineers Waterways Experiment Station. Retrieved from US Army Corps of Engineers: http://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf

United States Army Corps of Engineers. (2008a). *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).* Environmental Laboratory. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Retrieved from https://usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7627

United States Department of Agriculture Natural Resources Conservation Service. (2023, September 12). *Custom Soil Resource Report for Ventura Area, California. Hueneme Road BSA.* Retrieved September 12, 2023, from Web Soil Survey: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

United States Fish and Wildlife. (2023a, September 26). *Critical Habitat for Threatened & Endangered Species [USFWS]*. Retrieved September 27, 2023, from ECOS: Environmental Conservation Online System: https://ecos.fws.gov/ecp/report/table/critical-habitat.html

United States Fish and Wildlife Service. (2013, December 2). *Migratory Bird Treaty Act Protected Species (10.13 List)*. Retrieved November 2, 2018, from U.S. Fish and Wildlife Service Migratory Bird Program: https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php

United States Fish and Wildlife Service. (2018, September 26). *Birds Protected*. Retrieved November 2, 2018, from Migratory Bird Treaty Act: https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php

United States Fish and Wildlife Service. (2023a). *Information for Planning and Consultation.* Carlsbad, CA: Carlsbad Fish and Wildlife Office. Retrieved October 4, 2023, from Environmental Conservation Online System: https:// ecos.fws.gov/ipac/location/index

United States Fish and Wildlife Service. (2023c, January 20). *National Wetlands Inventory Surface Waters and Wetlands.* Retrieved January 20, 2023, from National Wetlands Inventory Wetlands Mapper: https://www.fws.gov/wetlands/data/Mapper.html

United States Fish and Wildlife Services. (2023b, January 5). *National Wetlands Inventory.* Retrieved January 5, 2023, from Wetlands Mapper: https://www.fws.gov/wetlands/data/Mapper.html

Ventura County Planning Division. (2023, July 25). Ventura County Non-Coastal Zoning Ordinance. *Division 8, Chapter 1 of the Ventura County Ordinance Code*. Ventura, California. Retrieved September 27, 2023, from https://vcrma.org/docs/images/pdf/planning/ordinances/VCNCZO_Current.pdf

Ventura County Public Works Agency Watershed Protection District. (2003). *Calleguas Creek Watershed Hydrology Study Present Condition.* Retrieved September 11, 2023, from https://s29422.pcdn.co/wp-content/uploads/2021/01/CC_Hydrology_Present_VCWPD.pdf

APPENDIX A

CNDDB, NMFS, AND USFWS SPECIES LISTS

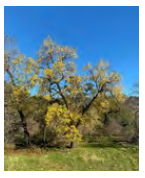
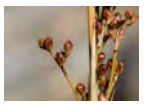
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	PDAST20095	None	None	G5T1T2	S1	1B.1
Chaetodipus californicus femoralis Dulzura pocket mouse	AMAFD05021	None	None	G5T3	S3	SSC
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya	PDCRA04051	None	None	G3T2	S2	1B.1
Dudleya verityi Verity's dudleya	PDCRA040U0	Threatened	None	G1	S1	1B.1
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriogonum crocatum conejo buckwheat	PDPGN081G0	None	Rare	G1	S1	1B.2
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	AFCPA03011	Endangered	Endangered	G5T1	S1	FP
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Helminthoglypta traskii traskii Trask shoulderband	IMGASC2473	None	None	G1G2T1	S2S3	
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Malacothrix similis Mexican malacothrix	PDAST660D0	None	None	G2G3	SH	2A
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T2T3	S2	SSC
Monardella hypoleuca ssp. hypoleuca white-veined monardella	PDLAM180A5	None	None	G4T3	S3	1B.3
Monardella sinuata ssp. gerryi Gerry's curly-leaved monardella	PDLAM18163	None	None	G3T1	S1	1B.1
Navarretia ojaiensis Ojai navarretia	PDPLM0C130	None	None	G2	S2	1B.1
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Panoquina errans wandering (=saltmarsh) skipper	IILEP84030	None	None	G4G5	S2	
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Rallus obsoletus levipes light-footed Ridgway's rail	ABNME05014	Endangered	Endangered	G3T1T2	S1	FP
Rana boylii pop. 6 foothill yellow-legged frog - south coast DPS	AAABH01056	Proposed Endangered	Endangered	G3T1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern California Coastal Lagoon Southern California Coastal Lagoon	CALE1220CA	None	None	GNR	SNR	
Southern California Steelhead Stream Southern California Steelhead Stream	CARE2310CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Riparian Scrub Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Texosporium sancti-jacobi woven-spored lichen	NLTEST7980	None	None	G3	S2	3
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Thamnophis sirtalis pop. 1 south coast gartersnake	ARADB3613F	None	None	G5T1T2	S1S2	SSC
Trimerotropis occidentiloides Santa Monica grasshopper	IIORT36300	None	None	G2	S2	
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 82

Calochortus clavatus var. *gracilis*	slender mariposa-lily	Liliaceae	perennial bulbiferous herb	Mar-Jun(Nov)	None	None	G4T2T3	S2S3	1B.2	Yes	1994-01-01	No Photo Available
Calochortus fimbriatus	late-flowered mariposa-lily	Liliaceae	perennial bulbiferous herb	Jun-Aug	None	None	G3	S3	1B.3	Yes	1994-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Calystegia peirsonii	Peirson's morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	None	None	G4	S4	4.2	Yes	1974-01-01	No Photo Available
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	Asteraceae	annual herb	Jan-Aug	None	None	G5T1T2	S1	1B.1		2001-01-01	No Photo Available
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2		1974-01-01	No Photo Available
Cistanthe maritima	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2		1980-01-01	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Corethrogyne leucophylla	branching beach aster	Asteraceae	perennial herb	May-Dec	None	None	G3Q	S3	3.2	Yes	1974-01-01	No Photo Available
Dichondra occidentalis	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2		1974-01-01	No Photo Available
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3T2	S2	1B.1		1974-01-01	 © 2011 Aaron E. Sims
Dudleya verityi	Verity's dudleya	Crassulaceae	perennial herb	May-Jun	FT	None	G1	S1	1B.1	Yes	1984-01-01	No Photo Available
Eleocharis parvula	small spikerush	Cyperaceae	perennial herb	(Apr)Jun-Aug(Sep)	None	None	G5	S3	4.3		1980-01-01	 ©2018 Ron Vanderhoff
Eriogonum crocatum	conejo buckwheat	Polygonaceae	perennial herb	Apr-Jul	None	CR	G1	S1	1B.2	Yes	1974-01-01	No Photo Available

Erysimum insulare	island wallflower	Brassicaceae	perennial herb	Mar-Jul	None	None	G3	S3	1B.3	Yes	1974-01-01	No Photo Available
Erysimum suffrutescens	suffrutescent wallflower	Brassicaceae	perennial herb	Jan-Jul(Aug)	None	None	G3	S3	4.2	Yes	1980-01-01	No Photo Available
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01	 © 2019 Belinda Lo
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Lepechinia fragrans	fragrant pitcher sage	Lamiaceae	perennial shrub	Mar-Oct	None	None	G3	S3	4.2	Yes	1974-01-01	 © 2014 Debra L. Cook
Malacothrix similis	Mexican malacothrix	Asteraceae	annual herb	Apr-May	None	None	G2G3	SH	2A		2007-04-05	No Photo Available
Monardella hypoleuca ssp. *hypoleuca*	white-veined monardella	Lamiaceae	perennial herb	(Apr)May-Aug(Sep-Dec)	None	None	G4T3	S3	1B.3	Yes	2013-01-03	No Photo Available
Monardella sinuata ssp. *gerryi*	Gerry's curly-leaved monardella	Lamiaceae	annual herb	Apr-Jun	None	None	G3T1	S1	1B.1	Yes	2015-08-31	No Photo Available
Navarretia ojaiensis	Ojai navarretia	Polemoniaceae	annual herb	May-Jul	None	None	G2	S2	1B.1	Yes	2008-05-15	No Photo Available
Polygala cornuta var. *fishiae*	Fish's milkwort	Polygalaceae	perennial deciduous shrub	May-Aug	None	None	G5T4	S4	4.3		1974-01-01	No Photo Available
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	No Photo Available
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2		1994-01-01	No Photo Available
Suaeda californica	California seablite	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	FE	None	G1	S1	1B.1	Yes	1988-01-01	No Photo Available

Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2	1984-01-01	No Photo Available
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2	1994-01-01	No Photo Available
Texosporium sancti-jacobi	woven-spored lichen	Caliciaceae	crustose lichen (terricolous)		None	None	G3	S2	3	2014-03-01	 ©2021 Scot Loring

