

**Biological Technical Report
for the
Stormwater Diversion at the Point Loma Wastewater
Treatment Plant Project**

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Project, City of San Diego, California**

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EXECUTIVE SUMMARY

The City of San Diego proposes to address storm water discharges from the Point Loma Wastewater Treatment Plant footprint. This Project is in response to a Consent Decree with San Diego Coastkeeper and Coastal Environmental Rights Foundation for several City of San Diego owned facilities regulated under California General Permit for Storm Water Discharges Associated with Industrial Activities (IGP). Per the 2018 IGP amendments, runoff capture BMPs must be designed to capture the volume of runoff produced during the 85th percentile 24-hour storm with a 24-hour drawdown time or with additional storage volume to offset a longer drawdown time. A storm drain system is proposed to divert storm water from the hillside east of the treatment plant directly from entering the ocean outfalls to avoid pumping and treating non-industrial storm water flow.

The approximately 26.024-acre survey area, which includes 2.579 acres of actual project impact area and 23.445 acres of 100-foot buffer area around the impact areas, is located in the southwest portion of the City of San Diego on the peninsula of Point Loma, west of Interstate 5, south of Interstate 8, and west and south of Gatchell and Cabrillo Roads. The site is directly adjacent to the Pacific Ocean (Figure 1). The survey area includes the existing Point Loma Wastewater Treatment Plant and associated buildings and parking lots, disturbed habitat, Diegan coastal sage scrub (undisturbed and disturbed), maritime succulent scrub, subtidal ocean, intertidal ocean, cliff face, and developed (Figure 2) and consists of a steep, west-facing slope on the east side of the survey area, a flat portion with the PLWTP in the middle of the survey area, and a steep drop to the Pacific Ocean on the west side of the survey area (Figure 3).

The entire Project Site is within the Coastal Overlay Zone. A small portion of the project areas are currently (likely unintentionally) mapped as City of San Diego's Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA), and the project site is surrounded on three sides by the MHPA (Figure 2). ECP will communicate with MSCP to inform them regarding potentially needing to execute a MHPA boundary line correction since the small portion of project work area within mapped MHPA is paved/developed.

In August 2022 biologists from Balk Biological, Inc. conducted biological reconnaissance surveys to map vegetation, assess whether a formal wetlands delineation would be indicated, survey for general wildlife use and potential for sensitive wildlife species to use the site, and conduct focused surveys for sensitive plant species.

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A total of five vegetation communities (or habitats) were identified within the project study area: coastal sage scrub (including disturbed and disturbed revegetated varieties), maritime succulent scrub, subtidal ocean, intertidal ocean, and disturbed habitat. In addition, two land covers are located on site: developed land and cliff face.

During the 11 August 2022 surveys, four special-status plant species were identified in the study area: California box-thorn (*Lycium californicum*), snake cholla (*Cylindropuntia californica* var. *californica*), cliff spurge (*Euphorbia misera*), and Torrey pine (*Pinus torreyana*). Four additional special-status plant species have a low to moderate potential to occur: Slender-pod jewelflower (*Caulanthus heterophyllus*), Orcutt's spineflower (*Chorizanthe orcuttiana*), San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*), and sand-loving wallflower (*Erysimum ammophilum*). Special-status wildlife species detected inside the survey area during the 22 August 2022 reconnaissance level wildlife surveys included coastal California gnatcatcher (*Polioptila californica californica*) and California brown pelican (*Pelicanus occidentalis californicus*), which were observed only in the 100-foot buffer surrounding the site. Six additional species have a moderate potential to occur: orange-throated whiptail (*Aspidoscelis hyperythra*), San Diego (Coast) horned lizard (*Phrynosoma coronatum blainvillei*), double-crested cormorant (*Phalacrocorax auratus*), osprey (*Pandion haliaetus*), northwestern San Diego pocket mouse (*Chaetodipus fallax*), and western Mastiff bat (*Eumops perotis*). The results of the biological surveys concluded that there are no areas within project impact areas that meet the definition of waters of the United States and/or state, including wetlands, subject to review and regulation by the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), the City of San Diego (City) and California Coastal Commission (CCC).

Implementation of the proposed project will result in permanent and direct impacts to 2.441 acres of developed land and 0.138 acre of disturbed habitat. Impacts to developed land and disturbed habitat are not significant and would not require mitigation.

Sensitive vegetation communities as well as special status wildlife and special-status plant species occur adjacent to the project impact areas and could be indirectly impacted from construction activities. Construction-related noise indirect impacts may occur to nesting wildlife, including California gnatcatcher, if construction occurs from February 1 through September 15.

Implementation of general measures would reduce impacts to sensitive biological resources through biological monitoring and avoidance of potential impacts to California gnatcatcher, and phasing of construction to avoid the bird nesting season, where feasible, and performing pre-

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construction nesting bird surveys and avoidance of potential impacts to other nesting birds if construction is to occur during the bird breeding season.

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1 INTRODUCTION

This technical report provides an analysis of potential biological resource impacts associated with the proposed Storm Water Diversion at the Point Loma Wastewater Treatment Plant (PLWTP) Project (Project), which is located in the community of Point Loma in the southwestern portion of the City of San Diego, California (Figure 1). In accordance with the current San Diego Land Development Code Biology Guidelines (SDBG; City of San Diego 2018), this report provides a brief project description, summary of the pertinent biological resource regulations, the project setting, survey methods, existing biological resources, special-status biological resources, project impacts (direct and indirect), and proposed mitigation. The project impacts, avoidance, and mitigation measures (MMs) are discussed in accordance with federal, state and local regulations, including the California Environmental Quality Act (CEQA), Clean Water Act (CWA), Migratory Bird Treaty Act (MBTA), California Fish and Game Code, California Porter-Cologne Act, the *City of San Diego Final Multiple Species Conservation Program (MSCP) Subarea Plan* (City Subarea Plan; City of San Diego 1997), the City of San Diego's (City's) Environmentally Sensitive Lands (ESLs) regulations, and California Coastal Commission's California Coastal Act.

1.1 Project Location

The approximately 26.024-acre survey area, which includes 2.579 acres of actual project impact area and 23.445 acres of 100-foot buffer area around the work areas, is located in the southwest portion of the City of San Diego on the peninsula of Point Loma, west of Interstate 5, south of Interstate 8, and west and south of Gatchell and Cabrillo Roads. The site is directly adjacent to the Pacific Ocean (Figure 1). The site includes wastewater treatment tanks, operations buildings, and parking lots surrounded by slopes to the east and ocean bluffs to the west. Two small portions of the project site are currently (likely unintentionally, as disturbed and developed areas are not generally desirable for conservation) mapped as City of San Diego's Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) and are likely a function of the coarseness of digitizing (i.e., "zoomed out" digitizing) during creation of the MHPA. These areas will be removed from the MHPA with a boundary line correction (see Appendix F for a graphic). The project site is surrounded on three sides by the MHPA (Figure 2).

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1.2 Project Description

Project Background and Intent

The Point Loma Wastewater Treatment Plant Stormwater Diversion Project (Project) addresses industrial storm water discharges from the PLWTP footprint, with the intent to reduce pollution entering the Ocean. The project is located within the Peninsula Community Planning Area (Council District 2) and is contained within the PLWTP property. This project design has been directed to minimize hillside and vegetation disturbances.

This project is in response to a Consent Decree with San Diego Coastkeeper and Coastal Environmental Rights Foundation for several City of San Diego owned facilities regulated under California General Permit for Storm Water Discharges Associated with Industrial Activities (IGP). In order to meet the Early Termination of Consent Decree requirements and per the 2018 IGP amendments, runoff capture BMPs must be designed to capture the volume of runoff produced during the 85th percentile 24-hour storm with a 24-hour drawdown time or with additional storage volume to offset a longer drawdown time. This captured industrial stormwater will then be diverted to the PLWTP for treatment prior to discharge into the Ocean.

The proposed design for diversion of this stormwater will treat “first flush” contamination of industrial stormwater, thus reducing pollution entering the Ocean. This design considers the City’s hydromodification requirements and has also been analyzed for hydraulics and hydrology impacts.

Industrial stormwater flow is proposed to be captured at locations near the five existing ocean outfalls at the PLWTP where stormwater runoff from both industrial and non-industrial areas currently flows to the ocean without treatment. This design will capture industrial stormwater runoff and divert these flows to the PLWTP for treatment prior to discharge. Stormwater runoff exceeding this design capture and diversion will be discharged into the ocean via the existing ocean outfalls without capture or treatment. Only one small drainage area of non-industrial stormwater will be diverted and treated due to infeasibility of re-directing non-industrial stormwater run-on from the eastern hillside in this area. Other than this segment, remaining non-industrial stormwater run-on from the eastern hillside will be directed around the industrial areas of the plant and discharged to the Ocean without treatment.

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Project Systems and Impact

This proposed design systems include the installation and/or expansion of wet wells with pumps, installation of trench drains, installation of berms, and regrading to capture industrial stormwater flows; installation of storm drains to divert industrial stormwater flows to the PLWTP for treatment; and use of existing terrace culverts and concrete swales to redirect non-industrial stormwater run-on flows from the eastern hillside in a system separate from industrial flows to prevent comingling of streams and to reduce the volume of stormwater requiring treatment.

Typical construction equipment will include backhoes, dump trucks, auger, and compaction equipment. Staging and stockpile areas are expected to be placed in the northernmost part of the Project site.

One portion of the Project includes aboveground piping to minimize impacts to existing vegetated slopes. Additionally, other portions of the storm drain pipeline will be aboveground where it can be installed along existing infrastructure (existing concrete walls, etc.). The portion of the project south of the proposed staging area will include storm drain installation, and grading of the area that is currently a parking lot but will not impact existing landscaped vegetation including the identified Torrey Pine.

The stormwater capture systems (wet wells, trench drains, berms, and regrading) total over 10,900 square feet of excavation area footprint. The storm drain system will include approximately 2,500 linear feet of pipe.

There may be minor horizontal directional drilling at the top of the stairs for the force mains from PS2B and PS2A. All stormdrain piping will be installed open cut. Open cut trenches will utilize sheeting and shoring. Trench widths are expected to be 24-inches wide for 18-inch diameter RCP and 36-inches wide for 24-inch diameter RCP. Will include shoring and will be approximately 6 to 15 feet deep.

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1.3 Project Background

The Project site has been used for the Point Loma Wastewater Treatment Plant since 1953, when the original plant was constructed. Prior to this, the area consisted of undeveloped land.

1.4 Regulatory Framework

This section provides a summary of the federal and state environmental regulations that govern the biological resources applicable to the Project. This section also provides a summary of other state and local environmental guidelines or listings that evaluate the rarity of species or the habitats they depend on. The California Environmental Quality Act (CEQA) significance criteria are also included in this section. The descriptions below provide a brief overview of agency regulations that may be applicable to the resources that occur within the project site, and their respective requirements.

1.4.1 Federal Regulations and Standards

1.4.1.1 *Federal Endangered Species Act*

The Federal Endangered Species Act (FESA) of 1973 (16 United States Code [U.S.C.] §§ 1531 et seq.) directs the USFWS to identify and protect endangered and threatened species and their critical habitat, and to provide a means to conserve their ecosystems. Section 9 of the FESA makes it unlawful for a person to take a listed animal without a permit. “Take” is defined by the FESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 U.S.C. 1532(19)). Through regulations, the term “harm” is interpreted to include actions that modify or degrade habitats to a degree that significantly impairs essential behavioral patterns, including breeding, feeding, or sheltering.

Section 7 of the FESA directs United States Fish and Wildlife Service (USFWS) to use its existing authority to conserve threatened and endangered species and, in consultation with federal agencies, ensure that any action authorized, funded, or carried out by such agency does not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat

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may include an area that is not currently occupied by the species but that will be needed for its recovery.

Section 7(a)(2) requires federal agencies to consult with USFWS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species. In consultation for those species with critical habitat, federal actions must also ensure that activities do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery.

1.4.1.2 Marine Mammal Protection Act

The Marine Mammal Protection Act of 1972 (MMPA) (16 U.S.C. § 1361 et. seq.) provides protection to all marine mammals. The MMPA, managed by National Marine Fisheries Service (NMFS) makes it illegal to "take" a marine mammal without authorization. "Take" is defined as harassing, feeding, hunting, capturing, collecting or killing, or attempting to "take" any marine mammal or part of a marine mammal. The MMPA defines "harassment" under two levels. Level A harassment means any act of pursuit, torment, or annoyance, which has the potential to injure a marine mammal or marine mammal stock in the wild. Level B harassment refers to acts that have the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. Take permits must be authorized by the NMFS.

1.4.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712) makes it unlawful to take or possess migratory birds, except as permitted by the USFWS. The MBTA protects all migratory bird, their eggs, their body parts, or their nests. Essentially all avian species native to the U.S. are protected under the provisions of the MBTA; introduced species and non-migratory upland game birds are not protected by the MBTA. "Take" under the MBTA is defined "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect" protected birds (50 Code of Federal Regulations [C.F.R.] 10.12). The current list of species protected by the MBTA includes several hundred species. Nearly all native birds in the San Diego region are considered migratory. Permits for take of nongame migratory birds can be

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issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, or protection of human health or safety and personal property.

1.4.1.4 Clean Water Act

Section 404 of the Clean Water Act (CWA) requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into “waters of the United States,” including wetlands. Waters of the U.S. include navigable waters of the U.S., interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries (33 CFR 328.3(a)). Many surface waters and wetlands in California meet the criteria for waters of the U.S. In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate Regional Water Quality Control Board (RWQCB), in this case the San Diego RWQCB, indicating that the project will not violate California water quality standards.

1.4.1.5 Rivers and Harbors Act – Sections 9 and 10

Section 9 of the Rivers and Harbors Act states that the construction of any bridge, dam, dike or causeway over or in navigable waterways of the U.S. requires Congressional approval. The U.S. Coast Guard (USCG) administers Section 9 and consultation with the USCG may be necessary to determine if a Section 9 permit would be required under the Rivers and Harbors Act.

The USACE administers Section 10 of the Rivers and Harbors Act, and permits are required for all structures, such as rip-rap, and activities such as dredging and filling, in navigable waters of the U.S. Navigable waters are defined as “those subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.” The USACE grants or denies permits based on the effects of navigation. Most activities covered under the Rivers and Harbors Act are also covered under Section 404 of the Clean Water Act.

1.4.1.6 Coastal Zone Management Act of 1972

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The Coastal Zone Management Act of 1972 (CZMA; 16 USC 1451 through 1464, Chapter 33) is a statute enacted by the U.S. Congress to encourage coastal states to develop and implement coastal zone management plans. Administered by the National Oceanic and Atmospheric Administration’s Office of Ocean and Resource Management, it was established as a national policy to preserve, protect, develop, and – where possible – enhance or restore the coastal zone in the U.S. The Coastal Zone Management Program (CZMP) was established under the CZMA and has key goals of “protecting natural resources, managing development in high hazard areas, giving development priority to coastal-dependent uses, providing public access for recreation, coordinating state and federal actions.” Individual states are encouraged to participate in the CZMP, allowing them to take a comprehensive approach to coastal resource management by issuing the applicable permits. California participates in, and has a federally approved CZMP, and the CZMA is administered by the California Coastal Commission (CCC). Permit requirements are discussed further in the California Coastal Act and CZMP sections under State Laws and Regulations.

1.4.1.7 *Executive Order 11988, Floodplain Management*

Executive Order (EO) 11988 requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. EO 11988 provides an eight-step process that agencies carry out as part of their decision-making process for projects that have potential impacts to or within a floodplain.

1.4.1.8 *Executive Order 11990, Protection of Wetlands*

Pursuant to EO 11990, each federal agency is responsible for preparing implementing procedures for carrying out the provisions of the EO. The purpose of this EO is to “minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.” Each agency, to the extent permitted by law, must avoid undertaking or providing assistance for any activity located in wetlands, unless the head of the agency finds that there is no practical alternative to such activity, and the proposed action includes all practical measures to minimize harm to wetlands that may result from such actions. In making this finding, the head of

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the agency may take into account economic, environmental, and other pertinent factors. Each agency must also provide opportunity for early public review of any plans or proposals for new construction in wetlands.

1.4.2 State Laws and Regulations

1.4.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Public Resources Code Section 15000 et seq.) requires identification of significant environmental effects of proposed projects (including impacts on biological resources) and avoidance (where feasible) or mitigation of the significant effects. CEQA applies to “projects” proposed to be undertaken or requiring approval by State and/or local governmental agencies. “Projects” are activities that have the potential to have a physical impact on the environment.

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely on the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would typically be considered significant. Based on these guidelines, impacts to biological resources would be considered significant if the project would do any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or the USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means.

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- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP); Natural Community Conservation Plan; or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. The evaluation of impacts considers direct impacts, indirect impacts, and cumulative impacts, and whether the impact is permanent or temporary.

1.4.2.2 California Endangered Species Act

California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et seq.) prohibits the “take” (defined as “to hunt, pursue, catch, capture, or kill”) of State-listed species except as otherwise provided in State law. CESA, administered by California Department of Fish and Wildlife (CDFW), is similar to FESA, although unlike the Federal law, CESA applies incidental take prohibitions to species currently petitioned for State-listing status (i.e., candidate species). State lead agencies are required to consult with the CDFW to ensure that their authorized actions are not likely to jeopardize the continued existence of any State-listed species or result in the degradation of occupied habitat.

Under Section 2081, the CDFW authorizes “take” of State-listed endangered, threatened, or candidate species through incidental take permits or memoranda of understanding if 1) the take is incidental to otherwise lawful activities, 2) impacts of the take are minimized and fully mitigated, 3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in questions, and 4) the applicant ensures suitable funding to implement the measures required by CDFW.

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1.4.2.3 Fully Protected Species

Prior to the development of FESA and CESA, species were listed as “fully protected” by California. Fully protected species, including fish, amphibians, reptiles, birds, and mammals, were identified to allow for the protection of those animals that were rare or that were threatened by potential extinction. The majority of fully protected species have since been listed as threatened or endangered under the CESA and/or FESA. Per § 4700 of the California Fish and Game Code (CFGC), the possession or taking of fully protected species is only allowed as provided in §2081.7 and §2835 of the CFGC.

