

Memorandum

To:	Ms. Fiailoa Ah Sue SCRRA Metrolink 2704 North Garey Avenue Pomona, CA 91767
From:	Debra Leight, Project Manager Meris Guerrero, Permitting Lead
Date:	August 7, 2023
Re:	San Clemente North Beach Revetment Emergency Repair and Restoration Project California Environmental Quality Act Notice of Exemption

Introduction and Background

This memorandum describes the emergency repair and restoration work performed by the Southern California Regional Rail Authority (SCRRA) and Orange County Transit Authority (OCTA) in October 2021 for the San Clemente North Beach Revetment Emergency Repair and Restoration Project (Project) and existing statutory exemptions from the California Environmental Quality Act (CEQA) that are applicable to the Project.

Emergency repair and restoration of the railroad revetment was performed by SCRRA and OCTA in October 2021 on a portion of Metrolink railroad track that was severely damaged by tidal energy. Emergency authorization was obtained by SCRRA and OCTA from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC) in September 2021 to perform this work. In accordance with the conditions set forth in the authorizations for the emergency repair work, post-Project implementation and Notice of Completion forms (per USACE Regional General Permit [RGP] 63 and the Water Quality Order [No. 2018-0029-EXEC] for RGP 63 and per RWQCB Water Quality Order No. 2018-0029-EXEC Conditions A.2.a and A.2.b) and a Coastal Development Permit application (per the California Coastal Act [CCA]) must be completed and submitted to the USACE/RWQCB and CCC, respectively, along with a CEQA Notice of Exemption for a statutory exemption.

Project Location

The Project location is in the city of San Clemente, Orange County, California (**Figure 1**, Regional Vicinity). Specifically, the Project is southwest of Buena Vista and northeast of San Clemente City Beach (**Figure 2**, Local Vicinity). The nearest cross street is Avenida Estacion. The Project limits are mapped in Section 32, Township 8S, and Range 7W of the U.S. Geological Survey (USGS) 7.5-minute Dana Point, California, topographic quadrangle (USGS 1968). The Project is within an approximately 0.06-mile stretch of Metrolink railroad track, approximately 480 feet south of the San Clemente

Metrolink station parking lot, on a 0.12-acre site. The Project is between latitude 33.429037°, longitude -117.629860° and latitude 33.429722°, longitude -117.630430° near San Clemente Orange Sub Mile Post 203.95.

The Project study area occurs along the coast as well as the coastal bluffs associated with San Clemente City Beach. The Project study area contains coastal bluffs to the east, the railroad track and adjacent access road in the middle, and open beach to the west. Surrounding land uses consist of the San Clemente Metrolink station, Ole Hanson Beach Club, and facilities associated with San Clemente City Beach (e.g., parking lot, restrooms) to the north; Buena Vista and residential areas to the east; and open space composed of beaches and the Pacific Ocean to the south and west. Elevations in the Project study area range from approximately sea level to 50 feet above mean sea level, with the high point associated with the coastal bluffs east of the railroad tracks. Beaches consists of sandy, gravelly, or cobbly coastal shores that are washed and rewashed by tidal and wave action.

Project Description

On July 30, 2021, a portion of the Metrolink railroad track near the North Beach San Clemente Metrolink station (1850 Avenida Estacion, San Clemente, California) suffered severe damage due to continued erosion from ocean waves; the recession then continued to accelerate, resulting in a safety hazard. Therefore, emergency repairs and restoration of the damaged sections of the sand berm and rock rip-rap were conducted in October 2021. Project construction began on October 1, 2021 and was completed on October 17, 2021; environmental monitoring continued through October 2022 and identified additional erosion occurred at the sand berm resulting the placement of additional riprap.

The purpose of the Project was to stabilize the eroded sand berm and rock rip-rap revetment supporting the existing railroad tracks. Erosion from ocean waves had severely eroded the revetment along the mainline, which serves as the main rail corridor for Amtrak, Metrolink, and the Burlington Northern and Santa Fe Railway. The emergency response was necessary to stabilize the track embankment and allow for continued safe railroad operations for both passenger and freight traffic. Without the emergency repairs and restoration, rail operations through the corridor would have ceased and safety would have been jeopardized. The final goal of the entire activity was to immediately eliminate the emergency situation and rebuild the railroad revetment and sand berm to reduce further erosion, increase stabilization, and prevent failure of the railroad tracks.

The emergency repair work area was approximately 0.13 acre and consisted of 0.03 acre of sand berm replacement and 0.10 acre of rock rip-rap revetment protection (**Figure 3**, USACE/RWQCB Impacts). The 0.13 acres consisted of barren land, and no native vegetation communities or special-status plant and wildlife species were permanently removed or temporarily disturbed during emergency repair activities (see **Appendix B**, Updated Biological Resources Memorandum - San Clemente North Beach Revetment Emergency Repair and Restoration Project). Approximately 300 linear feet of the berm and revetment was rebuilt by filling eroded areas of the earthen berm with native soil and rock rip-rap for the revetment. Native soil material originated from the railroad right-of-way near Calafia State Beach (latitude 33.404192, longitude -117.605694). The material was deposited and spread along the 130-foot-long by 6-foot-wide area of eroded earthen berm; the rip-rap was used to rebuild the 7- to 12-foot-high by 24-foot-wide by 220-foot-long revetment.

Equipment access to the Project site occurred via the existing railroad tracks. All work and discharges of fill material were limited to the original footprint of the railroad embankment. All Project work was

considered to be permanent; no temporary impacts occurred as a result of the Project. However, although all Project impacts are considered permanent, because all work occurred within a previously affected footprint of the railroad embankment, no new permanent impacts occurred as a result of Project-related emergency repair work. Project impact areas are illustrated in **Figure 3**. Pre- and post-Project photos are provided in **Appendix A**.

Environmental Review

The following identifies the statutory exemptions described in CEQA that are applicable to the Project. These exemptions are defined in the California Public Resources Code (PRC) and the California Code of Regulations, State CEQA Guidelines.

Basis for Statutory Exemptions

Statutory Exemption for Emergency Projects (State CEQA Guidelines Section 15269[b])

CEQA and the guidelines for implementation of CEQA adopted by the Secretary of the California Resources Agency identify a list of statutory exemptions from CEQA, as granted by the State Legislature. The lists show those specific activities that fall within each of the classes of exemptions set forth in Article 18 of the State CEQA Guidelines; the Project being considered must be consistent with both the letter and the intent expressed in such classes.

Under Section 15269, a statutory exemption is included for emergency projects, which exempts projects that fall within this category from the requirements of CEQA. Section 15269(b) concerns “Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.”

The statutory exemption for emergency projects exempts specific actions necessary to prevent or mitigate an emergency. In the past, this exemption has not applied to long-term projects undertaken for the purposes of preventing or mitigating a situation that has a low probability of occurrence in the short term; however, the revisions to the State CEQA Guidelines that became effective on December 28, 2018, contained the following additional language: “Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.” This additional text would fit the current Project objectives, particularly because the proposed improvements are in response to the operational issues emanating from the 1996 public safety evaluation.

As previously discussed, the Project involved emergency safety improvements to an existing Metrolink railroad track near the North Beach San Clemente Metrolink station—specifically, to stabilize the eroded sand berm and rock rip-rap revetment supporting the existing railroad track. The emergency response was necessary to stabilize the track embankment and allow for continued safe railroad operations for both passenger and freight traffic. Without the emergency repairs and restoration, rail operations through the corridor would have ceased and safety would have been jeopardized. The emergency situation was eliminated when construction concluded on October 17, 2021, and environmental monitoring continued through October 2022 and identified additional erosion at the sand berm resulting the placement of additional riprap. No additional improvements or repairs are planned. The emergency improvements consisted of minor alterations to an existing facility that did not greatly alter the existing structure. Capacity is unchanged. Given that the safety

improvements were necessary to maintain service essential to public health and safety, the Project meets the requirements of this statutory exemption.

Conclusion

Per State CEQA Guidelines Section 15269(b), the Project is statutorily exempt from CEQA.

Appendix A - Figures

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Figure 1
Regional Vicinity
San Clemente North Beach Revetment Emergency Repair and Restoration

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- Legend**
- Contours
 - Biological Study Area (100-ft Buffer)
 - USACE/RWQCB Impacts**
 - Seciton 404/10
 - Section 404
 - Permanent Impacts**
 - ▨ Earthen Berm
 - ▨ Riprap

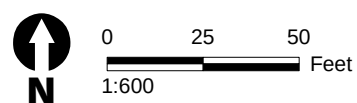


Figure 3
USACE/RWQCB Resources
San Clemente North Beach Revetment Emergency Repair and Restoration

Appendix B - Biology Memo



November 30, 2022

Ms. Fiailoa AhSue
SCRRA Metrolink
2704 North Garey Avenue
Pomona, CA 91767

**Subject: Updated Biological Resources Memorandum - San Clemente North Beach
Revetment Emergency Repair and Restoration Project**

Dear Ms. AhSue,

This memorandum contains the results of a biological literature review and impact assessment conducted by ICF for emergency repair work that was performed by Southern California Regional Rail Authority (SCRRA) Metrolink and the Orange County Transit Authority (OCTA) for the San Clemente North Beach Revetment Emergency Repair and Restoration Project (project) in October 2021. Biological resources reviewed included vegetation communities, special-status species, aquatic resources, and conservation areas. Habitat assessments were performed for special-status species with the potential to occur in the project and surrounding area that are protected under the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), California Endangered Species Act (CESA), California Fish and Game Code (e.g., protected species; CFG Code), or receive protection under the California Department of Fish and Wildlife (CDFW) as wildlife species of special concern or plant species with a California Rare Plant Rank of 1A, 1B, 2, 3, or 4. Based on the literature review results for the project area, there is potential for 14 special-status plant species and six special-status wildlife species to occur within the project biological study area (BSA; project limits of disturbance [LOD] plus a 100-foot buffer) within the coastal bluff scrub habitat outside of the project LOD; none of these species are expected to occur within the project LOD.

Emergency repair and restoration of railroad revetment was performed by SCRRA and OCTA in October 2021 to repair a portion of the Metrolink railroad track that was severely damaged by tidal energy. Emergency authorization was obtained by SCRRA and OCTA from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) in September 2021 to perform this work. Consultation with California Coastal Commission (CCC) was in process in September 2021, but emergency authorization was not provided or denied. In accordance with the conditions set forth in the authorizations for the emergency repair work, post-project implementation and notice of completion forms (per USACE Regional General Permit [RGP] 63 and Water Quality Order [No. 2018-0029-EXEC] for RGP 63 and per RWQCB Water Quality Order No. 2018-0029-EXEC Conditions A.2.a and A.2.b) and a Coastal Development Permit application (per the California Coastal Act [CCA]) must be completed and submitted to the USACE/RWQCB and CCC, respectively. This Biological Resources Memorandum supports the required documentation

demonstrating project compliance with Section 404(e) and 401 of the Clean Water Act (CWA) and the CCA.

Project Location and Description

The proposed project is in the City of San Clemente, Orange County, California (Figure 1). Specifically, the proposed project is southwest of Buena Vista and northeast of San Clemente City Beach (Figure 2). The nearest cross street is Avenida Estacion. The project limits are mapped in Section 32, Township 8S, and Range 7W of the U.S. Geological Survey (USGS) 7.5-minute Dana Point, California Topographic Quadrangle (USGS 1968). The project is within an approximately 0.06-mile stretch on the Metrolink railroad track, approximately 480 feet south from the San Clemente Metrolink Station Parking Lot. The project is located between latitude 33.429037°, longitude -117.629860° and latitude 33.429722°, longitude -117.630430° near the San Clemente Orange Sub Mile Post 203.95.