Showing 1 to 41 of 41 entries

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NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat - X
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - X
Range White Abalone (E) - X

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **Camarillo**

Quad Number **34119-B1**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

CONSULTING GPA

VICTORIA MASJUAN
Associate Biologist | victoria@gpaconsulting-us.com
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El Segundo, CA 90245
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El Segundo • Los Angeles • Sacramento

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958
Email Address: FW8VenturaSection7@FWS.Gov

In Reply Refer To: October 04, 2023
Project Code: 2024-0001603
Project Name: Hueneme Road Widening Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

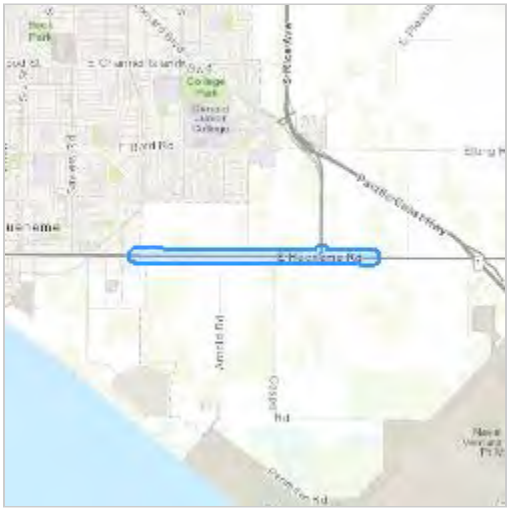
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

PROJECT SUMMARY

Project Code: 2024-0001603
Project Name: Hueneme Road Widening Project
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The County of Ventura proposes to widen an approximate 1.93-mile portion of Hueneme Road, between Edison Drive and Rice Avenue, from a two-lane roadway to a 4-lane roadway with buffered bike lanes, a paved median, and turn lanes. The purpose of this project is to improve vehicle and bicycle travel and safety between the Cities of Oxnard and Camarillo. The project is listed in the Southern California Association of Governments (SCAG) 2023 Federal Transportation Improvement Program (FTIP) for the fiscal years 2022/2023-2025/2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.14738785,-119.14775426445732,14z



Counties: Ventura County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 18 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Light-footed Clapper Rail *Rallus longirostris levipes* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6035	Endangered
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

FISHES

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

FLOWERING PLANTS

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

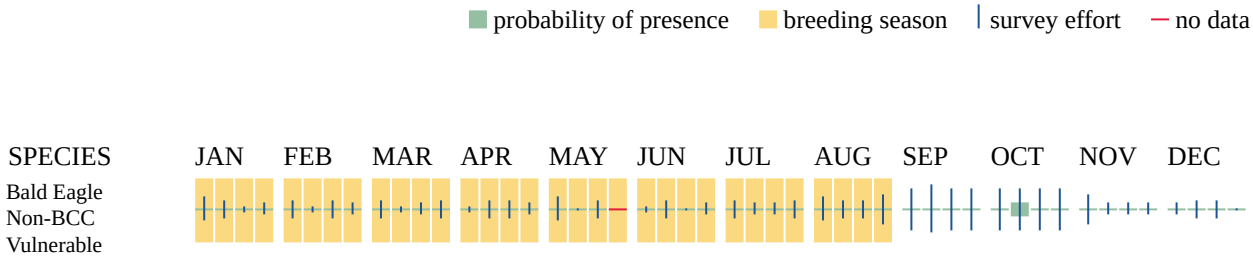
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch *Carduelis lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker *Picoides nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15

NAME	BREEDING SEASON
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird *Agelaius tricolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

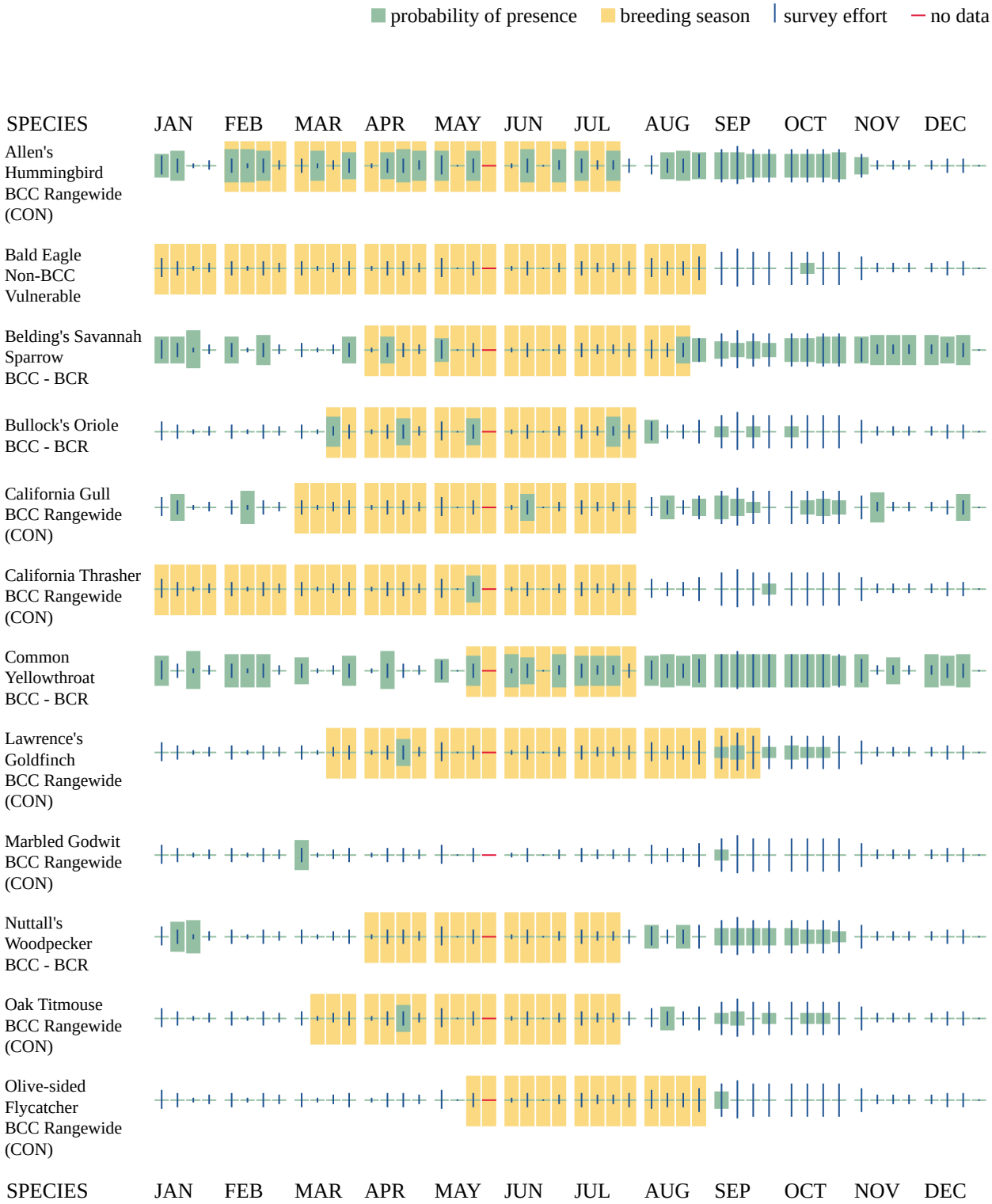
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