1.4.2.4 California Fish and Game Code Section 1602 – Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Fish and Game Code Section 1602. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

CDFW defines “stream” as a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. In practice, the CDFW typically extends its jurisdictional limit to the top of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider. Riparian habitats do not always have identifiable hydric soils, or clear evidence of wetland hydrology as defined by the USACE. Therefore, CDFW wetland boundaries often include, but extend beyond, USACE wetland boundaries. Jurisdictional boundaries under CFGC Section 1600-1616 (CDFW’s Lake and Streambed Alteration Program) may encompass an area that is greater than that under the jurisdiction of CWA Section 404. Therefore, jurisdictional waters of the state include jurisdictional waters of the U.S., federal and state jurisdictions do overlap, but would

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remain distinct for regulatory administration and permitting purposes. A CDFW Streambed Alteration Agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

1.4.2.5 California Fish and Game Code Section 3503 and 3503.5 – Protection of Birds, Nests, and Raptors

Section 3503 of the CFGC states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

1.4.2.6 California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Section 1900- 1913) directed the CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The NPPA gave CDFW the power to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take.

1.4.2.7 Porter-Cologne Water Quality Control Act – California Water Code Section 13000 et seq.

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. The RWQCB must prepare and periodically update water quality control plans (basin plans). Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters of the state may require waste discharge requirements from the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

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1.4.2.8 Regional Water Quality Control Board

The RWQCB is the primary agency responsible for protecting water quality in California. The RWQCB regulates discharges to surface waters under the federal CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of the state and to all waters of the U.S., including wetlands (isolated and non-isolated conditions).

Through 401 Certification, Section 401 of the CWA allows the RWQCB to regulate any proposed federally permitted activity that may affect water quality. Such activities include the discharge of dredged or fill material, as permitted by USACE, pursuant to Section 404 of the CWA. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards," pursuant to Section 401. Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

In addition, pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB is authorized to regulate any activity that would result in discharges of waste or fill material into waters of the state, including "isolated" waters and/or wetlands (e.g., vernal pools and seeps), saline waters, and groundwater within the boundaries of the state (California Water Code (CWC) Section 13050[e]). Porter-Cologne authorizes the SWRCB to adopt, review, and revise policies for all waters of the state, and directs the RWQCB to develop and implement regional Basin Plans that recognize and are designed to maintain the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, maintaining water quality, and addressing the water quality problems of that region (CWC Section 13050[j]). As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 does not apply. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

1.4.2.9 California Coastal Act and California Coastal Zone Management Program

The California Coastal Act of 1976, administered by the CCC, is the primary legislation guiding coastal development and protection. Pursuant to Section 30240 of the California Coastal Act, Environmentally Sensitive Habitat Areas (ESHAs) "shall be protected against any significant

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disruption of habitat values and only uses dependent on those resources shall be allowed within those areas.” ESHAs are “any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.” The California Coastal Act states that development adjacent to ESHAs must be located and designed to prevent significant impacts to the functions and values of the ESHA.

The federally approved California Coastal Zone Management Program (CZMP) is administered through a partnership between State and local coastal governments. The CCC and the California Coastal Conservancy manage and perform different roles under the CZMP. The CCC is primarily responsible for managing and permitting activities within the coastal zone, and the California Coastal Conservancy is responsible for land acquisition and the protection, restoration, and enhancement of wetlands and coastal resources. The CCC advocates for local coastal city governments to establish Local Coastal Programs (LCPs) to protect public access and coastal resources on a local level as well as govern decisions on behalf of the CCC. Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP, such as the City, has issued a Coastal Development Permit.

1.4.3 Local Plans and Policies

1.4.3.1 Multiple Species Conservation Plans (MSCP)

The City of San Diego has developed the Multiple Species Conservation Program (MSCP), which is a regional, multijurisdictional plan that provides a coordinated program issuing “take” authorization for covered species for projects that comply with the plan. The MSCP provides for the preservation of a network of habitat and open space, protecting biodiversity, and enhancing the region's quality of life. The MSCP also provides an economic benefit by reducing constraints on future development and decreasing the costs of compliance with federal and state laws protecting biological resources. The MSCP Plan has been developed cooperatively by participating jurisdictions and special districts in partnership with the wildlife agencies, property owners, and representatives of the development industry and environmental groups. The plan has been designed to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. By identifying priority areas for conservation and

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other areas for future development, the MSCP streamlines existing permit procedures for development projects that impact habitat.

The ultimate goal of the MSCP is to create a regional habitat preserve system, within the Multiple Habitat Planning Area (MHPA), while allowing development projects to occur. The MSCP provides for a streamlined development review system that avoids the traditional project-by-project review by regulatory agencies.

The City of San Diego's MSCP Subarea Plan (City of San Diego 1997a) has been prepared pursuant to the general outline developed by the USFWS and CDFW to meet the requirements of the California Natural Communities Conservation Planning (NCCP) Act of 1992. The Subarea Plan forms the basis for the implementing agreement, which is the contract between the City and the wildlife agencies that ensures implementation of the Subarea Plan and thereby allows the City to issue take permits at the local level (City of San Diego 1997b).

In addition to the City's MSCP Subarea Plan, other local planning policy documents include the City of San Diego Guidelines for Conducting Biology Surveys (City of San Diego 2002) and the SDBG (City of San Diego 2018). As described in these guidelines, the City of San Diego established Environmentally Sensitive Lands (ESLs) regulations to assure protection of resources consistent with CEQA and the City's MSCP. ESLs include lands within the MHPA, wetlands, sensitive vegetation communities, habitat for listed species, lands supporting narrow endemics, and steep slopes. The regulations encourage avoidance and minimization of impacts to ESLs. Biology guidelines have been established that define the survey and impact assessment methodologies and mitigation requirements for unavoidable impacts (City of San Diego 2018).

Sensitive biological resources are defined by the City's Municipal Code as:

- Lands that have been included in the MHPA as identified in the City's MSCP Subarea Plan;
- Wetlands (as defined by the Municipal Code, Section 113.0103);
- Lands outside of the MHPA that contain Tier I habitats, Tier II habitats, Tier IIIA habitats, or Tier IIIB habitats as identified in the SDBG;
- Lands supporting species or subspecies listed as rare, endangered, or threatened;

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- Lands containing habitats with narrow endemic species as listed in the SDBG; and
- Lands containing habitats of covered species as listed in the SDBG.

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2 SURVEY METHODS AND LIMITATIONS

The Project study area is comprised of the entire 26.024-acre site, including each project impact/work areas and a 100-foot buffer (Figure 2). The 100-foot buffer is appropriate in this case to allow for detection of, or analysis of potential habitat for any species which may be indirectly impacted by project activities onsite. Data regarding biological resources present within the study area were obtained through a review of pertinent literature and field reconnaissance, both of which are described in detail as follows. Survey areas were determined based on suitable habitat for the resource for which the survey was conducted.

2.1 Literature Review

The following data sources were reviewed to assist with the biological resources analysis:

- U.S. Department of Agriculture Web Soil Survey (USDA 2022)
- CDFW California Natural Diversity Database – Special Animals List (CDFW 2022a)
- CDFW California Natural Diversity Database – RareFind, Version 5 (CDFW 2022b)
- The Calflora Database (Calflora 2022)
- California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2022)
- MSCP Subarea Plan (City of San Diego 1997)
- SDBG (City of San Diego 2018)
- USFWS Species Occurrence Data (USFWS 2022)
- San Diego Natural History Museum (SDNHM 2022)
- Aerial maps from the San Diego Association of Governments (SANDAG 2022), Bing (Microsoft 2022), and Google Earth (2002-2022)
- Topographic maps (Google Earth 2022)

Additional resources reviewed prior to field investigations include: Special Vascular Plants, Bryophytes, and Lichens (CDFW 2022c); Fully Protected Animals (CDFW 2022d); State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2022e); State and Federally Listed Endangered and Threatened Animals of California (CDFW 2022f). A review of proposed or final USFWS Critical Habitat for federally threatened or endangered species (USFWS 2022) and MHPA Preserve boundary was also completed prior to field investigations.

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The results of the data query were then refined through site visits involving habitat assessments for these special status species. For the purposes of this report, species are considered to have special status if they meet at least one of the following criteria:

- Covered under the federal or state Endangered Species Act (CDFW 2022a; USFWS 1996, 2004)
- CDFW Species of Special Concern (CDFW 2022a; Remsen 1978; Williams 1986)
- CDFW Fully Protected Species (CDFW 2022a)
- Listed as having a California Rare Plant Rank (CRPR) (formerly CNPS List) as List 1A (presumed extinct in California), 1B (rare, threatened, and endangered in California and elsewhere), or 2 (rare, threatened, or endangered in California, but more common elsewhere). CRPR List 1A, 1B, and 2 species are considered special status plant species if they fall within any of these categories as defined in the NPPA, CFGC Section 1901 or the state ESA, CFGC Sections 2050 through 2098 CRPR List 3: (plants for which more information is needed [a review list]), or List 4 (plants of limited distribution [watch list]) (CNPS 2022)

2.2 Field Reconnaissance

Biological surveys conducted within the Project study area were conducted on August 11 and August 22, 2022, and included vegetation mapping and general floral and wildlife surveys. Table 1 provides additional details regarding the conditions during the surveys. All biological surveys conducted for the project were in accordance with the City’s Guidelines for Conducting Biological Surveys (Appendix II in City of San Diego 2018).

**TABLE 1
SCHEDULE OF SURVEYS**

Date	Time	Personnel	Survey Type	Conditions
8/11/2022	1345-1715	Michelle Balk	General biological, vegetation, rare plants	80 degrees F, wind 1-8 mph, 1% cloud cover

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**TABLE 1
SCHEDULE OF SURVEYS**

Date	Time	Personnel	Survey Type	Conditions
8/22/2022	0930- 1120	Brian Lohstroh	General wildlife	71-72 degrees F, wind 1-9 mph, 100-30% cloud cover

NA indicates not applicable to survey, and, or not recorded.

2.2.1 Resource Mapping

Vegetation communities and land uses on and within the survey area were mapped in the field directly onto a 100-foot-scale (1 inch = 100 feet), aerial photograph-based field map with proposed disturbance areas for the project. Following completion of the fieldwork, vegetation polygons were transferred to a digital map and digitized using ArcGIS, and a geographic information system (GIS) coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present within the study area was determined.

As adopted in the SDBG (City of San Diego 2018) the vegetation community and land cover mapping follows the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified by the County and noted in Draft Vegetation Communities of San Diego County (Oberbauer *et al.* 2008). These habitats were then cross-walked to their corresponding community in the SDBG (City of San Diego 2018). In general, areas on site supporting less than 20% native plant species cover were mapped as disturbed land, and areas supporting at least 20% native plant species, but fewer than 50% native cover, were mapped as a disturbed native vegetation community (e.g., disturbed coastal sage scrub).

2.2.2 Flora and Fauna

The plant species encountered during the field surveys were identified and recorded directly into a field notebook. Species that could not be identified in the field were brought into the laboratory for further investigation. A compiled list of plant species observed in the Project study area is presented in Appendix A, Plant Compendium. Latin and common names for plant species with a California Rare Plant Rank (formerly CNPS List) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022). For plant

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species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2022), and common names follow the List of Vegetation Alliances and Associations (CDFG 2010) or the United States Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2022b).

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly onto a field notebook. Binoculars (10x42) were used to aid in the identification of wildlife. The suitability of habitats for special status wildlife species within the Project study area was evaluated during the vegetation mapping and general wildlife surveys.

Latin and common names of any animals detected follow Crother (2012) for reptiles and amphibians, American Ornithologists' Union (AOU) (2022) for birds, Wilson and Reeder (2005) for mammals, and North American Butterfly Association (NABA) (2016) or SDNHM (2002) for butterflies. In addition to species actually detected during the surveys, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A list of wildlife species observed in the study area is presented in Appendix B, Wildlife Compendium.

2.2.3 Wetlands

The site was examined for any areas that could be considered jurisdictional wetlands or waters under the jurisdiction of the CDFW pursuant to Sections 1600–1603 of the California Fish and Game Code; under the jurisdiction of the ACOE pursuant to Section 404 of the federal CWA; under the jurisdiction of RWQCB pursuant to CWA Section 401 and the Porter–Cologne Act; wetlands defined under the City of SDBG (SDBG; City of San Diego 2018); and wetlands defined under the Coastal Act Section 30121 (CCC 2011). One area identified by City staff as an area of potential concern was examined during field work on August 11, 2022. This area consisted of a minor swale which may occasionally convey runoff downslope after a storm. However, the area did not contain a bed and bank or any wetlands vegetation. Moreover, the area is located within a landscaped/developed area of the site within the project buffer and would not be subject to regulation by wetlands resource agencies. Photos of the area can be found in the Photo Appendix

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(Appendix E). No other areas potentially considered jurisdictional wetlands or waters were observed.

2.3 Focused Surveys for Sensitive Biological Resources

Sensitive biological resources are those defined by the SDBG (City of San Diego 2018) as follows: (1) lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997); (2) wetlands (as defined by the Municipal Code, Section 113.0103); (3) lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the SDBG (City of San Diego 2018); (4) lands supporting species or subspecies listed as rare, endangered, or threatened; (5) lands containing habitats with narrow endemic species as listed in the SDBG (City of San Diego 2018); and (6) lands containing habitats of covered species as listed in the SDBG (City of San Diego 2018).

Additionally, sensitive biological resources are defined as follows: (1) species that have been given special recognition by federal, state, or local agencies and organizations due to limited, declining, or threatened population sizes; (2) habitat types recognized by local and regional agencies as sensitive; (3) habitat areas or plant communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; and (4) wildlife corridors and habitat linkages.

A summary of the dates and site conditions for the field efforts performed as part of this biological report is presented above in Section 2.2, Table 1. The following sections provide specific details regarding each survey.

2.3.1 Focused Surveys for Sensitive Plants

An assessment of rare plant species that have potential to occur in the Project study area was completed prior to field surveys. Following a review of sensitive plant species with potential to occur within the Project study area, suitable habitat areas were identified, and a focused survey for sensitive plant species was conducted to identify any species in the study area that were present/blooming.

Field survey methods and mapping of sensitive plants generally conformed to CNPS Botanical Survey Guidelines (CNPS 2001); Guidelines for Assessing the Effects of Proposed Projects on

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Rare, Threatened, and Endangered Plants and Natural Communities (CDFG 2009); and General Rare Plant Survey Guidelines (Cypher 2002). The plant species encountered during the field survey were identified and recorded directly into a field notebook. Special-status plant species were mapped by hand on the 1"=100-foot field map described above. Single points were recorded at special-status plant locations where the species count was equal to one. Special-status plant polygons were recorded when the plant was either covering a large area (greater than 15 square feet) or several plants were grouped together. The sensitive plant observations were then digitized into the geodatabase by a Balk GIS technician.

2.4 Survey Limitations

Site visits to the Project study area were conducted during daylight hours. No focused wildlife surveys were conducted. Wildlife species were recorded during site visits in the late summer season when many breeding species would not be present. Special-status plant surveys were performed during the late summer 2022 vegetation/floral visit; timing and seasonal conditions were not adequate to determine presence/absence of all potentially occurring special-status plants. Complete inventories of biological resources present on a site often require numerous focused surveys at different times of day during different seasons. Some species such as annual plants are detectable only in spring or summer, and nocturnal animals are difficult to detect during the day. Other species may be present in such low numbers that they could be missed. Due to such timing and seasonal variations, survey results are not an absolute list of all species that the Study Area may support. Based on the Potential to Occur (PTO) table (Appendix C), there are no highly sensitive special-status plant species with a moderate to high potential and/or suitable habitat present to support them. Sensitive species with potential to occur are described in Sections 3.2.5 and 3.2.6 of this report and in Appendices C and D.

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3 RESULTS

3.1 Physical Characteristics

3.1.1 Topography and Drainage

The Point Loma Wastewater Treatment site proper is located on flat ground, at approximately 86 feet above mean sea level (amsl). When buffer areas are included, the site study area ranges from approximately 220 feet along the east edge to 95 feet along the north edge to sea level along the west edge. Steep sea cliffs are located along much of the western boundary of the site. No jurisdictional waterways are located onsite, so all drainage from the site slopes would proceed toward the west, toward the ocean, and consist of sheet flow.

Surrounding land uses include the Point Loma Ecological Reserve (various owners) toward the south, Cabrillo National Monument (National Park Service) to the southeast, Fort Rosecrans National Cemetery (U.S. Military) to the east, and Naval Base Point Loma (U.S. Navy) land to the north, and more distant east and south.

3.1.2 Soils

According to the San Diego County Soil Survey and digital soil maps from NRCS' 2.2 Database, four soil types are present in the study area as shown in Table 2 below and as depicted on the Soils and Topography Map (Figure 3).

Table 2
MAPPED SOILS IN SURVEY AREA

Unit Name	Drainage Class	Runoff Class	Formation
Gaviota Fine Sandy Loam, 30 to 50% Slopes	Well	Rapid	Weathered from marine sandstone

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Reiff Fine Sandy Loam, 0 to 2% slopes	Well	Slow	Alluvium derived from granitic rock
Reiff Fine Sandy Loam, 5 to 9% slopes	Well	Slow to medium	Alluvium derived from granitic rock
Terrace Escarpments	N/A*	N/A*	N/A*

* Terrace Escarpments refers to a landscape feature, not a soil type. Terrace escarpments may contain four to 10 inches of loamy or gravel soil over soft marine sandstone, shale, or gravelly sediments, however.

3.2 Biological Resources

The following discussion describes the existing biological conditions within the project study area, provided as biological resource descriptions.

3.2.1 Vegetation Communities and Land Cover Types

Vegetation communities and land covers were mapped according to Holland (1986) and Oberbauer et al. (2008), with a few exceptions. These habitats were then cross-walked to their corresponding community listed in the SDBG (City of San Diego 2018). A total of five vegetation communities (or habitats) were identified within the project study area: coastal sage scrub (including disturbed and coastal sage scrub), maritime succulent scrub, subtidal ocean, intertidal ocean, and disturbed habitat. In addition, two land covers are located on site: developed land and cliff face.

The vegetation communities and land cover types recorded in the study area are described in detail as follows, their acreages are presented in Table 3, and their spatial distributions are presented on the Biological Resources Map (Figure 2). Also included in Table 3 are the sensitivity designations (City 2018).