On July 30, 2021, a portion of the Metrolink railroad track, located near the North Beach San Clemente Metrolink Station (1850 Avenida Estacion, San Clemente, California) suffered severe damage due to continued erosion from ocean waves; the recession then continued to accelerate, resulting in a safety hazard. Therefore, emergency repairs and restoration of the damaged sections of sand berm and rock rip-rap were conducted in October 2021. Project construction began on October 1, 2021 and was completed on October 17, 2021; environmental monitoring continued through October 2022 and identified additional erosion occurred at the sand berm resulting the placement of additional riprap.

The purpose of the project was to stabilize the eroded sand berm and rock rip-rap revetment supporting the existing train tracks. Erosion from ocean waves had severely eroded the revetment along the mainline which serves as the main rail corridor for Amtrak, Metrolink, and Burlington Northern and Santa Fe Railway. The emergency response was necessary to stabilize the track embankment to allow for continued safe railroad operations for both passenger and freight traffic. Without the emergency repairs and restoration, rail operations through the corridor would have ceased and safety would have been jeopardized. The final goal of the entire activity was to immediately eliminate the emergency situation and rebuild the railroad revetment and sand berm to reduce further erosion, increase stabilization, and prevent failure of the railroad tracks.

The emergency repair work area was approximately 0.13 acre and consisted of 0.03 acre of sand berm replacement and 0.10 acre of rock rip-rap revetment protection (Figure 3). Approximately 300 linear feet of the berm and revetment were rebuilt by filling eroded areas of the earthen berm with native soil and rock rip-rap for the revetment. Native soil material originated from the railroad right-of-way near Calafia State Beach (latitude 33.404192, longitude -117.605694) and was deposited and spread along the 130-foot long by 6-foot wide area of eroded earthen berm and the rip-rap was used to rebuild the 7 to 12-foot high by 24-foot wide by 220-foot long revetment.

Equipment access to the project site occurred via the existing train tracks. All work and discharges of fill material were limited to the original footprint of the railroad embankment.

All project work was considered to be permanent; no temporary impacts occurred as a result of the project. However, although all project impacts are considered permanent, because all work occurred within a previously impacted footprint of the railroad embankment, no new permanent impacts occurred as a result of project-related emergency repair work. Project impact areas are illustrated on Figure 3. Pre- and post-project photos are provided in Appendix A.

Methods

Literature Review

Sensitive biological resources potentially occurring within the BSA were investigated through desktop analysis; field surveys were not performed for the project due to the accelerated schedule required to perform the emergency repair work.

A literature review was conducted to evaluate the environmental setting of the project and identify sensitive biological resources that may be found on or near the BSA. The literature review results are included in Appendix B. The search included the U.S. Fish and Wildlife Service (USFWS) mapping of designated critical habitat (USFWS 2022a) and generation of an unofficial species list through the USFWS Information for Planning and Consultation database (USFWS 2022b). A review of the National Marine Fisheries Service (NMFS) Essential Fish Habitat (EFH) Mapper identified the presence or absence of EFH (NMFS 2022a), and a search of the NMFS West Coast Region Species List (NMFS 2022b) provided an informal list of NMFS-protected aquatic species that could be present within the general vicinity of the project. Finally, the California Natural Diversity Database (CNDDB) (CDFW 2022) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2022) were reviewed for the USGS Dana Point and San Clemente 7.5-minute quadrangles (USGS 1968). A two-quadrangle search, rather than a nine-quadrangle search, was performed because the project consists of a small area located along a developed rail line on the eastern boundary of the Dana Point quadrangle, thereby adequately capturing those species with potential to occur in the vicinity.

Vegetation communities were mapped using the U.S. Forest Service (USFS) CalVeg mapped vegetation communities (USFS 2014). As a part of the desktop analysis, habitat was visually assessed using Google Earth Pro (Google Earth 2022), site photos, and the mapped vegetation community layers from USFS CalVeg. In some instances, mapping discrepancies in the USFS dataset and aerial imagery/site photos were observed; in those cases vegetation layers were modified per Holland (1986) to match site-specific conditions.

Aquatic resources under the jurisdiction of USACE, RWQCB, and CCC were evaluated in the BSA. Aquatic resources within the project area were investigated through desktop analysis; field surveys, including a Jurisdictional Delineation, were not performed for the project. The desktop analysis used USGS National Hydrography Dataset (NHD) (USGS 2022), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS 2022c) mapping data, and aerial imagery. Tidal limits were based on tidal and elevation data using contour lines.

For this report, “special-status” species are (1) listed, proposed for listing, or candidates for listing under FESA as threatened or endangered; (2) listed or candidates for listing under the CESA as

threatened or endangered; (3) a CDFW fully protected species; (4) a CDFW species of special concern; or (5) species that have a California Rare Plant Rank of 1A, 1B, 2, 3, or 4.

The potential for lands within the BSA to support special-status plant and animal species was assessed via desktop analysis to identify possible project impacts on those species. Vegetation communities, land cover types, water bodies, soils, and records of occurrence within the BSA were considered when determining potentially suitable habitat to support special-status species and the potential of individual special-status species to occur. Resources reviewed included USFS CalVeg mapping (USFS 2014), Google Earth aerials and photos (Google Earth 2022), records of occurrence (CDFW 2022), Natural Resources Conservation Service soil mapping (NRCS 2022), and USGS topographic maps (USGS 1968).

Results and Discussion

Existing Conditions

The BSA occurs along the coast and coastal bluffs associated with San Clemente City Beach. The BSA contains coastal bluffs to the east, the railroad track and adjacent access road in the middle, and open beach to the west. Surrounding land use consists of San Clemente Metrolink Station, Ole Hanson Beach Club, and facilities associated with San Clemente City Beach (e.g., parking lot, restrooms) to the north; Buena Vista and residential areas to the east; and open space composed of beaches and the Pacific Ocean to the south and west.

Elevations in the BSA range from approximately sea level to 50 feet above mean sea level, with the high point associated with the coastal bluffs east of the railroad tracks. The topography within the BSA is gradual to steep slopes within the coastal bluffs portion of the BSA and relatively flat and gently sloping downward toward the Pacific Ocean at the base of the bluffs in the western portion of the BSA.

Soils in the BSA include Beaches and Myford Sandy Loam, 9 to 30 Percent Slopes, Eroded. Beaches consists of sandy, gravelly, or cobbly coastal shores that are washed and rewashed by tidal and wave action. These areas may be partly covered with high water during high tides or storm periods. Beaches support little or no vegetation and have very slow runoff. Myford Sandy Loam consists of a moderately drained soil on marine terraces and is formed from sandy sediments. Myford Sandy Loam has medium to rapid runoff and very slow permeability. Soil series identified in the BSA are shown on Figure 4 (provided in Appendix A; USDA-NRCS 2022).

Vegetation Communities/Land Cover Types

Two land cover types (barren land and urban) are reported within the BSA based on USFS CalVeg mapping data (USFS 2014). In addition, based on a review of aerial imagery and site photographs, coastal bluff scrub is present on the coastal bluffs along the eastern edge of the BSA and open beach is present along the western edge of the BSA outside of the project LOD. Vegetation communities and land cover types within the BSA are discussed below and depicted in Figure 5; representative photos of site conditions are presented in Appendix A.

Coastal Bluff Scrub

Coastal bluff scrub is characterized by California encelia (*Encelia californica*) and ashy buckwheat scrub (*Eriogonum cinereum*) being dominant or co-dominant within the shrub layer. This shrub cover is intermittent to continuous and typically less than 2 meters in height, with a variable herbaceous layer. Within the BSA, coastal bluff scrub habitat occurs on the coastal bluffs along the eastern edge of the BSA outside of the project footprint.

Open Beach

Open beach is free of vegetation and is associated with the Pacific Ocean along the western edge of BSA.

Barren Land/Urban

Barren land and urban areas are comprised of land cover types that are associated with human development and activities and do not contain native vegetation communities. Within the BSA, this includes the railroad tracks and associated infrastructure, rip-rap, parking lots, and other permanent structures, as well as open areas that are mostly devoid of vegetation and are frequently disturbed by human activities (e.g., erosion control, dirt access road, pedestrian activity). This land use type is the dominant land cover within the project footprint and is typically unvegetated or composed of nonnative, ruderal vegetation (Figure 5). The rock rip-rap adjacent to the railroad tracks has patches of sea fig (*Carpobrotus* sp.) interspersed throughout. The railroad track and immediate right-of-way are devoid of vegetation.

Table 1. Summary of Vegetation Community/Land Cover Type Acreages within the Project LOD and BSA

Vegetation/Land Cover Type¹	Acres within LOD	Acres within BSA²
Coastal Bluff Scrub	--	0.40
Open Beach	--	1.00
Barren Land	0.13	0.70
Urban	--	0.16
Total	0.13	2.26

¹Based on USFS CalVeg mapping data (USFS 2014), aerial imagery, and site photos.

²Project limits of disturbance (LOD) plus 100-foot buffer

Project Impacts on Vegetation Communities/Land Cover Types

The project resulted in 0.13 acre of permanent impacts on barren lands as a result of sand berm reconstruction and rock rip-rap revetment. No native vegetation communities were permanently removed or temporarily disturbed during emergency repair activities (Table 1; Figure 5).

Sensitive Natural Communities

Seven sensitive natural communities were identified from the CNDDB for the USGS Dana Point and San Clemente quadrangles: Southern Coast Live Oak Riparian Forest, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, Southern Foredunes, Southern Sycamore Alder Riparian Woodland, and Valley Needlegrass Grassland (see Appendix B; CDFW 2022). These communities are classified as sensitive by CDFW because they have a restricted range, cumulative losses throughout the region, and support a high number of endemic and/or listed sensitive plant and wildlife species. None of the seven sensitive natural communities identified within the literature search were detected in the BSA based on USFS CalVeg mapping data and a review of aerial imagery/site photos. Therefore, no sensitive natural communities were impacted as a result of project emergency repair activities.

Aquatic Resources

Aquatic resources under the jurisdiction of USACE, RWQCB, and CCC were evaluated in the BSA. USACE/RWQCB non-wetland waters of the U.S. (WoUS)/waters of the State (WoS) under Section 10 and Section 10/404 and CCC resources were detected in the BSA during the desktop review. No state or federally protected wetlands were identified within the BSA.

Up to 225 cubic yards (cy) of native soil material and approximately 1,605 cy of 3 to 5-foot diameter rock rip-rap were placed in approximately 0.13 acre of non-wetland WoUS/WoS as a result of sand berm reconstruction and rock rip-rap revetment (see Table 2). Approximately 0.13 acre (with 1,830 cy of discharge) of CCC resources within the California Coastal Zone were permanently impacted as well. No temporary impacts on either USACE/RWQCB or CCC resources occurred as a result of the project. Project impacts to USACE/USACE resources and CCC resources are illustrated on Figures 6 and 7, respectively.

Table 2. Project Impacts on USACE/RWQCB and CCC Resources

Permanent Impacts¹	Volume (cubic yards)	Section 10/404 (acre)	Section 10 Only (acre)	California Coastal Act
Sand berm reconstruction	225	0.004	0.01	0.02
Rock rip-rap revetment	1,605	0.02	0.09	0.11
Total	1,830	0.03	0.10	0.13

¹Constructed within the existing footprint

Under the conditions of the emergency work authorization from USACE, RWQCB, and CCC, post-project notification and submission of permitting forms demonstrating project compliance with the CWA 401/404 and CCA are required (Table 3).

Table 3. Project Permitting

Agency	Permit/Approval	Process
USACE	RGP 63, Regional Condition 26	Notification is in progress.
RWQCB	RGP 63, Notice of Completion	Notification is in progress.
CCC	Coastal Development Permit	Notification is in progress.

The project avoided new permanent impacts by limiting work and discharges of fill material to the original, as-built footprint of railroad embankment. Furthermore, direct impacts were minimized as all work was conducted from the railroad tracks and no equipment was used or staged on the beach.

