EXHIBIT L

CHULA VISTA BAYFRONT SWEETWATER PROJECT BIOLOGICAL IMPACT ANALYSIS REPORT

CHULA VISTA BAYFRONT SWEETWATER PARK PROJECT

BIOLOGICAL IMPACT ANALYSIS REPORT

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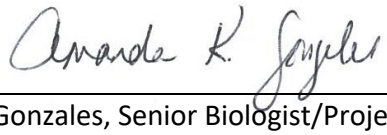

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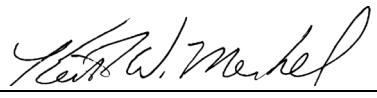

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GLOSSARY OF TERMS AND ACRONYMS

ACOE	U.S. Army Corps of Engineers
BS	Beaufort scale
BSA	Biological Study Area
CCA	California Coastal Act
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CVB	Chula Vista Bayfront
CVBMP	Chula Vista Bayfront Master Plan
CWA	Clean Water Act
CDP	Coastal Development Permit
District (or Port)	San Diego Unified Port District
ESA	(Federal) Endangered Species Act
ESRI	Environmental Systems Research Institute
°F	degrees Fahrenheit
FAC	Facultative Plants
FACU	Facultative Upland Plants
FACW	Facultative Wetland Plants
FEIR	Final Environmental Impact Report
FGS	Fish and Game Code
GIS	Geographical Information System
LCP	Local Coastal Program
M&A	Merkel & Associates, Inc.
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation and Monitoring Program
MPH	Miles per Hour
Port (or District)	San Diego Unified Port District
RV Resort Project	Sun Outdoors San Diego Bay RV Resort Project (formerly Costa Vista RV Resort)
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

1.1. Purpose of the Report

Merkel & Associates, Inc. (M&A) has prepared this biological impact analysis report for the proposed Chula Vista Bayfront (CVB) Sweetwater Park Project. The purpose of this report is to document the existing biological conditions within the project biological study area (BSA); identify potential impacts to biological resources that could result from implementation of the proposed project; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with applicable federal, state, and local regulations including the California Environmental Quality Act (CEQA) and the *Final Environmental Impact Report (FEIR) for the Bayfront Master Plan (CVBMP) and Port Master Plan Amendment* (Dudek 2010).

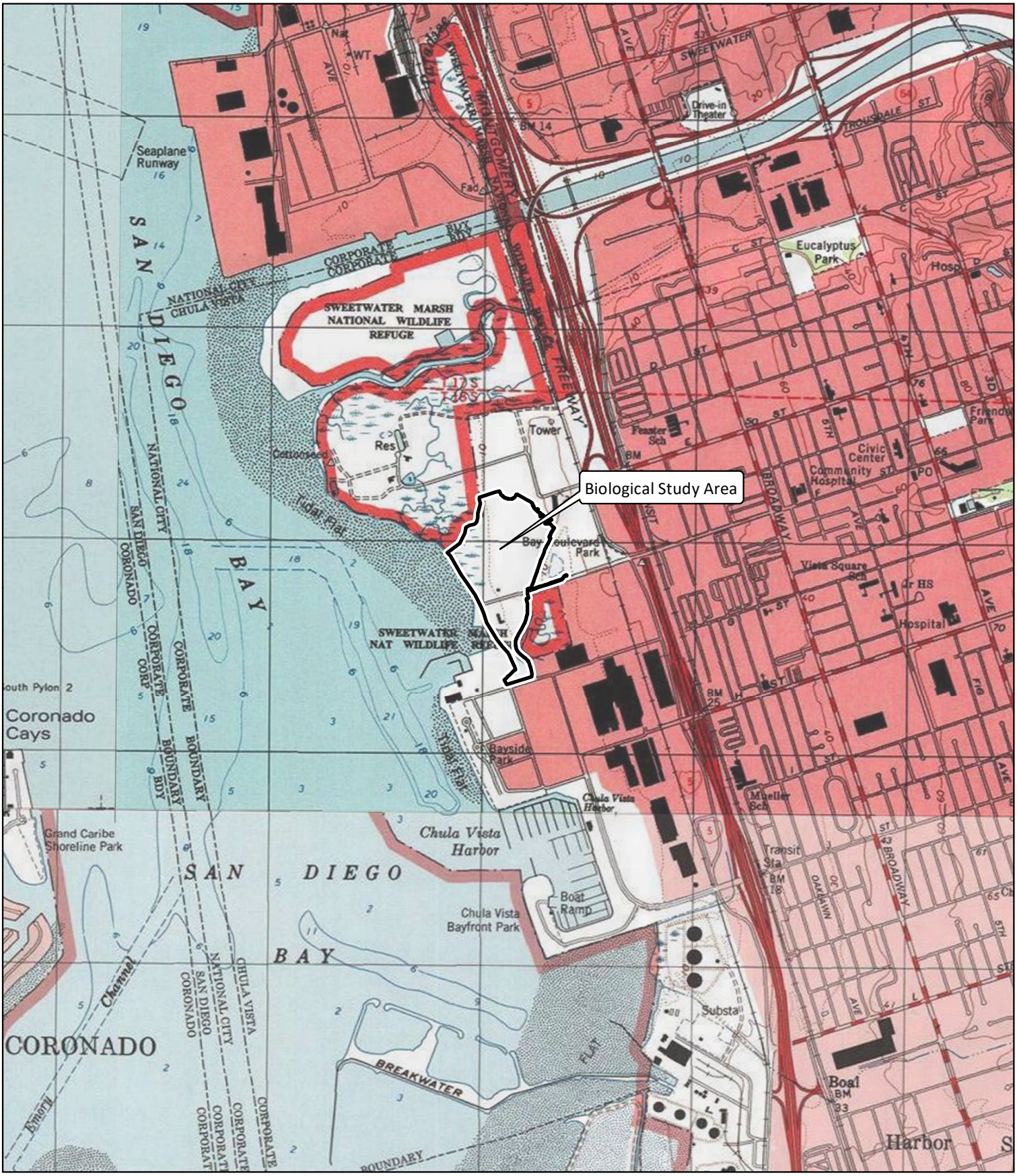
1.2. Project Location

The Project is located within the boundary of the Chula Vista Bayfront Master Plan (CVBMP), within the City of Chula Vista on parcels under tidelands trust resource management by the San Diego Unified Port District (Port) and the City of Chula Vista. The Project occurs predominantly within the Sweetwater District of the CVBMP on Parcel S-2 and extends into portions of Parcel SP-1 (buffer) consisting of the 100-foot "Transitional Use Buffer" as well as the 100-foot "Limited Use Buffer"; however, it does not encroach into the 200-foot "No-Touch Buffer". The southern portion of the Project, south of the existing span bridge over the inlet channel to the F&G Street Marsh is located within the Harbor District. The Project lies within unsectioned lands, Township 18 South, Range 2 West of the San Bernardino Base and Meridian, U.S. Geological Survey 7.5' National City, California Quadrangle (Figure 1 and Figure 2).

The Project site occurs between the open waters of San Diego Bay and Marina Parkway, south of Gunpowder Point Drive and north of G Street. It also occurs south of the recently constructed Sun Outdoors San Diego Bay RV Resort Project (RV Resort Project) and predominantly west of the recently constructed Sweetwater Bicycle Path and Promenade Bridge Project. Portions of the current Project require modifications within the footprint of the Sweetwater Bicycle Path and Promenade Bridge Project.

1.3. Project Description

The proposed Project is a new approximate 20-acre public park project focused on allowing users to explore habitats native to California via creation of the habitats within a park setting. Features include a network of pedestrian and bike-friendly trails connecting to the Bayshore Bikeway that would connect to the Sweetwater Bicycle Path and Promenade Bridge Project along with the trails around the RV Resort Project. Other key elements of the Project include a restroom, multiple parking lots and playground areas, picnic areas, and interpretive gardens and educational areas. As required, the Project includes stormwater management features including basins and dry creek drainage features, all contained within the Project area (i.e., no surface connection to the Bay or other jurisdictional water feature). Trails adjacent to project mitigation areas would be bordered by fencing (e.g., post-and-cable fencing). In addition, a six-foot tall chain link fence would be installed and meander along the western edge of the Project to prevent users from encroaching into the "No-Touch Buffer" zone. The Project also includes installation of associated underground utilities which have partially been implemented (concurrent with construction of the Sweetwater Bicycle Path and Promenade Bridge Project).



USGS Topography Map

Chula Vista Bayfront – Sweetwater Park Project

Source: USGS 7.5' National City, CA Quadrangle

Figure 1

N W E S

Aerial Vicinity Map

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 2

As part of the Project, several existing utilities that run along the Lagoon Drive street alignment will be removed within the park area. These utilities include an existing overhead electric line, existing underground water line, gas line, and AT&T conduit. In this same area a mature stand of eucalyptus trees and the associated vegetation around the eucalyptus including Diegan coastal sage scrub were removed as part of a separate project. The impacts associated with this completed work have been included within this Project.

The Project also includes creation of native upland habitat (i.e., maritime succulent scrub and Diegan coastal sage scrub) to serve as habitat mitigation to offset significant impacts to biological resources resulting from the Project. The Project also includes enhancement of existing native habitats occurring onsite (i.e., Diegan coastal sage scrub) as well as creation of native habitats (e.g., Diegan coastal sage scrub and maritime succulent scrub); these areas are not classified as mitigation.

The Project has been designed to connect with existing Bayfront elements including the Sweetwater Bicycle Path and Promenade Bridge Project, the trails around the existing RV Resort Project, and the Living Coast Discovery Center. A new parking lot for the Living Coast Discovery Center is proposed and will be constructed as a part of a separate bid package. However, the design has been included within the Sweetwater Park design and thus, evaluated within this report. The Project has also been designed with future CVBMP elements taken into consideration including the proposed Gaylord Chula Vista Resort and Convention Center Project as well as the Harbor Park Project. As applicable, Project components including chain link fencing, compensatory mitigation, non-compensatory habitat enhancement/creation, and park landscaping have been designed accordingly, while ensuring consistency with the FEIR and its associated controlling documents (listed in Section 1.5.3 of this report). The Project will not include invasive species as listed by the California Invasive Plant Council (Cal-IPC) in the California Invasive Plant Inventory.

One design footprint for Sweetwater Park including all three of the proposed additive bid alternates has been evaluated as part of the bid package (i.e., Bid Alternates). The Bid Alternates include all of the park elements described above but expand upon the amenities including the nature and adventure playground areas, picnic areas, plazas, grading, trails, landscape and irrigation. The Bid Alternates also includes a dune area, an overlook mound and a growing grounds area for native plant propagation. The purpose of the growing grounds area is to provide a space for volunteers to learn about California native plant communities by growing supplemental native plant species to install in the Sweetwater Park as part of its ongoing maintenance. The total area associated with the Bid Alternates is approximately 24 acres.

The BSA includes the proposed Park Project inclusive of the design with all additive bid alternates, the necessary transition areas within the Sweetwater Bicycle Path and Promenade Bridge Project and the RV Resort Project (e.g., trail and/or parking transitions), and the 200-foot No-Touch Buffer zone immediately west of the Project.

Implementation of the proposed Project is expected to occur following completion of the construction design documents and acquisition of all applicable approvals. Construction of the Project is expected to occur over an approximate 12-month period.

1.4. Survey Methodologies

M&A biologists, Ms. Amanda Gonzales and Mr. Kyle Ince conducted a biological survey that included ground-truthing previous vegetation mapping and updating the site's floral and faunal inventory. The survey was conducted on September 16, 2021 from approximately 1020 to 1630 hours. Weather conditions consisted of clear skies, winds ranging from approximately 4-12 miles per hour, and an average temperature of 72 degrees Fahrenheit. This effort serves as an update to previous biological mapping and sensitive species surveys conducted for the bayfront development as part of the FEIR; in particular this serves as a supplement/update to the most recent surveys conducted by M&A in 2019 of the proposed Project site which included rare plant surveys along with protocol and/or focused surveys for coastal California gnatcatcher (*Polioptila californica californica*), a federally listed threatened species; Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), a state listed endangered species; burrowing owl (*Athene cunicularia*), a California Department of Fish and Wildlife (CDFW) species of special concern; and raptor species (M&A 2020). The 2019 survey effort was negative for coastal California gnatcatcher, Belding's savannah sparrow, and burrowing owl. Various raptor species were observed to be utilizing the Bayfront for foraging and/or dispersing purposes.

Historical and currently available biological literature and data pertaining to the Project area were reviewed prior to initiation of the 2021 field investigation. This review included examination of: 1) aerial photography for the project site (Google Earth Pro, M&A 2018a); 2) previously mapped vegetation data for the project vicinity (M&A 2020, M&A 2019a, Dudek 2015, Dudek 2010); 3) soil types mapped on the project site (SanGIS 2002); 4) digital elevation model (DEM) and topographic data (M&A 2016); 5) federally designated critical habitat for the project vicinity (USFWS 2021a); 6) CDFW California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service (USFWS) special status species records for the project vicinity (CDFW 2021a and USFWS 2021b, respectively); and 7) previous biological reports/data for the project site and local vicinity including: *Final Environmental Impact for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment* (Dudek 2010), *Biological Resources Survey Report for the E Street Realignment in Chula Vista, Chula Vista Bayfront Master Plan* (Dudek 2015), *Final Report Restoration and Enhancement Alternatives for the Chula Vista Bayfront* (M&A 2017), *Habitat Mitigation for the Costa Vista RV Park* (M&A 2018b), *Vegetation Map, Impact and Mitigation Update for the Costa Vista RV Resort* (M&A 2019b), *Biological Impact Analysis Report for the Sweetwater Park – Urban Greening Grant Project* (M&A 2019a), and *Biological Resources Survey Report for the Chula Vista Bayfront – Sweetwater District and Harbor District* (M&A 2020).

Concurrent with the ground-truthing efforts, M&A biologists evaluated the site for jurisdictional resources regulated by the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), CDFW, and/or California Coastal Commission (CCC). The marine waters within the Project area are not subject to CDFW regulation under section 1600 of the California Fish & Game Code. Based on prior evaluation of the Project area as part of the Sweetwater Bicycle Path and Promenade Bridge Project (M&A 2019a), ACOE, RWQCB, and CCC resources are present but determined to be limited to the Bayfront shoreline and the inlet channel to the F&G Street Marsh; the ground-truthing effort conducted by M&A in September 2021 confirmed jurisdiction to the same areas. Impacts to jurisdictional areas are not proposed and/or anticipated as part of the Project; thus, no further discussion of jurisdictional resources is included within this report.

The 2021 survey was conducted on-foot and changes to vegetation types were mapped on a 1" = 183' scale, color aerial photograph of the Project site and where needed, resource locations were noted on a mobile mapping application on a hand-held device (i.e., Avenza). A minimum mapping unit of 0.01-acre was used for vegetation mapping. The vegetation types were classified according to the Holland (1986) code classification system as modified by Oberbauer (2008). A list of detectable flora and fauna species was recorded in a field notebook. Plant identifications were either resolved in the field or later determined through verification of voucher specimens, and faunal species were determined through direct observation (aided by binoculars), identification of songs, call notes and alarm calls, or by detection of sign (e.g., burrows, tracks, scat, etc.). The scientific and common names utilized for the floral and faunal resources were noted according to the following nomenclature: flora, Baldwin (2021); butterflies, Klein and San Diego Natural History Museum (2002) and Lotts et al. (2021); and birds, American Ornithologists' Union (1998 and 2021).

1.5. Applicable Regulations

A variety of federal, state, and local regulations may apply to the proposed Project. These regulations are listed herein with a brief description.

1.5.1. Federal Regulations and Standards

1.5.1.1. Federal Endangered Species Act (ESA)

The federal Endangered Species Act (ESA) (16 U.S.C. 1513-1543) was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. "Take" of a listed species is prohibited except when authorization has been granted through a permit under Sections 4(d), 7, or 10(a) of the act. Take is defined as harassing, harming, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any of these activities without a permit.