**Table 3
Vegetation Communities and Land Cover Types in the Project Study Area**

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General Vegetation Community/Land Cover Category (Holland/Oberbauer Code)	Vegetation Community/Land Cover Type	SDBG Vegetation Community	Tier/Wetland	Acres inside Project Areas	Acres in Buffer Area (outside Project Areas)	Total Acres Onsite*
Disturbed or Developed Areas (10000)	Developed Land	N/A	IV	2.441	14.543	16.984
	Disturbed Habitat	Disturbed Land	IV	0.138	5.222	5.361
<i>Disturbed or Developed Areas (10000) Subtotal</i>				2.579	19.765	22.345
Scrub and Chaparral (30000)	Diegan Coastal Sage Scrub	Coastal Sage Scrub	II	0.00	1.071	1.071
	Disturbed Diegan Coastal Sage Scrub	Coastal Sage Scrub	II	0.00	0.088	0.088
	Maritime Succulent Scrub	Maritime Succulent Scrub	I	0.00	0.402	0.402
<i>Scrub and Chaparral (30000) Subtotal</i>				0.00	1.561	1.561
Miscellaneous Land Covers	Cliff face	N/A	IV	0.00	0.827	0.827
	Subtidal Ocean	N/A	Non-wetland Waters of the United States	0.00	0.972	0.972
	Intertidal Ocean	N/A	Non-wetland Waters of the United States	0.00	0.320	0.320
<i>Miscellaneous Land Covers Subtotal</i>				0.000	23.445	2.119
Total				2.579	23.445	26.024

*Numbers may not total exactly due to rounding.

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3.2.1.1 *Disturbed Habitat (11300)*

Disturbed habitat (synonymous with “disturbed land” for the purposes of this report) is described by the SDBG as areas that may consist of bare ground or, when vegetated, “are dominated by at least 50 percent cover of invasive broad-leaved non-native plant species. Minor amounts of other species including non-native annual grasses can also be present.” The non-native species have often been introduced/established due to human action. Note that this is a vegetation type in itself separate from other disturbed vegetation communities, such as disturbed Diegan coastal sage scrub, where “disturbed” is simply used as a modifier describing a different vegetation community. Oberbauer et al. (2008) describes disturbed land as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate.

Disturbed habitat was mapped onsite in areas either devoid of vegetation such near the edges of cliffs, or more commonly, in areas dominated by non-native vegetation such as cyclops acacia (*Acacia cyclops*), ice plant (*Mesembryanthemum crystallinum*), sea fig (*Carpobrotus edulis*), Russian thistle (*Salsola tragus*), yellow star-thistle (*Centaurea melitensis*), grasses (*Bromus* spp.), myoporum (*Myoporum laetum*), and statice (*Limonium perezii*). A small area dominated by the weedy (although native) coastal goldenbush (*Isocoma menziesii* ssp. *menziesii*) and (*Heterotheca grandiflora*), with a graveled substrate, and just west of a developed area in the northern portion of the project site, was included with this mapping. A total of approximately 5.361 acres of disturbed habitat was mapped onsite (5.222 acre within the project buffer, and 0.138 acre within project impact areas).

3.2.1.2 *Developed (12000)*

According to Oberbauer et al. 2008, urban/developed represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. Urban/developed land is not regulated by the environmental

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resource agencies and is often considered a disturbed category. Urban/developed is not listed as a SDBG Vegetation Community (City of San Diego 2018).

The project areas proper and a large amount of the buffer areas were mapped as developed. Developed comprises all portions of the treatment facility, parking lots, buildings, and associated landscaped/ornamental areas onsite, including the area containing the earthen-bottomed swale described in Sections 2.2.3 and 3.2.2 of this report. A total of 16.984 acres of developed land were mapped onsite (14.543 acres within the project buffer, and 2.441 acres within project impact areas).

3.2.1.3 Diegan Coastal Sage Scrub (32500)

Diegan coastal sage scrub is a native vegetation community. According to Oberbauer et al. (2008), coastal sage scrub is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonade sumac (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). Diegan coastal sage scrub is listed as coastal sage scrub according to the SDBG Vegetation Community (City of San Diego 2018). Diegan coastal sage scrub is considered a sensitive vegetation community in the SDBG (City of San Diego 2018).

Onsite, this plant community is dominated by the lemonade sumac, with smaller quantities of California buckwheat, coastal goldenbush, California brittlebush (*Encelia californica*), and coyotebrush (*Baccharis pilularis*). California sagebrush, and four-wing saltbush (*Atriplex canescens*) were occasionally present. Three small patches of coastal sage scrub, totaling 1.071 acres, were mapped on slopes in the northern and southern portions of the buffer areas onsite.

Disturbed coastal sage scrub is also present on slopes in the eastern regions of the project area, in buffer areas only. Disturbed coastal sage scrub was mapped in areas where the percent cover of native scrub species ranged between 20 and 80 percent. Disturbed coastal sage scrub onsite is dominated by cyclops acacia, with lesser quantities of typical coastal sage species as mentioned above. A total of 0.088 acre of disturbed coastal sage scrub was mapped onsite, in project buffer areas only.

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3.2.1.4 Maritime Succulent Scrub (32400)

Maritime succulent scrub is a low-growing, open (25-75% cover) scrub dominated by drought-deciduous shrubs and stem and leaf succulents, occurring within a few miles of the coast from approximately Torrey Pines to El Rosario in northern Baja California. It also occurs on San Clemente and Catalina Islands (Holland 1986). As one proceeds southward through the range of this vegetation community, higher proportions of cacti are present. Maritime succulent scrub is considered a Tier I sensitive vegetation community in the SDBG (City of San Diego 2018).

Onsite, this habitat type is dominated by cliff spurge (*Euphorbia misera*; California Rare Plant Rank [CRPR] 2B.2) and California box thorn (*Lycium californicum*; CRPR 4.2), with lesser quantities of California sagebrush, California brittlebush, fishhook cactus (*Mamillaria dioica*), and snake cholla (*Cylindropuntia californica* var. *californica*; CRPR 1B.1). Maritime succulent scrub was mapped as a single polygon in a buffer area in the northeastern region of the site, on a steep slope. A total of 0.402 acre of developed land was mapped within the buffer area of the site.

3.2.1.5 Subtidal Ocean (64111)

Subtidal ocean is a land cover type not listed in Holland 1986, but it is listed in Oberbauer 2008. Subtidal ocean was mapped in areas from the bottom of the area exposed at low tide to an ocean depth of approximately 120 feet (lower limit depth that supports canopy forming kelp). In this case, as the upper limit of the subtidal zone was mapped using aerial photography, and the status of the tides at the time of the aerial photo was flown are not known, the limit is an approximation. As subtidal ocean is an area continuously covered in water, this area is generally unvegetated. In some areas, one species of flowering plant, surf grass (*Phyllospadix scouleri*), is present. Phytoplankton, algae, and canopy-forming macroalgae may be present if suitable substrates are present to support these species.

Subtidal ocean was mapped in the westernmost buffer areas of the site, beyond areas mapped as intertidal ocean. A total of 0.972 acre of subtidal ocean was mapped. Subtidal ocean is a “Marine Habitat” land cover type listed in Table 2A of the SDBG (City of San Diego 2018) and is considered a sensitive land cover type, but as it is unvegetated, it is not considered a wetland. It is considered a non-wetland waters of the United States and would be under the jurisdiction of the ACOE.

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3.2.1.6 *Intertidal Ocean*

Intertidal ocean is also a land cover type not listed in Holland 1986, but it is listed in Oberbauer 2008. Intertidal ocean extends inward from the subtidal ocean zone, from the lower limit of the area exposed at low tide to the upper limit of the “spray zone.” Intertidal ocean is a rocky, often unvegetated zone, although algae and surf grass may be present. As mentioned above, as the upper limit of the subtidal zone/lower limit of the intertidal zone was mapped using aerial photography, and the status of the tides at the time of the aerial photo was flown are not known, the limit is an approximation. Intertidal ocean was mapped onsite in exposed, rocky areas at the base of cliff faces (not including areas where riprap has been placed) and was observed to support algae.

Intertidal ocean was mapped in the western buffer area of the site, in two polygons, adjacent to (east of) subtidal ocean. A total of 0.320 acre of intertidal ocean was mapped. Intertidal ocean is a “Marine Habitat” land cover type listed in Table 2A of the SDBG (City of San Diego 2018) and is considered a sensitive land cover type, but as it is unvegetated, it is not considered a wetland. It is considered a non-wetland waters of the United States and would be under the jurisdiction of the ACOE.

3.2.1.7 *Cliff Face*

Cliff face is also not a land cover type found in Holland (1986) or Oberbauer *et al.* 2008. Cliff face refers to unvegetated, vertical or nearly vertical slopes, in this case, plunging into the Pacific Ocean. Onsite, cliff faces either intergrade with subtidal ocean or intertidal ocean on the western/ocean side, and they intergrade with disturbed habitat on the eastern/inland side. This land cover type, though not listed in Table 2A of the SDBG (City of San Diego 2018), would be considered a Tier 1 sensitive land cover type due to its extreme rarity and ability to support sensitive species such as sea birds.

A total of 0.827 acre of cliff face were mapped onsite, in the western portion of the buffer area.

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3.2.2 Wetlands

The site was examined for any areas that could be considered jurisdictional wetlands or waters according to the ACOE, RWQCB, CDFW, CCC, and City of San Diego. One area identified by City staff as an area of potential concern was examined during field work on August 11, 2022. This area consisted of a minor swale which may occasionally convey downslope after a storm. However, the area did not contain a bed and bank or any wetlands vegetation. Moreover, the area is located within a landscaped/developed area of the site within the project buffer and would not be subject to regulation by wetlands resource agencies.. Photos of the area can be found in the Photo Appendix (Appendix E). No other areas potentially considered jurisdictional wetlands or waters were observed.

3.2.3 Floral Diversity

A total of 49 species of vascular plants, 26 native (54%) and 22 non-native (46%), were recorded during the reconnaissance/rare plant surveys for the project. A cumulative list of all common and sensitive plant species observed in the study area is provided in Appendix A, *Plant Compendium*, of this report. Four of these species are considered special status, three of these are MSCP-covered species, and one of these is an MSCP narrow endemic species (see Section 3.2.5) of this report.

3.2.4 Wildlife Diversity

Wildlife species that were detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly onto a field notebook. Binoculars (10 millimeter x 42 millimeter) were used to aid in the identification of wildlife. A total of 20 wildlife species were recorded during the biological surveys for the project study area. One wildlife species observed within the survey area, coastal California gnatcatcher, is considered special status (see Section 3.2.6).

A cumulative list of all common and sensitive wildlife species observed in the study area during the surveys is provided in Appendix B of this report.

3.2.5 Special-Status Plants

Plant species are considered sensitive if they have been listed or proposed for listing by the federal or state government as rare, endangered, or threatened (“listed species”); have a CRPR of 1–4; are listed

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as a MSCP-covered species; and/or have been adopted by the City as narrow endemic. An evaluation of known California Natural Diversity Database records in a three-mile buffer surrounding the site was conducted. In addition, Balk Biological's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the Study Area were evaluated to determine the potential for various special-status species to occur.

Balk conducted a rare plant survey during vegetation/land cover mapping on August 11, 2022, to identify any species in the study area that were blooming or otherwise observable in that period. Surveys for species that are known to bloom outside of this period and have moderate or low-to-moderate potential to occur on the site were not conducted, since these species only have potential to occur in buffer areas, beyond the actual project sites proper. There are no special-status plant species not already observed with a high potential to occur. The potential for sensitive plant species to occur in the project study area is described in Appendix C, *Special-Status Plant Species Potentially Occurring within the Study Area*. Four sensitive plant species, snake cholla (*Cylindropuntia californica* var. *californica*), cliff spurge (*Euphorbia misera*), California box-thorn (*Lycium californicum*), and Torrey pine (*Pinus torreyana*), were observed within the project study area. All but three Torrey pines were observed in buffer areas, and the Torrey pines mapped within a work area is within a landscaped area which will not be impacted. In addition, four additional sensitive or MSCP covered plant species have a low-to-moderate or moderate potential to occur within buffer areas (Diegan coastal sage scrub) onsite: Slender-pod jewelflower (*Caulanthus heterophyllus*), Orcutt's spineflower (*Chorizanthe orcuttiana*), San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*), and sand-loving wallflower (*Erysimum ammophilum*).

3.2.5.1 Snake Cholla

Snake cholla (CRPR List 1B.1, MSCP covered, MSCP Narrow Endemic) is a stem succulent in the Cactus family. It blooms between April and May and occurs in chaparral and coastal scrub. One individual of snake cholla was mapped in the buffer area in the eastern region of the site, in maritime succulent scrub.

3.2.5.2 Cliff Spurge

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Cliff spurge is a CRPR List 2.2 shrub in the Spurge family. Blooming with separate male and female flowers between January and August, it occurs on rocky slopes and coastal bluffs. Approximately 160 individuals of cliff spurge were observed onsite, in coastal bluff scrub in the eastern buffer area of the site, and at the top of a sea cliff in the western buffer area.

3.2.5.3 *California Box-thorn*

California box-thorn is a medium-sized shrub in the Nightshade family. It occurs in coastal bluff scrub and coastal sage scrub and blooms between March and August. It loses its small, succulent leaves in dry months and often appears to be senesced during this time. Approximately 250 individuals of this species were mapped onsite, along tops of sea cliffs.

3.2.5.4 *Torrey Pine*

Torrey pine is a CRPR list 1B.2, MSCP-covered species that occurs in closed-cone coniferous forests and chaparral with sandstone soils. Eleven individuals of this perennial evergreen tree were observed in the northern and southern regions of the site—eight within buffer areas and three mapped in a project impact area which, despite this, is within a landscaped area and will not be impacted—were observed. These individuals were planted, however, and not naturally occurring.

3.2.5.5 *Slender-pod Jewelflower*

Slender-pod jewelflower is a MSCP-covered species that is not listed as endangered or threatened by USFWS or CDFW or as otherwise sensitive according to CNPS. This annual plant in the Mustard family blooms from March through May and occurs in dry, open scrub or chaparral in post-fire or otherwise disturbed areas. This species has a low-to-moderate potential to occur within coastal sage scrub or disturbed coastal sage scrub in buffer areas onsite.

3.2.5.6 *Orcutt's Spineflower*

Orcutt's spineflower is a federally-listed endangered plant in the Buckwheat family. It occurs only from Del Mar through Point Loma in San Diego County and has been extirpated from most original

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locations. It prefers sandy soils in openings in chaparral, Torrey pine woodland, and coastal scrub. Orcutt's spineflower has a low-to-moderate potential to occur within coastal sage scrub in buffer areas onsite.

3.2.5.7 *San Diego Sand Aster*

San Diego aster is a CRPR List 1B.1 perennial, herbaceous plant in the Sunflower family. It occurs in coastal bluff scrub, coastal sage scrub, and chaparral and blooms from June through September. San Diego aster has a low-to-moderate potential to occur in sandy openings in coastal sage scrub in buffer areas onsite.

3.2.5.8 *Sand-loving Wallflower*

Sand-loving wallflower occurs in sandy openings in coastal dune, coastal scrub, and maritime chaparral habitats. This CRPR List 1B.2, MSCP-covered plant blooms between February and June with yellow flowers and is a member of the Mustard family. It has a moderate potential to occur only within buffer areas onsite, within coastal sage scrub.

3.2.6 *Special-Status Wildlife*

Sensitive wildlife species are those listed as federal/state endangered or threatened, proposed for listing, fully protected by CDFW, California Watch List (WL), California SSC, or MSCP-covered. An evaluation of known California Natural Diversity Database records in a three-mile buffer surrounding the site was conducted. In addition, Balk Biological's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the Study Area were evaluated to determine the potential for various special-status species to occur.

One general biological survey of the project area was conducted according to the methods presented in Section 2 above, on August 11, 2022. A focused rare plant survey was also conducted during this visit. Protocol level wildlife surveys have not been conducted at this time, however sensitive wildlife species directly observed during the general biological survey on August 11, 2022, or general wildlife survey on August 22, 2022, or known to occur in the surrounding region

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are described in Appendix D, Special-Status Wildlife Species Detected or Potentially Occurring in the Study Area. Two special-status wildlife species were observed onsite/within the project survey area during the August 2022 surveys:

- Coastal California gnatcatcher (*Polioptila californica californica*; federally-listed threatened (FT)/MSCP covered; CAGN). Two individuals were confirmed detected, and an additional individual may also have been present during the August 22, 2022, survey. CAGN were observed on the north end of the site, with one observation just inside the buffer area, in disturbed habitat adjacent to coastal sage scrub.
- California brown pelican (*Pelicanus occidentalis californicus*; California Fully Protected species, MSCP covered). Approximately five individuals were observed flying within the buffer area, over the ocean, in the northwest region of the site.

Six special status wildlife species were determined to have moderate potential to occur within the Study Area: orange-throated whiptail, San Diego (Coast) horned lizard, osprey, double-crested cormorant, northwestern San Diego pocket mouse, and western mastiff bat. All of these species might only be expected to occur within buffer areas of the site, not in project work areas proper.

A description of federal and/ or state listed species observed within the study area or with moderate potential to occur is provided as follows:

3.2.6.1 Coastal California gnatcatcher

Coastal California gnatcatcher is federally listed as threatened, is considered a CDFW species of special concern, and is covered under the MSCP. CAGN is a local and uncommon year-round resident of Southern California. This species is found in the six southernmost California counties located within the coastal plain (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside). CAGN generally inhabits Diegan coastal sage scrub and Riversidian coastal sage scrub dominated by California sagebrush and flat-topped buckwheat, generally below 1,500 feet in elevation along the coastal slope. When nesting, this species typically avoids slopes greater than 25% with dense, tall vegetation. CAGN pairs will attempt several nests each year (average of four), each placed in a different location inside their breeding territory, but most nest attempts are unsuccessful due to depredation by a variety of species (Grishaver et al. 1998; Atwood and

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Bontrager 2001). Clutch size ranges from one to five eggs, with three or four eggs most common. CAGN will remain paired through the nonbreeding season and will generally expand their home range when not breeding.