Erosion control measures such as straw bales and fiber rolls were installed to avoid and minimize potential indirect impacts. Construction workers and field personnel followed measures outlined in the Orange County Stormwater Program, Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers. The City of San Clemente's Coastal Land Use Plan policies, regarding sand berms, equipment and the protection of environmentally sensitive habitats, and the Best Management Practices (BMPs) for Construction Sites policies were also implemented. To prevent water pollution, pans were set under construction equipment, fiber rolls were set along fencing, and all public structures and facilities were protected in place. Consequently, indirect impacts on aquatic resources are expected to have been minor.

While the project resulted in permanent discharges of fill material into non-wetland WoUS/WoS and CCC resources, all work and placement of fill material occurred within the original railroad embankment. The project restored the railroad embankment to baseline/as-built conditions; therefore, there is no new permanent or temporary impacts to WoUS/WoS or CCC resources. Furthermore, adverse impacts were minimized as all work was conducted from the railroad tracks and no equipment was used or staged on the beach. As such, no compensatory mitigation is proposed.

Plants and Wildlife

Special-Status Plants

A total of 48 special-status plant species were reported in the CDFW, CNPS, and USFWS literature search results for the USGS Dana Point and San Clemente, 7.5-minute quadrangles, two of which are federally and/or state listed: thread-leaved brodiaea (*Brodiaea filifolia*) and California Orcutt grass (*Orcuttia californica*), (Appendix B; CDFW 2022, CNPS 2022, USFWS 2022b). Of these 48 species, 34 were determined to be absent within the BSA due to a lack of suitable habitat or the species elevational or geographic range. Neither of the two federally and/or state listed species has a potential to occur in the BSA. Fourteen non-listed special-status plant species have a potential to occur within BSA in the coastal bluff scrub habitat that occurs outside of project LOD: aphanisma (*Aphanisma blitoides*), Coulter's saltbush (*Atriplex coulteri*), south coast saltscale (*Atriplex pacifica*), Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), seaside cistanthe (*Cistanthe maritima*), cliff spurge (*Euphorbia misera*), vernal barley (*Hordeum intercedens*), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), Santa Catalina Island desert-thorn (*Lycium brevipes* var. *hassei*), California box-thorn

(*Lycium californicum*), cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), chaparral ragwort (*Senecio aphanactis*), and woolly seablite (*Suaeda taxifolia*). Special-status plant species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed in Appendix C.

However, none of these 14 species are expected to occur within the project LOD due to lack of suitable habitat (see Appendix C). All project work was performed within barren land and urban areas along the existing railroad right-of-way. Consequently, no direct impacts on any special-status plant species, including federally and/or state-listed as threatened and/or endangered plants, would have occurred as a result of the project emergency repair work. Should any special-status species be present within the BSA outside of the project LOD, then the general BMPs that were implemented for the project (as described in the *Aquatic Resources* section above) would have avoided or reduced any indirect impacts that may have occurred (e.g., erosion, discharge, dust).

Special-Status Wildlife

A total of 53 wildlife species were reported in the CDFW, NMFS, and USFWS literature search results for the USGS Dana Point and San Clemente 7.5-minute quadrangles, 28 of which are federally and/or state listed or candidate species: San Diego fairy shrimp (*Branchinecta sandiegonensis*), monarch butterfly (*Danaus plexippus*), black abalone (*Haliotis cracherodii*), white abalone (*Haliotis sorenseni*), Riverside fairy shrimp (*Streptocephalus woottoni*), green sturgeon (Southern Distinct Population Segment; *Acipenser medirostris*), tidewater goby (*Eucyclogobius newberryi*), steelhead (Southern California Coast Distinct Population Segment; *Oncorhynchus mykiss*), arroyo toad (*Anaxyrus californicus*), North Pacific loggerhead sea turtle (*Caretta caretta*), East Pacific green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), olive Ridley sea turtle (*Lepidochelys olivacea*), tricolored blackbird (*Agelaius tricolor*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Polioptila californica californica*), California least tern (*Sternula antillarum browni*), least Bell's vireo (*Vireo bellii pusillus*), Guadalupe fur seal (*Arctocephalus townsendi*), Sei whale (*Balaenoptera borealis*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), North Pacific right whale (*Eubalaena japonica*), humpback whale (*Megaptera novaeangliae*), southern resident killer whale (*Orcinus orca*), sperm whale (*Physeter microcephalus*), Stephens' kangaroo rat (*Dipodomys stephensi*), and pacific pocket mouse (*Perognathus longimembris pacificus*) (Appendix B; CDFW 2022, NMFS 2022b, USFWS 2022b). Of the 53 species identified, 46 meet the definition of a "special-status" species used by this report and are included in the following analysis (i.e., Watch List, State Rank, and Global Rank only species were excluded). Of these 46 special-status species, 40 were determined to be absent within the BSA because of a lack of suitable habitat and/or the species geographic range. None of the 28 federally and/or state listed or candidate species has a potential to occur in the BSA. Six special-status non-listed wildlife species have a potential to occur within the BSA in the coastal bluff scrub habitat outside of the project LOD: Southern California legless lizard (*Anniella stebbinsi*), California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Special-status wildlife species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed in Appendix C.

Habitat to support these species is limited to the coastal bluff scrub portion of the BSA. None of the six special-status wildlife species are expected to occur within the project LOD, which is composed of the railroad track and right-of-way within barren land and urban land cover types. No native vegetation communities that could support any special-status wildlife species were disturbed or removed as a result of project emergency activities (see Table 1 and Figure 5). As such, no direct impacts on any special-status wildlife species (e.g., loss of habitat, mortality, or injury) would have occurred during project implementation.

If any of these species had been present within the BSA during project emergency activities, indirect impacts (e.g., degradation of habitat through noise, dust, human presence) on these species and their suitable habitat could have occurred. However, indirect impacts would have been temporary as project work was only performed for a total of 5 days (i.e., October 1-3, 2021 and October 16-17, 2021). In addition, avoidance and minimization measures that are non-specific to biological resources, including BMPs, were implemented to minimize project effects during construction. These BMPs, though not specific to biological resources, would have reduced indirect impacts on surrounding native habitats, including dust control, erosion and runoff control, and pollution prevention. Furthermore, if these special-status wildlife species are present within the BSA, they are likely already acclimated to disturbances from noise and human presence from the railroad track and pedestrian use of the dirt access road along the railroad track. Consequently, it is unlikely that these species would have been indirectly affected by the project. Because this area is small compared to the regional habitat available for these species, and because these temporary indirect impacts would not have resulted in the long-term decline of these species, no substantial impacts are expected to have occurred on special-status wildlife species as a result of the project emergency activities that were performed.

Nesting habitat for special-status bird species and common bird species protected under the MBTA occurs throughout the BSA in developed and undeveloped areas (e.g., trees, shrubs, grasses), particularly within the coastal bluff scrub habitat located in the eastern portion of the BSA outside of the project LOD. However, project emergency repair work was performed in October 2021, which is outside of the nesting bird season (i.e., February 1–September 1). Additional riprap was placed in September 2022 to address additional observed erosion and berm failure. No nesting birds are anticipated to have been impacted as a result of project emergency repair activities.

Conservation Areas

Critical Habitat

Based on a review of USFWS critical habitat documentation and maps (USFWS 2022a, 2022b) and the NMFS Species List Tool (NMFS 2022b), no USFWS- or NMFS-designated critical habitat is present within the BSA or general project vicinity. Because no critical habitat is present within the BSA, no impacts on USFWS- or NMFS-designated critical habitat occurred as a result of project-related emergency repair activities.

National Marine Fisheries Service Essential Fish Habitat and Marine Mammal Protection Act

The entirety of Orange County is within the NMFS jurisdictional boundary (NMFS 2022b). A query of the NMFS EFH Mapper (NMFS 2022a) and NMFS West Coast Region Species List (NMFS 2022b) for this project confirmed that there are NMFS resources, including EFH, located within the project region: FESA Anadromous Fish, FESA Anadromous Fish Critical Habitat (Southern California coast steelhead distinct population segment), FESA Marine Invertebrates, FESA Sea Turtles, FESA Whales, FESA Pinnipeds, EFH (groundfish, coastal pelagic, and highly migratory species), and species protected under the Marine Mammal Protection Act (cetaceans and pinnipeds; MMPA). Species protected under FESA are discussed in the *Special-Status Wildlife* subsection above and in Appendix C.

Although NMFS resources are present within the project region, none occur within the BSA, including EFH, FESA protected species, or MMPA species. Therefore, no impacts on NMFS resources, including EFH, are anticipated to have occurred as a result of project-related emergency repair activities.

Conclusions

Of the 20 special-status plant and wildlife species from the literature search results that may occur within the BSA (CDFW 2022, CNPS 2022, NMFS 2022b, USFWS 2022b), none of the species have a potential to occur within the project LOD due to lack of suitable habitat. No sensitive natural communities are reported within the BSA, and none were detected in aerial imagery or site photos during the desktop review (CDFW 2022, Google Earth 2022). No NMFS resources or USFWS-designated critical habitat are present within the BSA (NMFS 2022a, NMFS 2022b, USFWS 2022a). Therefore, none of these sensitive biological resources are expected to have been impacted during the implementation of emergency repair activities, including sand berm reconstruction and rock rip-rap revetment.

A total of 0.13 acre of non-wetland WoUS/WoS (Section 10 and Section 10/404) and CCC aquatic resources were permanently impacted by the project (see Table 2 above). However, the project restored the railroad embankment to baseline/as-built conditions; therefore, there is no new permanent or temporary impacts to WoUS/WoS or CCC resources. Emergency authorization from USACE and RWQCB was obtained in September 2021 prior to the start of project activities; Consultation with CCC was in process in September 2021, but emergency authorization was not provided or denied. Notification of project completion would be required following completion of emergency repair work per emergency project authorization requirements (see Table 3 above).

Should you have any questions please contact me at (949) 333-6622 or colleen.martin@icf.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Colleen Martin', with a stylized flourish at the end.

Colleen Martin
Senior Biologist

Figures

- Figure 1: Regional Vicinity
- Figure 2: Project Location
- Figure 3: Project Area and Biological Study Area
- Figure 4: Soils
- Figure 5: Vegetation Communities/Land Cover Types
- Figure 6: USACE/RWQCB Resources
- Figure 7: CCC Resources

Appendices

- Appendix A: Site Photos
- Appendix B: Literature Review Search Results
- Appendix C: Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

References

- California Department of Fish and Wildlife (CDFW). 2022. *Element Reports for Dana Point and San Clemente 7.5-minute Topographic Maps*. California Natural Diversity Database, Wildlife Habitat Data Analysis Branch, Habitat Conservation Division. Sacramento, CA. Available: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed: July 2022.
- California Native Plant Society (CNPS). 2022. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.39). Sacramento, CA. Available: <http://www.cnps.org/inventory>. Accessed: July 2022.
- Google Earth. 2022. *Google Earth Pro, V 7.1.1.1580*. 33.429408° N, -117.630146° W. Imagery: August 1, 2021. Accessed: July 2022.
- Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Wildlife. The Resources Agency, ed., p. 156. Sacramento, CA.
- National Marine Fisheries Service (NMFS). 2022a. *Essential Fish Habitat Mapper*. NOAA Office of Habitat Conservation. Available: <http://www.habitat.noaa.gov/protection/efh/efhmapper/>. Accessed: July 2022.
- _____. 2022b. *NMFS West Coast Region California Species List*. Updated May 26, 2016. Accessed: July 2022.
- U.S. Fish and Wildlife Service (USFWS). 2022a. *Critical Habitat GIS Data*. Carlsbad, CA. Available: <http://www.fws.gov/carlsbad/GIS/CFWOGIS.html>. Accessed: July 2022.
- _____. 2022b. *USFWS Unofficial Species List*. Carlsbad, CA. Available: <http://ecos.fws.gov/ipac/gettingStarted/map>. Accessed: July 2022.