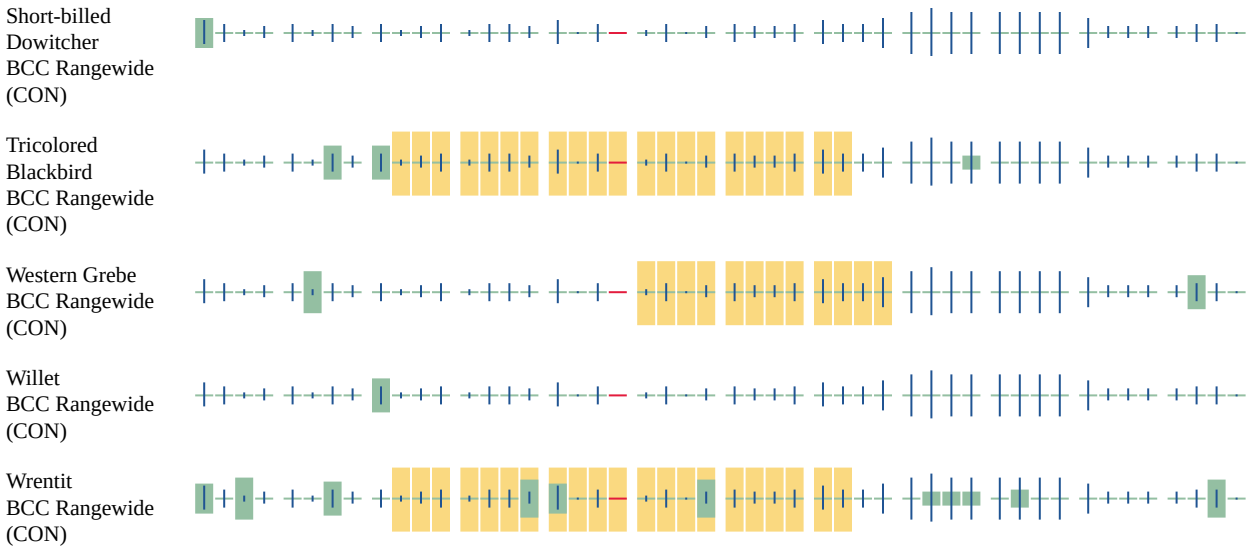
Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)

A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1Cx

IPAC USER CONTACT INFORMATION

Agency: County of Ventura
Name: Victoria Masjuan
Address: 840 Apollo Street, Suite 312
City: El Segundo
State: CA
Zip: 90245
Email victoria@gpaconsulting-us.com
Phone: 3107922690

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

APPENDIX B

SPECIES OBSERVED DURING BIOLOGICAL SURVEY

Hueneme Road Widening Project

Plant Species Observed in the Biological Study Area, May 3-5, 2023

Scientific Name	Common Name	Native Status
Plant Species		
ANGIOSPERMS (EUDICOTS)		
AIZOACEAE	FIG-MARIGOLD FAMILY	
Carpobrotus edulis	iceplant	non-native/invasive
APIACEAE	CARROT FAMILY	
Apium graveolens	celery (cultivated)	non-native
ASTERACEAE	ASTER FAMILY	
Baccharis salicifolia	mulefat	native
Glebionis coronaria	garland daisy	non-native/invasive
Helianthus annuus	common sunflower (cultivated)	native
Lactuca sativa	lettuce (cultivated)	non-native
Sonchus oleraceus	common sowthistle	non-native
BRASSICACEAE	MUSTARD FAMILY	
Brassica oleracea	cabbage (cultivated)	non-native
Barbarea vulgaris	bitter wintercress	non-native
Sisymbrium irio	London rocket	non-native
FABACEAE	PEA FAMILY	
Erythrina corallodendron	coral tree	non-native
Melilotus officinalis	yellow sweet clover	non-native
MALVACEAE	MALLOW FAMILY	
Malva parviflora	cheeseweed	non-native
MYRTACEAE	MYRTLE FAMILY	
Metrosideros excelsa	New Zealand Christmas tree	non-native
NYCTAGINACEAE	FOUR O'CLOCK FAMILY	
Bougainvillea x buttiana	bougainvillea	non-native
ONAGRACEAE	EVENING PRIMROSE FAMILY	
Epilobium ciliatum	fringed willowherb	native
POLYGONACEAE	BUCKWHEAT FAMILY	
Rumex crispus	curly dock	non-native/invasive
ROSACEAE	ROSE FAMILY	
Fragaria x ananassa	strawberry (cultivated)	non-native
SALICACEAE	WILLOW FAMILY	
Populus nigra	black poplar	non-native
SCROPHULARIACEAE	FIGWORT FAMILY	
Myoporum laetum	lollipop tree	non-native/invasive
TROPAEOLACEAE	NASTURTIUM FAMILY	
Tropaeolum nasturtium	garden nasturtium	Non-native
ANGIOSPERMS (MONOCOTS)		
ARECACEAE	PALM FAMILY	
Syagrus romanzoffiana	queen palm	non-native
Washingtonia robusta	Mexican fan palm	non-native/invasive

CYPERACEAE	SEDGE FAMILY	
Schoenoplectus californicus	California bulrush	native
POACEAE	GRASS FAMILY	
Bromus diandrus	ripgut brome	non-native/invasive
Hordeum murinum	wall barley	non-native/invasive
Polypogon monspeliensis	rabbitsfoot grass	non-native/invasive
Polypogon viridis	water beard grass	non-native
TYPHACEAE	CATTAIL FAMILY	
Typha sp.	cattail species	unknown

Hueneme Road Widening Project

Wildlife Species Observed in the Biological Study Area, May 3-5, 2023

Scientific Name	Common Name	Native Status
Wildlife Species		
BIRDS		
Anas platyrhynchos	mallard	native
Calypte anna	Anna's hummingbird	native
Chondestes grammacus	lark sparrow	native
Corvus brachyrhynchos	American crow	native
Euphagus cyanocephalus	Brewer's blackbird	native
Hirundo rustica	barn swallow	native
Icterus cucullatus	hooded oriole	native
Larus occidentalis	western gull	native
Melospiza lincolnii	Lincoln's sparrow	native
Melospiza melodia	song sparrow	native
Molothrus ater	brown-headed cowbird	native
Petrochelidon pyrrhonota	cliff swallow	native
Stelgidopteryx serripennis	northern rough-winged swallow	native
Sturnus vulgaris	European starling	non-native
Zenaida macroura	mourning dove	native
REPTILES		
Uta stansburiana	side-blotched lizard	native

APPENDIX C

PHOTOGRAPHS OF THE BIOLOGICAL STUDY AREA

Photo 1. South side of Hueneme Road, west of Edison Drive, view facing west (May 2023)

Photo 2. Overview of BSA from south side of Hueneme Road, east of Edison Drive, view facing east (May 2023)

Photo 3. Drainage Feature 1 east of Arnold Road, view facing south (May 2023)

Photo 4. Sod fields south of Hueneme Road, view facing southwest (May 2023)

Photo 5. Strawberry fields south of Hueneme Road, view facing southeast (May 2023)

Photo 6. Drainage 2 flowing east to west parallel to Hueneme Road, view facing east (May 2023)

Photo 7. Row of Lombardy poplars along Hueneme Road, between Olds Road and Casper Road, view facing west

Photo 8. Row of Lombardy poplars along Casper Road, south of Hueneme Road, view facing south (May 2023)

Photo 9. Agricultural field east of Casper Road, view facing east (May 2023)

Photo 10. Intersection of Hueneme Road and Rice Avenue, view facing west (May 2023)

Photo 11. Drainage 3 flowing north to south, south of Hueneme Road, view facing south (May 2023)

Photo 12. Drainage 3 flowing north to south beneath Hueneme Road, view facing northwest (May 2023)

Photo 13. Drainage 3 flowing south through private property, view facing south (May 2023)

Photo 14. Drainage Feature 4 flowing east to west, north of Hueneme Road, view facing southwest (May 2023)

Photo 15. Drainage Feature 4 flows east to west, north of Hueneme Road, east of Rice Avenue, view facing west (May 2023)

Photo 16.Intersection of Drainage Feature 5 (yellow arrow) and Drainage Feature 6 (red arrow) north of Hueneme Road, east of Rice Avenue, view facing northwest (May 2023)

Photo 17. Drainage Feature 5 flowing west to east, just east of Rice Avenue, view facing northwest (May 2023)

Photo 18. Drainage Feature 5 flowing west to east, west of Rice Avenue, view facing southwest (May 2023)

Photo 19. Southland Sod Farm offices north of Hueneme Road, view facing north (May 2023)

Photo 20. Southland Sod Farm fields north of Hueneme Road, view facing northwest (May 2023)

Photo 21. Drainage Feature 6 flowing north to south, north of Hueneme Road, view facing north

Photo 22. Drainage Feature 7 flows east to west, north of Hueneme Road, view facing west (May 2023)

Photo 23. Drainage Feature 8 flowing north to south just east of Olds Road, view facing northwest

Photo 24. Drainage Feature 9 north of Hueneme Road, west of Olds Road, view facing east (May 2023)

Photo 25. Drainage Feature 9 culvert at the intersection of Hueneme Road and Arnold Road, view facing northwest (May 2023)

Photo 26. Drainage Feature 10 flows north to south, north of Hueneme Road, view facing north (May 2023)

Photo 27. Agricultural field north of Hueneme Road, view facing north (May 2023)

Photo 28. Freshwater marsh area east of Teto's Produce, north of Hueneme Road, view facing northwest (May 2023)

Photo 29. Freshwater marsh area east of Teto's Produce, north of Hueneme Road, view facing north (May 2023)