3.2.6.2 Osprey

Osprey (*Pandion haliaetus*) is a CDFW watch list species. Ospreys can be found in fresh and saltwater, along the coast, and in rivers, lakes, reservoirs, estuaries, and salt marshes where large numbers of fish are present (Kaufman 1996). This species suffered the effects of DDT and pesticide poisoning in the mid-20th century but has since recovered following the ban of such poisons. Osprey was once rare in San Diego County but is now found regularly along the coast and on inland lakes, with several pairs now nesting in the region (Unitt 2004).

Suitable habitat for foraging (not nesting) osprey occurs along the western boundary of the site, in the buffer area.

3.2.6.4 Double-crested Cormorant

Double-crested cormorant (*Nannopterum auritum* [= *Phalacrocorax auratus*]) is a CDFW watch list species. Double-crested cormorant is adaptable to any aquatic environment, and can be found along the coasts, in bays, lakes, rivers, reservoirs, and ponds. This species is regularly found near water in San Diego county, with the nearest nesting colonies on the Channel and Los Coronados Islands (Unitt 2004). The population of this species has fluctuated in the last century due to the persecution of nesting colonies in the early 1900's, DDT poisoning in the mid-century, and pest control to protect aquaculture farms in present day (Unitt 2004).

Suitable roosting habitat (not nesting) for double-crested cormorant occurs along the western boundary of the site, on sea cliffs in the buffer area.

3.2.6.5 Orange-throated Whiptail

Orange-throated whiptail (*Aspidoscelis hyperythra*) is a CDFW Watch List species and MSCP-covered species. A condition of coverage for this species is that area-specific management

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directives must consider edge effects. Orange-throated whiptail is a small lizard species strongly associated with coastal sage scrub habitat. This species is found throughout Southern California and northern Baja California. Orange-throated whiptail may occur in coastal sage scrub, chaparral, edges of riparian woodlands and washes, and in weedy, disturbed areas adjacent to these habitats. Orange-throated whiptails emerge from hibernation in February and March, but some populations may be active throughout the year (Stebbins 2003). Mating may take place May through July, and females deposit two to three eggs. Hatchlings are observed in August. Moderately suitable habitat for this species occurs in the Diegan coastal sage scrub habitat within the study area.

3.2.6.6 San Diego (Coast) Horned Lizard

Coast (San Diego) horned lizard (*Phrynosoma coronatum blainvillei*) is a CDFW Species of Special Concern and MSCP-covered species. A condition of coverage for this species is that area-specific management directives must consider edge effects, as above for the orange-throated whiptail. In addition, management must include measures to discourage non-native, Argentine ants and measures to encourage native ants. This subspecies of horned lizard is endemic to extreme southwestern California, from Los Angeles County into Baja California (Stebbins 2003). This species occurs from sea level to over 8,000 feet in elevation, in sandy or friable soil within a variety of habitats, from sage scrub to chaparral to coniferous and broadleaf woodlands (Stebbins 2003). San Diego horned lizard requires open areas for sunning, shrubs for cover, and fine, loose soil for rapid mobility. Moderately suitable habitat for this species occurs in the Diegan coastal sage scrub habitat within the study area.

3.2.6.7 Northwestern San Diego Pocket Mouse

Northwestern San Diego pocket mouse (*Chaetodipus fallax*) is a CDFW Species of Special Concern. This mouse is a common resident of sandy, herbaceous areas, usually in association with rocks or coarse gravel (Grinnell 1933, Miller and Stebbins 1964). It occurs in a variety of habitat types in arid coastal and desert border areas, including coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper woodland, and annual grassland. It feeds mainly on the seeds of forbs, grasses, and shrubs. Northwestern San Diego pocket mouse excavates burrows in gravelly or sandy soil and breeds from March to May. Moderately suitable habitat for northwestern San Diego pocket mouse occurs in the Diegan coastal sage scrub habitat within the study area.

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3.2.6.8 Western Mastiff Bat

Western mastiff-bat (*Eumops perotis*) is a CDFW Species of Special Concern. Western mastiff bat is the largest bat in North America and can be found from California to Texas and across northern Mexico (Barbour and Davis 1969). Western mastiff bat is a year-round resident of San Diego County occurring along the coast, through the mountains, and in the desert. This species roosts colonially along steep cliffs, rocky outcrops, abandoned quarries, and rarely in palm trees (San Diego County Mammal Atlas 2017). Western mastiff bat is strongly associated with its roosting habitat in coastal and desert scrub, riparian zones, and oak woodlands (San Diego County Mammal Atlas 2017). However, because it is a long-distance flier, it has been documented foraging over San Diego Bay, Mission Bay, Point Loma, and the Tijuana estuary far from roost sites (San Diego County Mammal Atlas 2017). Moderately suitable roosting and foraging habitat for this species occurs in the CSS/chaparral habitat within the study area.

3.3 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability by (1) assuring the continual exchange of genes between populations, which helps maintain genetic diversity; (2) providing access to adjacent habitat areas, representing additional territory for foraging and mating; (3) allowing for a greater carrying capacity; and (4) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires).

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage does represent a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat “islands” that function as “stepping stones” for dispersal.

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The study area is not currently considered to be within a biological core or linkage area of the MSCP. However, undeveloped areas of the buffer around the project work area likely provide some refuge and cover for wildlife species and their movements and to some extent may function as a minor “stepping stone” wildlife corridor for animals moving north and south along the Point Loma Peninsula. Project work areas proper, however, would not function as a wildlife corridor due to lack of any suitable habitat located in the work areas. Due to the presence of the wastewater treatment plant, most animals moving around the area would be likely to stay to the east of the project site, within much higher quality habitat adjacent to the site.

3.4 Steep Slopes

The City of San Diego’s ESL regulations define steep slopes containing sensitive biological resources as a sensitive resource. The definition of steep slopes is those areas with greater than 25% slope with a height differential of more than 50 feet. A few areas meeting the definition of a steep slopes are present within the study area: sea cliffs along the western edge of the site, and buffer areas along the eastern regions of the site (containing Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed Diegan coastal sage scrub (revegetated), maritime succulent scrub, and a small amount of disturbed habitat [Figure 3]).

4.0 MSCP CONSISTENCY ANALYSIS

The project study area currently overlaps the MHPA in two locations: in the northwest buffer area, in an area largely mapped as developed (but with a small amount of riprap also included), and in a project work area in the northeast portion of the site also mapped as developed. This is likely unintentional and a consequence of “zoomed out” digitizing of the MHPA. An MHPA boundary line correction will be executed to remove these developed areas from the MHPA, as they are not considered habitat for plant or wildlife species.

Developed areas within both project impact areas and MHPA total 0.039 acre, and disturbed land within both project impact areas and MHPA total 0.001 acre. It is likely that in both of these areas, since they are highly anthropogenically altered land, which is generally not desirable for inclusion into the MHPA, MHPA mapping was not intended to capture these locations and is instead a

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function of the coarseness of digitizing (i.e., “zoomed out” digitizing) during creation of the MHPA. These areas will be removed from the MHPA via a boundary line correction (see Appendix F for a graphic).

The Point Loma Wastewater Treatment Plant Stormwater Diversion Project is a compatible land use within and adjacent to the MHPA. The project will follow the policies/requirements of the City of San Diego MSCP Subarea Plan.

4.1 Compatible Land Uses within the MHPA

Land uses considered conditionally compatible with the objectives of the MHPA and thus allowable in the MHPA include:

- Passive recreation
- Utility lines and roads in compliance with certain policies (see Section 4.2.1 below)
- Limited water facilities and other essential public facilities
- Limited low density residential uses
- Brush Management (Zone 2)
- Limited agriculture

4.2 Project Consistency with MSCP General Planning Policies and Design Guidelines

4.2.1 Roads and Utilities—Construction and Maintenance Policies

As this project is a utility line project, applicable policies to maintain the project’s applicable use status include:

(1) All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow

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previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.

The project has been designed to minimize intrusion into the MHPA. While two intrusions in the MHPA will result from the proposed project, these intrusions will impact areas of MHPA mapped as developed land or disturbed habitat. As discussed in the introduction to this section above, MHPA mapping was not intended to capture these locations and is instead a function of the coarseness of digitizing (i.e., “zoomed out” digitizing) during creation of the MHPA. A boundary line correction will be undertaken to resolve this issue.

(2) All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP covered species, and wetlands. If avoidance is infeasible, mitigation will be required (City of San Diego 1997a).

The project minimizes impacts to the MHPA by locating development nearly 100% in developed lands. As mentioned above, it is unlikely that these areas of development were likely desired for inclusion into the MHPA when the MHPA was originally designed, but instead resulted from the coarse-scale digitizing of the MHPA. A boundary line correction will be undertaken to resolve this issue (see Appendix F for a graphic).

(3) Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.

All temporary construction areas and staging areas for the project will be located in already disturbed or developed areas.

(4) Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans

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must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.

The project will not involve construction in areas likely to serve as wildlife corridors. Preconstruction training of crews and field workers will be conducted to ensure that conditions for avoidance of impacts to biological resources are met, and a responsible party will be specified prior to construction.

4.2.2 Fencing, Lighting, and Signage

Fencing, lighting, and signage guidelines include:

(1) Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).

The project will not create adjacent land uses incompatible with the MHPA, so no fencing/barriers are planned to be incorporated into the project.

(2) Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.

No additional lighting or signage is proposed for the project.

4.2.3 Materials Storage

Materials Storage guidelines include:

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Prohibit storage of materials (e.g., hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

All materials and equipment will be stored outside of the MHPA. Any materials and equipment stored adjacent to the MHPA with the potential to impact the MHPA must be in secondary containment to avoid leakage into the MHPA or otherwise.

4.2.4 Land Use Adjacency Guidelines

As project activities will be located adjacent to MHPA lands as delineated within the City's MSCP Subarea Plan (Figure 2) the City's Land Use Adjacency Guidelines (City of San Diego 1997a) are applicable. These guidelines are intended to minimize potential indirect effects to the MHPA and include the following issue areas: 1) drainage; 2) toxics; 3) lighting; 4) noise; 5) barriers; 6) invasive species; 7) brush management; and 8) grading/land development.

4.2.4.1 Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.

New developed areas onsite are expressly for the purposes of capturing surface stormwater runoff and returning it to the wastewater treatment plant for treatment prior to discharging into the ocean. As such, potential drainage into the MHPA would be less than before implementation of the proposed project. Rerouted runoff will be treated to remove toxins, chemicals, petroleum products, and exotic plant materials. The system will be maintained at least annually to ensure the removal of sediments and exotic plant materials, etc.

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4.2.4.2 Toxics

Land uses, such as recreation and agriculture, that use chemicals or generate byproducts such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA.

The proposed project will not use chemicals or generate by-products that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality.

4.2.4.3 Lighting

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

No additional lighting adjacent to the MHPA is proposed by the project.

4.2.4.4 Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

To avoid any direct impacts to coastal California gnatcatcher or other species identified as listed, candidate, sensitive, or special status in the MSCP, or MBTA-covered species, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting for these sensitive bird

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species on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). Should work cease for 10 days or more, the preconstruction survey shall be repeated prior to resuming work. The applicant shall submit the results of the preconstruction survey to the City's DSD for review and approval prior to initiating any construction activities. If nesting activities for any of the above-mentioned bird species are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

Construction noise that exceeds the maximum levels allowed (60 decibels [dB(a)] or greater at the edge of the habitat) shall be avoided during the breeding season for: coastal California gnatcatcher (breeding season March 1 and August 15). If construction is proposed during the breeding season for the coastal California gnatcatcher, the following are required:

1. Prior to the issuance of any grading permit, Notice to Proceed (NTP), or Pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the city manager:

- A. A qualified biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the coastal California gnatcatcher. Surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey

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guidelines established by the U.S. Fish and Wildlife service within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met:

- I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and

- ii. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB (A) hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB (A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city representative at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or

- iii. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB (A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction

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activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (august 16).

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* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. If coastal California gnatcatchers are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the city manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:

- I. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then condition a.iii shall be adhered to as specified above.
- ii. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

Noise reduction strategies after construction of the project are not necessary, as the project does not propose noise producing components.

4.2.4.5 Barriers

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

Construction of the proposed project would not introduce opportunities for public access to the Point Loma Wastewater Treatment Plant property, and as such, barriers along MHPA boundaries would not be necessary.

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4.2.4.6 Invasive Species

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA. The proposed project does not propose the introduction of invasive non-native plant species.

4.2.4.7 Brush Management

New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA.

The proposed project does not include residential development, so brush management zones are not a concern.

4.2.4.8 Grading/Land Development

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

Manufactured slopes are not a proposed component of this project.

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5 IMPACTS ANALYSIS

The purpose of Section 5 is to describe the direct, indirect, and cumulative impacts of the proposed project on special-status biological resources. The significance determinations for proposed or potential impacts are described in Section 4 and assume implementation of general measures listed in Section 6.1.

5.1 Definition of Impacts and Significance

Based upon the project description (Section 1.2), direct impacts, indirect (short-term and long-term), and cumulative impacts are defined as follows.

Direct Impacts may include both the permanent loss of on-site habitat and the plant and wildlife species that it contains and the temporary loss of on-site habitat. Direct impacts were quantified by overlaying the proposed impact footprint onto the biological resources map and evaluating the impacts by vegetation community. Direct impacts associated with this project are permanent in nature and result from the replacement of existing storage manholes with package duplex submersible pumps, and the installation of trench drains, gutters, swales, and berms to capture the facility storm water runoff.

Indirect Impacts refer to off-site and on-site effects that are short-term impacts (i.e., temporary) due to the project construction or long-term (i.e., permanent) design of the project and the effects it may have to adjacent resources. For this project, it is assumed that the potential short-term indirect impacts resulting from construction activities may include dust, noise, erosion, and general human presence that may temporarily disrupt species and habitat vitality.

Cumulative impacts refer to the combined environmental effects of the proposed project and other relevant projects. In some cases, the impact from a single project may not be significant, but when combined with other projects, the cumulative impact may be significant.

Lands containing Tier I, II, IIIA, and IIIB habitats (Table 3) are considered sensitive and declining and, as such, impacts to these resources may be considered significant. Lands designated as Tier IV are not considered to have significant habitat value and impacts would not be considered significant. In addition, total upland impacts (Tiers I - IIIB) less than 0.1 acre are not considered significant and do not require mitigation.

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As previously mentioned, overlap of two small portions of the project site with the MHPA is likely accidental and due to coarseness of digitizing this information. A boundary line correction (See Appendix F for a graphic) will be performed to resolve this issue. . Subsequent to the boundary line correction, the site (work area and 100-foot buffer) would be located entirely outside the MHPA.

5.2 Direct Impacts

5.2.1 Vegetation Communities and Land Cover Types

Implementation of the proposed project will result in permanent, direct impacts totaling 1.506 acres to developed land and disturbed habitat and temporary, direct impacts to 1.073 acres to developed land and disturbed habitat, for a total of 2.579 acres of total impacts. Table 4 provides a summary of these impacts as well as a list of the corresponding City SDBG habitats (City of San Diego 2018).

Table 4
Direct Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	SDBG Vegetation Community	City Subarea Plan Tier	¹ Permanent Impacts (acres)	¹ Temporary Impacts (Staging Areas) (acres)
<i>Native Vegetation Communities</i>				
<i>Non-Native Vegetation Communities and Land Covers</i>				
Developed Land	N/A	IV	1.426	1.015
Disturbed Habitat	Disturbed Land	IV	0.080	0.058
Total			1.506	1.073

¹ Numbers may not total due to rounding.

Developed land and disturbed habitat provide little native habitat value and foraging opportunities for wildlife and are considered a Tier IV land cover by the SDBG (City of San Diego 2018). Impacts to developed land and disturbed habitat therefore, would not be significant.

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5.2.2 Direct Impacts to Special-Status Plants

There were four sensitive plant species detected within the study area during surveys: California box-thorn, snake cholla, Torrey pine, and cliff spurge (Figure 2). Additionally, there are no sensitive plant species that were determined to have high or moderate potential to occur within the study area, and only four species with low to moderate potential to occur: slender-pod jewelflower, Orcutt's spineflower, San Diego sand aster, and sand-loving wallflower. As the species detected are all located within buffer areas and not directly within work areas, no impacts to special-status plant species detected are anticipated to occur. Species with low to moderate potential to occur would be likely to occur only within Diegan coastal sage scrub, which occurs only within buffer areas and not within work areas; direct impacts to these species, if present onsite, are not anticipated to occur.

5.2.3 Direct Impacts to Special-Status Wildlife

Two special-status wildlife species, coastal California gnatcatcher and California brown pelican, were detected during August 2022 surveys. These species were observed only within the project buffer, outside of impact areas.

Six additional special-status species were not observed onsite but nonetheless have a moderate potential to occur: orange-throated whiptail, San Diego (Coast) horned lizard, osprey, double-crested cormorant, northwestern San Diego pocket mouse, and western mastiff bat. Western mastiff bat, if present, could also occur in areas mapped as developed, specifically in cracks or holes in man-made structures. These types of structures are not located within the project work areas, so direct impacts to western mastiff bat via the loss of developed habitat are not anticipated.

5.2.4 Non-Special-Status Birds (Migratory Bird Treaty Act)

Most native nesting birds are protected under the MBTA (16 U.S.C. 703–712), and nesting raptors are afforded additional protection under California Fish and Game Code Section 3503.5. Non-special-status birds can nest on site. Direct impacts to active nests protected under the MBTA and/or California Fish and Game Code Section 3503.5 requires regulatory compliance that has been incorporated into the SDBG and standard general measures for resource protection (see Section 6.1). These measures are adequate to ensure avoidance of impacts to active nests and therefore these potential impacts are less than significant.

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5.2.5 Wildlife Corridors and Habitat Linkages

The study area is not currently considered to be within a biological core or linkage area of the MSCP. However, undeveloped areas of the buffer around the project work area likely provide some refuge and cover for wildlife species and their movements and to some extent may function as a minor “stepping stone” wildlife corridor for animals moving north and south along the Point Loma Peninsula. Project work areas proper, however, would not function as a wildlife corridor due to lack of any suitable habitat located in the work areas. Therefore, temporary impacts to these functions are less than significant.

5.3 Indirect Impacts

5.3.1 Vegetation Communities and Land Covers

Native vegetation communities occur adjacent to the work areas. The short-term indirect impacts that may affect the vegetation communities include dust, noise, erosion, temporary access impacts, and increased human presence. Long-term indirect impacts such as slightly increased noise and increased human presence associated with long-term maintenance of the facilities are not expected to impact vegetation communities/land covers.