1.5.1.2. Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) was enacted in 1918. Its purpose is to prohibit the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. Under the MBTA of 1918 (16 U.S.C. section 703-712; Ch. 128; July 3, 1918; 40 Stat. 755; as amended 1936, 1956, 1960, 1968, 1969, 1974, 1978, 1986 and 1998), it is unlawful, except as permitted by the USFWS, to take, possess, transport, sell, purchase, barter, import, or export all species of birds protected by the MBTA, as well as their feathers, parts, nests, or eggs (USFWS 2003). Take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12). Birds protected by the MBTA include all birds covered by the treaties for the protection of migratory birds between the United States and Great Britain (on behalf of Canada, 1916), Mexico (1936), Japan (1972), and Russia (1976), and subsequent amendments.

It is important to note that since the MBTA addresses migratory birds by family rather than at a lower taxonomic level, most bird species are protected by the MBTA because most taxonomic families include migratory members. In addition, "take" as defined under the federal MBTA is not synonymous with "take" as defined under the federal ESA. The MBTA definition of "take" lacks a "harm and harassment" clause comparable to "take" under the ESA; thus, the MBTA authority does not extend to activities beyond the nests, eggs, feathers, or specific bird parts (i.e., activities or

habitat modification in the vicinity of nesting birds that do not result in "take" as defined under the MBTA are not prohibited). Further, "a permit is not required to dislodge or destroy migratory bird nests that are not occupied by juveniles or eggs; however, any such destruction that results in take of any migratory bird is a violation of the MBTA (i.e., where juveniles still depend on the nest for survival) (USFWS 2003)."

1.5.1.3. Federal Water Pollution Control Act (Clean Water Act), 1972

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA) (33 U.S.C. 1251). The act regulates the discharge of pollutants into waters of the U.S. Under Section 404, permits need to be obtained from the ACOE for discharge of dredge or fill material into waters of the U.S. Under Section 401 of the CWA, Water Quality Certification from the RWQCB would need to be obtained if there are to be any impacts to waters of the U.S. As stated in Section 1.4 Survey Methodologies of this report, jurisdictional resources were determined to be limited to the Bayfront shoreline and the inlet channel to the F&G Street Marsh. Impacts to these areas are not proposed and/or anticipated; thus, no further discussion of jurisdictional resources is included within this report.

1.5.2. State Regulations and Standards

1.5.2.1. California Environmental Quality Act (CEQA)

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. CEQA does not specifically define what constitutes an "adverse effect" on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact.

1.5.2.2. California Fish and Game Code (FGC)

The California Fish and Game Code (FGC) regulates the taking or possession of birds, mammals, fish, amphibian and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act (CESA) (Sections 2050-2115) and Streambed Alteration Agreement regulations (Section 1600-1616), as well as provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife. As stated in the Survey Methodologies section, jurisdictional resources were determined to be limited to the Bayfront shoreline and the inlet channel to the F&G Street Marsh. Impacts to these areas are not proposed and/or anticipated; thus, no further discussion of jurisdictional resources is included within this report. Further, the marine waters within the project are not subject to CDFW regulation under section 1600 of the California Fish & Game Code.

In addition, Sections 3503, 3503.5, and 3513 of the FGC prohibit the "take, possession, or destruction of bird nests or eggs." Section 3503 states: "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 provides a refined and greater protection for birds-of-prey and states: "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." The distinctions made for birds-of-prey are the inclusion of such birds themselves to the protections and the elimination of the term "needlessly" from the language of §3503. Section 3513 states: "It is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of

such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act."

The definition of "take" under the FGC is not distinct from the definition of "take" under CESA, which is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (FGC Code §86); however, it is important to note that the state definition of "take" again does not include a "harm and harassment" clause, and thus, activities or habitat modification in the vicinity of nesting birds that do not result in "take" as defined under the FGC/CESA are not prohibited.

1.5.2.3. Porter-Cologne Water Quality Control Act

This act is substantively the California version of the Federal CWA. It provides for statewide coordination of water quality regulations through the establishment of the State Water Resources Control Board (SWRCB) and nine separate RWQCBs that oversee water quality regulation on a day-to-day basis at the regional watershed basin level. As stated in Section 1.4 Survey Methodologies of this report, jurisdictional resources were determined to be limited to the Bayfront shoreline and the inlet channel to the F&G Street Marsh. Impacts to these areas are not proposed and/or anticipated; thus, no further discussion of jurisdictional resources is included within this report.

1.5.2.4. California Coastal Act (CCA)

Under the CCA of 1976, the CCC regulates activities that would affect wetlands occurring in the California coastal zone through the CCA. The Port has a certified Local Coastal Program (LCP) (Amended 2013), which covers the proposed Project and enables authorization of projects by the District under the CCA via issuance of a CDP. As part of the regulatory process, the CCC must review all applications for a CDP.

1.5.3. Local Regulations and Standards

The site is located within the Sweetwater District of the CVBMP. The primary controlling documents for the CVBMP include: 1) the *Mitigation Monitoring and Reporting Program* (MMRP) developed as part of the CEQA environmental review process (FEIR, Dudek 2010); 2) the Settlement Agreement (Port 2010) entered into between the Port, the City of Chula Vista and the Bayfront Coalition of the City of Chula Vista; and 3) the Chula Vista Bayfront Development Policies (Port 2012), which bring together all conditions and policies that will guide development along the Chula Vista Bayfront. The Settlement Agreement further refines restoration and enhancement objectives for areas classified as Wildlife Habitat Areas (WHAs) within the Chula Vista Bayfront Project area, provides for management and protection of natural habitats through development of a *Natural Resources Management Plan* (NRMP) (Port and City 2016), and identifies priorities for habitat restoration. The environmental protections identified in the Settlement Agreement go above and beyond those required by federal, state, and local laws and regulations and, as detailed in the MMRP. Design of the proposed Project has been evaluated to be consistent with the above-listed controlling documents; refer to Section 3.3.4 Policies and Ordinances of this report.

2.0 SURVEY RESULTS

Regionally, the BSA is located in the southern coast ecoregion of San Diego County. It is located along the San Diego Bayfront, within the Lower Sweetwater Hydrologic Area (Basin No. 9.10) of the Sweetwater Hydrologic Unit/Watershed (Basin No. 9.00). Various regions of San Diego Bay including the shoreline west of the BSA are recognized under section 303(d) of the Clean Water Act (CWA) as an impaired waterbody (SWRCB 2010). Portions of the Project occur within the Federal Emergency Management Agency 100-year floodplain and 500-year floodplain (SanGIS 2021). The BSA is not located within federally designated critical habitat.

Locally, the BSA can be characterized by predominantly undeveloped flat land dominated by disturbed habitat and bordered to the north and west by recently constructed development elements of the CVBMP.

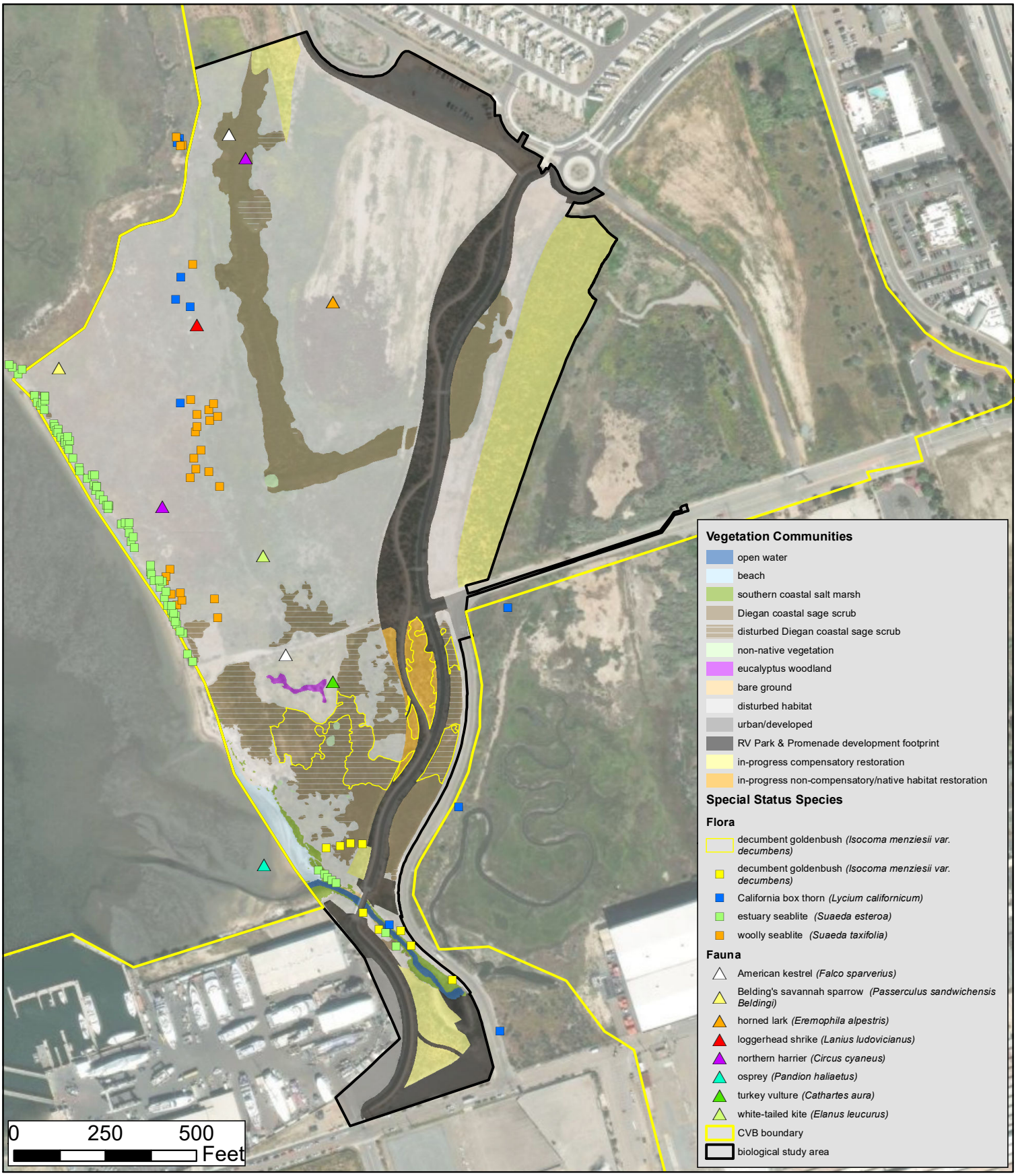
2.1. Biological Resources

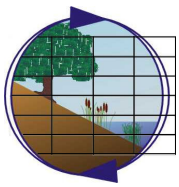
2.1.1. Botanical Resources – Vegetation and Flora

Nine vegetation types inclusive of sub-categories were identified within the BSA during the biological survey (Table 1; Figure 3). In addition to the vegetation types, M&A classified the recent development features of the adjacent Sweetwater Bicycle Path and Promenade Bridge Project and RV Resort Project as in-progress development and/or in-progress restoration areas. The below paragraphs provide a description of the BSA. General photographs of the BSA are included as Appendix 1.

Table 1. Habitats/Vegetation Communities within the Biological Study Area

Vegetation Community	Holland/ Oberbauer Code	General Habitat Group Classification	Existing (acres)
Open water	64100	Wetland	0.18
Beach	64400	Wetland	0.47
Southern coastal salt marsh	52120	Wetland	0.37
Diegan coastal sage scrub	32500	Upland	4.17
Diegan coastal sage scrub - disturbed	32500	Upland	3.56
Eucalyptus woodland	79100	Upland	0.07
Non-native vegetation	11000	Upland	0.05
Disturbed habitat	11300	Upland	31.49
Urban/developed	12000	Upland	0.83
In-progress development	NA	Upland	7.47
In-progress compensatory restoration	NA	Upland	4.50
In-progress non-compensatory restoration	NA	Upland	0.57
		Total:	**53.73**





N
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Biological Resources Map

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 3

The undeveloped portions of the BSA are dominated by disturbed habitat. Disturbed habitat has been classified for areas previously graded and disturbed but not fully improved by either the RV Resort Project, the Bicycle Path Project, and/or a utility project that cut down a large stand of *Eucalyptus* (Eucalyptus sp.) which are now growing back from their stumps. In addition, disturbed habitat has been mapped for unvegetated areas as well as areas dominated by non-native weedy species. Garland (*Glebionis coronaria*), a non-native annual herb is common and forms dense monotypic patches as does short-pod mustard (*Hirschfeldia incana*) and Russian thistle (*Salsola tragus*) in various areas of the site. Some areas include a mixture of various low-growing non-native forbs including stinkwort (*Dittrichia graveolens*), prickly lettuce (*Lactuca serriola*), cheeseweed (*Malva parviflora*), sprawling saltbush (*Atriplex suberecta*), and five hook bassia (*Bassia hyssopifolia*), intermixed with taller patches of sweet fennel (*Foeniculum vulgare*). Non-native grasses including hare barley (*Hordeum murinum* ssp. *leporinum*), red brome (*Bromus madritensis* ssp. *rubens*), and ripgut (*Bromus diandrus*) are found in portions of the disturbed habitat but their density and/or coverage is relatively low, less than 40 percent with the area expected to function as an extension of the surrounding disturbed habitat and not as non-native grassland. In addition, individual and/or small groups of native species are present throughout the disturbed habitat; however, in most cases, not in sufficient quantities to comprise a native vegetation type (e.g., Diegan coastal sage scrub). Native species present sporadically throughout the disturbed habitat generally consist of opportunistic species, most notably broom baccharis (*Baccharis sarothroides*).

A patch of disturbed wetland was previously identified along the western edge of the BSA, where it abuts the Sweetwater Marsh National Wildlife Refuge Unit of the San Diego Bay National Wildlife Refuge by the FEIR (Dudek 2010). Per the FEIR the dominant plant was listed as pineapple weed (*Matricaria discoidea*) [facultative upland plant (FACU), ACOE 2008 and 2016] (Dudek 2010). This area currently supports low-growing non-native upland species consistent with the adjacent disturbed habitat, including Australian saltbush (*Atriplex semibaccata*) [facultative plants (FAC), ACOE 2008 and 2016], Lindley's saltbush (*Atriplex lindleyi*), London rocket (*Sisymbrium irio*), crystalline iceplant (*Mesembryanthemum crystallinum*) (FACU), five hook bassia (FACU), tocalote (*Centaurea melitensis*), sourclover (*Melilotus indicus*), and Russian thistle. Although wetland associated plants are present in a portion of the area, their abundance is not sufficient to meet federal or state wetland parameter requirements. Similarly, while non-native grass cover is present, it is not sufficient enough to classify the community as non-native grassland. Thus, the area continues to be classified as disturbed habitat, consistent with the surrounding land.

Diegan coastal sage scrub is present in the Sweetwater District; however, much of the community is disturbed in nature. The disturbed classification is associated with areas supporting a relatively high coverage of non-native species (e.g., mustard, fennel, etc.). These areas are typically dominated by opportunistic coastal sage scrub species such as broom baccharis, Menzies's goldenbush (*Isocoma menziesii var. menziesii*), and big saltbush (*Atriplex lentiformis*). The FEIR previously classified all coastal sage scrub onsite as disturbed Diegan coastal sage scrub. In addition to the presence of invasive species, isolation of the sage scrub from other native habitat was a factor in the FEIR classification. Although the onsite coastal sage scrub is isolated from other native upland habitat, M&A has distinguished between disturbed and non-disturbed based on the presence of non-native invasive species. The below paragraphs provide a short description of each sub-community.