Photo 30. Drainage Feature 11 flowing east to west, north of Hueneme Road, view facing west (May 2023)

Photo 31. Drainage Feature 11 flowing east to west, north of Hueneme Road, view facing northeast (May 2023)

Photo 32.Drainage Feature 11 flowing east to west, north of Hueneme Road, east of Edison Drive, view facing northwest (May 2023)

APPENDIX D

SPECIAL-STATUS SPECIES WITH POTENTIAL TO BE IN THE BIOLOGICAL STUDY AREA

Table D-1 Special-Status Natural Communities with Potential to be in the Biological Study Area

Common and Scientific Name	Status		General Habitat Requirements	Habitat Present/Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
California Walnut Woodland	--	S2.1	The California Walnut Woodland community is a cold-deciduous woodland comprised of open tree canopies locally dominated by the California black walnut (*Juglans californica*). Other species in the canopy can include white alder (*Alnus rhombifolia*), California ash (*Fraxinus dipetala*), toyon (*Heteromeles arbutifolia*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), black elderberry (*Sambucus nigra*), and California bay (*Umbellularia californica*). The canopy is open to continuous, the shrub layer is sparse to intermittent, and the herbaceous layer is sparse or grassy. This community is found in riparian corridors, incised canyons, river and stream low-flow margins, seeps, river banks, terraces, and north-facing slopes.	A	There are no California black walnut trees within the BSA. Therefore, this community is absent from the BSA.

Common and Scientific Name	Status		General Habitat Requirements	Habitat Present/Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
Coastal and Valley Freshwater Marsh	--	S2.1	The Coastal and Valley Freshwater Marsh is dominated by perennial, emergent monocots, often forming completely closed canopies. Coastal and valley freshwater marshes are permanently flooded by fresh water and have deep, peaty soils.	P	There is an artificial freshwater marsh dominated by perennial, emergent monocots (*Typha* spp.) within the BSA. This community is present within the BSA.
Southern Coastal Salt Marsh	-	S2.1	Southern coastal salt marsh communities are found in bays, lagoons, and estuaries along the coast from Point Conception to the Mexican border. This community consist of highly productive, herbaceous, and salt-tolerant hydrophytes that form moderate to dense cover. Characteristic species include Watson's saltbush (*Atriplex watsonii*), Saltwort (*Batis maritima*), California boxthorn (*Lycium californicum*), shore grass (*Monanthochloe littoralis*), California seablite (*Suaeda californica*), and Parish's glasswort (*Arthrocnemum subterminale*).	A	There are no bays, lagoons, or estuaries within the BSA. Therefore, this community is absent from the BSA.

Common and Scientific Name	Status		General Habitat Requirements	Habitat Present/Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
Southern Riparian Scrub	-	S3.2	The Southern Riparian Scrub community consists of streamside thickets dominated by one or more willows and mulefat (*Baccharis salicifolia*), as well as by other fast-growing shrubs and vines. This community is found along intermittent stream channels and requires flooding. Most plants recolonize following flood disturbance.	A	There are no streams with streamside willow/mulefat thickets present within the BSA. Therefore, this community is absent from the BSA.
Valley Needlegrass Grassland	-	S3.1	Valley needlegrass grassland is a midheight (up to two feet) grassland that is dominated by perennial, tussock-forming purple needle grass (*Stipa pulchra*). Native and introduced annuals are found between the perennials and can exceed the bunchgrass in cover. Typical elevation ranges from 210 to 5,640 feet.	A	There are no native bunchgrasses present within the BSA. Therefore, this community is absent from the BSA.

Table Key: Absent [A] – The vegetation community is not expected to be within the Biological Study Area (BSA). S1 = critically imperiled, less than 1,000 individuals; S2 = Imperiled-rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or California; S3 = Vulnerable- restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

Information for the habitat requirements was obtained from the following sources: (Holland, 1986; Sawyer, Keeler-Wolf, & Evens, 2009)

Table D-2. Special-Status Plants with Potential to be in the Biological Study Area

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
Aphanisma blitoides Aphanisma	-	-	1B.2	Aphanisma is an annual herb found in coastal dunes, coastal, and coastal bluff scrub on sandy or gravelly soils. Typical blooming period: February to June Typical elevation range: Three to 1000 feet	A	Coastal dune, coastal, and coastal bluff scrub habitat for this species is absent; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Astragalus brauntonii Braunton's milk-vetch	FE	--	1B.2	Braunton's milk-vetch is a perennial herb found in chaparral, coastal scrub, and valley and foothill grassland. It may be found in recently burned or naturally disturbed areas. This species is restricted to carbonate limestone substrates within the Santa Monica, San Gabriel, and Santa Ana Mountain ranges. Typical blooming period: January to August Typical elevation: 13 to 2100 feet	A	Chaparral, coastal scrub, and valley/foothill grassland habitat for this species is absent; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Astragalus didymocarpus var.	--	--	1B.2	Miles' milk-vetch is an annual herb found in coastal scrub on clay soils.	A	Coastal scrub on clay soils, the habitat for this species,

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
milesianus Miles' milk-vetch				Typical blooming period: March to June Typical elevation range: 66 to 295 feet		is absent from the BSA; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Astragalus pycnostachyus var. *lanosissimus* Ventura Marsh milk-vetch	FE	SE	1B.1	Ventura marsh milk-vetch is a perennial herb found in coast dunes, coastal scrub, marshes, swamps, and saltmarsh. This species is found within reach of high tide or protected by barrier beaches, more rarely it is found near seeps on sandy bluffs. Typical blooming period: June to October Typical elevation range: Three to 115 feet	A	The BSA does not contain coastal dunes, coastal scrub, marshes, swamps, or salt marsh habitat for this species; therefore, it is not expected to be in the BSA.
Atriplex coulteri Coulter's saltbush	--	--	1B.2	Coulter's saltbush is a perennial herb found in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland in open sites with low lying clay or alkaline soils. Typical blooming period: March to	A	The BSA does not contain coastal bluff scrub, coastal dunes, coastal scrub, or valley/foothill grassland habitat for this species; therefore, it is not expected to be in the BSA. In addition,

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
				October Typical elevation: 82 to 1443 feet		this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Atriplex pacifica south coast saltscale	-	-	1B.2	South coast saltscale is an annual herb found on alkali playa, coastal dunes, coastal and coastal bluff scrub on alkali soils. Typical blooming period: March to October Typical elevation: Zero to 459 feet	A	The BSA does not contain alkali playa, coastal dunes, or coastal bluff scrub habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Atriplex serenana var. davidsonii Davidson's saltscale	--	--	1B.2	Davidson's saltscale is an annual herb found in coastal bluff scrub and coastal scrub in alkaline soils. Typical blooming period: April to October Typical elevation: 32 to 656 feet	A	The BSA does not contain coastal bluff scrub or coastal scrub habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
						this species.
Calochortus clavatus var. *gracilis* Slender mariposa-lily	--	--	1B.2	The slender mariposa lily is a perennial bulbiferous herb found in the San Gabriel Mountains, specifically in shaded foothill canyons and on grassy slopes within other habitats including chaparral, coastal scrub, and valley and foothill grassland. Typical blooming period: March to November Typical elevation: 1050 to 3281 feet	A	The BSA is not within the San Gabriel Mountains where this species is found; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Calochortus fimbriatus late-flowered mariposa-lily	--	--	1B.3	The late-flowered mariposa lily is a perennial bulbiferous herb found in chaparral, cismontane woodland, and riparian woodland on serpentinite soils. Typical blooming period: June to August Typical elevation range: 902 to 6250 feet	A	The BSA does not contain chaparral, cismontane woodland, or riparian woodland habitat for this species; therefore, it is not expected to be in the BSA.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	--	--	1B.1	Orcutt's pincushion is an annual herb found in coastal bluff scrub and coastal dunes on sandy soil. Typical blooming period: January to August	A	The BSA does not contain coastal bluff scrub or coastal dunes habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
				Typical elevation: Zero to 328 feet		not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Chloropyron maritumum ssp. *maritimum* salt marsh bird's-beak	FE	SE	1B.2	Salt marsh bird's-beak is an annual herb generally found in coastal dunes, marshe,s and swamps (coastal salt marshes). This species parasitizes many wetland plant species. Typical blooming period: May to October Typical elevation: Zero to 98 feet	A	The BSA does not contain coastal dunes, coastal salt marshes, or swamp habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	--	-	1B.1	Blochman's dudleya is a perennial herb found in coastal scrub, coastal bluff scrub, chaparral, and valley and foothill grassland. This species is found on open, rocky slopes, in shallow clays over serpentine or in rocky areas with little soil. Typical blooming period: April to June Typical elevation: Zero to 1476 feet	A	The BSA does not contain coastal scrub, coastal bluff scrub, chaparral, or valley/foothill grassland habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
						this species.
Dudleya verity Verity's dudleya	FT	--	1B.1	Verity's dudleya is a perennial herb found in coastal scrub, chaparral, and foothill woodland on rocky, north-facing volcanic substrate in the Santa Monica Mountains. Typical blooming period: May to June Typical elevation: 196 to 394 feet	A	The BSA does not contain coastal scrub, chaparral, or foothill woodland habitat for this species, nor is the BSA within the Santa Monica Mountains; therefore, the species is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Eriogonum crocatum conejo buckwheat	--	Rare	1B.2	Conejo buckwheat is a perennial herb found in chaparral, coastal scrub, and valley and foothill grasslands. This species is found on Conejo volcanic outcrops and rocky sites. This species is found in the northwest Santa Monica Mountains within Ventura County. Typical blooming period: May to June Typical elevation: 164 to 1903 feet	A	The BSA does not contain Conejo volcanic soils, nor does it contain chaparral, coastal scrub, or valley/foothill grassland habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
						this species.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	--	--	1B.1	Coulter's goldfield is an annual herb found in coastal salt marshes, swamps, playas, and vernal pools. Typical blooming period: February to June Typical elevation: Three to 4003 feet	A	The BSA does not contain coastal salt marsh, swamp, playa, or vernal pool habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Malacothrix similis Mexican malacothrix	--	--	2A	Mexican malacothrix is an annual herb found on coastal beaches and dunes. This species is presumed extinct in California. Typical blooming period: April to May Typical elevation: Zero to 131 feet	A	The BSA does not contain coastal beach or dunes habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. This species is also presumed extinct in California.
Monardella hypoleuca ssp.	--	--	1B.3	White-veined monardella is a perennial herb found in chaparral and	A	The BSA is not within the Santa Monica, Santa Ynez,