5.3.2 Special-Status Plant Species

Potential indirect impacts to these species would be similar to those previously described for vegetation communities. With implementation of general measures (Section 6.1) these potential short-term indirect impacts would be avoided and minimized such that impacts are considered less than significant.

5.3.3 Special-Status Wildlife Species

Most of the indirect impacts to vegetation communities previously described can also affect special-status wildlife. Wildlife may also be indirectly affected in the short-term by construction-related noise or in the long-term by slightly increased human presence associated with long-term maintenance of facilities proposed by this project, which can disrupt normal activities and subject wildlife to higher predation risks. Breeding birds can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

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Indirect impacts from construction-related noise or human presence may occur to breeding wildlife if construction occurs during the breeding season (i.e., February 1 through September 15). Wildlife that would be significantly affected by noise, based on suitable habitat in the project vicinity and in accordance with the SDBG, may occur up to 300 feet from the project work areas. Species whose breeding/nesting may be significantly impacted by noise include coastal California gnatcatcher. This impact would be considered a significant impact, absent mitigation. Implementation of measures listed in Section 6.1 would reduce these impacts to below significance.

Indirect impacts to potentially present orange-throated whiptail, northwestern San Diego pocket mouse, San Diego (coast) horned lizard, osprey, cormorant, and western mastiff bat would not be considered significant due to the low level of sensitivity of these species. Indirect noise impacts to California brown pelican would not be expected to affect breeding of this species, since they are not expected to breed onsite, but increased noise may affect roosting and foraging for this species. This impact would be considered a significant impact, absent mitigation. Implementation of measures listed in Section 6.1 would reduce these impacts to below significance.

5.4 Cumulative Impacts

The MSCP is a long-term regional conservation plan established to protect sensitive species and habitats in San Diego County. The MSCP is divided into subarea plans that are implemented separately from one another. The study area is within the City of San Diego subarea plan and largely outside the MHPA (Figure 2). Any overlap of the work areas with MHPA is likely the result of the scale of GIS digitizing (see discussion in the introduction to Section 4.0 and Section 4.2.1), and an MHPA boundary correction is being pursued to rectify this issue.

In an effort to eliminate cumulative impacts to sensitive biological resources throughout San Diego, the City is participating in a regional conservation planning effort, San Diego MSCP. This planning effort is designed to address cumulative impacts through development of a regional plan that addresses impacts to covered species and habitats in a manner that assures their conservation despite impacts of cumulative project over the long term. The ultimate goal of this plan is the establishment of biological reserve areas in conformance with the State of California Natural Communities Conservation Planning Act.

Cumulative impacts to sensitive vegetation communities from implementation of the project are not expected to be significant since all activities proposed are in conformance with the regional

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and City plans previously described. In addition, no vernal pools or native grassland habitat would be impacted as part of the project.

6 AVOIDANCE AND MITIGATION

6.1 Avoidance and Minimization

The proposed project has been designed to include the following requirements to ensure compliance with the City's MSCP Subarea Plan and to avoid or minimize impacts to biological resources to the maximum extent feasible. The following requirement shall be incorporated into the project plans and contract specifications:

Prior to issuance of Notice to Proceed (NTP), the Development Services Department (DSD) Environmental Designee (ED) shall review and approve all construction documents (plans, specifications, details, etc.) to ensure these MMRP requirements are incorporated.

6.1.1 Biological Resource Protection During Construction

I. Prior to Construction

- A. **Biologist Verification** - The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the SDBG (2018), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.
- B. **Preconstruction Meeting** - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.
- C. **Biological Documents** - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance (ESL), project permit

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conditions; California Environmental Quality Act (CEQA); endangered species acts (ESAs); and/or other local, state or federal requirements.

- D. BCME - The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.
- E. Avian Protection Requirements - To avoid any direct impacts to coastal California gnatcatcher, any species identified as listed, candidate, sensitive, or special status in the MSCP, and species protected under the Migratory Bird Treaty Act (MBTA) removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15).

If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting for coastal California gnatcatcher or MBTA-covered species on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities or if work is halted and are then resumed (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to the City's DSD for review and approval prior to initiating any construction activities.

If nesting activities for bird species are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction, and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities

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is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

- F. Resource Delineation - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
- G. Education –Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

- A. Monitoring- All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on “Exhibit A” and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

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- B. Subsequent Resource Identification - The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

II. Post Construction Measure

- A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with SDBG, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

6.1.2 Coastal California Gnatcatcher

- 1. Prior to the issuance of any grading permit, Notice to Proceed (NTP), or Pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the city manager:

- A. A qualified biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the coastal California gnatcatcher. Surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife service within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met:

- i. Between March 1 and August 15, no clearing, grubbing, or grading of

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occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and

- ii. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB (A) hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB (A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city representative at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
- iii. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB (A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to

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reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- B. If coastal California gnatcatchers are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the city manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:
 - I. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then condition a.iii shall be adhered to as specified above.
 - ii. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

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○ Project Site

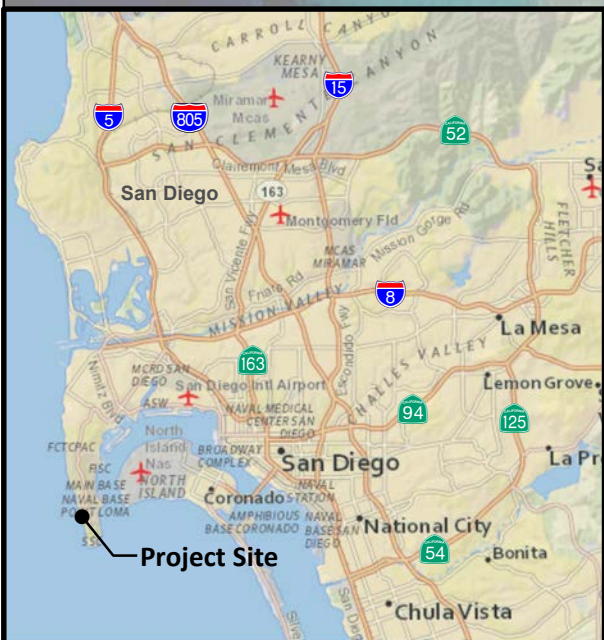
Pacific Ocean

Fort Rosecrans National Cemetery

San Diego Bay

Point Loma Wastewater Treatment Plant

Cabrillo National Monument



Aerial Photo: USDA NAIP 2022; Regional Map: National Geographic, Esri 2012

Figure 1

Project Location

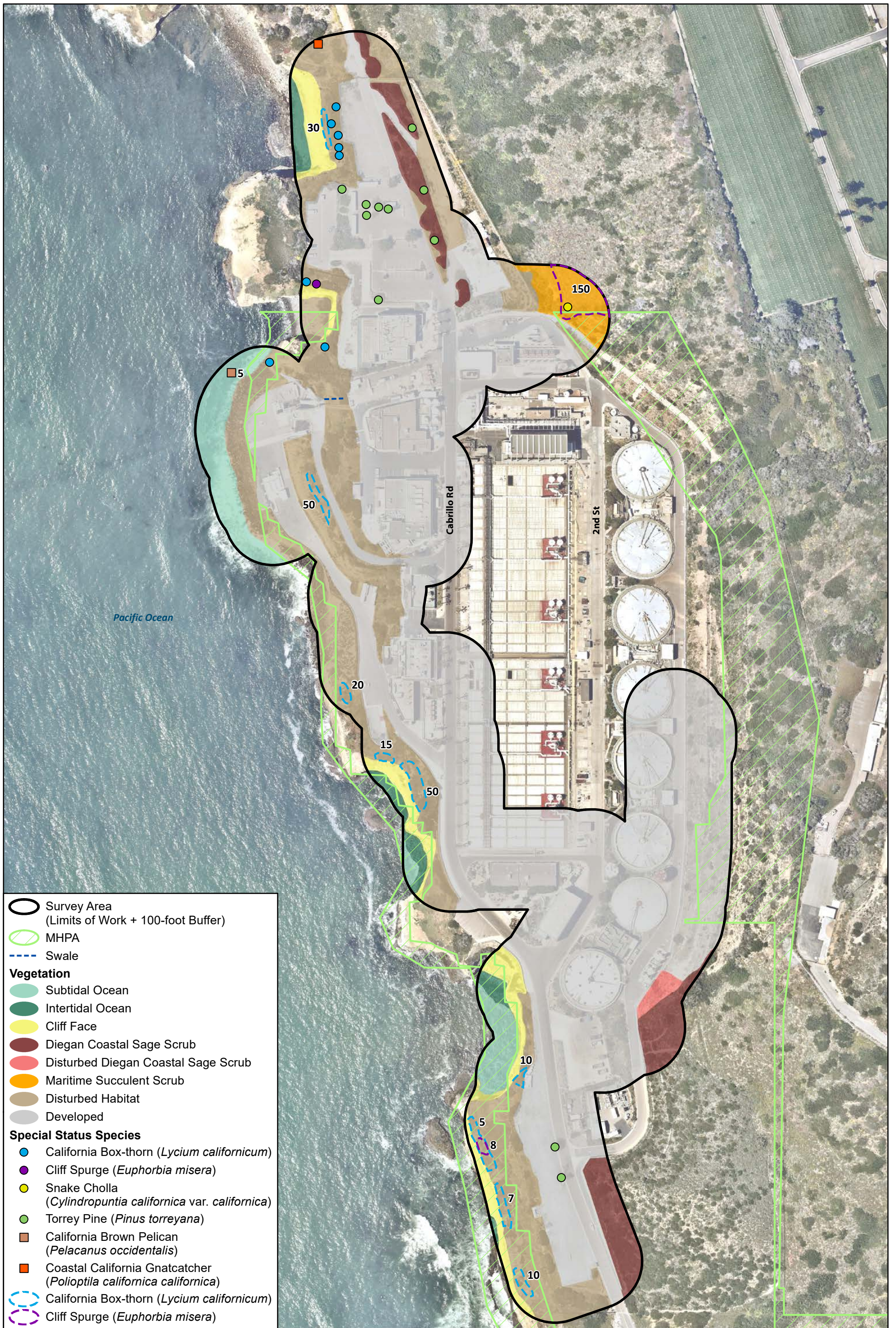
Storm Water Diversion at the Point Loma Wastewater Treatment Plant



Balk Biological, Inc.

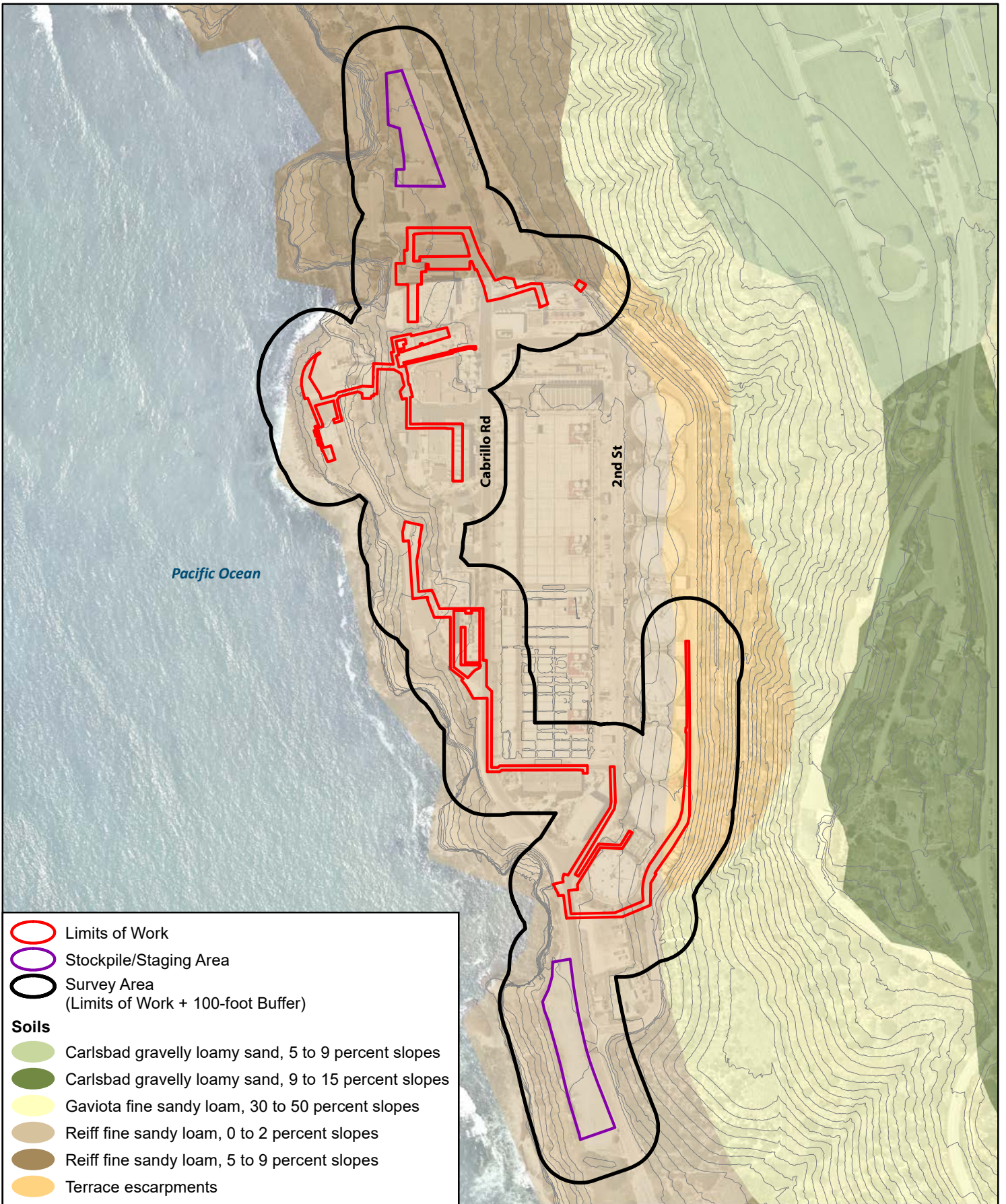
N

0 1,000 Feet



Aerial Photo: Nearmap 2023

Figure 2



Source: USDA NRCS; Aerial Photo: Nearmap 2023

Figure 3

Soils and Topography

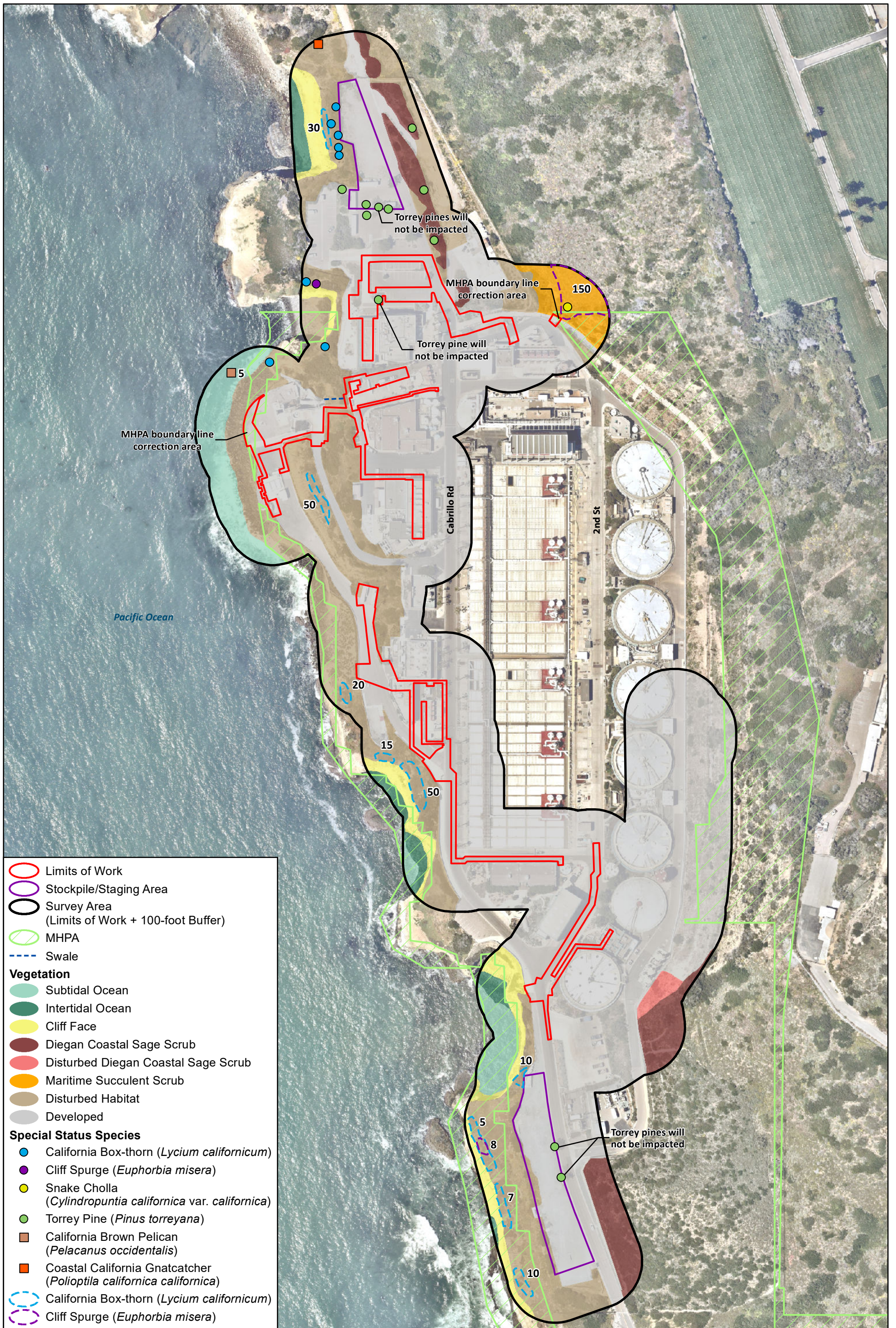
Storm Water Diversion at the Point Loma Wastewater Treatment Plant



Balk Biological, Inc.