Areas dominated by broom baccharis and goldenbush are typically associated with disturbed sites (e.g., previously brushed or graded) and/or contain compacted soils. Both species can be characterized as opportunistic, due to their ability to quickly thrive in undesirable conditions. Within the BSA, broom baccharis dominated areas comprise dense, moderately tall (four to six feet) shrub cover and occur primarily in the southern portion of the BSA. Goldenbush dominated areas form sparse, low growing cover (one to two feet) intermixed with bare ground and other low growing native species [e.g., coastal deerweed (*Acmispon glaber* var. *glaber*), telegraph weed (*Heterotheca grandiflora*)] that are typical of disturbed areas, also occurring in the southern portion of the BSA. One area on the man-made berm is dominated by big saltbush. Big saltbush is an opportunistic native shrub that commonly occurs in saline soils along the immediate coast of San Diego County. It generally occurs in coastal sage scrub vegetation but will also occur at lower elevations within moist soils of coastal salt marsh or brackish marsh habitats. As such, it is a species that can occur in both upland and wetland plant communities.

Patches of higher quality Diegan coastal sage scrub are present within the southern portion of the BSA, just north of the inlet to the F&G Street Marsh. Here, the community is dominated by various shrub species including California sagebrush (*Artemisia californica*), coastal California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), and decumbent goldenbush (*Isocoma menziesii* var. *decumbens*). The taller broom baccharis occurs occasionally in this area. A man-made narrow berm (approx. 10 to 15 feet wide) traverses the central portion of the BSA. This berm was constructed in approximately 1988 from surplus soil generated from the Sweetwater River channelization project and SR-54 construction. The soil was imported for future development of the Chula Vista Bayfront and stabilized for erosion control using a native sage scrub seed mix comprised mostly of California encelia (*Encelia californica*) (K. Merkel, pers. com.). Today, much of the berm is dominated by California encelia.

2.1.2. Zoological Resources – Fauna

Wildlife species most commonly observed during the biological surveys consisted of avian and butterfly species, many of which are common throughout coastal San Diego County. Avian species observed foraging throughout the BSA included common passerines: barn swallow (*Hirundo rustica*), cliff swallow (*Petrochelidon pyrrhonota*), Bewick's wren (*Thryomanes bewickii*), and Cassin's kingbird (*Tyrannus vociferans*). Other passerines observed dispersing through and/or foraging onsite include: Belding's Savannah sparrow, California horned lark (*Eremophila alpestris actia*), and loggerhead shrike (*Lanius ludovicianus*). A great egret (*Ardea alba*) was observed flying over the western edge of the BSA toward the Sweetwater Marsh National Wildlife Refuge Unit to the northwest. Raptors observed dispersing through and/or foraging onsite include: red-tailed hawk (*Buteo jamaicensis*) [predominately offsite to the northwest harassing an osprey (*Pandion haliaetus*) in flight], osprey (fly over the site to access the Bay), turkey vulture (*Cathartes aura*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*) (two individuals), and American kestrel (*Falco sparverius*) (two individuals). The survey was conducted outside the avian breeding season and no evidence of nesting was observed while onsite. Special status species are discussed in greater detail in the below section.

Butterflies observed onsite included western pygmy-blue (*Brephidium exile*), painted lady (*Vanessa cardui*), and dainty sulfur (*Nathalis iole*). Coyote (*Canis latrans clepticus*) scat was also observed within the BSA.

2.1.3. Rare, Threatened, Endangered, Endemic and/or Sensitive Species

2.1.3.1. Special Status Species Present within the BSA

Ten special status species were identified within the BSA during the biological surveys. They consist of four plant species (all relocated from prior surveys) including California box thorn (*Lycium californicum*), estuary seablite (*Suaeda esteroa*), woolly sea-blite (*Suaeda taxifolia*), and decumbent goldenbush, and six avian species including osprey, northern harrier, white-tailed kite, Belding's savannah sparrow, loggerhead shrike and California horned lark. The location of all special status species are depicted in Figure 3 and are discussed below.

State CEQA Guidelines §15380 (Title 14, Chapter 3, Article 20) define "endangered, rare or threatened species" as "species or subspecies of animal or plant or variety of plant" listed under the Code of Federal Regulations, Title 50, Part 17.11 or 17.12 (Volume 1, Chapter I) or California Code of Regulations, Title 14, Sections 670.2 or 670.5 (Division 1, Subdivision 3, Chapter 3), or a species not included in the above listings but that can be shown to be "endangered" meaning "when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" or "rare" meaning "although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the Federal Endangered Species Act". State CEQA guidelines Appendix G, Section IV generally refers to species that fall under the above criteria as "special status species".

Thus, for the purposes of this report, special status species are: 1) federally and state listed species (CDFW 2021b and 2021d); 2) CDFW Species of Special Concern (SSC) and Fully Protected (FP) species (CDFW 2021a and 2021c); 3) species designated as California Rare Plant Rank of 1 or 2 by the by the California Native Plant Society (CNPS); and 4) species identified as special status in the CVBMP EIR (Dudek 2010).

<u>California Box Thorn (*Lycium californicum*),</u>

California box thorn, a CNPS California Rare Plant Rank List 4.2 [Plants of limited distribution (a watch list), Fairly threatened in California (moderate degree/immediacy of threat] is a perennial shrub, commonly found in San Diego coastal bluff scrub and/or coastal sage scrub communities at elevations between approximately 16 and 492 feet.

California box thorn is present along the northern edge of the inlet channel to the F&G Street Marsh as well as the western portion of the BSA (approximately eight plants). All of the plants near the inlet channel are located outside the channel limits at the top of the eroding bank. The plants are small, low growing and classified as part of the surrounding habitat (i.e., disturbed habitat). The plants present in the western portion of the BSA are mature and occur as scattered individuals, classified as part of the surrounding habitat (i.e., disturbed habitat).

Estuary Seablite (*Suaeda esteroa*)
Estuary seablite, a CNPS California Rare Plant Rank List 1B.2 (Plant rare or endangered in California and elsewhere, moderately threatened in California with a moderate degree and immediacy of threat) is a perennial herb found in coastal bluff scrub, coastal dunes, marshes and swamps on the margins of coastal salt marsh at elevations ranging from approximately 0 to 164 feet.

Estuary seablite was detected along the bank of the inlet channel and along the western boundary of the BSA (approximately 121 plants). Most plants were relatively large and classified as southern coastal salt marsh. It should be noted that the plants along the western boundary of the BSA were originally identified in the 2010 FEIR as woolly seablite. They were reclassified as estuary seablite in Dudek's 2015 report. As part of the present survey, M&A retained the identification of those species along the western boundary of the BSA as estuary seablite.

Woolly Seablite (*Suaeda taxifolia*)
Woolly seablite, a CDFW CNDDB Special Plant and California Rare Plant Rank List 4.2 is a perennial evergreen shrub found in coastal bluff scrub, coastal dunes, marshes and swamps on the margins of coastal salt marsh at elevations ranging from approximately 0 to 164 feet.

Numerous woolly seablite were detected on the western portion of the BSA (approximately 24). Woolly seablite generally occurs at slightly higher elevations than estuary seablite.

Decumbent Goldenbush (*Isocoma menziesii* var. *menziesii*)
Decumbent goldenbush, a CNPS California Rare Plant Rank List 1B.2 (Plant rare or endangered in California and elsewhere, moderately threatened in California with a moderate degree and immediacy of threat) is a small shrub commonly found in chaparral and coastal sage scrub (and often in disturbed areas), and occasionally in wetland-riparian areas. It is documented to occur in sage scrub and disturbed communities throughout coastal San Diego County as well as in the local South Bay region (Calflora 2021).

Decumbent goldenbush was detected in the BSA, throughout the upland areas in disturbed habitat and coastal sage scrub. Plants were observed individually as well as in small groups. A patch of disturbed Diegan coastal sage scrub is dominated by decumbent goldenbush, with potential hybrids between decumbent goldenbush and Menzies's goldenbush. Only those plants with a predominance of distinctive decumbent goldenbush features were included in the onsite estimation.

Osprey (*Pandion haliaetus*)
Osprey, a CDFW watch list species (nesting site only) is a year-round avian resident of San Diego County, preferring the coast and inland lakes. Large nests are typically constructed on high structures (e.g., utility poles, utility platforms, trees) in the vicinity of water where it forages on live fish. Within the Chula Vista Bayfront, this species is expected to feed almost exclusively on live fish. Although osprey could prey on non-fish such as birds, the local setting within the Chula Vista Bayfront provides easy access to their preferred prey of live fish.

One active osprey nest (artificial platform) is located east of the BSA off H Street and Marina Parkway. During the 2019 survey season, the adult pair fledged three young. Based on the

presence of osprey throughout the Bayfront, it is assumed that the adult pair successfully fledged young in 2021 as well. There is no suitable nesting habitat for the osprey within the BSA.

Northern Harrier (*Circus cyaneus*)
The northern harrier, a CDFW species of special concern is a year-round avian resident and winter visitor to San Diego County that nests on the ground (marsh or other dense vegetation) and forages in open grassland and marshes. They forage mostly on voles and other small mammals, birds, frogs, small reptiles, crustaceans, and insects. Nests are typically built of a large mound of sticks in wet areas, and a smaller cup of grasses on dry sites. They typically breed between April and September, with peak activity in June and July.

Two northern harriers (one male and one female/juvenile, M&A unable to confirm sex) were observed foraging and flying low over the BSA and throughout the offsite areas along the Bayfront. The female/juvenile landed for a short period of time in the western portion of the BSA. No nests were located within the BSA. The low-growing non-native herbaceous vegetation along the western most edge of the BSA could potentially serve as nesting habitat for the northern harrier.

White-tailed Kite (*Elanus leucurus*)
The white-tailed kite, a CDFW Fully Protected species, is a year-round avian resident of San Diego County that builds their nests in the crowns of trees and forages in open areas; trees may be isolated or parts of contiguous canopied areas. They have a focused species of prey, the California vole (Unitt 2004).

One white-tailed kite was observed foraging over the BSA and throughout the immediate offsite areas of the Bayfront. This species is not known to nest within the Bayfront and no suitable nesting habitat occurs within the BSA.

Loggerhead Shrike (*Lanius ludovicianus*)
The loggerhead shrike is a CDFW species of special concern and is a year-round resident of San Diego County. Largest populations are located in Anza Borrego Desert and up the east slopes of the mountains but can also found in suitable habitat along the coast. It prefers open habitats with bare ground and shrub and/or tree cover for nesting and perching.

One loggerhead shrike was noted perched on a signpost near the north end of the BSA. This species is expected to forage onsite. The ideal nest site for this species is a dense-foliaged thorny shrub or tree (Unitt 2004). Boxthorn (*Lycium brevipes*, *L. californicum*) is a suitable nesting plant that is found in the BSA and on the adjacent Sweetwater Marsh National Wildlife Refuge Unit to the north. Thus, while no nesting or evidence of nesting has been documented onsite, there is a potential for this species to nest onsite and/or adjacent to the site along the Bayfront where boxthorn or similar plants are present.

California Horned Lark (*Eremophila alpestris actia*)
The California horned lark, a CDFW watch list species is a year-round avian resident of San Diego County. This species nests on the ground, commonly digging a small depression such that the nest is slightly below ground level (Unitt 2004). It can be found in the coastal strand, arid grasslands, and sandy deserts where there is open ground for foraging for insects and seeds. This species'

distribution in coastal San Diego County is patchy, due to the general lack of habitat and threats from urban-adapted predators. This non-migratory subspecies is generally concentrated throughout coastal San Diego County, in Warner Valley, and in the Anza Borrego desert.

California horned larks were observed foraging throughout the undeveloped portions of the BSA, most commonly those areas mapped as disturbed habitat. A flock of about 15-20 California horned larks were observed at one time; this is typical during the non-breeding season where nomadic foraging flocks form in search of food (Beason 2020). No active nests were observed; however, suitable nesting habitat occurs throughout the BSA (e.g., disturbed areas and/or areas with low-growing vegetation).

Belding's Savannah sparrow (*Passerculus sandwichensis beldingi*)
Belding's savannah sparrow, a state listed endangered species, is a nonmigratory subspecies of the Savannah sparrow endemic to the coast of southern California and northern Baja California, and is narrowly restricted to coastal marshes dominated by pickleweed (*Salicornia* spp.) (Unitt 2004).

One Belding's savannah sparrow was observed flying along the border of the BSA and the Sweetwater Marsh National Wildlife Refuge Unit during the September 2021 survey. This bird was likely opportunistically foraging since there is no suitable marsh habitat within the BSA at this location. Within the BSA, marsh habitat is limited to the narrow band of salt marsh along the shoreline and along the inlet channel to the F&G Street marsh. Due to the small amount of available habitat and lack of dominance by pickleweed, these areas are less likely to be used as nesting habitat but rather more readily as foraging habitat. Belding's savannah sparrows are known to occur within the Sweetwater Marsh National Wildlife Refuge Unit, adjacent to the BSA where the salt marsh community is much larger and includes areas dominated by pickleweed.

Other Avian Species
The Project site has the potential to be utilized by other regionally common migratory birds that are not designated as special status species under CEQA, but are protected under the federal MBTA and FGC Code Sections 3503 and 3513. The survey was conducted outside the avian breeding season and no evidence of nesting was observed within the BSA during the biological survey; however, birds protected by the above-referenced regulations have a potential to nest within the BSA and include ground nesting raptors such as the northern harrier as well as urban tolerant species such as Bewick's wren, Cassin's kingbird, and Anna's hummingbird (*Calypte anna*).

2.1.3.2. Occurrence Potential for Special Status Species within the BSA

An evaluation of the potential for special status species to occur within the BSA was conducted. This included ground-truthing as part of the current biological investigation as well as review of previous biological reports/data for the project area and local vicinity. This includes all documents listed in Section 1.4 Survey Methodologies of this report as well as the *San Diego Bay Avian Species Surveys 2016-2017* (Tierra Data Inc. 2018). Point Count Station 17 of the San Diego Bay 2016-2017 avian survey occurs near the inlet channel to F&G Street Marsh. Avian species observed (e.g., fly over, along shoreline, etc.) as part of the avian survey were recorded as occurring within up to 500-meter radius around the point count station.

Special Status Plants

The following special status plant species are known from the vicinity of the BSA but were not found onsite or within the CVBMP area as part of prior surveys (Dudek 2010 and 2015; M&A 2019a and 2020): Salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*), Nuttall's lotus (*Acmispon prostratus*), Palmer's frankenia (*Frankenia palmeri*), coast wooly heads (*Nemacaulis denudata* var. *denudata*), Brand's star phacelia (*Phacelia stellaris*), Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), and Lewis's evening primrose (*Camissoniopsis lewisii*).

Salt marsh bird's-beak is a federally and state listed endangered plant. It is an annual herb found in coastal dunes, coastal salt marshes and swamps, at elevations between approximately 0 to 100 feet. No suitable marsh habitat occurs within the Project footprint; limited marsh habitat occurs within the in-let channel to the F&G Street Marsh. This species has not been reported to occur onsite or within the CVBMP area as part of prior surveys (Dudek 2010 and 2015; M&A 2019a and 2020). There are no records of the species occurring within the F&G Street Marsh; however, the plant is reported to occur within the salt marsh of the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge approximately 0.80 miles north/northwest of the site (CDFW 2021a, CalFlora 2021).

Nuttall's lotus (CNDDB Special Plant) is an annual herb that is found in coastal dunes and coastal sage scrub on the immediate coast at elevations between approximately 0 to 33 feet. It is known to occur at the D Street Fill to the north of the site and at the Chula Vista Wildlife Reserve to the south of the site.

Palmer's frankenia (CNDDB Special Plant) is a perennial herb found in coastal dunes and coastal salt marshes occurring on the immediate coast at elevations between approximately 0-33 feet. This species occurs on the upper edges of salt marsh habitat just north and south of Gunpowder Point Drive. The type specimen for this species is known from Gunpowder Point.