———. 2022c. *National Wetlands Inventory Wetlands Mapper*. Available:
<https://www.fws.gov/wetlands/data/Mapper.html>. Accessed: April 2022.

U.S. Forest Service (USFS). 2014. *Vegetation Classification and Mapping. Pacific Southwest Region–Remote Sensing Lab*. U.S. Department of Agriculture. Available:
<https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192>. Accessed: July 2022.

United States Geological Survey (USGS). 1968. *Dana Point and San Clemente, California, 7.5-minute Topographic Map*. Reston, VA. Color, photorevised 1975, scale 1:24,000.

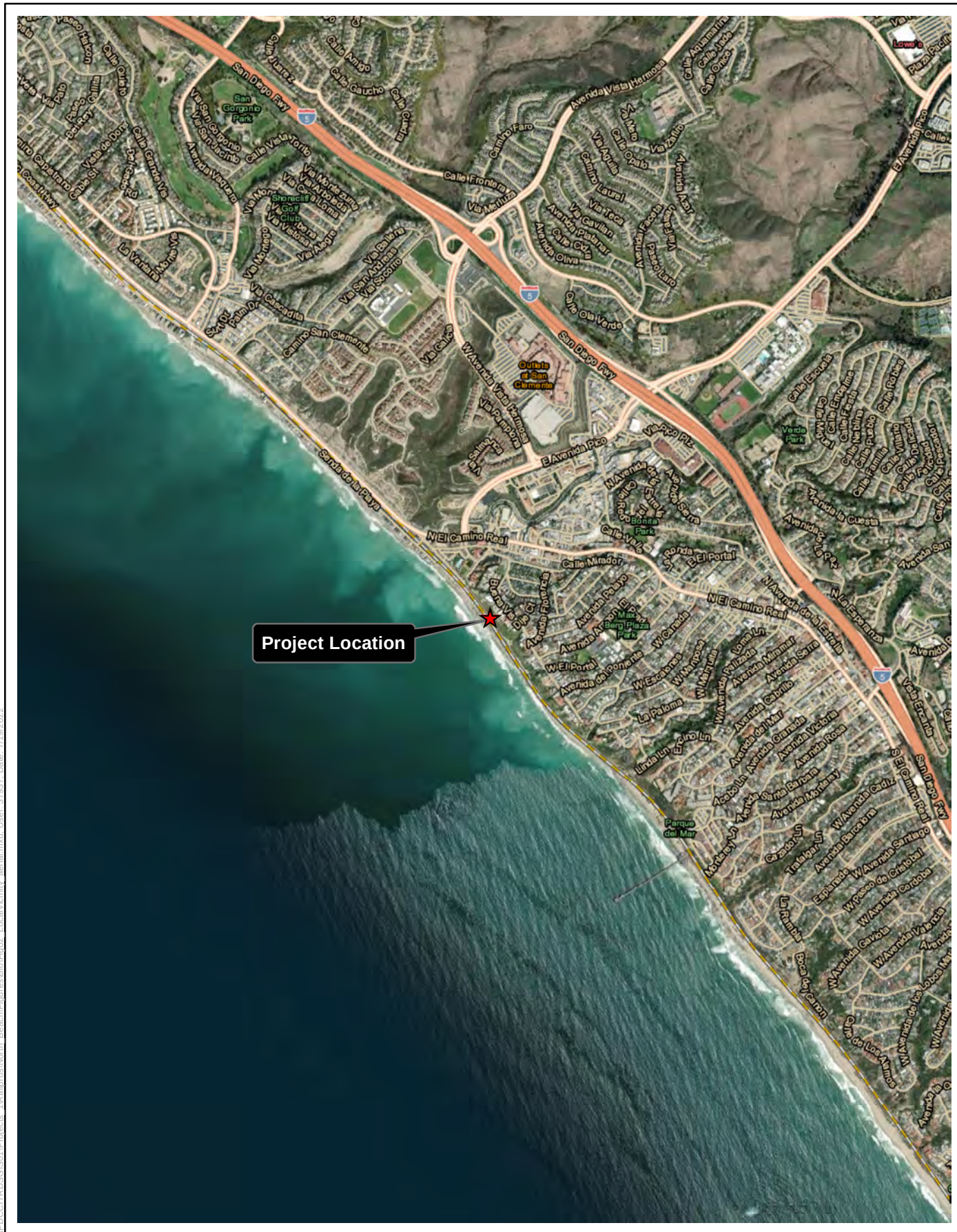
———. 2022. *National Hydrography Dataset*. U.S. Geological Survey in cooperation with the U.S. Environmental Protection Agency, U.S. Department of Agriculture Forest Service, and other federal, state, and local partners. Available: [ftp://nhdftp.usgs.gov/DataSets/Staged/ States/](ftp://nhdftp.usgs.gov/DataSets/Staged/States/). Accessed: April 2022.

Figures

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Figure 1
Regional Vicinity
San Clemente North Beach Revetment Emergency Repair and Restoration



0 1,000 2,000
Feet
1:24,000

Source: USGS Dana Point and San Clemente Quad

Figure 2
Local Vicinity
San Clemente North Beach Revetment Emergency Repair and Restoration

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- Legend**
- Biological Study Area (100-ft Buffer)
 - Permanent Impacts**
 - Earthen Berm
 - Riprap

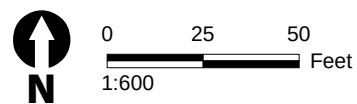
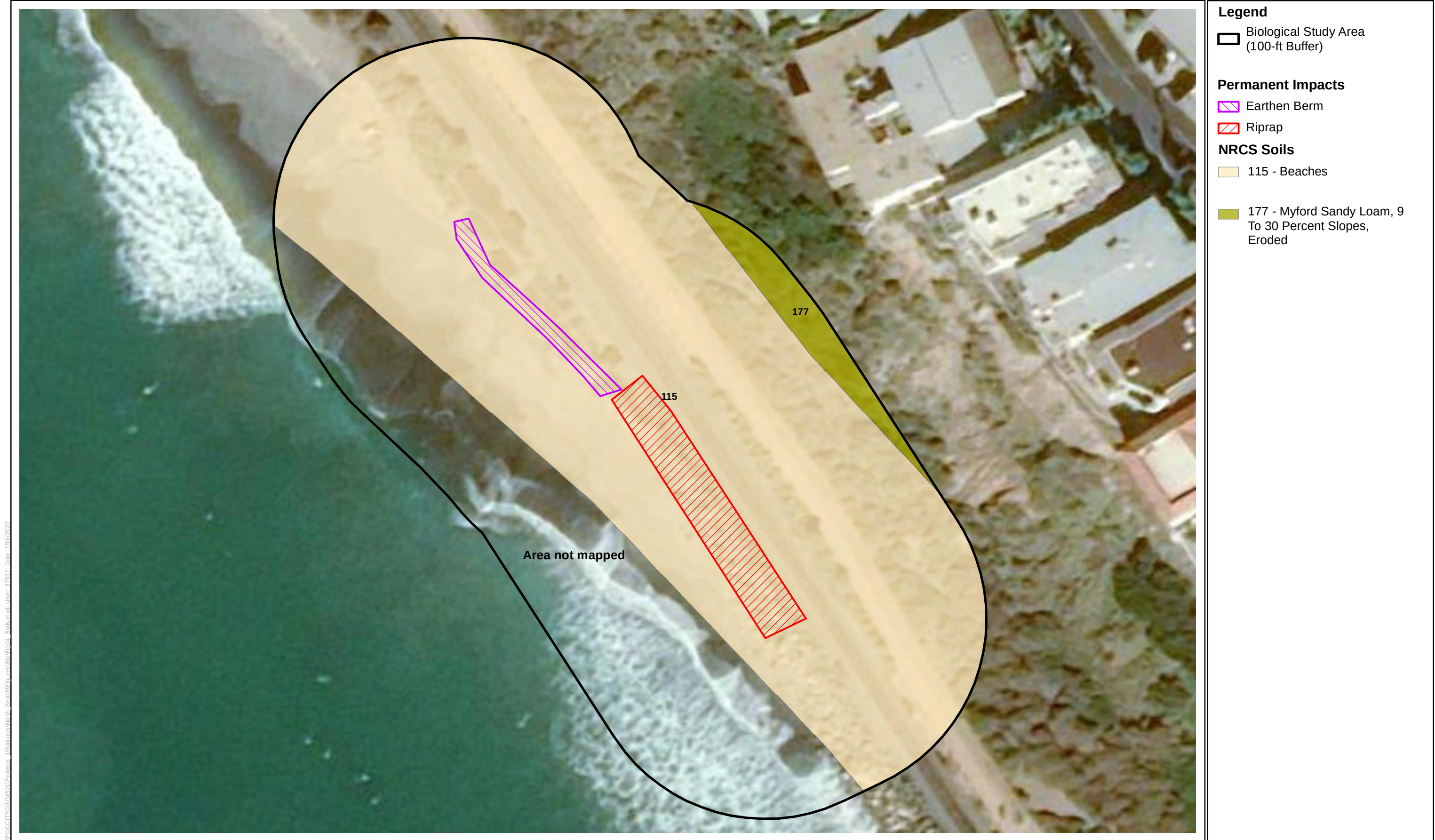


Figure 3
Project Area and Biological Study Area
San Clemente North Beach Revetment Emergency Repair and Restoration



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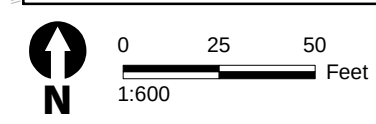
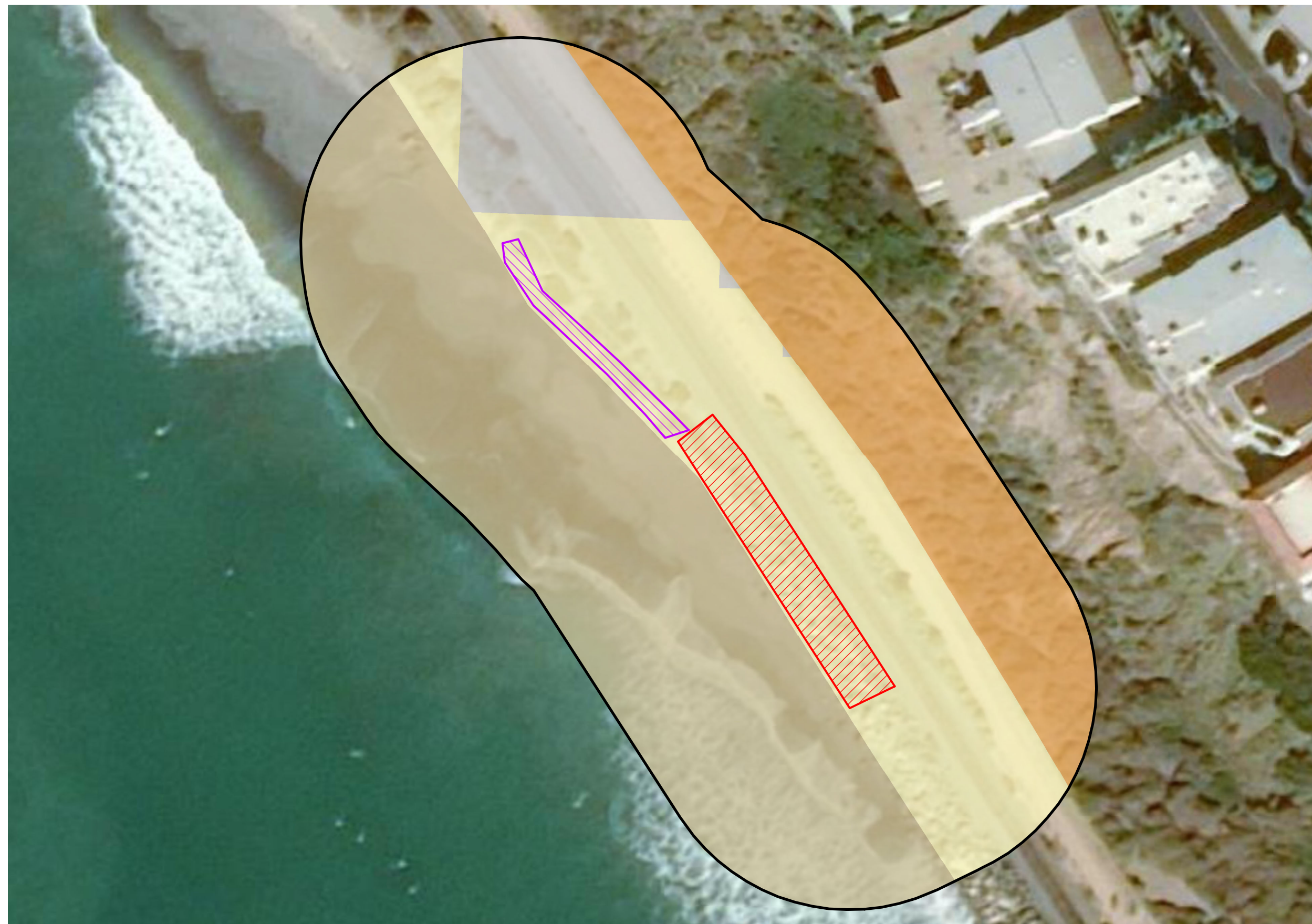