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
hypoleuca white-veined monardella				cismontane woodland. This species is known only from the Santa Monica, Santa Ynez, and Sierra Madre Mountains. Typical blooming period: May to August, but may bloom as early as April and as late as December Typical elevation: Zero to 5003 feet		or Sierra Madre Mountains, nor does it contain chaparral or cismontane woodland habitat for this species; therefore, the species is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Monardella sinuata ssp. *gerryi* Gerry's curly-leaved monardella	-	-	1B.1	Gerry's curly-leaved monardella is an annual herb found in sandy openings in coastal scrub. Typical blooming period: April to June Typical elevation: 492 to 805 feet	A	The BSA does not contain coastal scrub habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Navarretia ojaiensis Ojai navarretia	-	-	1B.1	Ojai navarretia is an annual herb found in chaparral, coastal scrub, and valley and foothill grassland. This species may also be found in openings in shrublands or grasslands and prefers clay soils. This species is found in Los Angeles and	A	The BSA does not contain chaparral, coastal scrub, or valley/foothill grassland habitat for this species; therefore, it is not expected to be in the BSA. In addition,

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
				Ventura Counties. Typical blooming period: May to Julyr Typical elevation: 902 to 3280 feet		this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Pseudognaphalium leucocephalum white rabbit-tobacco	-	-	2B.2	White rabbit-tobacco is a perennial herb found in riparian woodland, cismontane woodland, coastal scrub, and chaparral. This species is found on sandy, gravelly benches, dry stream bottoms, canyon bottoms arroyos, areas of oak-sycamore, oak-pine, and pine. Typical blooming period: July to December Typical elevation: Zero to 6890 feet	A	The BSA does not contain riparian woodland, cismontane woodland, coastal scrub, or chaparral habitat for this species; therefore, it is not expected to be in the BSA.
Senecio aphanactis chaparral ragwort	-	-	2B.2	Chaparral ragwort is an annual herb found in chaparral, cismontane woodland, and coastal scrub on dry open rocky areas, sometimes on alkaline substrate. Typical blooming period: January to April Typical elevation: 49 to 2625 feet	A	The BSA does not contain chaparral, cismontane woodland, or coastal scrub habitat for this species; therefore, it is not expected to be in the BSA.

Common and Scientific Names	Status			General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
Suaeda esteroa estuary seablite	-	-	1B.2	Estuary seablite is a perennial herb found in coastal salt marshes and swamps. Typical blooming period: May to January Typical elevation: Zero to 16 feet	A	The BSA does not contain coastal salt marsh or swamp habitat for this species; therefore, it is not expected to be in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species.
Texosporium sancti-jacobi woven-spored lichen	-	-	3	Woven-spored lichen is a crustose (terricolous) lichen found on in open sites in chaparral habitat on soil, small mammal pellets, dead twigs, and *Selaginella* spp. Typical blooming period: N/A Typical elevation: 196 to 2165 feet	A	The BSA does not contain chaparral habitat for this species; therefore, it is not expected to be in the BSA.

Table Key: Absent [A] –vegetation community or habitat requirements were not observed in the BSA during the biological survey. Habitat Present [HP] – There is habitat present within the BSA. Federal Endangered (FE); State Endangered (SE); State Threatened (ST); S1 = Critically Imperiled - extreme rarity (often 5 or fewer observations) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from California; S2 = Imperiled- rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or California; S3 = Vulnerable- restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation; S4 = Apparently Secure - uncommon but not rare; some cause for long-term concern due to declines or other factors.

California Native Plant Society (CNPS), etc. 1A = Plants presumed extirpated in California and either rare or extinct elsewhere; 1B= Plant species that are rare, threatened, or endangered in California and elsewhere; 2B= Plant species that are rare, threatened, or endangered in California, but are more common elsewhere; 3= Plants about which we need more information; 4 = Plants of limited distribution; 0.1=seriously threatened in California; 0.2 = moderately threatened in California; and 0.3 = Not very threatened in California.

Source: *(California Native Plant Society, 2021; Jepson Flora Project (eds.), 2021; eFloras, 2021) (San Joaquin County, 2000)*

Table D-3. Special-Status Wildlife with Potential to be in the Biological Study Area

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
Invertebrates					
Bombus crotchii Crotch bumble bee	-	SE (Candidate)	The Crotch bumble bee is found in open grassland and scrub habitats in coastal California east to the Sierra-Cascade crest and south into Mexico. This species nests underground in abandoned rodent burrows or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Food plant genera include snapdragons (*Antirrhinum* sp.), phacelia (*Phacelia* sp.), clarkia (*Clarkia* sp.), dendromecon (*Dendromecon* sp.), poppy (*Eschscholzia* sp.), and buckwheat (*Eriogonum* sp.).	A	The BSA does not contain open grassland or scrub habitat for this species; therefore, this species is not expected to be in the BSA.
Bombus pensylvanicus American bumble bee	--	S2	The American bumble bee is found in open farmland and fields throughout its range. It nests mostly on the surface of the ground, among long grass, but occasionally underground. Example food plants include *Astragalus* spp., *Cirsium* spp., *Cornus* spp., *Dalea* spp., *Echinacea* spp., *Helianthus* spp., *Kallstoemia* spp., *Liatris* spp., *Mentzelia* spp., *Silphium* spp., *Solanum* spp., *Trifolium* spp., and	HP	The habitat typically preferred by this species is present within the BSA; therefore, there is potential for this species to be in the BSA.

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
			Vicia spp. This species is host to the cuckoo bumble bee *Bombus variabilis*.		
Cicindela hirticollis gravida sandy beach tiger beetle	-	S2	The sandy beach tiger beetle is found in areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico in coastal dunes habitat. This species prefers clean, dry, light-colored sand in the upper zone and subterranean larvae prefer moist sand not affected by wave action.	A	The BSA does not contain coastal dunes habitat for this species; therefore, this species is not expected to be in the BSA.
Cicindela senilis frosti senile tiger beetle	-	S2	The senile tiger beetle is found in coastal mud flats, salt marsh edges, and inland alkali mud flats.	A	The BSA does not contain coastal mud flats, salt marsh, or inland alkali mud flats habitat for this species; therefore, this species is not expected to be in the BSA.
Coelus globosus globose dune beetle	-	S1S2	The globose dune beetle is found in coastal sand dune habitat in foredunes and sand hummocks. This species is erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. The globose dune beetle burrows beneath the sand surface and is most common beneath dune vegetation.	A	The BSA does not contain coastal sand dune habitat for this species; therefore, this species is not expected to be in the BSA.