Coast wooly heads (CNDDB Special Plant) is an annual herb that occurs in coastal dunes and sandy coastal flats on the immediate coast at elevations between 0-328 feet. It is known to occur on D Street Fill to the north of the site and the Chula Vista Wildlife Reserve to the south of the site.

Brand's star phacelia (Federal Candidate Species) is found in coastal dunes and sandy openings of coastal sage scrub occurring on the coast between elevations of approximately 16 and 1,312 feet. Known nearby populations occur to south (i.e., Imperial Beach and Borderfield State Park), and to the west on the Silver Strand.

Orcutt's pincushion (CNDDB Special Plant) is an annual herb that grows in sandy soils of coastal bluff scrub and coastal dunes along the immediate coast between elevations of approximately 10 and 328 feet. The nearest known population of this species occurs south of the site near the mouth of the Tijuana River.

Lewis's evening primrose (CNDDB Special Plant) is an annual herb that grows in sandy soils near the beach. The nearest known populations occur west of the site on the Silver Strand near Coronado and at the south end of San Diego Bay near Imperial Beach.

Special Status Animals

The following special status avian species were evaluated for their potential presence onsite: Cooper's hawk (*Accipiter cooperii*), brown pelican (*Pelecanus occidentalis*), burrowing owl, Double-crested cormorant (*Phalacrocorax auritus*), coastal California gnatcatcher, southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), light-footed Ridgway's rail (*Rallus obsoletus levipes*), California least tern (*Sternula antillarum browni*), western snowy plover (*Charadrius nivosus nivosus*), and senile tiger beetle (*Cicindela senilis frosti*).

An individual Cooper's hawk was previously identified onsite by M&A (M&A 2020); it was observed foraging throughout the Sweetwater District including the BSA (M&A 2020). While the species likely continues to utilize the area as dispersal and foraging grounds, the BSA does not support suitable nesting habitat. Cooper's hawk, a CDFW watch list species (nesting site only) is a year-round avian resident of San Diego County that frequently nests in dense stands of coast live oak, riparian deciduous or other forest habitat located near water and along broken woodland habitat and edges where it perches under cover and hunts live prey, including amphibians, reptiles, and small birds and mammals. Cooper's hawks are common in urban areas where suitable canopy is present, including eucalyptus trees (Unitt 2004). They typically nest high in trees but beneath the canopy.

The brown pelican (CDFW Fully Protected species; nesting colony & communal roosts) and double-crested cormorant (CDFW Watch List species; nesting colony) are water-associated birds and are known to occur within the open waters of San Diego Bay. No suitable nesting and/or foraging habitat occurs within the BSA.

The burrowing owl, a CDFW Species of Special Concern prefers short, sparse vegetation with few shrubs, level to gentle topography and well-drained soils, commonly associated with grassland as well as agricultural areas, ruderal grassy fields, vacant lots and pastures so long as the vegetation structure is suitable and there are usable burrows and foraging habitat in proximity (CDFW 2012). A requirement for this small owl are underground cavities for nesting during the breeding season and for roosting and cover year around (multiple burrow sites within its local area). The BSA was determined to not support any suitable burrows. In addition, the majority of habitat was determined to not support foraging habitat with the exception of the western edge of the BSA where the non-native vegetation is relatively low. Overall, the burrowing owl is not expected to nest onsite due to lack of suitable nesting habitat. However, due to the proximity to known occupied burrowing owl habitat located approximately 2.5 miles south of the BSA, there is a potential that the BSA could be used by burrowing owls in transit.

Protocol surveys for the coastal California gnatcatcher, a federally listed threatened species were conducted by M&A in 2019 for the proposed Project (M&A 2020). No coastal California gnatcatchers were detected on the Project site during the 2019 surveys nor were they detected elsewhere in the Sweetwater or Harbor Districts of the CVBMP. This is consistent with prior surveys conducted for the CVBMP. Due to the isolated and disturbed nature of the onsite coastal sage scrub, there is a low potential for gnatcatchers to occur onsite. Future restored upland habitats (i.e., Diegan coastal sage scrub and potentially maritime succulent scrub) within the Sweetwater District of the CVBMP are anticipated to expand the upland habitat function and may result in

development of future upland scrub habitat occupied by the coastal California gnatcatcher; however, at the present time, the species is not present onsite.

Dudek's 2015 biological report identified one southern California rufous-crowned sparrow in the southern portion of the BSA (within sage scrub habitat). Southern California rufous-crowned sparrow have not been documented onsite since this observation. This species is typically a sedentary year-round resident that occurs on moderate to steep, dry rocky slopes vegetated with sparse, mixed chaparral and sage scrub habitats with patches of grasses and rock outcrops. Per the CNDDB, the closest record for this species is approximately six miles east of the BSA in Otay Mesa (record date of 2002). Although coastal sage scrub is present within the BSA, the community does not support features typical of this species. Thus, there is a low potential for the southern California rufous-crowned sparrow to nest onsite.

Light-footed Ridgway's rail is a federally and state listed endangered bird species. It is a year-round resident of the tidal salt marshes that support California cordgrass (*Spartina foliosa*) and has been reported to occur in the tidal salt marshes in the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge. Per a California Natural Diversity Database record from 2007, three pairs of rails have been documented in marsh habitat extending from the mouth of the Sweetwater River, southward to the F&G Street Marsh (CDFW 2021a). The rail's exact location is not provided but listed as the center section of the marsh which occurs outside the action area. Ridgway's rail have not been observed or documented by M&A within the F&G Street Marsh inlet channel and there is low potential for the Ridgway's rail to use the salt marsh habitat within the inlet channel due to lack of suitable habitat (M&A 2019, M&A 2020). In addition, this species has not been detected within the Project vicinity as part of previous biological surveys (Dudek 2010, Dudek 2015), including avian surveys conducted in 2016 and 2017 near the entrance to the F&G Street Marsh inlet (Tierra Data Inc. 2018).

The California least tern is a federally and state listed endangered bird. As a summer visitor to San Diego County, this species nests on sandy ocean beaches, drying margins of lagoons, tidal mudflats, and salt pond levees. It is known to nest within the D Street Fill area of the Sweetwater Marsh Unit of the San Diego National Wildlife Refuge as well as the Chula Vista Wildlife Reserve located approximately 0.70 miles to the south of the site (CDFW 2021a). Limited exposed beach/mudflats during low tide occur within the BSA; however, this species is not known nest onsite. California least tern has been observed foraging within the open waters of the Bay adjacent to the site (M&A 2020).

The western snowy plover is a federally listed threatened bird. It is a partial migrant to San Diego County that nests, winters, and forages on sandy ocean beaches, drying margins of lagoons, tidal mudflats, salt panne, and small pond levees. This species is known to occur approximately one mile to the north of the site in the Sweetwater Marsh Unit of the San Diego National Wildlife Refuge (e.g., D Street Fill area). Limited exposed beach/mudflats during low tide occur within the BSA; however, this species is not known to nest onsite or within the limits of the CVBMP. Western snowy plover could forage along the exposed beach and mudflat in-transit to suitable nesting habitat; however, it has not been reported onsite (Dudek 2010 and 2015; M&A 2019a and 2020).

Dudek's 2015 report also evaluated the potential presence for the senile tiger beetle (*Cicindela senilis frosti*), a CDFW CNDDB Special Animal. The senile tiger beetle occurs in coastal salt marsh, fresh and brackish lagoons, open patches of pickleweed, dried salt pans, and muddy alkali areas with no historic records in the CVBMP area. Due to the small area of coastal salt marsh habitat present within the BSA, the potential for senile tiger beetle to occur onsite is expected to be low.

2.1.4. Wildlife Movement and Nursery Sites

Many species of wildlife move through the landscape during their daily and/or seasonal activities. Many resident and sedentary species move only short distances within their home ranges or territories. Others, such as migratory birds, may move great distances during the year. Larger mammalian predators often traverse extensive areas of the landscape over the course of their activities. Because predation is a key process in maintaining biodiversity, it is important to maintain connectivity between large core areas of preserved habitat (Soulé and Terborgh 1999). Corridors are often defined as linear habitats that differ from the extensive surrounding landscape in which they are embedded. But Soulé and Terborgh (1999) point out that this definition is vague and has multiple meanings. The key concept in regional conservation efforts is landscape connectivity. Core areas need to be connected. The more fragmented and isolated a patch of habitat becomes, the less value it has for regional conservation efforts.

The San Diego Bay is an important landscape for migratory avian species, many of which forage in the open waters of the Bay. Within the Project limit of work, the disturbed nature of the habitat and limited native marsh habitats reduce the potential for the site to serve as a nursery site for wildlife (e.g., avian, invertebrates, etc.).

3.0 BIOLOGICAL IMPACT ANALYSIS

State CEQA Guidelines §15065 (a) (Title 14, Chapter 3, Article 5) states, "A project may have a significant effect on the environment" if:

- "The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory."
- "The project has possible environmental effects, which are individually limited but cumulatively considerable."

The following analysis identifies potential impacts to biological resources that could result from implementation of the proposed project, and addresses the significance of these impacts pursuant to CEQA, in accordance with the Issues listed under CEQA Guidelines Appendix G, Section IV.

3.1. Impact Definitions

Project impacts are categorized pursuant to CEQA as direct, indirect, or cumulative impacts.

- CEQA Guidelines §15358 (a) (1) and (b) (Title 14, Chapter 3, Article 20) defines a "direct impact or primary effect" as "effects, which are caused by the project and occur at the same time and place" and relate to a "physical change" in the environment.
- CEQA Guidelines §15358 (a) (2) and (b) (Title 14, Chapter 3, Article 20) defines an "indirect impact or secondary effect" as "effects, which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable" and relate to a "physical change" in the environment.
- CEQA Guidelines §15355 (Title 14, Chapter 3, Article 20) defines "cumulative impacts" as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

Direct, indirect, and cumulative impacts can be described as either permanent or temporary. Permanent impacts are generally defined as effects that would result in an irreversible loss of biological resources; temporary impacts can be defined as effects that could be restored, thus providing habitat and wildlife functions and values effectively equal to the functions and values that existed before the area was impacted.

3.2. Mitigation Definitions

CEQA Guidelines §15370 (Title 14, Chapter 3, Article 20) defines "mitigation" as:

- "Avoiding the impact altogether by not taking a certain action or parts of an action."
- "Minimizing impacts by limiting the degree or magnitude of the action and its implementation."
- "Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment."
- "Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action."

- "Compensating for the impact by replacing or providing substitute resources or environments."

3.3. Project Impacts, Significance, and Recommended Mitigation

Potential Project impacts were evaluated based on examination of the proposed Project (i.e., base file design) and the Bid Alternates within the context of the biological resources documented during the field survey and those biological resources assessed as having a likely potential to occur in the project area. Direct impacts were determined by overlaying the project plans on the mapped vegetation communities/habitats in GIS ESRI software platforms. Indirect impacts were determined based on the design, intended use, and location of the proposed project elements relative to biological resources.

3.3.1. Habitats/Vegetation Communities

Implementation of the proposed Project would result in permanent direct impacts to Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, eucalyptus woodland, non-native vegetation, disturbed habitat, urban/developed lands, in-progress development (i.e., landscaped areas associated with the Sweetwater Bicycle Path and Promenade Bridge Project), in-progress non-compensatory restoration (i.e., native Diegan coastal sage scrub preserved/enhanced but not impacted or designated as compensatory mitigation as part of the Sweetwater Bicycle Path and Promenade Bridge Project), and in-progress compensatory restoration (i.e., compensatory mitigation areas associated with the Sweetwater Bicycle Path and Promenade Bridge Project) (Table 2; Figure 4).

Table 2. Habitats/Vegetation Communities, Impacts, and Mitigation

Vegetation Community	Permanent Project Impact (acres)	Mitigation Ratio	Mitigation Required
Diegan coastal sage scrub	1.18	3:1	3.54
Diegan coastal sage scrub (impacted from utility work) [1]	0.05	3:1	0.15
Diegan coastal sage scrub - disturbed	0.38	3:1	1.14
Diegan coastal sage scrub - disturbed (impacted from utility work) [1]	0.47	3:1	1.41
Eucalyptus woodland	0.01	NA	---
Non-native vegetation	0.05	NA	---
Disturbed habitat	16.04	NA	---
Urban/developed lands	0.60	NA	---
In-progress development [2]	1.77	NA	---
In-progress non-compensatory restoration [3]	0.03	3:1	0.09
In-progress compensatory restoration [4]	0.11	1:1	0.11
Total:	**20.69**		**6.44**

[1] Impacts from project-related utility needs. Work already incurred; conducted concurrent with the implementation of the Sweetwater Bicycle Path and Promenade Bridge Project.

[2] In-progress development mapped for landscaped areas associated with the Sweetwater Bicycle Path and Promenade Bridge Project.

[3] In-progress non-compensatory/native habitat restoration is mapped for areas of native Diegan coastal sage scrub that were preserved/enhanced by the Sweetwater Bicycle Path and Promenade Bridge Project but not impacted or designated as compensatory mitigation as part of the Sweetwater Bicycle Path and Promenade Bridge Project. The proposed Project will now result in minor impacts to this community.

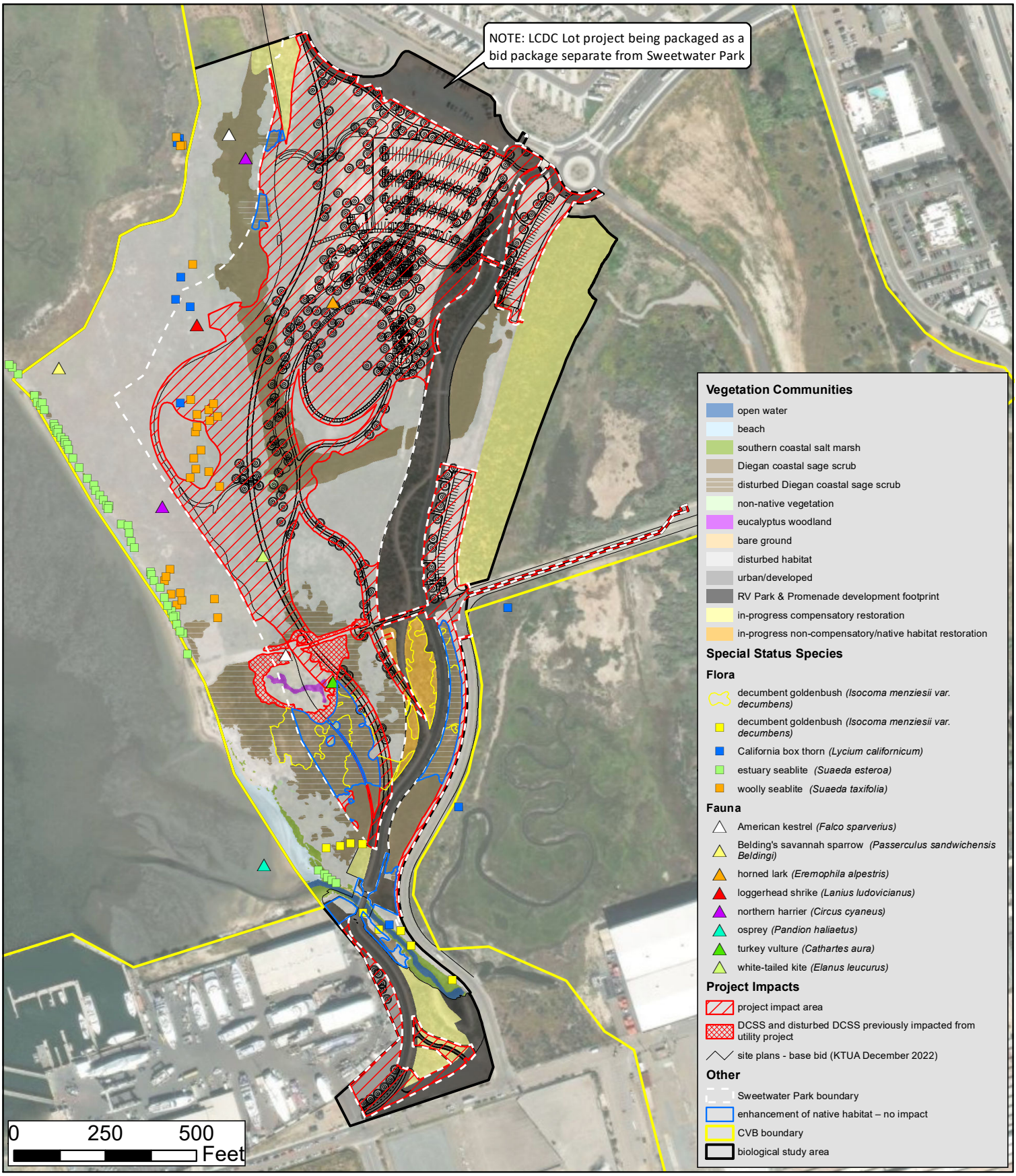
[4] In-progress compensatory restoration is mapped for areas that serve as mitigation for the Sweetwater Bicycle Path and Promenade Bridge Project. Because the mitigation is still within the Year 5 program, the replacement ratio has been set at 1:1 to ensure a no-net-loss.