Figure 4
Soils
San Clemente North Beach Revetment Emergency Repair and Restoration

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- Legend**
- Biological Study Area (100-ft Buffer)
 - Permanent Impacts**
 - Earthen Berm
 - Riprap
 - Vegetation Communities/
Land Cover Types**
 - Barren Land
 - Coastal Bluff Scrub
 - Open Beach
 - Urban

Source: USFS CalVeg



0 25 50
1:600 Feet

Figure 5
Vegetation Communities/Land Cover Types
San Clemente North Beach Revetment Emergency Repair and Restoration

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- Legend**
- Contours
 - Biological Study Area (100-ft Buffer)
 - USACE/RWQCB Impacts**
 - Seciton 404/10
 - Section 404
 - Permanent Impacts**
 - ▨ Earthen Berm
 - ▨ Riprap

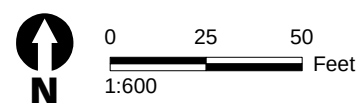


Figure 6
USACE/RWQCB Resources
San Clemente North Beach Revetment Emergency Repair and Restoration



Figure 7
CCC Resources
San Clemente North Beach Revetment Emergency Repair and Restoration

Appendix A

Site Photos

Appendix A. Site Photos

General Vicinity



Damage to Revetment:



Damage to Earthen Berm



Appendix B

Literature Review Search Results

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Orange County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [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.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Pacific Pocket Mouse <i>Perognathus longimembris pacificus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher <i>Poliophtila californica californica</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5945	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3762	Endangered

Fishes

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats 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.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- 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>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

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 (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

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

Black Oystercatcher *Haematopus bachmani*

Breeds Apr 15 to Oct 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9591>

Black Skimmer *Rynchops niger*

Breeds May 20 to Sep 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5234>

Black Swift *Cypseloides niger*

Breeds Jun 15 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Black Turnstone *Arenaria melanocephala*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher *Toxostoma redivivum*

Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe *Aechmophorus clarkii*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat *Geothlypis trichas sinuosa*

Breeds May 20 to Jul 31

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>

Lawrence's Goldfinch *Carduelis lawrencei*

Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Marbled Godwit *Limosa fedoa*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Nuttall's Woodpecker *Picoides nuttallii*

Breeds Apr 1 to Jul 20

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>

Oak Titmouse *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Olive-sided Flycatcher *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Short-billed Dowitcher *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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 and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

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

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.











Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin

Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be

confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also

been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad(Dana Point (3311746) OR San Clemente (3311745))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
<i>Anaxyrus californicus</i> arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
<i>Anniella stebbinsi</i> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aphanisma blitoides</i> aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex coulteri</i> Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
<i>Atriplex pacifica</i> south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G2	S1S2	
<i>Branchinecta sandiegonensis</i> San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S2	
<i>Brodiaea filifolia</i> thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
<i>Calochortus weedii</i> var. <i>intermedius</i> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> Orcutt's pincushion	PDAST20095	None	None	G5T1T2	S1	1B.1
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	AMAFD05021	None	None	G5T3	S3	SSC
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
<i>Choeronycteris mexicana</i> Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
<i>Coelus globosus</i> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	PDERI0B011	None	None	G3T2	S2	1B.2
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T2T3	S2S3	
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S2	
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	PDCRA04051	None	None	G3T2	S2	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium pendletonense</i> Pendleton button-celery	PDAP10Z120	None	None	G1	S1	1B.1
<i>Eucyclogobius newberryi</i> tidewater goby	AFCQN04010	Endangered	None	G3	S3	
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Euphorbia misera</i> cliff spurge	PDEUP0Q1B0	None	None	G5	S2	2B.2
<i>Gila orcuttii</i> arroyo chub	AFCJB13120	None	None	G2	S2	SSC
<i>Harpagonella palmeri</i> Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Isocoma menziesii</i> var. <i>decumbens</i> decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Lycium brevipes</i> var. <i>hassei</i> Santa Catalina Island desert-thorn	PDSOL0G0N0	None	None	G5T1Q	S1	3.1



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Monardella hypoleuca ssp. intermedia</i> intermediate monardella	PDLAM180A4	None	None	G4T2?	S2?	1B.3
<i>Myosurus minimus ssp. apus</i> little mousetail	PDRAN0H031	None	None	G5T2Q	S2	3.1
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<i>Nolina cismontana</i> chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
<i>Oncorhynchus mykiss irideus pop. 10</i> steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
<i>Pentachaeta aurea ssp. allenii</i> Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Plestiodon skiltonianus interparietalis</i> Coronado skink	ARACH01114	None	None	G5T5	S2S3	WL
<i>Poliophtila californica californica</i> coastal California gnatcatcher	ABPB08081	Threatened	None	G4G5T3Q	S2	SSC
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Quercus dumosa</i> Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
<i>Senecio aphanactis</i> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<i>Southern Coastal Salt Marsh</i> Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
<i>Southern Cottonwood Willow Riparian Forest</i> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<i>Southern Dune Scrub</i> Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
<i>Southern Foredunes</i> Southern Foredunes	CTT21230CA	None	None	G2	S2.1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
<i>Suaeda esteroa</i> estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 68

Search Results

48 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3311746:3311745]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
<i>Aphanisma blitoides</i>	aphanisma	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2
<i>Artemisia palmeri</i>	San Diego sagewort	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	None	None	G3?	S3?	4.2
<i>Atriplex coulteri</i>	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S1S2	1B.2
<i>Atriplex pacifica</i>	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	FT	CE	G2	S2	1B.1
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Asteraceae	annual herb	Jan-Aug	None	None	G5T1T2	S1	1B.1
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	None	None	G3	S3	4.2
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	None	None	G5T3	S3	1B.2
<i>Cistanthe maritima</i>	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	Ericaceae	perennial evergreen shrub	Apr-Jun	None	None	G3T2	S2	1B.2
<i>Convolvulus simulans</i>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2
<i>Deinandra paniculata</i>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2
<i>Dichondra occidentalis</i>	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3T2	S2	1B.1
<i>Dudleya multicaulis</i>	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2
<i>Eryngium pendletonense</i>	Pendleton button-colum	Apiaceae	perennial herb	Apr-Jun(Jul)	None	None	G1	S1	1B.1

	celery									
<u>Erythranthe diffusa</u>	Palomar monkeyflower	Phrymaceae	annual herb	Apr-Jun	None	None	G4	S3	4.3	
<u>Euphorbia misera</u>	cliff spurge	Euphorbiaceae	perennial shrub	(Oct)Dec- Aug	None	None	G5	S2	2B.2	
<u>Harpagonella palmeri</u>	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2	
<u>Holocarpha virgata ssp. elongata</u>	graceful tarplant	Asteraceae	annual herb	May-Nov	None	None	G5T3	S3	4.2	
<u>Hordeum intercedens</u>	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2	
<u>Isocoma menziesii var. decumbens</u>	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2	
<u>Juncus acutus ssp. leopoldii</u>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May- Jun	None	None	G5T5	S4	4.2	
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1	
<u>Lepidium virginicum var. robinsonii</u>	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3	
<u>Lessingia hololeuca</u>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	
<u>Lycium brevipes var. hassei</u>	Santa Catalina Island desert-thorn	Solanaceae	perennial deciduous shrub	Jun(Aug)	None	None	G5T1Q	S1	3.1	
<u>Lycium californicum</u>	California box- thorn	Solanaceae	perennial shrub	Mar- Aug(Dec)	None	None	G4	S4	4.2	
<u>Malacothrix saxatilis var. saxatilis</u>	cliff malacothrix	Asteraceae	perennial rhizomatous herb	Mar-Sep	None	None	G5T4	S4	4.2	
<u>Microseris douglasii ssp. platycarpha</u>	small-flowered microseris	Asteraceae	annual herb	Mar-May	None	None	G4T4	S4	4.2	
<u>Monardella hypoleuca ssp. intermedia</u>	intermediate monardella	Lamiaceae	perennial rhizomatous herb	Apr-Sep	None	None	G4T2?	S2?	1B.3	
<u>Myosurus minimus ssp. apus</u>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1	
<u>Navarretia prostrata</u>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	
<u>Nolina cismontana</u>	chaparral nolina	Ruscaceae	perennial evergreen shrub	(Mar)May- Jul	None	None	G3	S3	1B.2	
<u>Orcuttia californica</u>	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	
<u>Pentachaeta aurea ssp. allenii</u>	Allen's pentachaeta	Asteraceae	annual herb	Mar-Jun	None	None	G4T1	S1	1B.1	
<u>Pentachaeta aurea ssp. aurea</u>	golden-rayed pentachaeta	Asteraceae	annual herb	Mar-Jul	None	None	G4T3	S3	4.2	
<u>Phacelia ramosissima</u>	south coast	Hvdrophyllaceae	perennial herb	Mar-Aug	None	None	G5?T3Q	S3	3.2	

[var. austrolitoralis](#) branching phacelia

Piperia cooperi	chaparral rein orchid	Orchidaceae	perennial herb	Mar-Jun	None	None	G3G4	S3S4	4.2
Polygala cornuta var. fishiae	Fish's milkwort	Polygalaceae	perennial deciduous shrub	May-Aug	None	None	G5T4	S4	4.3
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2
Viguiera laciniata	San Diego County viguiera	Asteraceae	perennial shrub	Feb-Jun(Aug)	None	None	G4	S4	4.3

Showing 1 to 48 of 48 entries

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Quad Name **Dana Point**

Quad Number **33117-D6**

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) - **X**

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 - **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**