0 300 Feet



Aerial Photo: Nearmap 2023

Figure 4

Impacts

Storm Water Diversion at the Point Loma Wastewater Treatment Plant

Appendix A

Plant Species Observed within the Survey Area

Scientific Name	Common Name	Family Name	Status
Gymnosperms and Gnetophytes			
<i>Cupressus</i> sp.	Cypress	Cupressaceae	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	Pinaceae	CRPR List 1B.2
Angiosperms - Dicots			
* <i>Carpobrotus edulis</i>	Hottentot fig	Aizoaceae	
* <i>Mesembryanthemum crystallinum</i>	Common iceplant	Aizoaceae	
* <i>Tetragonia tetragonioides</i>	New Zealand spinach	Aizoaceae	
<i>Malosma laurina</i>	Laurel sumac	Anacardiaceae	
<i>Rhus integrifolia</i>	Lemonade sumac	Anacardiaceae	
<i>Artemisia californica</i>	Coastal sagebrush	Asteraceae	
<i>Baccharis pilularis</i>	Coyotebrush	Asteraceae	
<i>Baccharis sarothroides</i>	Desertbroom	Asteraceae	
* <i>Centaurea melitensis</i>	Maltese star-thistle	Asteraceae	
<i>Encelia californica</i>	California brittlebush	Asteraceae	
* <i>Erigeron bonariensis</i>	Asthma weed	Asteraceae	
<i>Heterotheca grandiflora</i>	Telegraph weed	Asteraceae	
<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies' goldenbush	Asteraceae	
<i>Gnaphalium stramineum</i>	Cottonbatting plant	Asteraceae	
<i>Heliotropium curassavicum</i>	Salt heliotrope	Boraginaceae	
* <i>Hirschfeldia incana</i>	Shortpod mustard	Brassicaceae	
<i>Cylindropuntia californica</i> var. <i>californica</i>	Snake cholla	Cactaceae	CRPR List 1B.1
<i>Mammillaria dioica</i>	Fish-hook cactus	Cactaceae	
<i>Opuntia</i> sp.	Prickly-pear	Cactaceae	
<i>Atriplex canescens</i>	Fourwing saltbush	Chenopodiaceae	
* <i>Atriplex semibaccata</i>	Australian saltbush	Chenopodiaceae	
* <i>Bassia hyssopifolia</i>	Fivehorn smotherweed	Chenopodiaceae	
* <i>Salsola tragus</i>	Prickly Russian thistle	Chenopodiaceae	
<i>Dudleya lanceolata</i>	Lance-leaf liveforever	Crassulaceae	
* <i>Portulacaria afra</i>	Elephant bush	Didiereaceae	
<i>Heteromeles arbutifolia</i>	Toyon	Ericaceae	
<i>Dudleya lanceolata</i>	Lance-leaf liveforever	Crassulaceae	

* <i>Portulacaria afra</i>	Elephant bush	Didiereaceae	
<i>Heteromeles arbutifolia</i>	Toyon	Ericaceae	
* <i>Euphorbia maculata</i>	Spotted sandmat	Euphorbiaceae	
<i>Euphorbia misera</i>	Cliff spurge	Euphorbiaceae	CRPR List 2B.2
* <i>Euphorbia tirucalli</i>	Fire sticks	Euphorbiaceae	
* <i>Acacia cyclops</i>	Coastal wattle	Fabaceae	
<i>Astragalus trichopodus</i>	Santa Barbara milkvetch	Fabaceae	
* <i>Melilotus sp. indicus</i>	Annual yellow sweetclover	Fabaceae	
<i>Salvia mellifera</i>	Black sage	Lamiaceae	
<i>Malacothamnus fasciculatus</i>	Chaparral mallow	Malvaceae	
* <i>Malva parviflora</i>	Cheeseweed mallow	Malvaceae	
* <i>Limonium perezii</i>	Perez's sea lavender	Plumbaginaceae	
<i>Eriogonum fasciculatum</i>	Eastern Mojave buckwheat	Polygonaceae	
* <i>Myoporum laetum</i>	Ngaio tree	Scrophulariaceae	
<i>Lycium californicum</i>	California box-thorn	Solanaceae	CRPR List 4.2
* <i>Nicotiana glauca</i>	Tree tobacco	Solanaceae	
* <i>Malva parviflora</i>	Cheeseweed mallow	Malvaceae	
* <i>Limonium perezii</i>	Perez's sea lavender	Plumbaginaceae	
<i>Eriogonum fasciculatum</i>	Eastern Mojave buckwheat	Polygonaceae	
* <i>Agave americana</i>	Century plant	Asparagaceae	
* <i>Aloe vera</i>	Aloe	Asphodelaceae	
Angiosperms - Monocots			
* <i>Bromus diandrus</i>	Ripgut brome	Poaceae	
* <i>Bromus madritensis ssp. rubens</i>	Red brome	Poaceae	
<i>Eragrostis sp.</i>	Lovegrass	Poaceae	
<i>Leymus condensatus</i>	Giant wild rye	Poaceae	

*Non-native species

FE = Federally Endangered

SE = State Endangered

CRPR = California Rare Plant Rank

Appendix B

Wildlife Species Observed within the Study Area

Common Name	Scientific Name	Order	Family	Status
Invertebrates				
Gray hairstreak	<i>Strymon melinus</i>	Lepidoptera	Lycaenidae	None
Western pygmy blue	<i>Brephidium exilis</i>	Lepidoptera	Lycaenidae	None
Reptiles				
Western fence lizard	<i>Sceloporus occidentalis</i>	Squamata	Phrynosomatidae	None
Avian				
Anna's hummingbird	<i>Calypte anna</i>	Apodiformes	Trochilidae	None
Western gull	<i>Larus occidentalis</i>	Charadriiformes	Laridae	None
Double-crested cormorant	<i>Phalacrocorax auritus</i>	Suliformes	Phalacrocoracidae	WL (nesting colony)
California brown pelican	<i>Pelicanus occidentalis</i>	Pelecaniformes	Pelicanidae	FP
Osprey	<i>Pandion haliaetus</i>	Accipitriformes	Pandionidae	WL (nesting)
Cassin's kingbird	<i>Tyrannus vociferans</i>	Passeriformes	Tyrannidae	None
Black phoebe	<i>Sayornis nigricans</i>	Passeriformes	Tyrannidae	None
Western scrub-jay	<i>Aphelocoma californica</i>	Passeriformes	Corvidae	None
American crow	<i>Corvus brachyrhynchos</i>	Passeriformes	Corvidae	None
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Passeriformes	Poliptilidae	FT
House sparrow*	<i>Passer domesticus</i>	Passeriformes	Passeridae	Introduced
House finch	<i>Haemorhous mexicanus</i>	Passeriformes	Fringillidae	None
California towhee	<i>Melospiza crissalis</i>	Passeriformes	Emberizidae	None
Spotted towhee	<i>Pipilo maculatus</i>	Passeriformes	Emberizidae	None
Orange-crowned warbler	<i>Oreothlypis celata</i>	Passeriformes	Parulidae	None
Mammals				
California ground squirrel	<i>Spermophilus beecheyi nudipes</i>	Rodentia	Sciuridae	None
Harbor seal	<i>Phoca vitulina</i>	Carnivora	Phocidae	None

FE – Federally Endangered, SE- State Endangered, FP – CDFW Fully Protected species, WL – California Department of Fish and Wildlife (CDFW) WatchList species, SSC – CDFW Species of Special Concern

*Naturalized or Vagrant Species

Appendix C

Sensitive Plant Species Detected or Potentially Occurring within the Project Study Area

SENSITIVE PLANT SPECIES OBSERVED OR POTENTIALLY OCCURRING

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Abronia maritima</i> Red sand-verbena	No/ No	None/ None/ 4.2	Dunes, coastal strand/ perennial herb/ February- November	Not observed. Not expected to occur due to lack of dune/coastal strand habitat.
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand verbena	No/ No	None/ None/ 1B.1	Chaparral, coastal scrub, desert dunes/ annual herb/ March- September	Not observed. Very low potential to occur only within the buffer area of the site due to lack of desert dune, chaparral, or high quality coastal scrub habitat.
<i>Acanthomintha</i> <i>ilicifolia</i> San Diego thornmint	Yes/Yes	FT/ SE/ 1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; openings on clay or gabbro soils / annual herb/ April-June	Not observed. Very low potential to occur only within the buffer area of the site due to lack of chaparral, grassland, vernal pool, or high quality coastal scrub habitat and lack of suitable soils.
<i>Acmispon prostratus</i> Nuttall's acmispon	Yes/ No	None/ None/ 1B.1	Coastal dunes and open, sandy coastal scrub/ annual or perennial herb/ March-June	Not observed. Low potential to occur only within the buffer area of the site; If present, would likely have been observed during surveys.
<i>Adolphia californica</i> California adolphia	No/ No	None/ None/ 2.1	Chaparral, coastal scrub, valley and foothill grassland/ perennial deciduous shrub/ December-May	Not observed. Very low potential to occur only within the buffer area of the site. If present, this shrub would likely have been observed during surveys.
<i>Agave shawii</i> Shaw's agave	Yes/Yes	None/ None/ 2B.1	Maritime succulent scrub, coastal bluff scrub, and coastal scrub/ perennial leaf succulent/ September-May	Not observed. Very low potential to occur only within the buffer area of the site. If present onsite, this large perennial species would likely have been observed.
<i>Ambrosia</i> <i>chenopodiifolia</i> San Diego bur sage	No/ No	None/ None/ 2B.1	Coastal sage scrub/ shrub/ April- June	Not observed. Low potential to occur only within the buffer area of the site. If present onsite, this large perennial species would likely have been observed.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Ambrosia monogyra</i> Singlewhorl burrobush	No/ No	None/ None/ 2B.2	Chaparral and Sonaran desert scrub, washes; sandy soil/ perennial shrub/ August- November	Not observed. This large, perennial species would likely have been observed if present. In addition, suitable habitat for this species is not present onsite.
<i>Ambrosia pumila</i> San Diego Ambrosia	Yes/Yes	None/ None/ 1B.1	Chaparral, coastal sage scrub, valley and foothill grasslands, vernal pools; sandy loam or clay; disturbed areas/ perennial rhizomatous herb/ April- October	Not observed. Low potential to occur. The buffer portion of the survey area contains moderately suitable habitat to support this species, but this perennial species would likely have been observed if present onsite.
<i>Aphanisma blitoides</i> Aphanisma	Yes/Yes	None/ None/ 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy/ annual herb/ March - June	Not observed. Low potential to occur only within the buffer area of the site, which contains marginally suitable habitat to support this species.
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> Del Mar manzanita	No/ No	FE/ None/ 1B.1	Chaparral; maritime, sandy/ perennial evergreen shrub/ December- June	Not observed. The site does not contain suitable habitat to support this species, and this large perennial species would likely have been observed if present.
<i>Arctostaphylos otayensis</i> Otay manzanita	Yes/ No	None/ None/ 1B.2	Chaparral, foothill woodland, volcanic rock outcrops/ perennial shrub/ January- April.	Not observed. The site does not contain suitable habitat to support this species, and this large perennial species would likely have been observed if present.
<i>Artemisia palmeri</i> San Diego sagewort	No/ No	None/ None/ 4.2	Chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland in sandy/mesic soils/ perennial deciduous herb/ May-September	Not observed. The site does not contain suitable mesic habitat to support this species, and this large perennial species would likely have been observed if present.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Astragalus deanei</i> Dean's milk-vetch	No/ No	None/ None/ 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian forest/ perennial herb/ February- May	Not observed. Low potential to occur. The site does not contain chaparral, cismontane woodland, riparian forest, or high quality coastal scrub to support this species.
<i>Astragalus tener</i> var. <i>titi</i> Coastal dunes milk-vetch	Yes/Yes	FE/ SE/ 1B.1	Coastal bluff scrub, coastal dunes, coastal prairie; mesic/ Annual herb/ March- May	Not observed. Very low potential to occur. The site does not contain suitable mesic habitat to support this species.
<i>Atriplex coulteri</i> Coulter's saltbush	No/ No	None/ None/ 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay/ perennial herb/ March-October	Not observed. Very low potential to occur. The site does not contain suitable alkaline or clay soils to support this species.
<i>Atriplex pacifica</i> South coast saltscale	No/ No	None/ None/ 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/ March-October	Not observed. Low potential to occur. The site contains marginally suitable coastal scrub to support this species, but the species was not observed.
<i>Atriplex parishii</i> Parish's saltbush	No/ No	None/ None/ 1B.1	Chenopod scrub, playas, Vernal pools/ annual herb/ June- October	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Baccharis vanessae</i> Encinitas baccharis	Yes/Yes	FT/ SE/ 1B.1	Chaparral, cismontane woodland; sandstone/ perennial deciduous shrub/ August, October, November.	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species, and this species would likely have been observed if present.
<i>Bahiopsis laciniata</i> San Diego viguiera	No/ No	None/None/ 4.3	Chaparral, coastal scrub/ perennial shrub/ February- June	Not observed. Low potential to occur. The site contains marginally suitable coastal scrub to support this species, but the species was not observed. This perennial species would have been observed if present onsite.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Berberis nevinii</i> Nevin's barberry	Yes/ No	None/ SE/ 1B.1	Chaparral; sandy to gravelly soils, washes/ shrub/ March-June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Bergerocactus emoryi</i> Golden-spined cactus	No/ No	None/ None/ 2B.1	Closed-cone coniferous forest, chaparral, and coastal scrub; sandy soils/ perennial stem succulent/ May-June	Not observed. Very low potential to occur. The site buffer area only contains suitable marginally suitable coastal scrub to support this species, but the species was not observed. Also, this perennial species would have been observed if present onsite.
<i>Bloomeria [=Muilla] clevelandii</i> San Diego goldenstar	Yes/ No	None/ None/ 1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay soil/ bulbiferous herb/ May	Not observed. Not expected to occur. The site does not contain suitable clay soil to support this species.
<i>Brodiaea filifolia</i> Thread-leaved brodiaea	Yes/ No	FE/ SE/ 1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; clay/ perennial bulbiferous herb/ March-June	Not observed. Not expected to occur. The site does not contain suitable clay soil to support this species.
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	Yes/ No	None/ None/ 1B.1	Closed-cone conifer forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay, sometimes serpentine/ bulbiferous herb/ May-July	Not observed. Not expected to occur. The site does not contain suitable clay, mesic, or serpentine substrates to support this species.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Calamagrostis koelerioides</i> Dense pine reed grass	Yes/ No	None/ None/ None	Meadows; slopes, dry hills, ridges/ perennial grass/ June- August	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This perennial species would likely have been observed if present onsite.
<i>Calandrinia breweri</i> Brewer's calandrinia	No/ No	None/ None/ 4.2	Chaparral, coastal scrub; sandy or loamy soil; disturbed and/or burned sites/ annual herb/ March- June	Not observed. Low potential to occur. Only the buffer areas of the site contain marginally suitable coastal scrub habitat with sandy soils to support this species.
<i>Calochortus dumii</i> Dunn's mariposa lily	No/ No	None/ None/ 1B.2	Chaparral, closed-cone pine forest; dry, stony ridges/ perennial herb/ April- June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Camissoniopsis lewisii</i> Lewis' evening-primrose	No/ No	None/ None/ 3	Coastal bluff scrub, coastal dunes, coastal scrub; sandy or clay soils/ annual herb/ March- June	Not observed. Low potential to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species.
<i>Carex obispoensis</i> San Luis Obispo sedge	No/ No	None/ None/ 1B.2	Chaparral, coastal scrub; often serpentinite seeps, on clay soils/ perennial herb/ April- June	Not observed. Not expected to occur. The site does not contain suitable soils to support this species. If present onsite this perennial species would likely have been observed.
<i>Caulanthus simulans</i> Payson's jewelflower	No/ No	None/ None/ 4.2	Chaparral, coastal scrub; sandy, granitic soils/ annual herb/ March-May	Not observed. Not expected to occur. The site does not contain suitable soils to support this species.
<i>Caulanthus heterophyllus</i> Slender-pod jewelflower	Yes/ No	None/ None/ None	Coastal sage scrub, chaparral; disturbed/ annual herb/ March-May	Not observed. Moderate potential to occur. Only the buffer areas of the site contain suitable habitat to support this species.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Ceanothus cyaneus</i> Lakeside ceanothus	Yes/ No	None/ None/ 1B.2	Chaparral, closed-cone pine forest/ shrub/ April-June	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. In addition, if present within the survey area, this large, perennial species would likely have been observed.
<i>Ceanothus verrucosus</i> Wart-stemmed ceanothus	Yes/ No	None/ None/ 2.2	Chaparral/ perennial evergreen shrub/ December-April	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. In addition, if present within the survey area, this large, perennial species would likely have been observed.
<i>Centromadia parryi</i> ssp. <i>australis</i> Southern tarplant	No/ No	None/ None/ 1B.1	Marshes and swamps, valley and foothill grasslands, vernal pools/ annual herb/ May-November	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. In addition, if present within the survey area, this perennial species would likely have been observed.
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant	No/ No	None/ None/ 1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/ annual herb/ April- September	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. In addition, if present within the survey area, this perennial species would likely have been observed.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> Orcutt's pincushion	Yes/ No	None/ None/ 1B.1	Coastal dunes and sandy coastal bluff scrub/ annual herb/ January-August	Not observed. Low potential to occur. The survey area does not contain suitable habitat to support this species.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> Salt marsh bird's-beak	Yes/ No	FE/ SE/ 1B.2	Coastal dunes, marshes and swamps; coastal salt/ annual herb/ May-October	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Chorizanthe orcuttiana</i> Orcutt's spineflower	No/ No	FE/ SE/ 1B.1	Sandy openings in closed-cone coniferous forest, maritime chaparral, and coastal scrub/ annual herb/ March-May	Not observed. Low to moderate potential to occur. Only the buffer area of the site contains marginally suitable habitat to support this species.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> Long-spined spineflower	No/ No	None/ None/ 1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland; often clay/ annual herb/ April-July	Not observed. Low to potential to occur. Only the buffer area of the site contains marginally suitable habitat to support this species.
<i>Cistanthe maritima</i> Seaside cistanthe	No/ No	None/ None/ 4.2	Coastal bluff scrub, coastal scrub, valley and foothill grasslands; sandy soils/ annual herb/ March- June	Not observed. Low potential to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species.
<i>Clinopodium chandleri</i> San miguel savory	Yes/ No	None/ None/ 1B.2	Chaparral; rocky slopes/ perennial herb/ March- July	Not observed. Not expected to occur. The site lacks suitable habitat to support this species. This perennial species would likely have been observed if present onsite.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> Summer holly	No/ No	None/ None/ 1B.2	Chaparral, cismontane woodland/ perennial evergreen shrub/ February-May	Not observed. Not expected to occur. The site lacks suitable habitat to support this species. This perennial species would likely have been observed if present onsite.
<i>Corethrogyne filaginifolia</i> var. <i>incana</i> San Diego sand aster	No/ No	None/ None/ 1B.1	Coastal bluff scrub, chaparral, and coastal scrub habitats/ perennial herb/ June-September	Not observed. Low to moderate potential to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species. This perennial species would likely have been observed if present onsite.