Impacts to Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and in-progress restoration (i.e., native Diegan coastal sage scrub) are significant per the CVBMP FEIR and would require mitigation at a 3:1 ratio (Figure 4a and Figure 5). The mitigation ratios listed in Table 2 are defined by the FEIR and the controlling documents for the CVBMP. Where conflicts occur between the documents, M&A has applied the highest mitigation ratio (i.e., 3:1). Implementation of habitat-based mitigation in accordance with Table 3 and as bulleted below would be required to reduce impacts to a level below significance and ensure consistency with the CVBMP FEIR and controlling documents.

Implementation of the Project would also result in impacts to in-progress compensatory restoration for the Sweetwater Bicycle Path and Promenade Bridge Project. These impacts would result from necessary grading for installation of the park improvements but have been minimized to the extent practicable. Because the in-progress mitigation is still within the beginning stages of the 5-year program, the replacement ratio has been set at 1:1 to ensure a no-net-loss of the mitigation.

The Project also proposes enhancement (approximately 1.61 acres) of existing disturbed Diegan coastal sage scrub via removal of target non-native invasive plant species. Removal would occur by hand and/or hand-held equipment. Following removal of the target plants, the areas will be broadcasted with native seed (Diegan coastal sage scrub). This enhancement is not classified as a Project impact. The details of this enhancement including identification of target invasive species and proposed native seed palette have been provided by M&A to KTUA and are included within the landscape plan set.

Impacts to eucalyptus woodland, disturbed habitat, non-native vegetation, urban/developed lands, as well as in-progress development would be considered less than significant since these habitats are not regionally considered to have high conservation value requiring mitigation. This is consistent with guidance provided by the CVBMP FEIR and controlling documents.



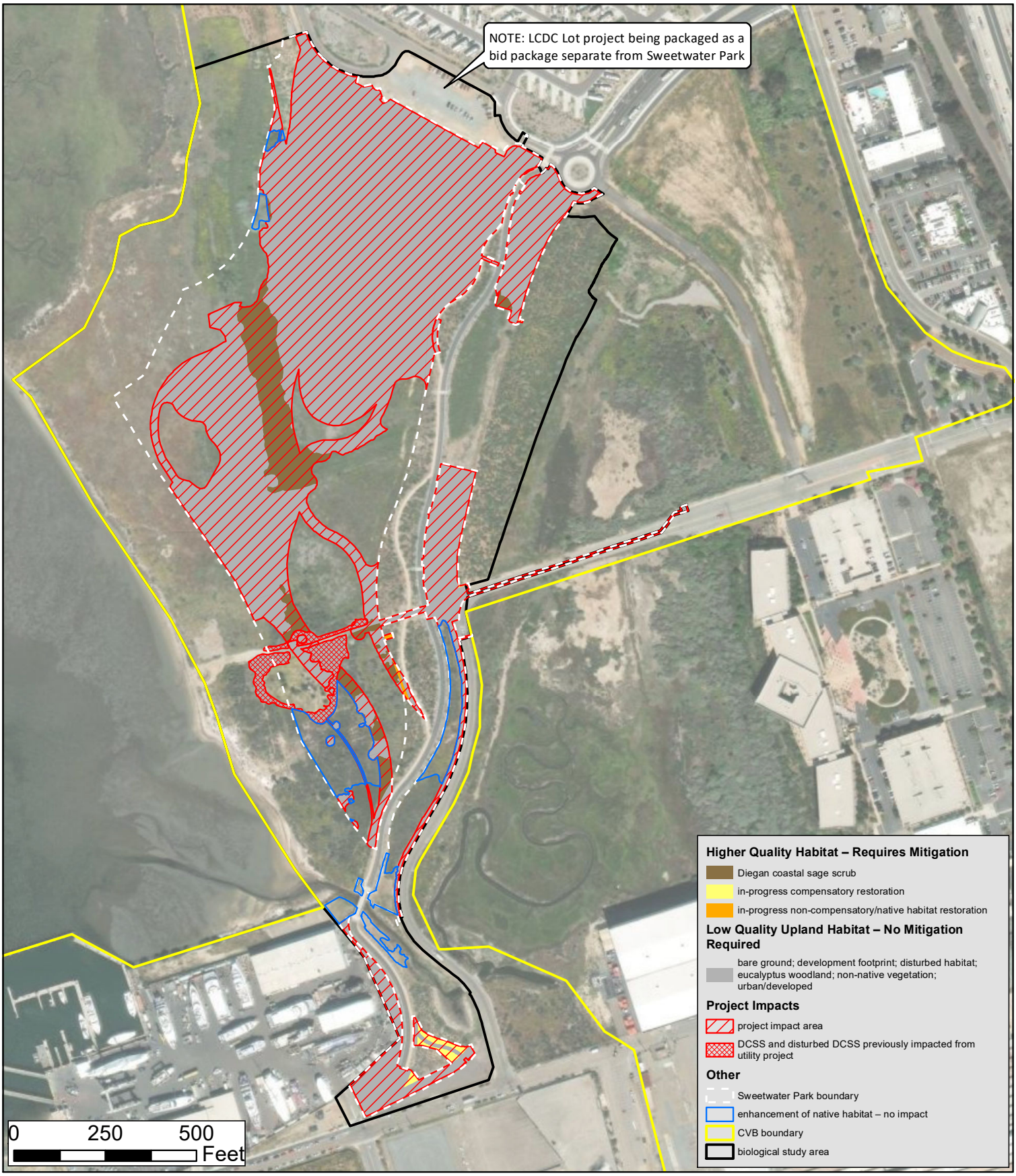
Biological Impacts Map

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 4



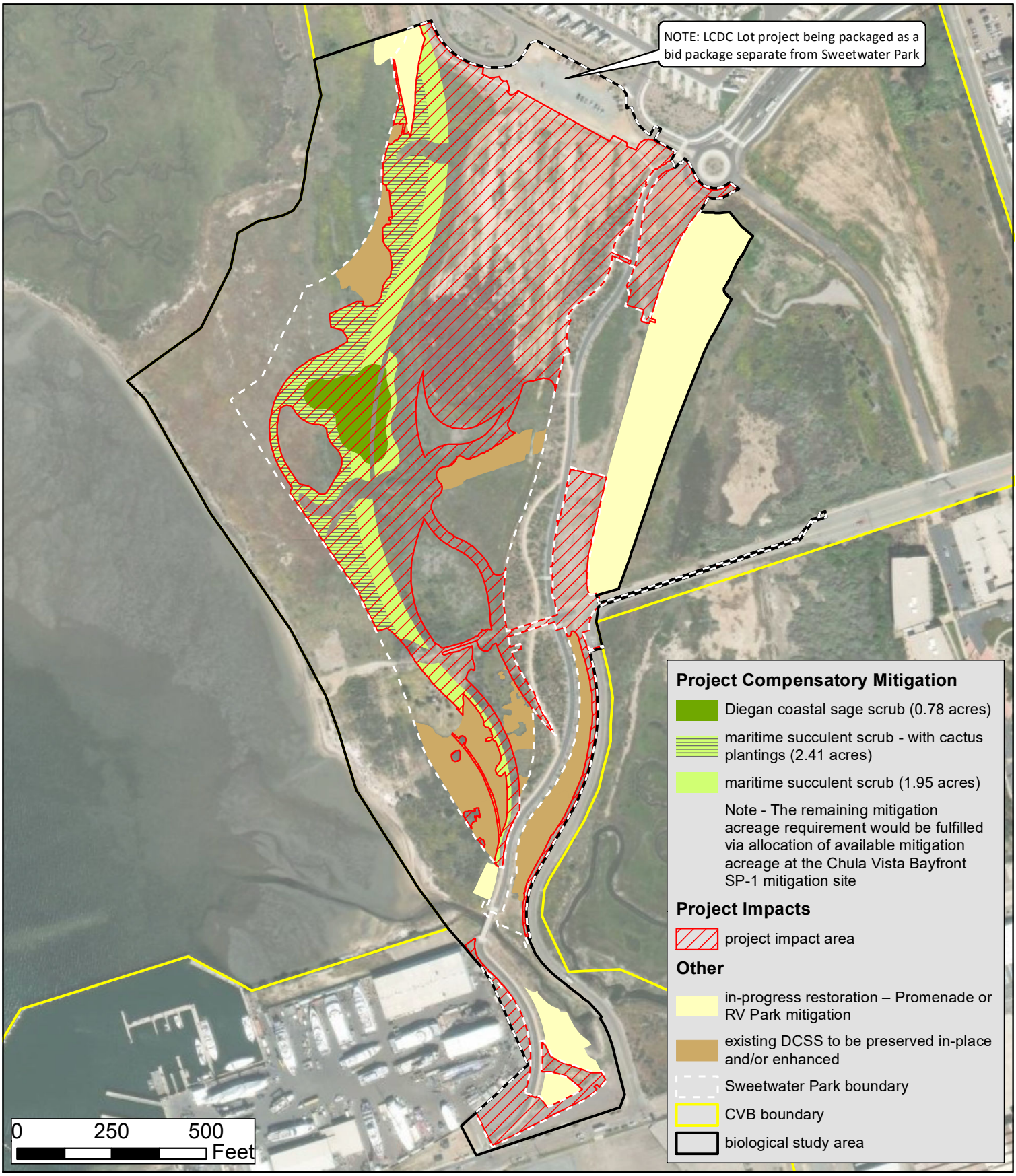
Biological Impacts Map, Areas that Require Habitat-Based Mitigation

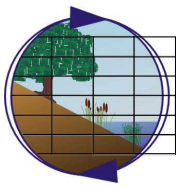
Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 4a





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Compensatory Mitigation Map

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 5

BIO-1: Corresponds to CVBMP MM#4.8-10, 4.8-12, 4.8-14, 4.8-21, and Development Policy 2.5: Mitigation of impacts to regionally and local sensitive habitats within the proposed project site includes compensatory mitigation of Diegan coastal sage scrub (all forms). Implementation of the project would result in significant impacts to approximately 2.22 acres of Diegan coastal sage scrub (all forms). At mitigation ratios of 3:1 and 1:1, the total compensatory mitigation required is approximately 6.44 acres (refer to Table 2). Mitigation is proposed to occur via onsite establishment of maritime succulent scrub and Diegan coastal sage scrub through conversion of disturbed habitat; the total proposed creation onsite is approximately 5.14 acres. The remaining mitigation acreage requirement of approximately 1.30 acres would be fulfilled via allocation of available mitigation acreage at the Chula Vista Bayfront SP-1 mitigation site (i.e., the mitigation area currently being implemented by Sun Communities, Inc. on the RV Resort Project). The onsite mitigation component would require preparation of a conceptual habitat mitigation/restoration plan.

Prior to issuance of the grading permit, the Applicant must submit to the Port a Condition Satisfaction request; the purpose of the request would be to utilize available mitigation credits from the Chula Vista Bayfront SP-1 mitigation site. The letter should specify the acreage to be utilized as well as document remaining acreage within the SP-1 mitigation site.

BIO-2: Corresponds to CVBMP MM4.8-6:
During construction, impacts to regionally sensitive habitats adjacent to the Project limit of work may occur if not effectively controlled through project design and construction monitoring and management actions. To avoid inadvertent impacts to adjacent habitats, the following construction-period impact control measures are required:

A) Lighting: Temporary night lighting during construction, if required should be downcast/fully shielded and directed away from adjacent native habitat.

B) Invasive: Best Management Practices (BMPs) proposed for the project should not include any species listed by the California Invasive Plant Council (Cal-IPC) in the California Invasive Plant Inventory.

C) Toxic Substances and Drainage: A Stormwater Pollution Prevention Plan or similar, as applicable for the project should be prepared and BMPs implemented to control erosion and export of sediment.

D) *Access: Prior to the start of clearing and grubbing of habitat, temporary fencing (e.g., orange silt fence, orange snow fence, etc.) should be installed along the perimeter of the project footprint to prevent inadvertent disturbance to adjacent biological resources. Installation of perimeter fencing may require removal of vegetation using hand-held equipment. Temporary fencing should be installed and maintained by the Construction Contractor. A qualified biologist should be retained and perform the following duties: 1) inspect and oversee installation of the temporary fencing; 2) be onsite fulltime during the initial clearing and grubbing of habitat; 3) conduct weekly inspections thereafter during grading operations and as necessary to ensure compliance with the project biological requirements; and 4) provide environmental training for contractors and construction personnel prior to the start of construction work, training should be repeated if gaps of more*

than 30 days in construction operations were required, and annually provided thereafter (if necessary).

Indirect impacts were determined based on the design, intended use, and location of the proposed Project elements relative to biological resources. The Project proposes to allow passive recreational use as well as creation of mitigation habitat. Due to the nature of the recreational use, there is a potential for unauthorized encroachment into the adjacent habitats. The Project includes fencing (e.g., post-and-cable fencing along the trails and a chain link meandering fence in the Limited Use and Transitional Use buffers) to prevent unauthorized encroachment into the No Touch Buffer Zone as well as the compensatory mitigation areas. Other indirect impacts evaluated include the potential for erosion and invasive plant species. The Project is proposing to landscape the Project with native and/or non-invasive ornamental vegetation; in addition, areas not planted would be protected from erosion by bark, mulch, or similar material. In addition, the Project would be maintained by the Port maintenance staff and/or as part of the compensatory mitigation requirements. Thus, the potential for intrusion by non-native plant species and erosion has been reduced as feasible.

3.3.1.1. Habitats/Vegetation Communities – Bid Alternates

Implementation of the Bid Alternates would result in similar direct and indirect impacts as discussed above with the exception that impacts to vegetation communities would increase in acreage. Impacts are quantified in Table 3 below and depicted in Figure 6. Impacts to Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, in-progress restoration, and in-progress compensatory restoration are significant per the CVBMP FEIR and would require mitigation at a 3:1 ratio (Figure 6a and Figure 7). Implementation of BIO-1 Alternative and BIO-2 would reduce these impacts to less than significant in accordance with CEQA and the EIR controlling documents.