Appendix C
Likelihood of Occurrence for Special-Status Species and
Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Plants				
aphanisma (<i>Aphanisma blitoides</i>)	-/-1B.2	Annual herb. Found in sandy or clay soils on ocean bluffs or slopes in coastal scrub, coastal dunes, and coastal bluff scrub at elevations between 3–600 ft. amsl. Blooming period: March–June.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
San Diego sagewort (<i>Artemisia palmeri</i>)	-/-4.2	Perennial deciduous shrub. Found in sandy, mesic areas in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland at elevations ranging from 49–3,002 ft. amsl. Blooming period: (February) May–September.	HA	Suitable mesic habitat is not present within the BSA.
Coulter's saltbush (<i>Atriplex coulteri</i>)	-/-1B.2	Perennial herb/shrub. Found in alkaline to clay soils on ocean bluffs, ridgetops within coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland at elevations from 10–1,500 ft. amsl. Blooming period: March–October.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
south coast saltscale (<i>Atriplex pacifica</i>)	-/-1B.2	Annual herb. Found in alkaline soils in coastal scrub, coastal dunes, coastal playas, and coastal bluff scrub at elevations between sea level and 460 ft. amsl. Blooming period: March–October.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	T/E/1B.1	Perennial bulbiferous herb. Found in heavy soils (e.g., clay) in coastal sage scrub, chaparral, cismontane woodland, and vernal pools from 1,575–4,000 ft. amsl. Blooming period: March–June.	HA	Suitable soils are not present within the BSA and the BSA is outside of the species elevation range. There are no records of occurrence for this species within the project region.
intermediate mariposa-lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	-/-1B.2	Perennial bulbiferous herb. Dry chaparral, valley grassland, and coastal sage scrub habitats, often on sandstone outcrops. Soil affinities include sandy or clay soils. Elevations range from 590–2,805 ft. amsl. Blooming period: May–July.	HA	The BSA is outside of the species elevation range.
Orcutt's pincushion (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	-/-1B.1	Annual herb. Found in sandy areas of coastal bluff scrub and coastal dunes from sea level to 328 ft. amsl. Blooming period: January–August.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Peninsular spineflower (<i>Chorizanthe leptotheca</i>)	-/-4.2	Annual herb. Found in alluvial fan and granitic soils in chaparral, coastal scrub, and lower montane coniferous forest habitats at elevations ranging from 984–6,234 ft. amsl. Blooming period: May–August.	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.
long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	-/-1B.2	Annual herb. Occurs in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools; often in clay soils. Elevations from 98–5,020 ft. amsl. Blooming period: April–July.	HA	Suitable habitat and soils are not present within the BSA.
seaside cistanthe (<i>Cistanthe maritima</i>)	-/-4.2	Annual herb. Occurs in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland at elevations from 16–984 ft. amsl. Blooming period: (February) March–June (August).	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	-/-1B.2	Perennial evergreen shrub. Found in chaparral and cismontane woodland habitats at elevations from 98–2,592 ft. amsl. Blooming period: April–June.	HA	Suitable habitat is not present in the BSA.
small-flowered morning-glory (<i>Convolvulus simulans</i>)	-/-4.2	Annual herb. Found in openings in chaparral, coastal scrub, and valley and foothill grassland habitats in clay soil and serpentinite seeps. It occurs in elevations ranging from 98–2,297 ft. amsl. Blooming period: March–July.	HA	Suitable habitat and soils are not present in the BSA.
paniculate tarplant (<i>Deinandra paniculata</i>)	-/-4.2	Annual herb. Found in coastal scrub, valley and foothill grassland, and vernal pool habitats, generally in vernal mesic and sometimes sandy conditions. It occurs at elevations ranging from 82–3,084 ft. amsl. Blooming period: April–November.	HA	Suitable habitat and mesic conditions are not present in the BSA.
western dichondra (<i>Dichondra occidentalis</i>)	-/-4.2	Perennial rhizomatous herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations from 164–1,640 ft. amsl. Blooming period: (January) March–July.	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.
Blochman's dudleya (<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>)	-/-1B.1	Perennial herb. Occurs in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland in rocky areas, often clay or serpentinite soils. Elevations from 16–1,476 ft. amsl. Blooming period: April–June.	HA	Suitable clay and serpentinite soils and rocky areas are not present in the BSA.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
many-stemmed dudleya (<i>Dudleya multicaulis</i>)	-/-1B.2	Perennial herb. Found in heavy clay soils on grassy slopes in chaparral, coastal scrub and valley and foothill grasslands at elevations between 45–2,400 ft. amsl. Blooming period: April–July.	HA	Suitable habitat and soils are not present in the BSA.
Pendleton button-celery (<i>Eryngium pendletonense</i>)	-/-1B.1	Perennial herb. Occurs in clay and vernal mesic areas within coastal bluff scrub, valley and foothill grassland, and vernal pool habitat at elevations from 49–361 ft. amsl. Blooming period: April–June (July).	HA	Suitable soils and mesic conditions are not present in the BSA.
Palomar monkeyflower (<i>Erythranthe diffusa</i>)	-/-4.3	Annual herb. Occurs in gravelly and sandy areas in chaparral and lower montane coniferous forest habitat at elevations from 4,005–6,005 ft. amsl. Blooming period: April–June.	HA	Suitable habitat is not present and the BSA is outside of this species' elevation range.
cliff spurge (<i>Euphorbia misera</i>)	-/-2B.2	Perennial shrub. Found in rocky areas in coastal bluff scrub, coastal scrub, and Mojavean desert scrub at elevations ranging from 33–1,640 ft. amsl. Blooming period: December–August (October).	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	-/-4.2	Annual herb. Found in clay soils in chaparral, coastal scrub, and valley and foothill grassland at elevations from 66–3,133 ft. amsl. Blooming period: March–May.	HA	Suitable habitat and soils are not present in the BSA.
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	-/-4.2	Annual herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats at elevations from 195–3,610 ft. amsl. Blooming period: May–November.	HA	The BSA is outside of this species' elevation range.
vernal barley (<i>Hordeum intercedens</i>)	-/-3.2	Annual herb. Found in coastal dunes, coastal scrub, vernal pools, and valley and foothill grasslands at elevations between 15–3,000 ft. amsl. Blooming period: March–June.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	-/-1B.2	Perennial herb. Found in chaparral and coastal scrub often in sandy, disturbed areas at elevations between 30–400 ft. amsl. Blooming period: April–November.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	-/-/4.2	Perennial rhizomatous herb. Found in mesic areas of coastal dunes, alkaline seeps in meadows and seeps, and coastal salt marshes and swamps at elevations from 10–2,953 ft. amsl. Blooming period: (March) May–June.	HA	Suitable habitat and mesic conditions are not present in the BSA.
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	-/-/1B.1	Annual herb. Found in coastal salt marshes and swamps, playas, and vernal pools at elevations below 4,000 ft. amsl. Blooming period: February–June.	HA	Suitable habitat and mesic conditions are not present in the BSA.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	-/-/4.3	Annual herb. Found in dry soils in chaparral and coastal sage scrub openings at elevations ranging from sea level to 3,100 ft. amsl. Blooming period: January–July.	HA	Suitable habitat is not present in the BSA.
woolly-headed lessingia (<i>Lessingia hololeuca</i>)	-/-/3	Annual herb. Occurs in clay and serpentinite soils in broadleaved upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland habitats at elevations ranging from 50–1,000 ft. amsl. Blooming period: June–October.	HA	Suitable soils are not present in the BSA.
Santa Catalina Island desert-thorn (<i>Lycium brevipes</i> var. <i>hassei</i>)	-/-/3.1	Perennial deciduous shrub. Found in coastal bluff scrub and coastal scrub habitats at elevations ranging from 210–985 ft. amsl. Blooming period: June–August.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
California box-thorn (<i>Lycium californicum</i>)	-/-/4.2	Perennial shrub. Occurs in coastal bluff scrub and coastal scrub at elevations from 16–492 ft. amsl. Blooming period: (December) March–August.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
cliff malacothrix (<i>Malacothrix saxatilis</i> var. <i>saxatilis</i>)	-/-/4.2	Perennial rhizomatous herb. Found in coastal bluff scrub and coastal scrub habitats at elevations ranging from 10–656 ft. amsl. Blooming period: March–September.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
small-flowered microseris (<i>Microseris douglasii</i> ssp. <i>platycarpha</i>)	-/-/4.2	Annual herb. Found in clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools. Elevations from 49–3,510 ft. amsl. Blooming period: March–May.	HA	Suitable soils are not present in the BSA.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
intermediate monardella (<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>)	-/-1B.3	Perennial herb. Found within the understory of chaparral, cismontane woodland, and less frequently in lower montane coniferous forests. It occurs at elevations ranging from 984–3,510 ft. amsl. Blooming period: June–August.	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.
little mousetail (<i>Myosurus minimus</i> ssp. <i>apus</i>)	-/-3.1	Annual herb. Occurs in valley and foothill grassland and vernal pools (alkaline) at elevations ranging from 66–2,100 ft. amsl. Blooming period: March–June.	HA	Suitable habitat and mesic conditions are not present in the BSA.
prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	-/-1B.2	Annual herb. Found in alkaline soils in mesic sites within coastal scrub, valley and foothill grassland, and vernal pool habitats at elevations between 9–3,600 ft. amsl. Blooming period: April–July.	HA	Suitable habitat, soils, and mesic conditions are not present in the BSA.
chaparral nolina (<i>Nolina cismontana</i>)	-/-1B.2	Perennial evergreen shrub. Inhabits mountainous areas with sandstone or gabbro soils in chaparral and coastal scrub habitats along the coast. Elevations ranging from 459–4,182 ft. amsl. Blooming period: March–July.	HA	Suitable habitat and soils are not present and the BSA is outside of the species elevation range.
California Orcutt grass (<i>Orcuttia californica</i>)	E/E/1B.1	Annual herb. Found in vernal pools at elevations ranging from 49–2,165 ft. amsl. Blooming period: April–August.	HA	Suitable vernal pool habitat is not present in the BSA.
Allen's pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>allenii</i>)	-/-1B.1	Annual herb. Openings in coastal scrub and valley and foothill grassland habitats at elevations from 246–1,706 ft. amsl. Blooming period: March–June.	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.
golden-rayed pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>aurea</i>)	-/-4.2	Annual herb. Occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grassland habitats at elevations ranging from 260–6,070 ft. amsl. Blooming period: March–July.	HA	The BSA is outside of the species' elevation range.
south coast branching phacelia (<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>)	-/-3.2	Perennial herb. Found in sandy and rocky substrates within chaparral, coastal dunes, coastal scrub, and coastal swamps and marshes at elevations between 10–900 ft. amsl. Blooming period: March–August.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
chaparral rein orchid (<i>Piperia cooperi</i>)	-/-4.2	Perennial herb. Found in chaparral, cismontane woodland, and valley and foothill grassland at elevations from 49–5,200 ft. amsl. Blooming period: March–June.	HA	Suitable habitat is not present in the BSA.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	-/-4.3	Perennial deciduous shrub. Occurs in chaparral, cismontane woodland, and riparian woodland habitats at elevations ranging from 328–3,280 ft. amsl. Blooming period: May–August.	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.
white rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	-/-2B.2	Perennial herb. Chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats in sandy, gravelly soils. Elevation ranges from sea level to 6,890 ft. amsl. Blooming period: (July) August–November (December).	HA	Suitable habitat and gravelly soils are not present in the BSA.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	-/-1B.1	Perennial evergreen shrub. Occurs in sandy and clay loam soils in closed-cone coniferous forest, chaparral, and coastal scrub at elevations from 49–1,312 ft. amsl. Blooming period: February–April (August).	HA	Suitable habitat is not present in the BSA.
Coulter's matilija poppy (<i>Romneya coulteri</i>)	-/-4.2	Perennial rhizomatous herb. Chaparral and coastal scrub; often in burned areas. Elevation ranges from 65–3,936 ft. amsl. Blooming period: March–July.	HA	Suitable habitat and burned areas are not present in the BSA.
chaparral ragwort (<i>Senecio aphanactis</i>)	-/-2B.2	Annual herb. Found in chaparral, cismontane woodland, and coastal scrub habitats, sometimes within alkaline soils at elevations between 49–2,625 ft. amsl. Blooming period: January–April.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
estuary seablite (<i>Suaeda esteroa</i>)	-/-1B.2	Perennial herb. Found in coastal salt marshes and swamps. Located on clay, silt, and sandy substrates at elevations between sea level and 15 ft. amsl. Blooming period: May–October (January).	HA	Suitable habitat is not present in the BSA.
woolly seablite (<i>Suaeda taxifolia</i>)	-/-4.2	Perennial evergreen shrub. Found in coastal bluff scrub, coastal dunes, and margins of coastal salt marshes and swamps at elevations between sea level and 164 ft. amsl. Blooming period: January–December.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
San Diego County viguiera (<i>Viguiera laciniata</i>)	-/-4.2	Perennial shrub. Occurs in chaparral and coastal scrub at elevations ranging from 197–2,461 ft. amsl. Blooming period: February–June (August).	HA	Suitable habitat is not present and the BSA is outside of the species elevation range.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Wildlife				
Invertebrates				
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	E/-/-	Species found in deep vernal pools, road cuts, and depressions that retain water through the warm weather of late April and May. Distribution is limited to discrete localities from Los Angeles (LAX), Orange, Riverside, and San Diego counties south to Baja California.	HA	No suitable fairy shrimp habitat or pooled areas that could hold water long enough to support this species are present within the BSA.
monarch butterfly (<i>Danaus plexippus</i>)	C/-/-	Migratory species, with overwintering populations in California. Primarily overwinters in large trees within wind-protected groves, including Eucalyptus spp., Monterey pine (<i>Pinus radiata</i>), and cypress (<i>Cupressus macrocarpa</i>), at sites that are cool (but above freezing), sheltered from wind, have a moisture source, and are exposed to filtered sunlight. Winter roost sites are within the immediate vicinity of the coast and extend from northern Mendocino to Baja California, Mexico.	HA	Suitable habitat is not present in the BSA.
black abalone (<i>Haliotis cracherodii</i>)	E/-/-	Occurs in marine coastal waters on rocky substrates in intertidal and shallow subtidal reefs (to about 18 feet deep) along the coast. They typically occur in habitats with complex surfaces and deep crevices that provide shelter for juveniles and adults.	HA	There is no rocky intertidal and subtidal reefs for this species within the BSA.
white abalone (<i>Haliotis sorenseni</i>)	E/-/-	Occurs in marine coastal waters on rocky substrates alongside sand channels, which tend to accumulate the algae they eat. They are usually found at depths of 50 to 180 feet, making them the deepest living abalone species.	HA	There is no rocky marine habitat for this species within the BSA.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	E/-/-	Coastal scrub, valley and foothill grassland, vernal pool, and wetland habitats. Endemic to western Riverside, Orange and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatches in warm water later in the season.	HA	No suitable fairy shrimp habitat or pooled areas that could hold water long enough to support this species are present within the BSA.
Fishes				
green sturgeon, Southern Distinct	T/CSC/-	Green sturgeon are anadromous fish that can be found along the coastal region from Alaska to Mexico, although they are most commonly found	HA	Suitable aquatic habitat is not present within the BSA and the BSA