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
Danaus plexippus plexippus pop. 1 Monarch butterfly – California overwintering population	Candidate	S2	The monarch butterfly requires closed-cone coniferous forests and milkweed (*Asclepias* sp.) for breeding and as a food source for larvae. This species roosts in eucalyptus, Monterey pines, and Monterey cypresses groves in California. Nectar and nearby water sources are required.	A	None of the tree species monarchs are known to overwinter in are present within the BSA; therefore, this species is not expected to overwinter in the BSA.
Panoquina errans wandering (=saltmarsh) skipper	-	S2	The wandering (saltmarsh) skipper is found in southern California coastal salt marshes. This species requires moist salt grass (*Distichlis spicata*) for larval development.	A	The BSA does not contain coastal salt marsh habitat for this species; therefore, this species is not expected to be in the BSA.
Trimerotropis occidentiloides Santa Monica grasshopper	-	S2	The Santa Monica grasshopper is found on bare hillsides and along dirt trails in chaparral habitat. This species is known only from the Santa Monica Mountains.	A	The BSA is not within the Santa Monica Mountains; therefore, this species is not expected to be in the BSA.
Mollusks					
Helminthoglypta traskii traskii Trask shoulderband	--	S2S3	The Trask shoulderband is a terrestrial invertebrate that is known from Ventura, Los Angeles, Orange, and San Diego counties and has also been reported from northwestern Baja	A	The BSA does not contain coastal sage scrub or chaparral habitat for this species; therefore, this species is not expected to

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
			California. This species prefers coastal sage scrub and chaparral habitats. The Trask shoulderband has been found in the Conejo Valley south of Newbury Park (Thousand Oaks), Ventura County, and at Malibu Lagoon State Park.		be in the BSA.; therefore, this species is not expected to be in the BSA.
Tryonia imitator mimic tryonia (=California brackishwater snail)	-	S2	The mimic tryonia is found in coastal lagoons, estuaries, and salt marshes, from Sonoma County south to San Diego County. This species is found only in permanently submerged areas in a variety of sediment types and is able to tolerate a wide range of salinities.	A	The BSA does not contain coastal lagoon, estuary, or salt marsh habitat for this species; therefore, this species is not expected to be in the BSA.
Fish					
Catostomus santaanae Santa Ana sucker	FT	S1	The Santa Ana sucker is endemic to Los Angeles basin south coastal streams. This species is a habitat generalist and prefers streams with sand-rubble-boulder bottoms, cool, clear water, and algae.	A	The BSA does not contain streams with sand-rubble-boulder bottom; therefore, this species is not expected to be in the BSA.
Eucyclogobius newberryi	FE	S3	The tidewater goby is found in brackish shallow lagoons and lower stream reaches. This species requires	A	The BSA does not contain brackish shallow lagoons, estuaries, or salt marshes;

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
tidewater goby			fairly still water with high oxygen levels. Tidewater goby appears to spend all life stages in lagoons, estuaries, and salt marshes where brackish water conditions occur. The tidewater goby is found along the coast of California from Agua Hedionda Lagoon in San Diego County to the mouth of the Smith River in Del Norte County. Tidewater gobies prefer sandy substrate for breeding, but this species can also be found on rocky, mud, and silt substrates. The tidewater goby eats small crustaceans, insects, and mollusks.		therefore, this species is not expected to be in the BSA.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE	SE	The unarmored threespine stickleback is found in small slow moving and quiet water microhabitats in Southern California streams. This species uses weedy pools, backwaters, and emergent vegetation at stream edges for refuge. This species is found in cool (less than 75 degrees Fahrenheit), clear water with abundant vegetation.	A	The BSA does not contain weedy pools, backwaters, or other quiet water microhabitats; therefore, this species is not expected to be in the BSA.
Gila orcuttii arroyo chub	-	S2	The arroyo chub is native to streams from Malibu Creek to San Luis Rey River basin. This species was	A	The BSA does not contain slow water streams with mud or sand bottoms which

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
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			introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave, and San Diego River basins. This species is found in slow water stream sections with mud or sand bottoms, and feeds heavily on aquatic vegetation and associated invertebrates.		are preferred by this species; therefore, this species is not expected to be in the BSA.
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	FE	SE (Candidate)	The steelhead – southern California DPS is found in seasonally accessible coastal rivers and streams between the Santa Maria River in Santa Barbara County and the Tijuana River at the United States/Mexico border. This species requires cool, clean water with natural cover such as submerged and overhanging large wood, and rocks and boulders.	A	The BSA does not contain coastal rivers or streams with natural cover preferred by this species; therefore, this species is not expected to be in the BSA.
Amphibians					
Rana boylii pop. 6 foothill yellow-legged frog - south coast DPS	Proposed	SE	The foothill yellow-legged frog is found in partly-shaded, shallow streams with riparian and along rocky streams in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, riparian forest, and wet	A	The BSA does not contain chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, riparian forest, or wet meadow habitat for this

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
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			meadow habitats. This species ranges from the Oregon border south to the Transverse Mountains in Los Angeles County, in most of California west of the Cascade crest, and along the western Sierra south to Kern County. Adults eat both aquatic and terrestrial invertebrates, including spiders, flying insects, snails, and grasshoppers. Tadpoles graze on algae and diatoms along rocky stream bottoms. This species requires cobble-sized substrate for egg-laying and needs at least 15 weeks to attain metamorphosis.		species; therefore, it is not expected to be in the BSA.
Rana draytonii California red-legged frog	FT	SSC	The California red-legged frog is found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Suitable habitat includes freshwater ponds or streams with calm stable water, and good water quality. Seasonal water for egg laying, hatching and metamorphosis has to last for three to five months.	A	The BSA does not contain permanent sources of deep water with vegetation, the preferred habitat for this species. Google Earth aerial imagery shows that the presence of the freshwater marsh varies throughout the years. Any upland habitat would be disturbed and fragmented due to agricultural activities. Therefore, this species is not

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
					expected to be in the BSA.
Reptiles					
Anniella spp. California legless lizard	--	SSC	This element in CNDDB represents California records of *Anniella* not yet assigned to new species within the *Anniella pulchra* complex. Range is from Contra Costa County south to San Diego, within a variety of open habitats, generally in moist, loose soil. They prefer soils with a high moisture content.	HP	The BSA is within the known range for this species and contains moist, loose soils and open habitats. Therefore, there is potential for this species to be in the BSA.
Anniella stebbinsi Southern California legless lizard	-	SSC	The southern California legless lizard is generally found south of the Transverse Range, extending to northwestern Baja California. This species is found in a variety of habitats in sandy or loose, loamy soils with high moisture content under sparse vegetation. This species is often locally abundant with specimens found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. This species is often found in leaf litter under trees and shrubs in sunny areas and dunes stabilized with bush lupine and mock	HP	The BSA is within the known range for this species and contains sandy, loamy soils. Therefore, there is potential for this species to be in the BSA.

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
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			heather. The southern California legless lizard can also be found under surface objects such as rocks, boards, driftwood, and logs.		
Aspidoscelis tigris stejnegeri coastal whiptail	-	SSC	The coastal whiptail is found primarily in hot and dry open areas with sparse foliage, including chaparral, woodland, and riparian areas. This species is also found in woodland and riparian areas where the ground may be firm soil, sandy, or rocky.	A	The BSA does not contain chaparral, woodland, or riparian habitat for this species; therefore, it is not expected to be in the BSA.
Emys marmorata western pond turtle	-	SSC	The western pond turtle is found in slow moving rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters. This species prefers areas that provide logs, algae, or vegetation for cover, and boulders, partially submerged logs, vegetation mats, or open mud banks for basking, and is found below 6,000 feet elevation.	A	The BSA does not contain slow moving rivers, streams, lakes, ponds, reservoirs, or brackish-estuarine water habitat for this species. There is a small wetland feature within the BSA, however, it is artificial, lacks connectivity to other waters, and due to this lack of connectivity does not appear to sustain aquatic wildlife that turtles would feed on. As the species can only swallow underwater, this species is not expected