Table 3. Habitats/Vegetation Communities, Impacts, and Mitigation – Bid Alternates

Vegetation Community	Bid Alternates Impact (acres)	Mitigation Ratio	Mitigation Required
Diegan coastal sage scrub	1.21	3:1	3.63
Diegan coastal sage scrub (impacted from utility work) [1]	0.05	3:1	0.15
Diegan coastal sage scrub - disturbed	0.69	3:1	2.07
Diegan coastal sage scrub - disturbed (impacted from utility work) [1]	0.47	3:1	1.41
Eucalyptus woodland	0.03	NA	---
Non-native vegetation	0.05	NA	---
Disturbed habitat	19.04	NA	---
Urban/developed lands	0.60	NA	---
In-progress development [2]	1.80	NA	---
In-progress non-compensatory restoration [3]	0.03	3:1	0.09
In-progress compensatory restoration [4]	0.11	1:1	0.11
Total:	**24.08**		**7.46**

[1] Impacts from project-related utility needs. Work already incurred; conducted concurrent with the implementation of the Sweetwater Bicycle Path and Promenade Bridge Project.

[2] In-progress development mapped for landscaped areas associated with the Sweetwater Bicycle Path and Promenade Bridge Project.

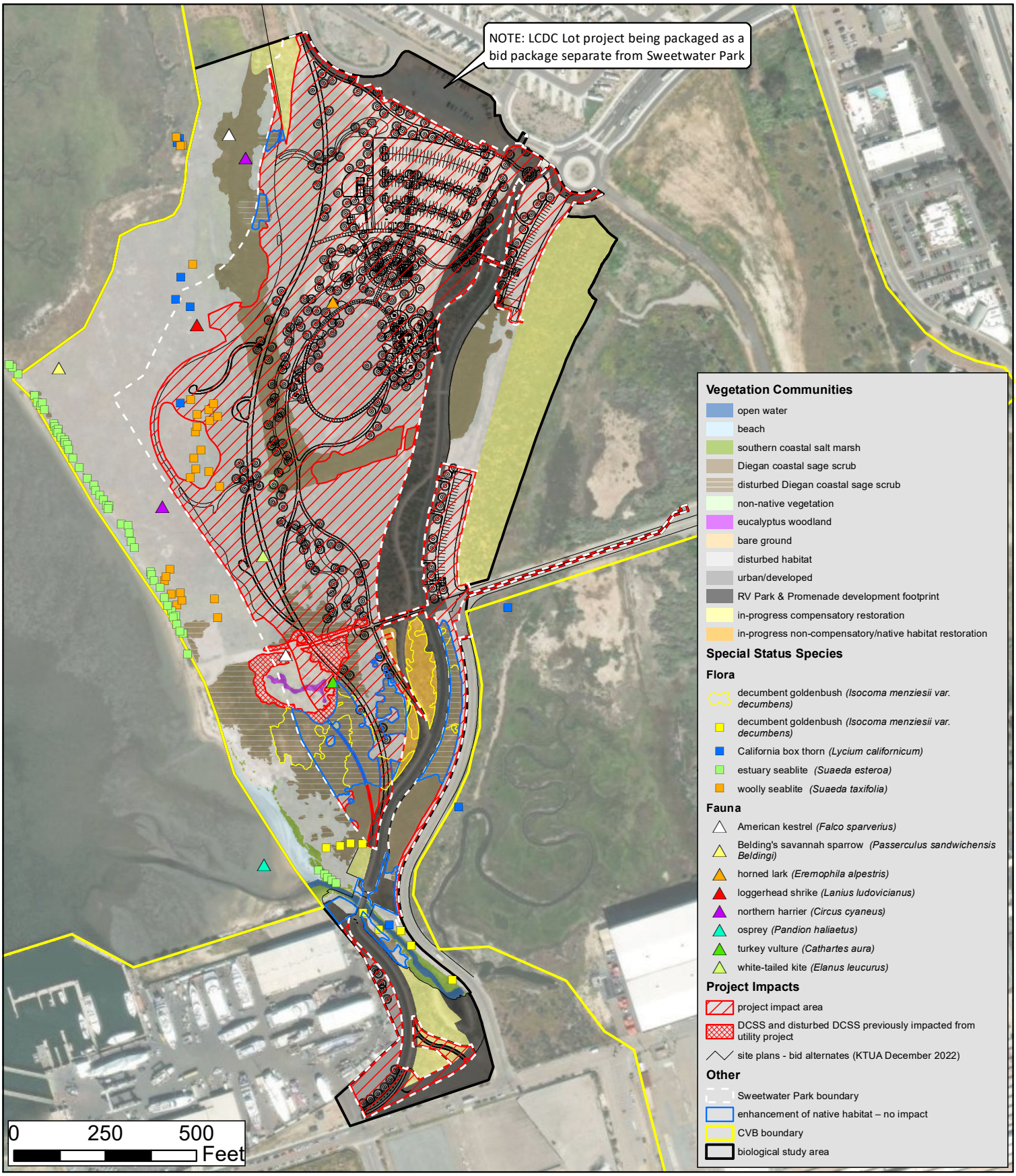
[3] In-progress non-compensatory/native habitat restoration is mapped for areas of native Diegan coastal sage scrub that were preserved/enhanced but the Sweetwater Bicycle Path and Promenade Bridge Project but not impacted or designated as compensatory mitigation as part of the Sweetwater Bicycle Path and Promenade Bridge Project. The proposed Project will now result in minor impacts to this community.

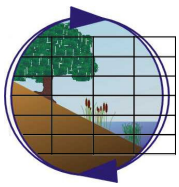
[4] In-progress compensatory restoration is mapped for areas that serve as mitigation for the Sweetwater Bicycle Path and Promenade Bridge Project. Because the mitigation is still within Year 1 of a Year 5 program, the replacement ratio has been set at 1:1 to ensure a no-net-loss.

BIO-1 Alternative: Corresponds to CVBMP MM#4.8-10, 4.8-12, 4.8-14, 4.8-21, and Development Policy 2.5:

Mitigation of impacts to regionally and local sensitive habitats within the proposed project site includes compensatory mitigation of Diegan coastal sage scrub (all forms). Implementation of the project would result in significant impacts to approximately 2.56 acres of Diegan coastal sage scrub (all forms). At mitigation ratios of 3:1 and 1:1, the total compensatory mitigation required is approximately 7.46 acres (refer to Table 3). Mitigation is proposed to occur via onsite establishment of maritime succulent scrub and Diegan coastal sage scrub through conversion of disturbed habitat; the total proposed creation onsite is approximately 5.30 acres. The remaining mitigation acreage requirement of approximately 2.16 acres would be fulfilled via allocation of available mitigation acreage at the Chula Vista Bayfront SP-1 mitigation site (i.e., the mitigation area currently being implemented by Sun Communities, Inc. on the RV Resort Project). The onsite mitigation component would require preparation of a conceptual habitat mitigation/restoration plan.

Prior to issuance of the grading permit, the Applicant must submit to the Port a Condition Satisfaction request; the purpose of the request would be to utilize available mitigation credits from the Chula Vista Bayfront SP-1 mitigation site. The letter should specify the acreage to be utilized as well as document remaining acreage within the SP-1 mitigation site.





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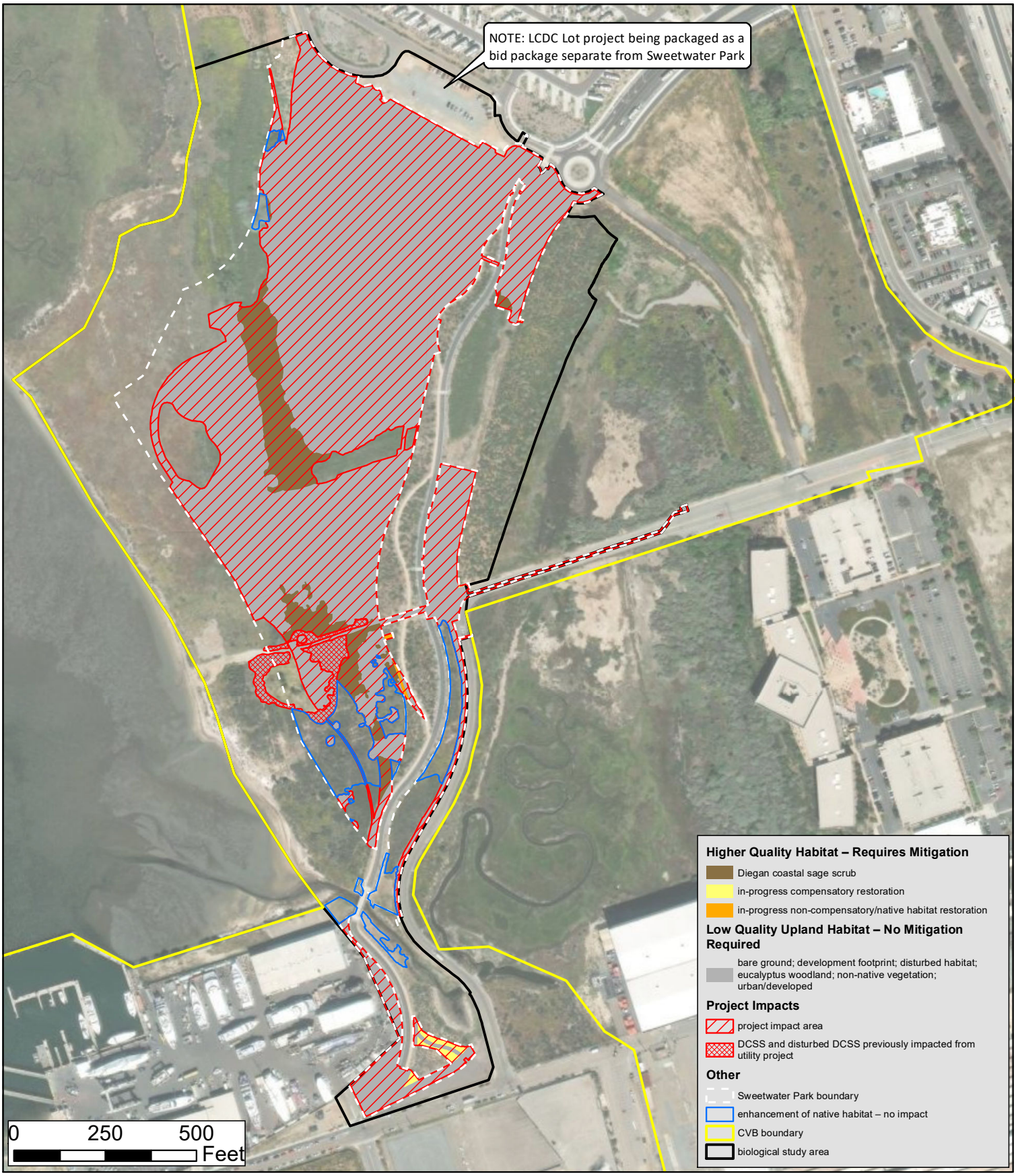
Biological Impacts Map - Bid Alternates

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 6



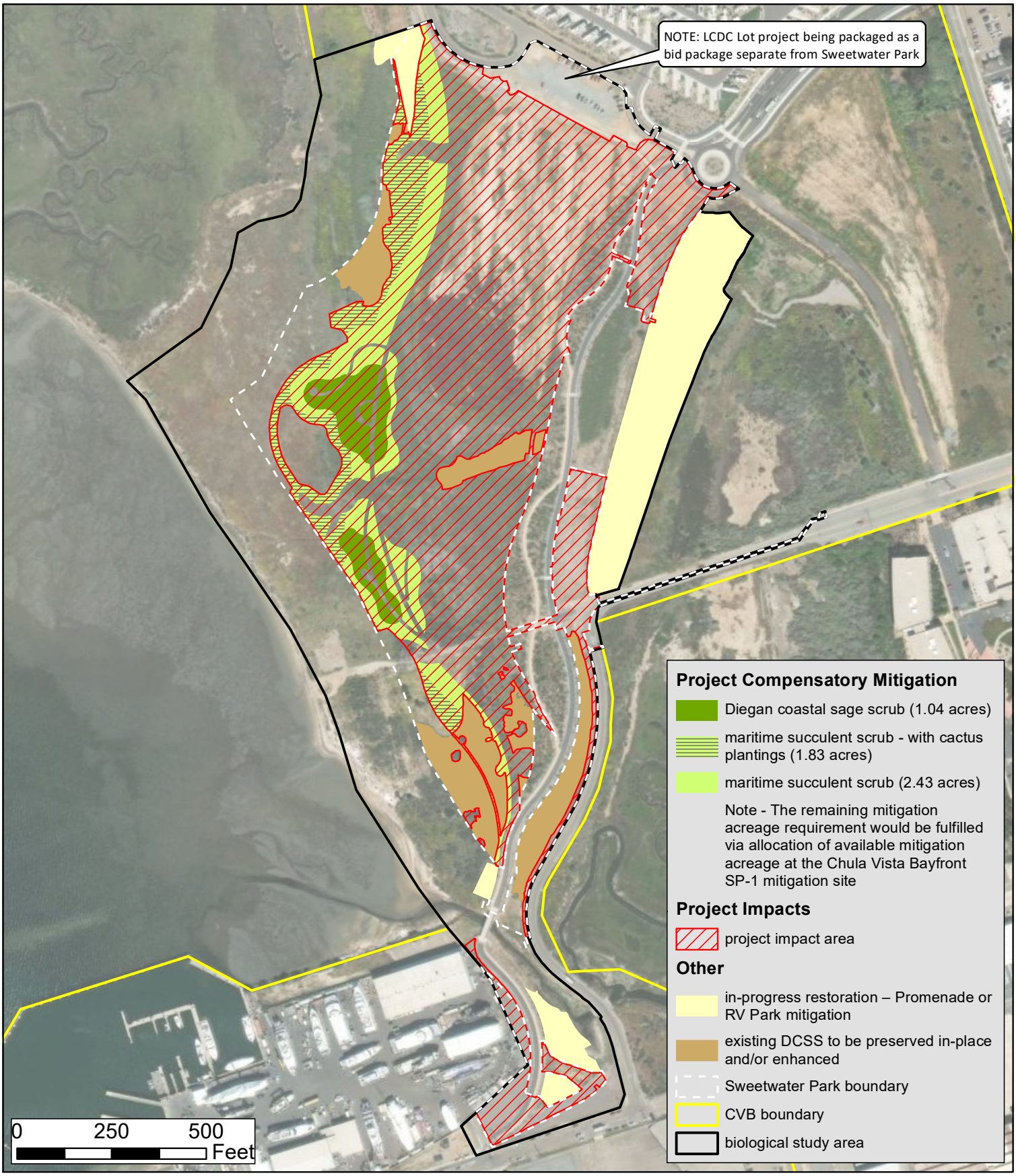
Biological Impacts Map - Bid Alternates, Areas that Require Habitat-Based Mitigation

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 6a



Compensatory Mitigation Map - Bid Alternates

Chula Vista Bayfront – Sweetwater Park Project

Aerial Source: Maxar, March 2022

Revised on December 12, 2022

Figure 7

3.3.2. Special Status Species

Implementation of the proposed Project or the Bid Alternates would result in permanent, direct impacts to one California box thorn, 7 woolly seablite, and decumbent goldenbush. The California box thorn and woolly seablite occur along the western edge of the impact boundary and occur within areas proposed to serve as compensatory mitigation. As feasible, the box thorn and woolly seablite would be protected in place; however, for purposes of this analysis, we have assumed permanent removal. Records for all three species occur along the coastal habitats of San Diego County (Calflora 2021). In addition, all three species occur within the BSA (outside the Project impact area) as well as offsite within the Sweetwater Marsh National Wildlife Refuge Unit. Further, approximately 1,000 California box thorn were planted on the adjacent mitigation area for the RV Resort Project. The loss of one California box thorn, 7 woolly seablite, and decumbent goldenbush is not expected to adversely affect the local populations of these species and thus would not be considered significant.