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<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i> Del Mar Mesa sand aster	Yes/ No	None/ None/ 1B.1	Coastal bluff scrub, chaparral, coastal scrub; sandy soils/ perennial herb/ May, July, August, September	Not observed. Not expected to occur as the site is outside the known range of the species.
<i>Cryptantha wigginsii</i> Wiggin's cryptantha	No/ No	None/ None/ 1B.2	Coastal scrub; often clay soils/ annual herb/ February- June	Not observed. Very low potential to occur. Only the buffer areas of the site contain marginally suitable coastal scrub to support this species. The most recent and local occurrence of this species was recorded 2012 in Carlsbad.
<i>Cylindropuntia californica</i> var. <i>californica</i> Snake cholla	Yes/Yes	None/ None/ 1B.1	Chaparral, coastal scrub/ stem succulent/ April-May	Observed onsite during August 2022 surveys. One individual was observed within the buffer area in maritime succulent scrub.
<i>Deinandra conjugens</i> Otay tarplant	Yes/ Yes	FT/ SE/ 1B.1	Coastal scrub, grassland; openings, clayey soils/ annual herb/ March-June	Not observed. Not expected to occur. The site does not contain suitable soils to support this species.
<i>Deinandra floribunda</i> Tecate tarplant	No/ No	None/ None/ 1B.2	Chaparral, coastal scrub/ annual herb/ August-October	Not observed. Not expected to occur. Although the buffer areas of the site appear to contain suitable coastal sage scrub habitat to support this species, the site is outside the known range of the species.
<i>Deinandra paniculata</i> Paniculate tarplant	No/ No	None/ None/ 4.2	Coastal scrub, valley and foothill grassland, vernal pools; usually vernal mesic, sometimes sandy/ annual herb/ April-November	Not observed. Low potential to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species.

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<i>Dicranostegia orcuttiana</i> Orcutt's bird's-beak	Yes/ No	None/ None/ 2B.1	Coastal scrub/ annual herb/ April- July	Not observed. Low potential to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species.
<i>Dudleya attenuata</i> ssp. <i>attenuate</i> Orcutt's dudleya	No/ No	None/ None/ 2B.1	Coastal bluff scrub, chaparral, coastal scrub; rocky or gravelly soils/ perennial herb/ May-July	Not observed. Not expected to occur. The survey area does not contain suitable rocky or gravelly soils to support this species.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	Yes/ No	None/ None/ 1B.1	Coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland; rocky, clay, and serpentine soils; perennial herb/ April-June	Not observed. Not expected to occur. The survey area does not contain suitable rocky, clay, or serpentine soils to support this species.
<i>Dudleya brevifolia</i> Short-leaved dudleya	Yes/ Yes	None/ SE/ 1B.1	Chaparral and coastal scrub; Torrey sandstone/ perennial herb/ April-May	Not observed. Not expected to occur. The survey area does not contain Torrey sandstone substrates to support this species.
<i>Dudleya multicaulis</i> Many-stemmed dudleya	No/ No	None/ None/ 1B.2	Chaparral, coastal scrub, valley and foothill grassland; often clay soils/ perennial herb/ April-July	Not observed. Very low potential to occur. Only buffer areas of the site contain marginally suitable coastal scrub to support this species.
<i>Dudleya variegata</i> Variegated dudleya	Yes/Yes	None/ None/ 1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay soils/ perennial herb/ May-June	Not observed. Not expected to occur. The survey area lacks suitable clay soils to support this species..

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<i>Dudleya viscida</i> Sticky dudleya	Yes/ No	None/ None/ 1B.2	Coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub; rocky soils/ perennial herb/ May-June	Not observed. Not expected to occur. The survey area does not contain suitable rocky soils to support this species.
<i>Ericameria palmeri</i> var. <i>palmeri</i> Palmer's goldenbush	Yes/ No	None/ None/ 1B.1	Chaparral, coastal scrub; mesic soils/ perennial evergreen shrub/ September- November	Not observed. Not expected to occur. The survey area does not contain suitable mesic soils to support this species. If present onsite this large perennial species would likely have been observed.
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	Yes/ No	None/ None/ 1B.1	Coastal scrub, valley and foothill grasslands, vernal pools; mesic soils/ annual or perennial herb/ April- June	Not observed. Not expected to occur. The survey area does not contain suitable mesic soils to support this species.
<i>Erysimum ammophilum</i> Sand-loving wallflower	Yes/ No	None/ None/ 1B.2	Sandy soils in openings in maritime chaparral, coastal dune, and coastal scrub habitats/ perennial herb/ February-June	Not observed. Moderate potential to occur. Only buffer areas of the site contain marginally suitable habitat to support this species.
<i>Euphorbia misera</i> Cliff spurge	No/ No	None/ None/ 2B.2	Coastal bluff scrub, coastal scrub, Mojavean Desert scrub; rocky soils/ perennial shrub/ Dec-August	Observed onsite during August 2022 surveys. Approximately 150 individuals observed in maritime succulent scrub in the buffer area of the site.
<i>Ferocactus viridescens</i> San Diego barrel cactus	Yes/ No	None/ None/ 2B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/ shrub/ May-June	Not observed. The species has a low potential of occurring only in buffer areas onsite due to lack of high quality coastal scrub habitat. If present onsite this large perennial species would likely have been observed.

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<i>Frankenia palmeri</i> Palmer's frankenia	No/ No	None/ None/ 2B.1	Coastal dunes, coastal marshes and swamps, playas/ perennial herb/ May-July	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species.
<i>Geothallus tuberosus</i> Campbell's liverwort	No/ No	None/ None/ 1B.1	Coastal scrub, vernal pools/ ephemeral liverwort	Not observed. Not expected to occur. Only buffer areas of the site contain marginally suitable habitat to support this species. Few occurrence location records for this species exist.
<i>Grindelia hallii</i> San Diego gumplant	No/ No	None/None/ 1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grasslands/ perennial herb/ May- October	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. If present onsite this perennial species would likely have been observed.
<i>Harpagonella palmeri</i> Palmer's grapplinghook	No/ No	None/ None/ 2.1	Open grassy areas within chaparral, coastal scrub, and valley and foothill grassland in clay soils. March-May	Not observed. Not expected to occur. The survey area does not contain suitable habitat or soils to support this species.
<i>Hazardia orcuttii</i> Orcutt's hazardia	No/ No	FSC/ ST/ 1B.1	Chaparral, coastal scrub; often clay soils/ perennial evergreen shrub/ August- October	Not observed. Not expected to occur. Only the buffer areas of the site contain marginally suitable habitat to support this species. If present onsite this large perennial species would likely have been observed.
<i>Hesperocyparis forbesii</i> Tecate cypress	Yes/ No	None/None/ 1B.1	Chaparral, closed-cone pine forest/ gymnosperm tree	Not observed. Not expected to occur. The survey area does not contain suitable habitat to support this species. If present onsite this large perennial species would likely have been observed.

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<i>Heterotheca sessiliflora</i> ssp <i>sessiliflora</i> Beach goldenaster	No/ No	None/ None/1B.1	Coastal chaparral, coastal dunes, and coastal scrub/ perennial herb/ March-December	Not observed. Low potential to occur. Only buffer areas of the site contain marginally suitable habitat to support this species. If present onsite this perennial species would likely have been observed.
<i>Holocarpha virgata</i> ssp. <i>elongata</i> Graceful tarplant	No/ No	None/ None/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ annual herb/ May-November	Not observed. Low potential to occur. Only buffer areas of the site contain marginally suitable habitat to support this species. If present onsite this perennial species would likely have been observed.
<i>Hordeum intercedens</i> Vernal barley	No/ No	None/ None/3.2	Coastal dunes, coastal scrub, valley and foothill grassland, vernal pools/ annual herb/ March-June	Not observed. Very low potential to occur. Only buffer areas of the site contain marginally suitable habitat to support this species.
<i>Ipomopsis tenuifolia</i> Slender-leaved ipomopsis	No/ No	None/ None/2B.3	Chaparral, pinyon and juniper woodland, Sonoran Desert scrub; gravelly or rocky soils/ perennial herb/ March-May	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. Site is outside known range of species.
<i>Isocoma menziesii</i> ssp. <i>decumbens</i> Decumbent goldenbush	No/ No	None/ None/1B.2	Chaparral, coastal scrub; sandy, often disturbed areas/ perennial shrub/ April-November	Not observed. Low potential to occur. Only buffer areas of the site contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.
<i>Iva hayesiana</i> San Diego marsh-elder	No/ No	None/ None/2B.2	Marshes, swamps, and playas/ perennial herb/ April-October	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.

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<i>Juncus acutus</i> ssp. <i>leopoldii</i> Southwestern spiny rush	No/ No	None/ None/4.2	Coastal dunes, alkaline meadows and seeps, coastal salt marshes and swamps/ perennial herb/ May- June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	No/ No	None/ None/ 1B.1	Coastal salt marsh and swamp, playa, and vernal pools/ annual herb/ February-June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Lathyrus splendens</i> Pride-of-California	No/ No	None/ None/4.3	Chaparral/ perennial herb/ March-June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Lepechinia cardiophylla</i> Heart leaved pitcher sage	Yes/ No	None/ None/ 1B.2	Chaparral, foothill woodlands, closed-cone pine forest/ shrub/ April-July	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.
<i>Lepechinia ganderi</i> Gander's pitcher sage	Yes/ No	None/ None/ 1B.3	Chaparral/ shrub/ June-July	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's peppergrass	No/ No	None/ None/4.3	Chaparral, coastal scrub/ annual herb/ January-July	Not observed. Low potential to occur. Only buffer areas of the site contain minimal suitable coastal scrub habitat to support this species.
<i>Leptosyne maritima</i> Sea dahlia	No/ No	None/None/2B.2	Coastal bluff scrub and coastal scrub. March-May	Not observed. Low potential to occur. Only buffer areas of the site contain marginally suitable habitat to support this species.

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<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> Ocellated Humboldt lily	No/ No	None/ None/ 4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland/ perennial herb/ March-July	Not observed. Very low potential to occur. Only buffer areas of the site contain minimal suitable coastal scrub habitat to support this species.
<i>Lycium californicum</i> California box-thorn	No/ No	None/ None/ 4.2	Coastal bluff scrub, coastal scrub/ perennial shrub/ March, June, July, and August.	Observed onsite within buffer areas during August 2022 surveys. Approximately 250 individuals were observed throughout the buffer, both in maritime succulent scrub and in disturbed habitat at edges of cliffs and steep slopes.
<i>Mobergia calculiformis</i> Light gray lichen	No/ No	None/ None/ 3	Occurs on rocks potentially in coastal scrub	Not observed. Not expected to occur. The survey area does not contain rocks within coastal scrub to support this species.
<i>Monardella hypoleuca</i> ssp. <i>lanata</i> Felt-leaved monardella	Yes/ No	None/ None/ 1B.2	Chaparral; rocky, granitic slopes or hilltops/ perennial herb/ June-August	Not observed. Not expected to occur. The survey area does not support suitable habitat to support this species.
<i>Monardella stoneana</i> Jennifer's monardella	No/ No	None/ None/ 1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub; rocky intermittent streambeds/ perennial herb/ June- September	Not observed. Not expected to occur. The survey area does not contain rocky intermittent streambeds to support this species. If present this perennial species would likely have been observed.
<i>Monardella viminea</i> [= <i>M. linoides</i> ssp. <i>viminea</i>] Willowy monardella	Yes/ No	FE/ SE/ 1B.1	Alluvial, ephemeral washes in: chaparral, coastal scrub, riparian forest, riparian woodland, and riparian scrub/ perennial herb/ June-August	Not observed. Not expected to occur. The survey area does not contain alluvial ephemeral washes to support this species. If present this perennial species would likely have been observed.

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<i>Mucronea californica</i> California spineflower	No/ No	None/ None/ 4.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy soils/ annual herb/ March-July	Not observed. Low potential to occur. Only buffer areas of the site contain suitable coastal scrub habitat to support this species.
<i>Myosurus minimus</i> ssp. <i>apus</i> Little mousetail	No/ No	None/ None/ 3.1	Valley and foothill grassland, alkaline vernal pools/ annual herb/ March- June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Nama stenocarpa</i> Mud nama	No/ No	None/ None/ 2B.2	Freshwater marshes and swamps/ annual or perennial herb/ January-July	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Navarretia fossalis</i> Spreading navarretia	Yes/Yes	FT/ None/ 1B.1	Chenopod scrub, freshwater marshes and swamps, playas, and vernal pools/ annual herb/ April-June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	No/ No	None/ None/ 1B.1	Coastal scrub, meadows and seeps, alkaline valley and foothill grassland, vernal pools; mesic soils/ annual herb/ April-July	Not observed. Not expected to occur. The site does not contain suitable mesic soils to support this species.
<i>Nemacaulis denudata</i> var. <i>denudata</i> Coast woolly-heads	No/ No	None/ None/ 1B.2	Coastal dunes/ annual herb/ April-September	Not observed. Low potential to occur. The site does not contain suitable coastal dunes habitat to support this species.
<i>Nemacaulis denudata</i> var. <i>gracilis</i> Slender cottonheads	No/ No	None/ None/ 2B.2	Coastal dunes, desert dunes, and Sonoran Desert scrub/ annual herb/ (March) April - May	Not observed. Low potential to occur. The site does not contain suitable habitat to support this species.

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<i>Nolina cismontane</i> Chaparral nolina	No/ No	None/ None/ 1B.2	Chaparral, coastal scrub; sandstone or gabbro soils/ perennial evergreen shrub/ May-July	Not observed. Not expected to occur. Only buffer areas of the site contain suitable coastal scrub habitat to support this species. If present onsite this large perennial species would likely have been observed.
<i>Nolina interrata</i> Dehesa nolina	Yes/ No	None/ SE/ 1B.1	Chaparral; gabbroic, metavolcanic, or serpentinite soils/ perennial herb/ June-July	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This species would likely have been observed if present onsite.
<i>Ophioglossum californicum</i> California adder's-tongue	No/ No	None/ None/ 4.2	Chaparral, valley and foothill grassland, vernal pool; mesic soils/ perennial herb/ January-June	Not observed. Not expected to occur. The survey area does not contain suitable mesic habitat to support this species.
<i>Orcuttia californica</i> California Orcutt grass	Yes/Yes	FE/ SE/ 1B.1	Vernal pools/ annual herb/ April- August	Not observed. Not expected to occur. The site does not contain vernal pools to support this species.
<i>Ornithostaphylos oppositifolia</i> Baja California birdbush	No/ No	None/ SE/ 2B.1	Chaparral/ perennial evergreen shrub/ January- April	Not observed. Not expected to occur. The site does not contain chaparral habitat to support this species. This species would likely have been observed if present onsite.
<i>Orobanche parishii</i> ssp. <i>brachyloba</i> Short-lobed broomrape	No/ No	None/ None/ 4.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy soils/ perennial parasitic herb/ April- October	Not observed. Low potential to occur. Only the buffer areas onsite contain minimal suitable soils and host plants, such as <i>Isocoma menziesii</i> ssp. <i>menziesii</i> , to support this species.
<i>Packera ganderi</i> Gander's ragwort	Yes/ No	None/ None/ None	Chaparral; understory, recently burned slopes, gabbroic soils/ April-June	Not observed. Not expected to occur. The site does not contain suitable habitat or soils to support this species.

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<i>Pentachaeta aurea</i> ssp. <i>aurea</i> Golden-rayed pentachaeta	No/ No	None/ None/ 4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grasslands/ annual herb/ March- July	Not observed. Low potential to occur. Only buffer areas of the site contain minimal suitable coastal scrub habitat to support this species.
<i>Phacelia ramosissima</i> var. <i>australitoralis</i> South coast branching phacelia	No/ No	None/ None/ 3.2	Chaparral, coastal dunes, coastal scrub, salt marshes and swamps; sandy, sometimes rocky soils/ perennial herb/ March- August	Not observed. Low potential to occur. Only buffer areas of the site contain minimal suitable coastal scrub habitat to support this species.
<i>Phacelia stellaris</i> Brand's star phacelia	No/ No	None/ None/ 1B.1	Coastal dune and coastal scrub March-June	Not observed. Low potential to occur. Only buffer areas of the site contain suitable coastal scrub habitat to support this species.
<i>Pinus torreyana</i> ssp. <i>Torreyana</i> Torrey pine	Yes/No	None/ None/ 1B.2	Closed-cone coniferous forest, chaparral; sandstone soils/ perennial evergreen tree	Observed onsite during August 2022 surveys. A total of 9 individuals of this species were observed both within the site proper as landscape plants and on a manufactured slope containing coastal sage scrub.
<i>Piperia cooperi</i> Chaparral rein orchid	No/ No	None/ None/ 4.2	Chaparral, cismontane woodland, valley and foothill grasslands/ perennial herb/ March- June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.