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	Federal USFWS	State CDFW			
					to be in the BSA.
Phrynosoma blainvillii coast horned lizard	-	SSC	The coast horned lizard is found in open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains. This species is also found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. California buckwheat (*Eriogonum fasiculatum*) is considered to be a primary indicator species for favorable soil and climatic conditions. Key habitat elements for this species are the presence of loose, fine soils, with a high sand content; an abundance of native ants; open areas for basking; and areas with low dense shrubs for refuge.	A	The BSA does not contain areas with low dense shrubs preferred by this species; therefore, it is not expected to be in the BSA.
Thamnophis hammondii two-striped gartersnake	-	SSC	The two-striped garter snake is found in coastal California from the vicinity of Salinas to northwest Baja California. This species is often found along streams with rocky beds and riparian growth and has an elevational range from sea level to about 7,000 feet.	A	The BSA does not contain streams with rocky beds or riparian growth preferred by this species; therefore, it is not expected to be in the BSA.
Thamnophis sirtalis	-	SSC	The south coast garter snake is found	A	The BSA does not contain

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pop. 1 south coast gartersnake			in scattered locations along the southern California coastal plain, south to the vicinity of San Pasqual. This species is found in or near permanent fresh water in marshes or upland habitat. This species has an elevational range from sea level to about 2,730 feet.		permanent freshwater habitat for this species, as the freshwater marsh is only present during some years according to Google Earth aerial imagery. Therefore, this species is not expected to be in the BSA.
Birds					
Agelaius tricolor Tricolored blackbird	--	ST	The tricolored blackbird is a highly colonial species that is found in freshwater marshes dominated by cattails and bulrushes. This species is most numerous in the Central Valley, where this species forages in fields and farms. The tricolored blackbird breeds in large freshwater marshes, in dense strands of cattails or bulrushes. Mostly endemic to California, the tricolored blackbird requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	A (Nesting) HP (Foraging)	While a small freshwater wetland is present within the BSA, the BSA and nearby area lack the open water preferred by this species; therefore, it is not expected to nest in the BSA. However, the species is known to forage in cultivated fields up to four miles from their nesting grounds, and although the BSA is within a California Wildlife Habitat Relationships Predicted Habitat Suitability location of low suitability, there is still potential for the species to forage within the BSA.

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	Federal USFWS	State CDFW			
Athene cunicularia burrowing owl	--	SSC	The burrowing owl is found in open, dry, annual, or perennial grasslands, deserts, scrublands characterized by low-growing vegetation, agricultural lands, and requires perches for horizontal visibility. This species is dependent upon burrowing mammals, most notably, the California ground squirrel. The burrowing owl uses these burrows for roosting and nesting cover. The burrowing owl is also common in disturbed areas, including roadsides, and may develop burrows in debris piles. Within the northern portion of Los Angeles County, the burrowing owl is within its yearlong range and within the southern portion of Los Angeles County, the burrowing owl is within its wintering range. Burrowing owls are opportunistic feeders and prey upon insects, scorpions, small mammals, birds, amphibians, and small reptiles. This species generally forages within 985 to 1,969 feet from their burrows, but they will travel as far as two miles.	HP (Nesting) HP (Foraging)	The BSA is within the range of this species, and agricultural lands make up the majority of the BSA; Therefore, there is potential for this species to forage and nest in the BSA.
Charadrius nivosus	FT	SSC	The Pacific coast population of the western snowy plover breeds	A	The BSA does not contain coastal beach habitat for

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nivosus western snowy plover			primarily on coastal beaches from southern Washington to southern Baja California, Mexico. The population breeds above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	(Nesting) A (Foraging)	this species; therefore, it is not expected to be in the BSA.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT	FE	The western yellow-billed cuckoo breeds in large blocks, or contiguous areas of riparian habitat, primarily cottonwood-willow riparian woodlands. Within California, the species breeds along the Colorado River, in Sacramento and Owens valleys, along the South Fork of the Kern River in Kern County, along the Santa Ana River in Riverside County, along the Amargosa River in Inyo and San Bernardino Counties and potentially along the San Luis Rey River in San Diego County. This species is found in dense riparian habitat of willow, often mixed with cottonwoods, with understory of blackberry, nettles, or wild grape.	A (Nesting) A (Foraging)	The BSA does not contain riparian habitat for this species; therefore, it is not expected to be in the BSA.

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Elanus leucurus White-tailed kite	--	FP	The white-tailed kite is found in low-elevation grassland, wetland, oak woodland, low shrub, open woodlands, or savannah habitats. Riparian areas adjacent to open space areas are typically used for nesting, where kites prefer dense, broad-leafed deciduous trees for nesting and night roosting. In California, kites are known to be reliant on California voles (*Microtus californicus)* as a prey source, and habitat quality is largely dependent on abundance and availability of California voles. Lightly grazed or ungrazed fields generally support larger prey populations as well as alfalfa, hay, and irrigated pasture agricultural areas. Wetlands or marshes where California voles tend to be abundant is also important foraging habitat.	HP (Nesting) HP (Foraging)	White-tailed kites are known to nest in large trees and forage in agricultural areas. Therefore, the species has potential be in the BSA.
Empidonax traillii extimus southwestern willow flycatcher	FE	SE	Within California, the southwestern willow flycatcher's known breeding locations are restricted primarily to Sierra Nevada/Cascade region south to northern Kern County, including Alpine, Inyo, and Mono Counties, in Southern California near Buellton in	A (Nesting) A (Foraging)	The BSA does not contain riparian habitat for this species; therefore, it is not expected to be in the BSA.

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			Santa Barbara County, at the Prado Basin riparian forest in Riverside County, and several locations in San Diego County. This species breeds in extensive riparian thickets near surface water or saturated soil. However, suitable vegetation is not uniformly dense and typically includes interspersed patches of open habitat. The southwestern willow flycatcher can occupy riparian habitats composed of native broadleaf species, a mix of native and exotic species, or monotypic stands of exotics.		
Laterallus jamaicensis coturniculus California black rail	-	ST	The California black rail is found in freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. This species requires a stable water depth of approximately one inch and dense vegetation for nesting.	A (Nesting) A (Foraging)	The BSA does not contain wet meadow or saltwater marsh margin habitat preferred by this species. While the BSA does contain less than an acre of freshwater marsh habitat, the vegetation canopy is very open and lacks the density preferred by this species therefore, it is not expected to be in the BSA.
Passerculus	-	SE	The Belding's savannah sparrow is	A	The BSA does not contain

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sandwichensis beldingi Belding's savannah sparrow			endemic to the upper littoral region of salt marshes and is associated with dense pickleweed, particularly Salicornia virginica, where most nests are found.	(Nesting) A (Foraging)	salt marsh habitat for this species; therefore, it is not expected to be in the BSA.
Polioptila californica californica coastal California gnatcatcher	FT	SSC	The coastal California gnatcatcher is found in coastal sage scrub, chaparral, and riparian areas that border coastal sage scrub. This species prefers south facing slopes for nesting sites and prefers coastal sage scrub with a semi-open canopy. This species is most closely associated with California sagebrush (Artemisia californica) on shallow slope gradients.	A (Nesting) A (Foraging)	The BSA does not contain coastal sage scrub, chaparral, or riparian habitat for this species; therefore, it is not expected to be in the BSA.
Rallus obsoletus levipes light-footed Ridgway's rail	FE	SE	The light-footed Ridgway's rail is found exclusively in salt marshes between Santa Barbara, California and San Quintin Bay, Baja California, Mexico. This species nests primarily in dense cordgrass, plant material deposited at the high-water mark of tidally influenced waves deposits, and in hummocks of high marsh within the low marsh zone.	A (Nesting) A (Foraging)	The BSA does not contain salt marsh habitat for this species; therefore, it is not expected to be in the BSA.
Riparia riparia	-	ST	The bank swallow is a migratory,	A	The BSA does not contain

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bank swallow			dense colonial nester that is found in lowland and riparian habitats west of the deserts. The majority of the extant breeding populations are found within the Sacramento and Feather River corridors in the north Central Valley. Other colonies persist along the central coast from Monterey to San Mateo Counties, and northeastern California in Shasta, Siskiyou, Lassen, Plumas, and Modoc Counties. This species requires near vertical banks or cliffs with fine-textured or sandy soils near streams, rivers, lakes, or the ocean to dig nesting holes. The bank swallow forages in locations with high insect biomass, typically in close proximity to water, riparian scrub, riparian woodland, and grasslands.	(Nesting) A (Foraging)	riparian habitat for this species; therefore, it is not expected to be in the BSA.
Setophaga petechia yellow warbler	-	SSC	The yellow warbler is found in riparian plant associations in close proximity to water. This species also nests in montane shrubbery in open coniferous forests in the Cascades and Sierra Nevada. This species is frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including	A (Nesting) A (Foraging)	The BSA does not contain riparian habitat for this species; therefore, it is not expected to be in the BSA.