Six special status avian species were identified dispersing through and/or foraging within the BSA, they include the osprey, northern harrier, white-tailed kite, Belding's savannah sparrow, loggerhead shrike, and California horned lark. Additional special status species previously detected foraging onsite include Cooper's hawk. While there is low potential for nesting onsite (due to lack of suitable nesting habitat) by osprey, white-tailed kite, Belding's savannah sparrow, and Cooper's hawk, the Project site does support suitable nesting habitat for the northern harrier, loggerhead shrike, and California horned lark. Impacts to active migratory bird nests (including raptors), if present at the time of construction are prohibited under the federal MBTA and California FGC §3503 and §3513. Since avian species could potentially nest in the onsite habitats, the proposed Project could result in impacts to active bird and/or raptor nests, if present at the time of construction under the federal MBTA and California FGC §3503 and §3513; therefore, the project Mitigation Measure BIO-3 listed below is required. With the implementation of mitigation measure BIO-3, potential impacts to nesting birds would be mitigated to a less than significant level.

BIO-3: Corresponds to CVBMP MMRP 4.8-1, 4.8-2, and 4.8-3:

> *Prior to construction in any areas with suitable nesting habitat or locations for raptors, burrowing owl, or migratory birds, and if grading or construction occurs during the breeding season for nesting raptors (January 15 through July 31), burrowing owl (January 15 through July 31), or migratory birds (January 15 through August 31), the project developer(s) shall retain a qualified biologist, approved by the Port, to conduct a pre-construction survey for nesting migratory birds. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port, for review and approval. If active nests are present, the Port would coordinate with USFWS and CDFW to determine the appropriate construction setback distance. Construction setbacks should be implemented until the young are completely independent of the nest or relocated with the approval of the USFWS and CDFW. A bio-monitor shall be present on-site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is properly installed and maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the Port shall define the frequency of field inspections. The bio-monitor should send a monthly*

monitoring letter report to the Port detailing observations made during field inspections. The bio-monitor should also notify the Port immediately if clearing is done outside of the permitted project footprint.

There is no potential for direct impacts to the Ridgway's rail from implementation of the proposed Project or Bid Alternates since there is no suitable foraging and/or breeding habitat within the Project limit of work. The light-footed Ridgway's rail has a low potential to occur within the inlet channel to the F&G Street Marsh and would not be expected to visit the area for any purpose other than transiting between marshes. However, there is a potential for the light-footed Ridgway's rail to occur/nest within suitable habitat adjacent to the Project site within the San Diego Bay National Wildlife Refuge and F&G Street Marsh. In following the standards of the CVBMP MMRP, Mitigation Measure BIO-4 should be adopted to minimize potential noise impacts to sensitive species, if present adjacent to the Project limit of work. With the implementation of mitigation measure BIO-4, impacts of noise on potentially present special status avian species would be avoided.

BIO-4: Corresponds to CVBMP MMRP 4.8-6:

A. Construction-related noise. Construction-related noise should be limited adjacent to the Sweetwater Marsh and South San Diego Bay Units of the San Diego Bay National Wildlife Refuge, F&G Street Marsh, and the mudflats west of the Sweetwater District during the general avian breeding season of January 15 to August 31. During the avian breeding season, noise levels from construction activities must not exceed 60 dB(A) Leq., or ambient noise levels if higher than 60 dB(A). The project developer(s) should prepare and submit to the Port for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) Leq. Noise level is maintained at the location of any active nest within the marsh. If noise attenuation measures or modifications to construction activities are unable to reduce the noise level below 60 dB(A), either the developer(s) must immediately consult with the USFWS to develop a noise attenuation plan or construction in the affected areas must cease until the end of the breeding season. Because potential construction noise levels above 60 dB(A) Leq have been identified at the F&G Street Marsh, specific noise attenuation measures have been identified and are addressed in Section 4.7 of the EIR.

No other special status species are expected to have a moderate or high potential to occur onsite.

Indirect impacts were determined based on the design, intended use, and location of the proposed Project elements relative to biological resources. The Project inclusive of the Bid Alternates is proposing permanent lighting at the restroom facility; however, the lighting will be downcast and focused on the park feature for public safety (it will not cast west toward the compensatory mitigation areas and/or No-Touch Buffer Zone). The Project has also been designed with the intent to prevent/deter raptor nesting. This includes use of wide building ledges and/or inclusion of bird deterrents (e.g., wire, "spider" feature, or similar) on the ledges and/or lamp posts. While the Project landscape includes some tree species, the trees are small in relation to suitable raptor nesting trees and will be maintained as part of the Project. In addition, native willow (*Salix* spp.) are proposed within the interpretive garden; however, the placement and maintenance of the garden is expected to deter raptor nesting. Thus, Project construction is not expected to result in indirect impacts to special status species.

3.3.3. Wildlife Movement and Nursery Sites

Implementation of the Project, inclusive of the Bid Alternates is not expected to interfere with connectivity to offsite habitat (San Diego Bay, Sweetwater Marsh National Wildlife Refuge Unit of the San Diego Bay National Wildlife Refuge, F&G Street Marsh) or adversely affect the local long-term survival of resident or migratory wildlife species.

3.3.4. Policies and Ordinances

The following federal/state laws/regulations and local ordinances are applicable to the proposed project, and are evaluated below for consistency purposes.

3.3.4.1. Federal Migratory Bird Treaty Act and California Fish and Game Code

Nesting birds may be present within the Project footprint, inclusive of the Bid Alternates during construction and could include such species as Bewick's wren and Cassin's kingbird. Impacts to active migratory bird nests, if present at the time of construction, are prohibited under the federal MBTA and California FGC §3503 and §3513. Since avian species could potentially nest in the onsite habitats, the proposed project could result in impacts to active bird and/or raptor nests, if present at the time of construction; therefore, the Project Mitigation Measure BIO-3 listed in the above section is required. With the implementation of mitigation measure BIO-3, potential impacts to nesting birds would be mitigated to a less than significant level.

3.3.4.2. Chula Vista Bayfront Master Plan, Mitigation Monitoring and Reporting Program

Implementation of the mitigation measures listed within the above sections would ensure consistency with the CVBMP MMRP. The below tables have been prepared to ensure that the results of the current biological investigation and impact analysis for both the proposed project or Bid Alternates, cumulatively referred to as "Project" in the below table comply with all applicable development policies identified in the CVB Development Policies and MMRP, respectively.

Table 4. Consistency Evaluation with the Chula Vista Bayfront Development Policies

Policy Number	Policy Text	Consistency
2.1	The biological productivity and the quality of wetlands shall be protected and, where feasible, restored.	Consistent – The project avoids encroachment into jurisdictional resources.
2.2	Wetlands shall be defined and delineated consistent with the Coastal Act and the Coastal Commission Regulations, and shall include, but not be limited to, lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. Any unmapped areas that meet these criteria are wetlands and shall be afforded all of the protections provided for wetlands in the PMP. Wetlands shall be further defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.	Consistent – A wetland delineation was conducted for Sweetwater Bicycle Path and Promenade Bridge Project (M&A 2019a). Site conditions were verified by M&A as part of the current Project with the field survey conducted in September 2021. M&A confirmed that all jurisdictional resources are located outside the Project limit of work/impact area. The closest Project element to jurisdictional wetlands (i.e., inlet channel to the F&G Street Marsh) is planting of container stock adjacent to the Sweetwater Promenade bridge.
2.3	Where the required initial site inventory indicates the presence or potential for wetland species or other wetland indicators, the District shall require the submittal of a detailed biological study of the site, with the addition of a delineation of all wetland areas on the project site. Wetland delineations shall be based on the definitions contained in Section 13577(b) of Title 14 of the California Code of Regulations.	Consistent – A wetland delineation was conducted for Sweetwater Bicycle Path and Promenade Bridge Project (M&A 2019a). Site conditions were verified by M&A as part of the current Project with the field survey conducted in September 2021. M&A confirmed that all jurisdictional resources are located outside the Project limit of work/impact area.
2.4	a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this Plan, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:	Not Applicable - The project avoids encroachment into jurisdictional resources.

Policy Number	Policy Text	Consistency
	(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities. (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. (6) Restoration purposes. (7) Nature study, aquaculture, or similar resource dependent activities.	
2.5	Where wetland fill or development impacts are permitted in wetlands in accordance with the Coastal Act and any applicable PMP policies, mitigation measures shall include creation of wetlands of the same type lost. Adverse impacts will be mitigated at a ratio of 4:1 for all types of wetland, and 3:1 for non-wetland riparian areas. Replacement of wetlands on-site or adjacent to the project site, within the same wetland system, shall be given preference over replacement off-site or within a different system. Areas subjected to temporary wetland impacts shall be restored to the pre-project condition at a 1:1 ratio. Temporary impacts are disturbances that last less than 12 months and do not result in the physical disruption of the ground surface, death of significant vegetation within the development footprint, or negative alterations to wetland hydrology.	Not Applicable - The project avoids encroachment into jurisdictional resources.
2.6	Wherever wetlands are identified, a buffer of at least 100 feet in width from the upland edge of wetlands and at least 50 feet in width from the upland edge of riparian habitat shall be established. In some unusual cases, smaller buffers may be appropriate, when conditions of the site as demonstrated in a site-specific biological survey, the nature of the proposed development, etc. show that a smaller buffer would provide adequate protection. In such cases, the California Department of Fish and Game (CDFG) [now referred to as CDFW] must be consulted and agree that a reduced buffer is appropriate and the District, or Commission on appeal, must find that the development could not be feasibly constructed without a reduced buffer.	Not applicable – By design, the Project is within immediate proximity to wetlands (i.e., inlet channel to the F&G Street Marsh). The closest Project element to the inlet channel of the F&G Street Marsh is an area of container stock planting adjacent to the Sweetwater Promenade bridge.

Policy Number	Policy Text	Consistency
	However, in no case shall the buffer be less than 50 feet.	
5.2	Prohibit active recreation, construction of any road (whether paved or not), within No Touch Buffer Areas and "Transition Buffer Areas" as that term is defined and described in Exhibit 2, with the exception of existing or necessary access points for required maintenance.	Consistent – The Project limit of work does not encroach into the No-Touch Buffer Zone. Pedestrian trails and one overlook are proposed within the Limited Use Buffer. Pedestrian and bike-friendly trails along the western park edge are proposed within portions of the Transitional Use Buffer. The trails and overlook would be fenced (e.g., post-and-cable fencing) to prevent users from unauthorized access to the adjacent areas. In addition, a chain link fence would be installed to prevent users from entering the No Touch Buffer Zone.
5.3	Protect the No Touch Buffer Areas from the impacts of the Chula Vista Bayfront project including, without limitation, fencing necessary to protect the Sweetwater Marsh and the Sweetwater parcel tidal flats, the J Street Marsh next to the San Diego Bay National Wildlife Refuge, and the north side of Parcel H-3.	Consistent – The Project limit of work does not encroach into the No-Touch Buffer Zone. A chain link fence would be installed as part of the Project and meander through the Limited Use Buffer and Transitional Use Buffer to prevent users from encroaching into the No-Touch Buffer.
5.4	Include additional controls and strategies restricting movement of humans and Predators into sensitive areas beyond the boundaries of the designated Buffer Areas.	Consistent – Fencing (i.e., post-and-cable fencing and chain link) would be installed along the trail system and meander along the western edge of the Project to prevent users from unauthorized access into the compensatory mitigation areas as well the No-Touch Buffer Zone. In addition, vegetation within the compensatory mitigation areas would be planted relatively dense to ensure achievement of the success criteria and reduction of weeds; this would also deter unauthorized access into the compensatory mitigation areas. By design, users are encouraged to explore the Sweetwater Park

Policy Number	Policy Text	Consistency
		system through the trail systems, playgrounds, and interpretive gardens. Predators, as identified by the FEIR and the controlling documents include raptor species which could prey upon sensitive avian species known to occur within the vicinity of the Project as well as urban tolerant species (e.g., racoon, skunk). Such raptor species include those identified onsite and listed in Section 2.1.2 of this report. The Project has been designed to reduce the potential for raptor perching and/or nesting. This includes use of bird deterrents (e.g., wire or "spider" feature) on lamp posts around the restroom. While the Project landscape includes some tree species, the trees are small in relation to suitable raptor nesting trees and they will be maintained as part of the Project. In addition, native willow (*Salix* spp.) are proposed within the interpretive garden; however, the placement and maintenance of the garden is expected to deter raptor nesting. With the exception of necessary culvert features to drain onsite runoff, features providing cover for urban tolerant species have been reduced.
5.9	"Environmentally sensitive habitat area" (ESHA) means 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 following areas shall be considered ESHA, unless there is compelling site-specific evidence to the contrary: • Any habitat area that is rare or especially valuable from a local, regional, or statewide basis. • Areas that contribute to the viability of plant or animal species designated as rare, threatened, or endangered under State or Federal law. • Areas that contribute to the viability of species designated as Fully Protected or	Consistent – The southern coastal salt marsh communities have been classified as sensitive vegetation communities and are considered to be ESHA. Implementation of the Project would not impact ESHA. The Diegan coastal sage scrub present onsite has been considered for its potential ESHA status, but is not considered to be ESHA due to its fragmented nature, absence of adequate continuity to contribute to the viability of plant

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	Species of Special Concern under State law or regulations. • Areas that contribute to the viability of plant species for which there is compelling evidence of rarity, for example, those designated by the California Native Plant Society (CNPS) as 1b (Rare or endangered in California and elsewhere), such as Nuttall's scrub oak or "2" (rare, threatened or endangered in California but more common elsewhere), such as wart-stemmed Ceanothus.	and animal populations considered to be rare, threatened or endangered and the lack of support for species designated as fully protected. Future restored habitats along the Bayfront (e.g., compensatory mitigation for the Project as well as mitigation for the adjacent Sun Outdoors San Diego Bay RV Resort Project and Sweetwater Bicycle Path and Promenade Bridge Project) are anticipated to expand the upland habitat function and may result in development of future upland scrub habitat considered ESHA.
5.10	New development shall be sited and designed to avoid impacts to ESHA. ESHA shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. These uses include enhancement/restoration work, passive recreational parks and public access or recreational facilities such as trails and bike paths integrated into the natural environment and sited and designed to preserve, and be compatible with, native habitat.	Consistent – Implementation of the Project would not impact southern coastal salt marsh/ESHA. The closest Project element to southern coastal salt marsh/ESHA is a re-vegetated area adjacent to the Sweetwater Promenade bridge. BMPs would be installed during construction to prevent inadvertent impacts to the adjacent resources including erosion of the creek bank.
5.13	If located in or adjacent to ESHA, new development shall include an inventory conducted by a qualified biologist of the plant and animal species present on the project site. If the initial inventory indicates the presence or potential for sensitive species or habitat on the project site, a detailed biological study shall be required. Sensitive species are those listed in any of three categories: federally listed, state listed or designated species of special concern or fully protected species, and CNPS categories 1B and 2.	Consistent – This current report fulfills this requirement.
5.14	Development adjacent to ESHAs shall minimize impacts to habitat values or sensitive species to the maximum extent feasible. Native vegetation buffer areas shall be provided around ESHAs to serve as transitional habitat and provide distance and physical barriers to human intrusion. Buffers shall be of a sufficient size to ensure the	Consistent – The closest Project element to southern coastal salt marsh/ESHA is a re-vegetated area adjacent to the Sweetwater Promenade bridge. BMPs would be installed