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Population Segment (DPS) (<i>Acipenser medirostris</i>)		north of Point Conception. Abundance increases northward of Point Conception. The southern DPS consists of coastal and Central Valley populations south of the Eel River, with the only known spawning population in the Sacramento River.		is outside of the known range for this species.
tidewater goby (<i>Eucyclogobius newberryi</i>)	E/-/-	Occurs in lagoons of shallow coastal streams. Prefer salinities below 10 parts per thousand (ppt).	HA	Suitable aquatic habitat is not present within the BSA.
arroyo chub (<i>Gila orcuttii</i>)	-/CSC/-	Occurs within cool to warm, fluctuating streams. Often found within slow moving sections of streams containing sandy or muddy bottoms. Native to streams of the Los Angeles plain, including the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers, and to Malibu and San Juan creeks. Widely introduced to other watersheds throughout Southern California.	HA	Suitable aquatic habitat is not present within the BSA.
steelhead, Southern California Coast Distinct Population Segment (<i>Oncorhynchus mykiss</i>)	E/-/-	An anadromous salmonid that has physiological tolerances to warm water temperatures of Southern California and changing flow conditions in streams. Populations are known for the Ventura River and Santa Clara River watersheds.	HA	Suitable aquatic habitat is not present within the BSA.
Amphibians				
arroyo toad (<i>Anaxyrus californicus</i>)	E/CSC/-	Inhabits washes, arroyos, sandy river banks, riparian areas with willows, sycamores, oaks, cottonwoods. Requires exposed sandy stream sides with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding. Young toads require moderately vegetated sandbars.	HA	Suitable wash and aquatic habitat is not present within the BSA.
western spadefoot (<i>Spea hammondi</i>)	-/CSC/-	Found primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools and seasonal ponds are essential for breeding and egg laying. Occurs at elevations ranging from sea level to 4,500 feet.	HA	Suitable vernal pool habitat is not present within the BSA.
Reptiles				
Southern California legless lizard (<i>Anniella stebbinsi</i>)	-/CSC/-	Occurs in sandy or loose loamy soils under sparse vegetation in broadleaved upland forest, chaparral, coastal dunes, and coastal scrub.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
		Generally south of the Transverse Ranges, extending to northwestern Baja California.		coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
California glossy snake (<i>Arizona elegans occidentalis</i>)	-/CSC/-	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils. Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges, south to Baja California.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
North Pacific loggerhead sea turtle (<i>Caretta caretta</i>)	E/-/-	Found throughout the world's marine ecosystems in the temperate and tropical regions of the Atlantic, Pacific, and Indian Oceans. They are the most common species of sea turtle found in U.S. coastal waters. Nests on sandy beaches; only known Pacific nesting location is in Japan.	HA	Suitable marine habitat is not present within the BSA.
East Pacific green sea turtle (<i>Chelonia mydas</i>)	T/-/-	Occur throughout the world's oceans, primarily nearshore in coastal marine communities. Migrate between nearshore foraging grounds and nesting beaches in the tropics and sub-tropics. Breeding takes place in spring-summer. Nesting locations found in the Hawaiian Islands, and U.S. Pacific Island territories.	HA	Suitable marine habitat is not present within the BSA.
red-diamond rattlesnake (<i>Crotalus ruber</i>)	-/CSC/-	As far north as Puente Hills in Yorba Linda and southwestern San Bernardino County, and occurs south to Loreto, Baja California, Mexico; known elevation range is sea level to just under 15,000 feet, but apparently rare above about 3,940 feet; greatest frequency in areas of heavy brush, such as chamise chaparral, but also in open areas at lower densities; boulders and rocky outcrops.	HA	Suitable habitat and rocky scrub areas are not present within the BSA.
leatherback sea turtle (<i>Dermochelys coriacea</i>)	E/-/-	Found in the Atlantic, Pacific, and Indian Oceans. Within U.S. waters, they are found in the West Pacific, East Pacific, and Northwest Atlantic. Highly migratory turtle species. Documented as traveling 3,700 miles between foraging grounds and nesting sites in tropical regions.	HA	Suitable marine habitat is not present within the BSA.
western pond turtle (<i>Emys marmorata</i>)	-/CSC/-	Found in association with permanent or nearly permanent water in a fairly wide variety of habitat types. It requires basking sites, such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.	HA	Suitable aquatic habitat is not present within the BSA.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
olive Ridley sea turtle (<i>Lepidochelys olivacea</i>)	E/-/-	Most abundant sea turtle in the world. Found in the southern Atlantic, Pacific, and Indian Oceans. Prefers the oceans' warmer waters. Nest grounds are beaches found in tropical and sub-tropical regions throughout the world. Nesting season occurs in June through December. Females come ashore and nest all at once in an event called "arribada."	HA	Suitable marine habitat is not present within the BSA.
coast horned lizard (<i>Phrynosoma blainvillii</i>)	-/CSC/-	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
Birds				
tricolored blackbird (<i>Agelaius tricolor</i>)	-/T/-	Breeds near freshwater, preferably in emergent wetland with tall, dense cattails (<i>Typha</i> spp.) or tules (<i>Scirpus</i> spp.), but also in thickets of willow (<i>Salix</i> spp.), blackberry (<i>Rubus</i> spp.), wild rose (<i>Rosa</i> spp.), and tall herbs and forages in grassland and cropland habitats. For breeding sites, requires open accessible water, flooded vegetation, and suitable foraging space to provide adequate insect prey. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	HA	Suitable freshwater marsh habitat is not present in the BSA.
burrowing owl (<i>Athene cunicularia</i>)	-/CSC/-	Level, open, dry, heavily grazed or low grassland or desert vegetation with available burrows. In coastal Southern California, a substantial fraction of burrowing owls are found in microhabitats highly altered by humans, including flood control and irrigation basins, dikes, banks, abandoned fields surrounded by agriculture, and road cuts and margins. Several factors in combination probably explain the species' distribution on local scales: vegetation density, availability of suitable prey, availability of burrows or suitable soil, and disturbance.	HA	Suitable grassland and field habitat is not present in the BSA.
coastal cactus wren	-/CSC/-	Non-migratory, obligate resident within a subset of coastal sage scrub habitats; require the presence of, but are not entirely restricted within, relatively	HA	Suitable sage scrub and cactus habitat is not present in the BSA.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
(<i>Campylorhynchus brunneicapillus sandiegensis</i>)		arborescent (over 3 feet tall) stands of several species of cactus (<i>Opuntia</i> spp.).		
white-tailed kite (<i>Elanus leucurus</i>)	-/FP/-	Hunts in open country. It is found across most of California west of the Sierra Nevada and deserts, from north of the San Francisco Bay south into northern Baja California, Mexico. Nests are flimsy, often not lasting to the next breeding season, and are located low in trees and large shrubs near foraging areas in savannahs and at edges between open habitat and woodland or forest areas.	HA	Suitable woodland and savannah habitat is not present in the BSA.
southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	E/E/-	Restricted to riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods or smaller spring fed or boggy areas with willows or alders.	HA	Suitable riparian habitat is not present in the BSA.
yellow-breasted chat (<i>Icteria virens</i>)	-/CSC/-	Found in riparian forest, riparian scrub, and riparian woodlands. Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, and wild grape; forages and nests within 10 feet of the ground.	HA	Suitable riparian habitat is not present in the BSA.
coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	T/CSC/-	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied. Generally prefers open sage scrub with California sagebrush (<i>Artemisia californica</i>) as a dominant or co-dominant species. Nest placement typically in areas with less than 40 percent slope gradient. Monogamous pairs tend to stay in the same locale. Both parents build nest, incubate, and care for young.	HA	Suitable coastal sage scrub habitat is not present in the BSA.
California least tern (<i>Sternula antillarum browni</i>)	E/E & FP/-	Nests on sandy upper ocean beaches, open barren sites, and occasionally uses mudflats. Forages on adjacent surf line, estuaries, or the open ocean. Colonies are located near the ocean shoreline (within 0.5 miles), typically on nearly flat, loose sandy substrates with lightly scattered short vegetation and debris, although some colonies have been located on hard-packed surfaces, even	HA	Although open beach habitat that is suitable for nesting is present within the BSA outside the project limits of disturbance, the area experiences high disturbance from people using the beach that would preclude this species from nesting in the area.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
		unused asphalt. Colony sites must provide access to the shoreline for juveniles, and must be relatively free of predators or the colony may abandon breeding efforts before completion.		
least Bell's vireo (<i>Vireo bellii pusillus</i>)	E/E/-	Found as a summer resident of Southern California where it inhabits low riparian growth in the vicinity of water or in dry river bottoms below 2,000 feet amsl. Species selects dense vegetation low in riparian zones for nesting; most frequently located in riparian stands between 5 and 10 years old; when mature riparian woodland is selected, vireos nest in areas with a substantial robust understory of willows, as well as other plant species.	HA	Suitable riparian habitat is not present in the BSA.
Mammals				
pallid bat (<i>Antrozous pallidus</i>)	-/CSC/-	Occurs throughout Southern California from coast to mixed conifer forest, grasslands, shrublands, woodlands, and forest. Most common in open, dry habitats with rocky areas for roosting. Yearlong resident in most of its range. The species is not thought to migrate, so maternity colonies and winter roosts are expected to occur within the vicinity of one another. Roost sites include rock crevices, old buildings, bridges, caves, mines, and hollow trees.	HA	No suitable roosting habitat is present within the BSA; the coastal bluffs onsite are composed of loose sediment and lack crevices for roosting.
Guadalupe fur seal (<i>Arctocephalus townsendi</i>)	T, MMPA/T, FP/-	Found in marine intertidal zones, splash zone communities, and protected deepwater coastal communities. Breeds on Isla de Guadalupe off of Mexico, occasionally found on San Miguel, San Nicolas, and San Clemente Islands. Prefers shallow, nearshore island water, with cool and sheltered rocky areas for haul-outs.	HA	No suitable marine habitat or sheltered rocky areas for haul-outs are present within the BSA.
Sei whale (<i>Balaenoptera borealis</i>)	E, MMPA/-/-	Found in subtropical, temperate, and subpolar waters throughout the world. Prefer temperate waters. Feeding usually takes place at dawn, and typical prey includes plankton, small fish, and cephalopods. Breeding grounds are unknown, but breeding behavior generally occurs in winter at lower altitudes.	HA	No suitable deep, open water marine habitat is present within the BSA.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
blue whale (<i>Balaenoptera musculus</i>)	E, MMPA/-/-	Occurs in all the world's oceans except the Arctic. Filter feeders that feed almost entirely on krill. Largest of all the whales, Blue whales migrate long distances spending winters toward the equator and summers foraging in the polar waters. Reproductive behavior occurs during the winter months.	HA	No suitable deep, open water marine habitat is present within the BSA.
fin whale (<i>Balaenoptera physalus</i>)	E, MMPA/-/-	Found throughout the world's major oceans, primarily in waters that are deep and offshore. They mostly range from temperate to polar latitudes and are less abundant in tropical regions. Spend summers feeding in the Arctic and Antarctic waters, then heading toward more tropical waters in the winters for breeding (specific breeding grounds unknown).	HA	No suitable deep, open water marine habitat is present within the BSA.
Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	-/CSC/-	Occupies a wide variety of habitats year-round within its range. These include montane hardwood, valley foothill hardwood-conifer, valley foothill hardwood, annual grassland, sagebrush, chamise-redshank and montane chaparral, and coastal scrub. This species occurs in greatest abundance in habitats where grassland and chaparral are in close proximity. Found primarily at moderate elevations.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	-/CSC/-	Sandy herbaceous areas, usually associated with rocks and coarse gravel in southwestern California; coastal and desert border areas in San Bernardino, Riverside, and San Diego counties; elevation ranges from sea level to 6000 feet. Vegetation community preferences include sage scrub, chamise-redshank chaparral, mixed chaparral, sage brush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	-/CSC/-	Feeds on nectar and pollen of night-blooming succulents, such as agave and columnar cacti. Roosts in the twilight areas of caves, mines, rock crevices, and abandoned buildings. Occasionally found in San Diego County, which is on the periphery of their range.	HA	No suitable roosting habitat is present within the BSA; the coastal bluffs onsite are composed of loose sediment and lack crevices for roosting.