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<i>Plagiobryoides vinosula</i> Wine-colored tufa moss	No/ No	None/ None/ 4.2	Cismontane woodland, mojavean desert scrub, meadows and seeps, riparian woodland; usually granitic rock or soils/ moss	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Pogogyne abramsii</i> San Diego mesa mint	Yes/Yes	FE/ SE/ 1B.1	Vernal pools/ annual herb/ April-July	Not observed. Not expected to occur. The site does not contain suitable vernal pool habitat to support this species.
<i>Pogogyne nudiuscula</i> Otay Mesa mint	Yes/Yes	FE/ SE/ 1B.1	Vernal pools/ annual herb/ May-July	Not observed. Not expected to occur. The site does not contain suitable vernal pool habitat to support this species.
<i>Polygala cornuta var. fishiae</i> Fish's milkwort	No/ No	None/ None/ 4.3	Chaparral, cismontane woodland, riparian woodland/ perennial deciduous shrub/ May-August	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present onsite.
<i>Pseudognaphalium leucocephalum</i> White rabbit-tobacco	No/ No	None/ None/ 2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland/; sandy, gravelly soils/ perennial herb/ August-November	Not observed. Low potential to occur. Only the buffer areas of the site contain minimal suitable habitat and soils to support this species.
<i>Psilocarphus brevissimus var. multiflorus</i> Delta woolly-marbles	No/ No	None/ None/ 4.2	Vernal pools/ annual herb/ May-June	Not observed. Not expected to occur. The site lacks vernal pools to support this species.
<i>Quercus dumosa</i> Nuttall's scrub oak	No/ No	None/ None/ 1B.1	Chaparral, coastal scrub, closed-cone coniferous forest; sandy and clay loam/ evergreen shrub/ February-March	Not observed. The survey area contains minimal suitable habitat to support this species; however, this large, perennial shrub would have been observed if present.

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<i>Quercus engelmannii</i> Engelmann oak	No/ No	None/ None/ 4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland/ perennial deciduous tree/ March- June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present.
<i>Ribes viburnifolium</i> Santa Catalina Island currant	No/ No	None/ None/ 1B.2	Chaparral, cismontane woodland/ perennial evergreen shrub/ February- April	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. This large perennial species would likely have been observed if present.
<i>Romneya coulteri</i> Coulter's matilija poppy	No/ No	None/ None/ 4.2	Chaparral, coastal scrub/ perennial herb/ March- July	Not observed. Low potential to occur. Only the buffer areas of the site contain suitable coastal scrub habitat. If present onsite, this perennial species would likely have been observed.
<i>Rosa minutifolia</i> Small-leaved rose	Yes/ No	None/ SE/ 2B.1	Chaparral, coastal scrub/ perennial deciduous shrub/ January- June	Not observed. Low potential to occur. Only the buffer areas of the site contain suitable coastal scrub habitat to support this species. If present onsite, this perennial species would likely have been observed.
<i>Salvia munzii</i> Munz's sage	No/ No	None/ None/ 2B.2	Chaparral, coastal scrub/ perennial evergreen shrub/ February- April	Not observed. Low potential to occur. Only the buffer areas of the site contain suitable coastal scrub habitat to support this species. If present onsite, this perennial species would likely have been observed.
<i>Selaginella cinerascens</i> Ashy spike-moss	No/ No	None/ None/ 4.1	Chaparral, coastal scrub/ perennial herb	Not observed. Not expected to occur. The site contains minimal coastal scrub habitat to support this species. If present onsite, this perennial species would likely have been observed.

SCIENTIFIC AND COMMON NAMES	MSCP COVERED/ MSCP NARROW ENDEMIC (YES/ NO)	SENSITIVITY CODE AND STATUS ^a (FEDERAL/ STATE/ CRPR LIST)	PRIMARY HABITAT ASSOCIATIONS/LIFE FORM/ BLOOMING PERIOD	STATUS ONSITE
<i>Senecio aphanactis</i> Chaparral ragwort	No/ No	None/ None/ 2B.2	Chaparral, cismontane woodland, coastal scrub; sometimes alkaline soils/ annual herb/ January- April	Not observed. Low potential to occur. Only the buffer areas of the site contain coastal scrub habitat to support this species.
<i>Solanum xanti</i> Chaparral nightshade	Yes/ No	None/ None/ None	Shrubland, oak woodland, conifer forest/ perennial herb to subshrub/ February-June	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species.
<i>Stylocline citroleum</i> Oil nestraw	No/ No	None/ None/ 1B.1	Chenopod scrub, coastal scrub, valley and foothill grassland/clay soils/annual herb/ March – April	Not observed. Not expected to occur. The site does not contain suitable clay soils to support this species.
<i>Suaeda esteroa</i> Estuary seablite	No/ No	None/ None/ 1B.1	Coastal salt marshes and swamps/ perennial herb/ July- October	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. If present onsite this perennial species would likely have been observed.
<i>Suaeda taxifolia</i> Woolly seablite	No/ No	None/ None/ 4.2	Coastal bluff scrub, coastal dunes, coastal salt marshes and swamps/ perennial evergreen shrub/ January- December	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. If present onsite this large perennial species would likely have been observed.
<i>Tetracoccus dioicus</i> Parry's tetracoccus	Yes/ No	None/ None/ 1B.2	Chaparral; dry slopes/ shrub/ April- May	Not observed. Not expected to occur. The site does not contain suitable habitat to support this species. If present onsite this perennial species would likely have been observed.

¹ Table entries are based on the results of a nine-quad search of the California Native Plant Society (CNPS) online database (<http://cnps.org/cnps/rareplants/inventory/>), centered on the La Jolla Quad.

Legend

***Status:**

FEDERAL/STATE LISTED:

- FE: Federally-listed as endangered
- FT: Federally-listed as threatened
- FSC: Federally-listed as species of concern
- SE: State-listed as endangered
- ST: State-listed as threatened

California Native Plant Society Rare Plant Ranking system:

- 1B – rare, threatened, or endangered in California and elsewhere;
- 2 – rare, threatened, or endangered in California, but more common elsewhere;
- 3 – plants about which more information is needed – a review list;
- 4 – plants of limited distribution—a watch list.

CRPR Threat Ranks:

Threat Ranks

- 0.1--Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2--Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3--Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Appendix D

Sensitive Wildlife Species Detected or Potentially Occurring Within The Project

**SENSITIVE WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING
WITHIN THE PROJECT**

SCIENTIFIC NAME/Common Name	MSCP COVERED	SPECIAL STATUS	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
INVERTEBRATES				
<i>Habroscelimorpha gabbii</i> Western tidal-flat tiger beetle		G3 - Vulnerable	Tidal mud flats, salt marshes, and sea beaches	Not observed onsite. Low potential to occur due to lack of presence of suitable habitat and soils onsite.
<i>Panoquina errans</i> Saltmarsh wandering skipper	X	IUCN - near threatened	Salt marshes; larval host plant is salt grass (<i>Distichlis spicata</i>)	Not observed onsite. Low potential to occur due to lack of presence of suitable habitat.
REPTILES AND AMPHIBIANS				
<i>Anniella stebbinsi</i> Southern California legless lizard		SSC	Coastal sand dunes, sandy washes, and alluvial fans	Not observed onsite. Low potential to occur due to lack of suitable habitat and soils onsite.
<i>Arizona elegans occidentalis</i> California glossy snake		SSC	Arid scrub, rocky washes, grasslands, and chaparral occurring in desert regions.	Not observed onsite. No potential to occur due to lack of suitable habitat and soils onsite.
<i>Cnemidophorus hyperythra beldingi</i> Belding's orange-throated whiptail	X	WL	Coastal sage scrub, chaparral, grassland, juniper and oak woodland with loose soils.	Not observed onsite. Moderate potential to occur due to presence of suitable habitat and soils onsite.
<i>Phrynosoma coronatum</i> (<i>blainvillei</i> population) Coast (San Diego) horned lizard	X	SSC	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest.	Not observed onsite. Moderate potential to occur due to presence of suitable habitat onsite.

SCIENTIFIC NAME/COMMON NAME	MSCP COVERED	SPECIAL STATUS	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
<i>Spea hammondi</i> Western spadefoot		SSC	Temporary ponds, vernal pools, and backwaters of slow-flowing creeks for required for breeding and egg-laying. Also upland habitats such as grasslands and coastal sage scrub where burrows are constructed.	Not observed onsite. No potential to occur due to lack of suitable habitat.
BIRDS				
<i>Athene cunicularia hypugaea</i> Western burrowing owl	X	SSC	Annual and perennial grasslands, deserts, agricultural areas, disturbed habitat, and scrublands, characterized by low-growing vegetation.	Not observed onsite. Low potential to occur due to lack of sizable flat areas with grassland/low vegetation..
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	X	FT/SSC	Nests on beaches, dunes, and salt flats in San Diego County, with the highest concentrations in two areas: Camp Pendelton and Silver Strand. Outside the breeding season they are more widespread but not common along the county's coast.	Not observed onsite. Low potential to breed onsite due to lack of suitable habitat.
<i>Circus hudsonius</i> Northern harrier	X	SSC	Marshes, fields, prairies. Found in many kinds of open terrain, both wet and dry habitats, where there is good ground cover.	Not observed onsite. Low potential to occur due to lack of suitable habitat.
<i>Egretta rufescens</i> Reddish egret	X		Coastal tidal flats, salt marshes, shores, lagoons.	Not observed onsite. Low potential to occur due to lack of suitable habitat.
<i>Eremophila alpestris actia</i> California horned lark		WL	Coastal strand and prairie, grasslands	Not observed onsite. Low potential to occur due to lack of suitable habitat.

SCIENTIFIC NAME/COMMON NAME	MSCP COVERED	SPECIAL STATUS	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
<i>Falco peregrinus anatum</i> American peregrine falcon	X	CFP	Resident in a variety of open habitats near water where shorebirds and waterfowl concentrate. Nests on cliffs, buildings, cranes, and bridges.	Not observed onsite. Low potential to occur due to lack of suitable habitat.
<i>Laterallus jamaicensis coturniculus</i> California black rail		ST/CFP	Freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays.	Not observed onsite. Low potential to occur due to lack of marsh habitat.
<i>Nannopterum auritum</i> (= <i>Phalacrocorax auritus</i>) Double-crested cormorant		WL	Coasts, bays, lakes, rivers, any aquatic habitat.	High potential to occur on sea cliffs just outside the western buffer of the site. May forage in buffer areas of project but would not be expected to breed onsite.
<i>Pandion haliaetus</i> Osprey (nesting only)		WL	Prefers to nest on human-made structures such as floodlights for athletic fields, cell phone towers, electricity poles. Nests are generally near water.	High likelihood of foraging in the buffer area to the west of the site. Would not be expected to breed onsite.
<i>Pelecanus occidentalis californicus</i> California brown pelican (nesting colonies and communal roosts)	X	CFP	Ocean, beaches, salt bays, and coastal areas.	Approximately five individuals observed flying within the western buffer area of the site, over the ocean. May forage in buffer areas of project but would not be expected to nest onsite. Site is also not expected to represent a large communal roost area as communal roosts are known only from the Channel Islands.

SCIENTIFIC NAME/COMMON NAME	MSCP COVERED	SPECIAL STATUS	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
<i>Polioptila californica californica</i> Coastal California gnatcatcher	X	FT/SSC	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	Observed during August 2022 surveys. Two to three individuals observed in the northern region of the site: one just inside the buffer in disturbed habitat, and two outside the buffer in maritime succulent scrub.
<i>Sterna antillarum browni</i> California least tern	X	FE/SE/CFP	Sea beaches, bays, large rivers, salt flats.	Not observed onsite. Low potential to occur due to lack of suitable habitat.
MAMMALS				
<i>Chaetodipus fallax fallax</i> Northwestern San Diego pocket mouse		SSC	Coastal sage scrub, grassland, sage scrub-grassland ecotones, sparse chaparral; rocky substrates, loams and sandy loams	Not observed onsite. Moderate potential to occur onsite in buffer areas only due to presence of moderately-suitable coastal sage scrub and sandy loam soils onsite. However, no burrows potentially belonging to this species were observed.
<i>Eumops perotis californicus</i> Western mastiff bat		SSC	Roosts in small colonies in cracks and small holes, along steep cliffs, rocky outcrops, abandoned quarries, and rarely in palm trees. Strongly associated with its roosting habitat in coastal and desert scrub, riparian zones, and oak woodlands	Not observed onsite. Moderate potential to occur within buffer areas onsite due to of coastal scrub and steep cliffs.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit		S3S4 – Vulnerable – Apparently Secure	Open grasslands with short grass, agricultural fields, and sparse coastal scrub.	Not observed onsite. Low potential to occur due to lack of suitable habitat.

SCIENTIFIC NAME/COMMON NAME	MSCP COVERED	SPECIAL STATUS	PRIMARY HABITAT ASSOCIATIONS	STATUS ONSITE OR POTENTIAL TO OCCUR
<i>Neotoma lepida intermedia</i> San Diego desert woodrat		SSC	Coastal sage scrub, chaparral, pinyon-juniper woodland with rock outcrops, cactus thickets, dense undergrowth	Not observed onsite. Low potential to occur onsite due to presence of moderately-suitable habitat. No wood rat nests potentially belonging to this species were observed onsite, however.
<i>Nyctinomops macrotis</i> Big free-tailed bat		SSC	Pinyon-juniper and Douglas fir forests, chaparral and oak forests in mountains and foothills where rocky cliffs and crevices are present. Rugged, rocky canyons.	Not observed onsite. Low potential to occur due to lack of suitable habitat.

^a Status:

FEDERAL/STATE LISTED:

FE = Federally listed endangered

FT = Federally listed threatened

SE = State listed endangered

ST = State listed threatened

OTHER:

CFP = California Department of Fish and Wildlife Fully Protected Species

G = Global Rank

IUCN = International Union for Conservation of Nature

MMPA = Marine Mammal Protection Act

S = State Rank

SSC = California Department of Fish and Wildlife Species of Special Concern

USFS - Sensitive = United States Forest Service Sensitive Animal

WL = California Department of Fish and Wildlife Watch List

WBWG - M = Western Bat Working Group - Medium Priority

Appendix E
Photo Document



- Limits of Work
- Stockpile/Staging Area
- Survey Area
(Limits of Work + 100-foot Buffer)
- MHPA
- → Photo Location

Aerial Photo: Nearmap 2023



Photo 1. East-facing view of disturbed Diegan coastal sage scrub (center of photo) on the north end of the survey area



Photo 2. South-facing view of disturbed habitat within the buffer area on the north end of the survey area. California box-thorn plants are visible in the center of the photo.



Photo 3. South-facing view of disturbed habitat within project buffer area on the north end of the site



Photo 4. East-facing view of disturbed Diegan coastal sage scrub revegetation area in center of photo



Photo 5. Close-up of representative cliff spurge (*Euphorbia misera*) from eastern buffer area



Photo 6. Snake cholla (*Cylindropuntia californica* var. *californica*) from eastern buffer area



Photo 7. North-facing view of swale location investigated for wetlands/waters of the United States features



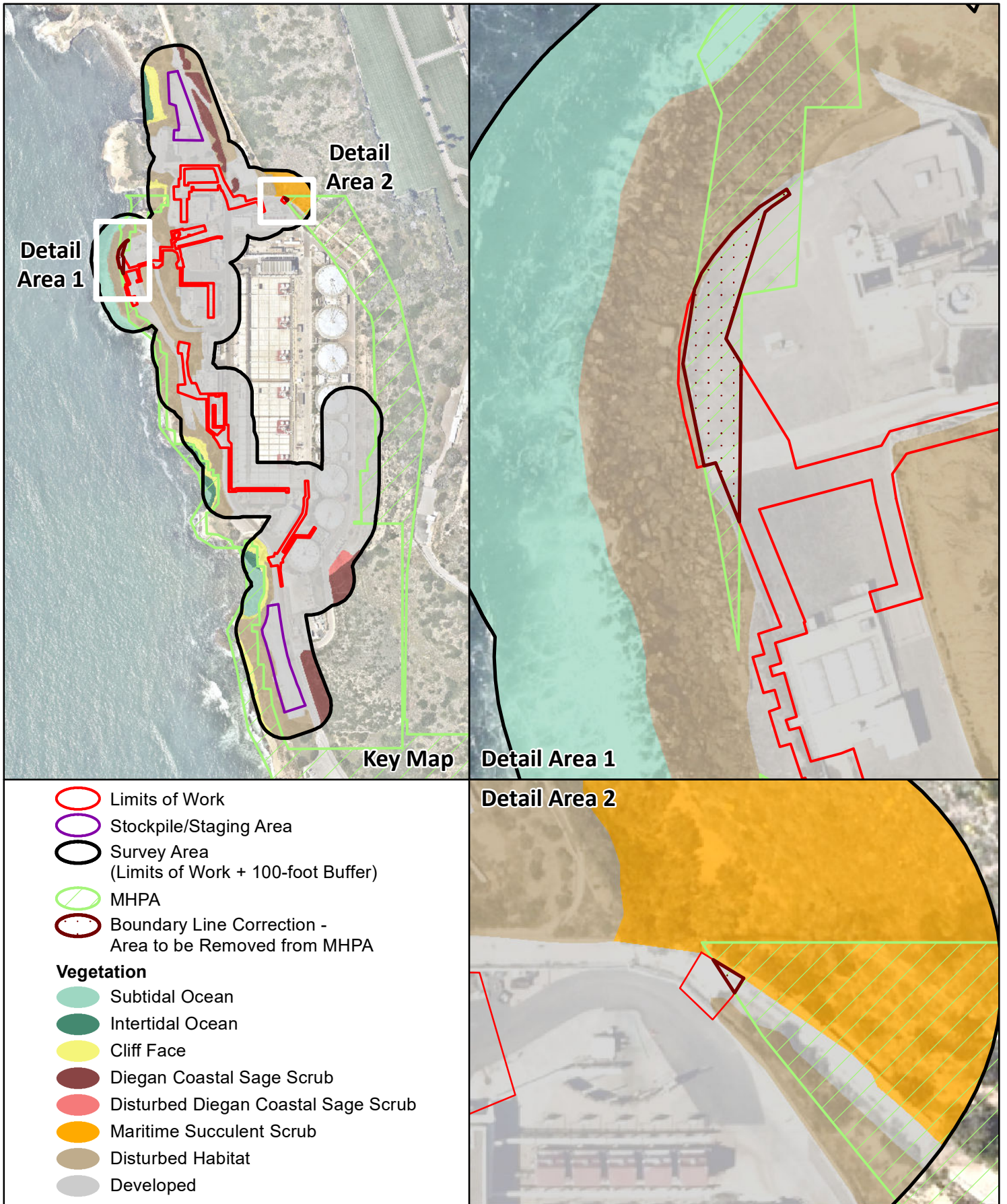
Photo 8. Subtidal and intertidal ocean at base of sea cliff, in western site buffer.



Photo 9. Northeast-facing view of disturbed Diegan coastal sage scrub in the eastern site buffer area

Appendix F

MHPA Boundary Line Correction Map



Aerial Photo: Nearmap 2023

MHPA Boundary Line Correction

Storm Water Diversion at the Point Loma Wastewater Treatment Plant