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	Federal USFWS	State CDFW			
			cottonwoods (Populus sp.), sycamores (Plantanus sp.), ash (Fraxinus sp.), and alders (Alnus sp.).		
Sternula antillarum browni California least tern	FE	SE	The California least tern nests in sparsely vegetated sandy or gravelly ground (typically tidal flats and beaches) near lagoons, estuaries, or bays. The California least tern forages in shallow estuaries, lagoons, and near shore ocean waters.	A (Nesting) A (Foraging)	The BSA does not contain tidal flats, estuary, lagoon, or beach habitat for this species; therefore, it is not expected to be in the BSA.
Vireo bellii pusillus Least Bell's vireo	FE	SE	The least Bell's vireo is found in dense, willow dominated riparian habitat with lush understory vegetation. This species is a summer resident of Southern California in low riparian areas in the vicinity of water or in dry river bottoms below 2,000 feet. Least Bell's vireo nests are placed along margins of shrubs or on twigs projecting into pathways. This species primarily occupies riparian habitats that typically feature dense cover within three to seven feet of the ground and a dense, stratified canopy. This species is found in edge riparian growth along water or along dry parts of intermittent streams. In general,	A (Nesting) A (Foraging)	The BSA does not contain riparian habitat for this species; therefore, it is not expected to be in the BSA.

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	Federal USFWS	State CDFW			
			this species nests in vegetation typically dominated by willows (*Salix* sp.) and mule fat (*Baccharis salicifolia*), but habitats may also be populated by a variety of shrubs, trees, and vines. Least Bell's vireo forage in riparian habitat and at times are known to forage in mustard and coastal sage habitat patches in close proximity to their nests.		
Mammals					
Antrozous pallidus pallid bat	-	SSC	The pallid bat is found year-round in a variety of low-elevation habitats in most parts of California, including grasslands, shrub lands, woodlands, and forests. This species is thought to prefer open, dry habitats with rocky areas for roosting. The pallid bat day roosts in caves, crevices, mines, hollow trees, buildings, and bridges, and night roosts in more open sites, such as porches, open buildings, and bridges. Roosts must protect bats from high temperatures, and this species will move deeper into cover if temperatures rise. The pallid bat is highly sensitive to disturbance.	HP	Pallid bats are known to day roost in hollow trees and buildings, and night roost in more open sites such as porches and open buildings Therefore, there is potential for this species to be in the BSA.

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Chaetodipus californicus femoralis Dulzura pocket mouse	-	SSC	The Dulzura pocket mouse is found in coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland in southwestern California. In San Diego County this species occurs mainly in arid coastal and desert border areas and its range also includes portions of Riverside and San Bernardino counties. The Dulzura pocket mouse prefers sandy herbaceous areas, usually in association with rocks or coarse gravel and has a high preference for grass seeds.	A	The BSA does not contain coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, or annual grassland habitat for this species; therefore, it is not expected to be in the BSA.
Choeronycteris mexicana Mexican long-tongued bat	-	SSC	The Mexican Long-tongue bat has been recorded in the southwestern United States and Mexico. This species is irregularly found in the southeastern section of California. This species is found in pinyon and juniper woodlands, riparian scrub, and Sonoran thorn woodlands and roosts in well-lit caves and in buildings. This species has also been documented	A	The BSA does not contain pinyon and juniper woodlands, riparian scrub, or Sonoran thorn woodlands; therefore, it is not expected to be in the BSA.

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
			roosting in bridges.		
Eumops perotis californicus western mastiff bat	-	SSC	The western mastiff bat is found in many open, semi-arid and arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. This species has been recorded throughout central and southern California, with a concentration in southern California. This species roosts in crevices on high vertical cliffs or surfaces (including buildings), trees, or tunnels. Because of their large size, they typically require a larger drop distance from roosting sites.	HP	There are large trees on the shoulder of Hueneme Road that may support roosting by this species; therefore, there is potential for this species to be in the BSA.
Microtus californicus stephensi south coast marsh vole	-	SSC	The San Pablo vole is found in the saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay. This species constructs networks to burrows in soft soil and feeds on grasses, sedges, and herbs.	A	The BSA is not within the salt marshes of San Pablo Creek; therefore, this species is not expected to be in the BSA.
Sorex ornatus salicornicus southern California	-	SSC	The southern California saltmarsh shrew is found in coastal marshes in Los Angeles, Orange, and Ventura	A	The coastal marsh habitat preferred by this species is absent; therefore, it is not

Common and Scientific Names	Status		General Habitat Requirements	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW			
saltmarsh shrew			counties. This species requires dense vegetation and woody debris for cover.		expected to be in the BSA.
Taxidea taxus American badger	-	SSC	The American badger is most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. This species needs sufficient food, friable soils, and open and uncultivated ground. Ground squirrels are a major prey item, but the American badger will also feed on other burrowing rodents, reptiles, and insects	A	The majority of the BSA consists of cultivated, agricultural land unsuitable for this species; therefore, it is not expected to be in the BSA.

Table Key: Absent [A] – The plant species/vegetation community or habitat requirements were not observed in the BSA during the biological survey. Habitat Present [HP] – There is habitat present within the BSA. Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST); Fully Protected (FP); Watch List (WL); State Species of Special Concern (SSC); S1 = Critically Imperiled - extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from California; S2 = Imperiled- rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or California; S3 = Vulnerable- restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation; S4 = Apparently Secure - uncommon but not rare; some cause for long-term concern due to declines or other factors.

Information for the habitat requirements and species range was obtained from the following sources: *(California Department of Fish and Wildlife, 2018; California Department of Fish and Wildlife, 2019; National Marine Fisheries Service, 2016; National Marine Fisheries Service, 2018; Sonoma Water and California Sea Grant, 2019; U.S. Fish and Wildlife Service, 2011)*; *(California Department of Fish and Wildlife, 2021)*; *(San Joaquin County, 2000)*; *(Shuford & Gardali, 2008)*

References

California Department of Fish and Wildlife. (2018). *California Wildlife Habitat Relationships*. Retrieved June 20, 2019, from httpc://wildlife.ca.gov/Data/CWHR

California Department of Fish and Wildlife. (2019, July). *Biogeographic Information and Observation System*. Retrieved June 20, 2019, from https://www.wildlife.ca.gov/Data/BIOS

California Department of Fish and Wildlife. (2021, March 2). *Spotted Owl Observation Viewer.* Retrieved from CNDDB BIOS: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios

California Native Plant Society. (2021, September). *Inventory of Rare and Endangered Plants of California (online edition , v8-03 0.45)*. Retrieved November 2, 2018, from www.rareplants.cnps.org/

eFloras. (2021). *Flora of North America*. Retrieved May 1, 2019, from eFloras.org: http://www.efloras.org/flora_page.aspx?flora_id=1

Holland, R. F. (1986). *Preliminary Descriptions of the Terrestrial Natural Communities of California.* California Department of Fish and Game. Sacramento, CA: State of California.

Jepson Flora Project (eds.). (2021). *Jepson eFlora*. Retrieved February 2, 2018, from Jepson Herbarium: http://ucjeps.berkeley.edu/jepson_flora_project.html

National Marine Fisheries Service. (2016, November). *California Species List Tool.* Retrieved June 3, 2019, from NOAA Fisheries | West Coast Region: https://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html

National Marine Fisheries Service. (2018). *Endangered Species Act Critical Habitat*. Retrieved November 20, 2018, from https://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html

National Marine Fisheries Service. (2018, February 2). *Essential Fish Habitat Mapper*. Retrieved July 26, 2018, from NOAA Habitat Conservation/Habitat Protection: https://www.habitat.noaa.gov/protection/efh/efhmapper/

San Joaquin County. (2000). *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).*

Sawyer, J. O., Keeler-Wolf, T., & Evens, J. M. (2009). *A Manual of California Vegetation* (2nd Edition ed., Vol. 2nd Edition). Sacramento, CA: California Native Plant Society Press. Retrieved November 2, 2018, from http://vegetation.cnps.org/

Shuford, W., & Gardali, T. (2008). *California Bird Species of Special Concern.* Camarillo, CA: Western Field Ornithologists.

Sonoma Water and California Sea Grant. (2019). *Implementation of California Coastal Salmonid Population Monitoring in the Russian River Watershed (2015 - 2019).* Santa Rosa, CA. Retrieved from https://www.sonomawater.org/cmp

U.S. Fish and Wildlife Service. (2011, June). *Revised Recovery Plan for the Northern Spotted Owl (Strix occidentalis caurina).* Retrieved from https://www.fws.gov/arcata/es/birds/NSO/documents/USFWS2011RevisedRecoveryPlanNorthernSpottedOwl.pdf