Appendix C. Likelihood of Occurrence for Special-Status Species and Sensitive Natural Communities

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	E/T/-	Found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer. Avoids dense grasses and is more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. Typically found in sandy and sandy loam soils with low clay to gravel content for burrowing; will sometimes utilize the burrows of other mammals. Tends to avoid rocky soils. In general, the highest abundances of species occur on gentle slopes less than 15%.	HA	Suitable grassland and shrubland habitat is not present in the BSA.
North Pacific right whale (<i>Eubalaena japonica</i>)	E, MMPA/-/-	Rarest of whale species. Found mostly in the North Pacific and Bering Sea. Migratory patterns and specific breeding grounds are unknown, but nursery areas have been observed in shallow coastal waters.	HA	No suitable deep, open water marine habitat is present within the BSA.
western mastiff bat (<i>Eumops perotis californicus</i>)	-/CSC/-	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	HA	No suitable roosting habitat is present within the BSA; the coastal bluffs onsite are composed of loose sediment and lack crevices for roosting.
humpback whale (<i>Megaptera novaeangliae</i>)	E, MMPA/-/-	Found in oceans throughout the world. Heavily migratory whale species, sometimes swimming 5,000 miles between feeding and breeding grounds. Winter breeding grounds are found in more tropical regions, while summer feeding occurs in colder areas. Commonly prefer waters close to shore.	HA	No suitable deep, open water marine habitat is present within the BSA.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	-/CSC/-	Found in dry and/or sunny shrublands, especially (but not requiring) areas with cacti and abundant rocks and crevices. Sage scrub communities are frequently occupied. Does not require a source of drinking water.	HP	No suitable habitat is present within the project footprint, but marginally suitable habitat occurs within the coastal bluff scrub portion of the BSA outside of the project limits of disturbance.
pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	-/CSC/-	Found rarely in southwestern California; found in southeastern deserts of California, with portions of western Riverside County apparently on the periphery of their range. Species roost in high rock crevices and cliffs, and forage primarily on large moths, especially over water. Habitats are arid.	HA	No suitable roosting habitat is present within the BSA; the coastal bluffs on site are composed of loose sediment and lack crevices for roosting.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
southern resident killer whale (<i>Orcinus orca</i>)	E, MMPA/-/-	Top marine predator found in all the world's oceans. The Southern Resident occurs most often in the Pacific Northwest but has been documented from central California to Southeast Alaska. Spring–Fall is known to be spent in/near inland waterways of Washington.	HA	No suitable deep, open water marine habitat is present within the BSA.
pacific pocket mouse (<i>Perognathus longimembris pacificus</i>)	E/CSC/-	Found in fine, sandy soils within about 2 to 4 miles of the Pacific coast of Southern California. Historically, this species was found from the Mexican border to El Segundo in Los Angeles County. Currently, the only known populations are in Dana Point and on the Camp Pendleton Marine Base.	HA	The BSA is outside of the extant range of this species.
sperm whale (<i>Physeter microcephalus</i>)	E, MMPA/-/-	Found in all oceans throughout the world but prefer deeper areas for foraging. Population's location depends on food availability and conditions that support breeding. Migratory patterns and breeding/feeding ground sites are variable and not well understood.	HA	No suitable deep, open water marine habitat is present within the BSA.
Sensitive Natural Communities				
southern coast live oak riparian forest	-/CNDDDB S4/-	An open to locally dense evergreen sclerophyllous riparian woodland dominated by coast live oak (<i>Quercus agrifolia</i>). Typically very little in shrub understory, but rich in herbs.	HA	This community was not detected within the BSA.
southern coastal salt marsh	-/CNDDDB S2.1/-	Southern coastal salt marsh communities are found in bays, lagoons, and estuaries along the coast from Point Conception to the Mexican border. Southern coastal salt marsh communities consist of highly productive, herbaceous, and salt-tolerant hydrophytes that form moderate to dense cover. Characteristic species include <i>Atriplex watsonii</i> , <i>Batis maritima</i> , <i>Lycium californicum</i> , <i>Monanthochloe littoralis</i> , <i>Sueda californica</i> , and <i>Salicornia subterminalis</i> .	HA	This community was not detected within the BSA.
southern cottonwood willow riparian forest	-/CNDDDB S3.2/-	A tall, open, broadleaved winter-deciduous forest. Community is dominated by Fremont's cottonwood (<i>Populus fremontii</i>) and willow species. The understory typically consists of shrubby willows, such as arroyo willow (<i>Salix lasiolepis</i>).	HA	This community was not detected within the BSA.

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
southern dune scrub	-/CNDDDB S1.1/-	By nature a dynamic system found on inland dunes characterized by densely packed shrubs with scattered grasses, wildflowers, and open sand. Some species found in this community include bush lupine (<i>Lupinus albifrons</i>), coyote brush (<i>Baccharis pilularis</i>), spineflower (<i>Chorizanthe</i> spp.), and mock heather (<i>Ericameria ericoides</i>).	HA	This community was not detected within the BSA.
southern foredunes	-/CNDDDB S2.1/-	Areas of sand accumulation along the coast. Dominated by suffrutescent plants, with <i>Abronia maritima</i> , <i>Ambrosia</i> , and <i>Cakile</i> in exposed sites and <i>Abronia umbellata</i> , <i>Calystegia</i> , and <i>Camissonia</i> in less exposed sites.	HA	This community was not detected within the BSA.
southern sycamore alder riparian woodland	-/CNDDDB S4/-	A tall, open, broadleafed, winter-deciduous streamside woodland dominated by western sycamore and alder (<i>Alnus rhombifolia</i>). These stands seldom form closed canopy forests, and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. Lianas include California blackberry (<i>Rubus ursinus</i>) and poison oak (<i>Toxicodendron diversilobum</i>).	HA	This community was not detected within the BSA.
valley needlegrass grassland	-/CNDDDB S3.1/-	Medium height grassland dominated by perennial needle grass such as <i>Stipa pulchra</i> by at least 20%. Native and nonnative annuals occur between perennials. Soils often consist of fines with high amounts of clay that remain wet for long periods but are very dry in the summer.	HA	This community was not detected within the BSA.
^a Status Codes Federal E = Federally listed; Endangered T = Federally listed; Threatened C = Federal Candidate for Listing MMPA = Marine Mammal Protection Act State E = State listed; Endangered T = State listed; Threatened C = State Candidate for Listing CSC = California Species of Special Concern FP = California Fully Protected Species		^b Habitat Presence/Absence Codes HP =Habitat is or may be present within the BSA. The species may potentially be present. Focused survey is warranted. HA = No habitat is present or the project site is outside of the species elevation or known range. No further work is needed. Note: The assessments in this table are based on the desktop review that was performed for the project; field surveys were not conducted for the project due to the accelerated schedule required to perform the emergency repair work.		

Common/ Scientific name	Status ^a Fed/State/ CRPR	Species Requirements	Specific Habitat ^b Present/Absent	Rationale
CNPS Rare Plant Rank (CRPR) 1A = Plants presumed extinct in California 1B = Plants rare, threatened, or endangered in California and elsewhere 2 = Plants rare, threatened, or endangered in California, but more common elsewhere 3 = Plants about which we need more information 4 = Limited distribution (Watch List) CNPS CRPR Threat Codes 0.1 = Seriously endangered in California 0.2 = Fairly endangered in California 0.3 = Not very endangered in California				
Note: The California Natural Diversity Database (CNDDDB) uses the same ranking methodology originally developed by The Nature Conservancy and now maintained and recently revised by NatureServe. The <i>state rank</i> (S-rank) refers to the imperilment status only within California's state boundaries. It is a reflection of the overall status of an element through its state range. The state rank represent a letter + number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state. S2 = Imperiled - Imperiled in the state because of 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 state. S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state. S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors. S5 = Secure - Common, widespread, and abundant in the state. SH = All sites are historical; the element has not been seen for at least 20 years, but suitable habitat still exists. SX = All sites are extirpated. Uncertainty about the rank of an element is expressed in two major ways: By expressing the ranks as a range of values: e.g., S2S3 means the rank is somewhere between S2 and S3. By adding a ? to the rank: e.g., S2? This represents more certainty than S2S3, but less certainty than S2.				