Policy Number	Policy Text	Consistency
	biological integrity and preservation of the ESHA they are designed to protect	during construction to prevent inadvertent impacts to the adjacent resources including erosion of the creek bank.
5.15	All buffers around (non-wetland) ESHA shall be a minimum of 100 feet in width, or a lesser width may be approved by the District if findings are made that a lesser buffer would adequately protect the resource. However, in no case can the buffer size be reduced to less than 50 feet.	Consistent – There are no designated non-wetland ESHA resources.
5.16	Public access-ways and trails are considered resource dependent uses. New access-ways and trails located within or adjacent to ESHA shall be sited to minimize impacts to ESHA to the maximum extent feasible. Measures including, but not limited to, signage, placement of boardwalks, and limited fencing shall be implemented as necessary to protect ESHA.	Consistent – The closest Project element to southern coastal salt marsh/ESHA is a re-vegetated area adjacent to the Sweetwater Promenade bridge.
5.17	Modifications to required development standards that are not related to ESHA protection (street setbacks, height limits, etc.) shall be permitted where necessary to avoid or minimize impacts to ESHA.	Not applicable
5.18	Protection of ESHA and public access shall take priority over other development standards and where there is any conflict between general development standards and ESHA and/or public access protection, the standards that are most protective of ESHA and public access shall have precedence.	Not Applicable
5.19	Impacts to native habitat that does not constitute ESHA that cannot be avoided through the implementation of siting and design alternatives shall be fully mitigated, with priority given to on-site mitigation. Off-site mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on-site or where off-site mitigation is more protective. Mitigation for impacts to native habitat shall be provided at a 3:1 ratio.	Consistent – The Project would mitigate non-ESHA Diegan coastal sage scrub habitat at a 3:1 ratio. As detailed in Section 2.1.1 of this report, mitigation is proposed to occur onsite via creation of maritime succulent scrub and Diegan coastal sage scrub. The details of the proposed mitigation are outlined within a standalone compensatory mitigation plan.
11.1	Walkways, paths, and overlooks near Wildlife Habitat Areas outside of the No Touch Buffer Areas will be designed in accordance with the following: a) Alignment, design, and general construction plans of walkways and overlooks will be developed to minimize potential impacts to Wildlife Habitat Areas. b) Path routes will be sited with appropriate setbacks from Wildlife Habitat Areas. c) Paths running parallel to shore or marsh areas that will cause or contribute to bird	Consistent – Wildlife Habitat Areas within immediate proximity to the Project include the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge (at minimum 200 feet away). The Project limit of work does not encroach into the No-Touch Buffer Zone and the

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	flushing will be minimized throughout the Chula Vista Bayfront. d) Walkways and overlooks will be designed to minimize and eliminate, where possible, perching opportunities for raptors and shelter for skunks, opossums or other Predators. e) Walkways and overlooks that approach sensitive areas must be blinded, raised, or otherwise screened so that birds are not flushed or frightened. In general, walkway and overlook designs will minimize visual impacts on the Wildlife Habitat Areas of people on the walkways.	public trail system is separated from the No Touch Buffer Zone by a six-foot high chain link fence. Further, the wildlife overlooks are directed toward the open waters of San Diego Bay and are set back from the shoreline by at minimum distance of 200 feet; at this distance, trail users are not expected to be a nuisance to foraging wildlife within the Bay. Wildlife Habitat Areas within immediate proximity to the Project also include the F&G Street Marsh (separated by Marina Parkway). A parking lot is proposed west of Marina Parkway; ornamental landscaping within the parking lot is not expected to negatively affect wildlife within the marsh. The Project's trail and park system have been designed to eliminate dense coverage for urban tolerant species such as skunks and opossums. With the exception of paths over minor storm drain pipe culverts that are necessary to convey onsite runoff through the BMP system, the Project is not proposing any elevated pathways.
20.3	Create a meandering pedestrian trail constructed of natural material that is easily maintained and interwoven throughout the Signature Park. Create, as part of the E Street Extension, a pedestrian pathway/bridge to provide a safe route for pedestrians to walk and to transition from the Sweetwater District to the Harbor Park Shoreline Promenade and park in the Harbor District.	Consistent – The proposed Project includes a network of pedestrian and bike-friendly trails that would connect to the Sweetwater Bicycle Path and Promenade Bridge Project along with the trails around the Sun Outdoors San Diego Bay RV Resort Project and the Living Coast Discovery Center. It has also been designed with future CVBMP elements taken into consideration including the Gaylord Chula Vista and Convention Center Project as well as the Harbor Park Project.

Table 5. Consistency Evaluation with the Chula Vista Bayfront MMRP

MM Number	Summary of Significant Impact	MM Text	Consistency
4.8	*Terrestrial Biological Resources*		
4.8-1	Impacts to nesting raptors	Prior to construction in any areas with suitable nesting locations for raptors (such as trees, utility poles, or other suitable structures) and, if grading or construction occurs during the breeding season for nesting raptors (January 15 through July 31), the project developer(s) within the Port's or City's jurisdiction shall retain a qualified, Port- or City approved biologist, as appropriate, who shall conduct a pre-construction survey for active raptor nests. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active nest is found, an appropriate setback distance will be determined in consultation with the applicant, Port or City, USFWS, and CDFG. The construction setback shall be implemented until the young are completely independent of the nest or the nest is relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all	Consistent - Implementation of BIO-3, as included in this report would ensure consistency with MM 4.8-1.
4.8-2	Impacts to western burrowing owl	Prior to construction in any areas with suitable nesting habitat for burrowing owl and, if grading or construction occurs during the breeding season for the burrowing owl (January 15 through July 31), the project developer(s) within the Port's	Consistent – No suitable burrows/nesting habitat detected within the BSA. However, limited foraging habitat does occur onsite, along the western edge of the BSA. Further, due to the proximity to known occupied burrowing owl

MM Number	Summary of Significant Impact	MM Text	Consistency
		or City's jurisdiction, as appropriate, shall retain a qualified biologist, who shall be approved by the Port or City, respectively, to conduct a pre-construction survey within all suitable habitat prior to any grading activities. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active burrow is detected during the breeding season of January 15 to July 31, construction setbacks of 300 feet from occupied burrows shall be implemented until the young are completely independent of the nest. If an active burrow is found outside of the breeding season, or after an active nest is determined to no longer be active by a qualified biologist, the burrowing owl would be passively relocated according to the guidelines provided by CDFG (1995) and in coordination with CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done	habitat located approximately 2.5 miles south of the BSA, there is a potential that the BSA could be used by burrowing owls in transit. Implementation of BIO-3, as included in this report would ensure consistency with MM 4.8-2, if owls were identified onsite.

MM Number	Summary of Significant Impact	MM Text	Consistency
		outside of the permitted project footprint.	
4.8-3	Impacts to nesting birds protected by the MBTA	If grading or construction occurs during the breeding season for migratory birds (January 15 through August 31), the project developer(s) shall retain a qualified biologist, approved by the Port/City (depending on the jurisdiction), to conduct a pre-construction survey for nesting migratory birds. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If active nests are present, the Port will consult with USFWS and CDFG to determine the appropriate construction setback distance. Construction setbacks shall be implemented until the young are completely independent of the nest, or, relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	Consistent – Implementation of BIO-3, as included in this report would ensure consistency with MM 4.8-3.

MM Number	Summary of Significant Impact	MM Text	Consistency
4.8-4	Impacts to the light-footed clapper rail and loss of raptor foraging habitat at the inlet of the F&G Street Marsh as a result of the construction of the extension of E Street and development of Sweetwater Park.	Prior to construction or grading in any areas of suitable nesting or foraging habitat for light-footed and, regardless of the time of year, the project developer(s) shall retain a qualified biologist who shall be approved by the Port or City, as appropriate, and shall be present during removal of southern coastal salt marsh vegetation within the inlet to the F & G Street Marsh to ensure that there are no direct impacts to foraging light-footed clapper rails. If a light-footed clapper rail is encountered, construction will be temporarily halted until the bird leaves the area of construction. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint. The project developer(s) shall consult with the U.S. Fish and Wildlife Service prior to impacting any areas of suitable nesting or foraging habitat for light-footed clapper rail so as not to prevent any unauthorized take of the light-footed clapper rail. Any take must be authorized by U.S. Fish and	Not Applicable – As discussed within Section 3.3.2 of this report, the light-footed Ridgway's rail has a low potential to occur within the inlet channel to the F&G Street Marsh and would not be expected to visit the area for any purpose other than transiting between marshes. Further, impacts to suitable habitat for the rail have been avoided.

MM Number	Summary of Significant Impact	MM Text	Consistency
		Wildlife Service.	
4.8-5	Impact to MSCP-covered species within the City's jurisdiction	Prior to issuance of any clearing and grubbing or grading permits within the jurisdiction of the City, the project applicant within the City's jurisdiction shall be required to obtain a HLIT permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan. In addition, the MSCP requires additional protective measures for the western burrowing owl, as identified in Mitigation Measure 4.8-2 above.	MSCP-covered species detected within the BSA include northern harrier, Belding's savannah sparrow, and Cooper's hawk. Burrowing owl and light-footed Ridgway's rail were not detected within the BSA and there is no suitable nesting habitat within the BSA; however, there is a low potential for these species to utilize the BSA in transit. Although the habitat within the City's jurisdiction does not support suitable nesting habitat for any of the above-listed species, if present, impacts to the above-listed species would be significant. Implementation of BIO-3 and BIO-4 would reduce this potential impact to less than significant. Coordination with the City of Chula Vista is required in support of the HLIT permit process; also refer to MM 4.8-11 of this table.
4.8-6	Potential impact to special status species present in the F&G Street Marsh and Sweetwater Marsh National Wildlife Refuge as a result of construction adjacent to these locations.	A. Construction-related noise (full measure not included) B. Perching of raptors (full measure not included) C. Raptor management and monitoring (full measure not included) D. Lighting (full measure not included) E. Noise (same as 4.8-6A. Construction-related Noise) F. Invasives (full measure not included) G. Toxic Substances and Drainage (full measure not included) H. Public Access (full measure not included) I. Boating Impacts (NA)	Consistent – Implementation of BIO-4, as included in this report would ensure consistency with MM 4.8-6(A) construction related noise. The Project has been designed to reduce the potential for raptors to perch within the landscape to ensure consistency with MM 4.8-6(B). This includes (1) Light posts would have anti-perching spike strips along any portions that would be accessible to raptors, (2) The top edge of the restroom building would be rounded with sufficient radius to reduce the amount of suitable perching building edges, (3) Landscaping avoids the use of large unmaintained trees. It should be noted that the Project does include a

MM Number	Summary of Significant Impact	MM Text	Consistency
			chain link fence along the western edge of the Project to prevent users from entering the No-Touch Buffer Zone. While the fence has been designed to be hidden, as feasible from public view (e.g., placed at low points in the elevation compared to the proposed Project Park elements), the fence itself could potentially serve as a perch location for raptors. The Port has prepared a Raptor Nest Monitoring & Management Plan [for the] Sweetwater Park & Sweetwater Bicycle and Pedestrian Path (June 2020). Implementation of this Plan by the Port would ensure consistency with MM 4.8-6(C). Permanent lighting is proposed around the restroom. The lighting would be directed toward the restroom and away from the compensatory mitigation areas, adjacent Wildlife Areas (e.g., F&G Street Marsh and Refuge), and the No-Touch Buffer Zone. This would ensure consistency with MM 4.8-6(D). BIO-2 is included in this report to offset potential impacts to natural resources located adjacent to the project area and is consistent, as applicable with MM 4.8-6(F) and (G). Specifically, implementation of BIO-2B would ensure consistency with MM 4.8-6(F) construction-period invasive species requirements (e.g, prohibit use of invasive species). Further, M&A has worked closely with KTUA to review the proposed plant palettes to ensure that invasives are not installed onsite. Implementation of BIO-

MM Number	Summary of Significant Impact	MM Text	Consistency
			2C would ensure consistency with MM 4.8-6(G) BMPs (e.g., reduce the potential for impact as a result of release of toxins, chemicals, etc.) that might harm the natural environment. Access areas outside the project footprint are prohibited. Implementation of BIO-2D would ensure consistency with MM 4.8-6(H) public access (e.g., requirements to install and maintain fencing, oversight by a biologist, requirement for inspections, and pre-construction training for construction personnel). The proposed compensatory mitigation consists of creation of maritime succulent scrub and Diegan coastal sage scrub. This mitigation is proposed to occur within the Limited Use and Transitional Use Buffers, consistent with MM 4.8-6(H). Further, the project includes fences along the public trail system including a chain link fence to ensure users do not enter the No-Touch Buffer Zone. The Park system includes trash cans, to be maintained by Port Maintenance Staff.
4.8-7	No significant impact identified; measure provided as further mitigation to reduce potential indirect impacts to biological resources.	Natural Resources Management Plan (full measure not included)	Consistent – The project has been designed to be consistent with the NRMP and Settlement Agreement; consistency is detailed below (the below headings are consistent with those in the Settlement Agreement). No-touch Buffer: Consistent – The Project limit of work does not encroach into the No-Touch Buffer Zone. A chain link fence would be installed as part of the Project and meander through the Limited Use Buffer and Transitional

MM Number	Summary of Significant Impact	MM Text	Consistency
			Use Buffer to prevent users from encroaching into the No-Touch Buffer. Walkway and Path Design: Consistent - The trail system has been placed outside the No-touch buffer and sufficiently set back from the open water of the Bay (where most shore birds and waterfowl would forage) to avoid regular nuisance to resting and/or foraging wildlife. Predator Management: Consistent – The Project has been designed to reduce the potential for raptor perching and/or nesting. This includes use of bird deterrents (e.g., wire strip or similar) on lamp posts around the restroom. While the Project landscape includes some tree species, the trees are small in relation to suitable raptor nesting trees and they will be maintained as part of the Project. In addition, native willow (*Salix* spp.) are proposed within the interpretive garden; however, the placement and maintenance of the garden is expected to deter raptor nesting. With the exception of necessary pipe culvert features to drain onsite runoff, features providing cover for urban tolerant species have been reduced. Additional Habitat Management and Protection: Not Applicable Bird Strikes and Bird Disorientation: Not Applicable; the restroom is not expected to serve as a bird strike feature.

MM Number	Summary of Significant Impact	MM Text	Consistency
			Storm Water and Urban Runoff Quality: The Project includes stormwater management features including basins and dry creek drainage features, all contained within the Project area (i.e., no surface connection to the Bay or other jurisdictional water feature). Landscaping and Vegetation: Consistent – Implementation of the conceptual mitigation plan (provided in separate report) would ensure consistency with landscape and vegetation requirements. The conceptual mitigation plan does not include invasive species or trees. Lighting and Illumination: Consistent – The Project is proposing permanent lighting at the primary parking lot at the north end of the Park as well as the ADA spaces at the ancillary parking lots and the restroom facility; however, the lighting will be downcast and focused on the park features for public safety (it will not cast west toward the compensatory mitigation areas and/or No-Touch Buffer Zone). Noise: Consistent – Implementation of BIO-4, as included in this report would ensure consistency with construction-related noise. Education: Not Applicable Boating Impacts: Not Applicable Restoration Priorities: Consistent – The proposed project includes compensatory mitigation within

MM Number	Summary of Significant Impact	MM Text	Consistency
			the Limited Use and Transitional Use Buffers. Sweetwater and Otay District Public Park Requirements: Consistent – The proposed Project includes a network of pedestrian and bike-friendly trails that would connect to the Sweetwater Bicycle Path and Promenade Bridge Project along with the trails around the Sun Outdoors San Diego Bay RV Resort Project and Living Coast Discovery Center Parking Lot. Hazardous Waste Removal Standards: Implementation of BIO-2C, as included in this report would ensure consistency with BMP requirements (e.g., reduce the potential for impact as a result of release of toxins, chemicals, etc.) to prevent harm to the natural environment. H-3 Densities: Not Applicable Creation of the South Bay Wildlife Advisory Group: Not Applicable Dispute Resolution: Not Applicable Bayfront Cultural and Design Committee for Project Located in Port District Lands: Not Applicable Port Master Plan Amendment: Not Applicable Energy: Not Applicable

MM Number	Summary of Significant Impact	MM Text	Consistency
			Housing Impacts: Not Applicable The Coalition's Undertakings: Not Applicable Identification of Grants: Not Applicable No Limitation on the District's, City's or RDA's Discretion: Not Applicable The District's, City's and RDA's Undertakings: Not Applicable Reservation of Discretion: Not Applicable Job Quality: Not Applicable Miscellaneous: Not Applicable
4.8-8	Construction of H Street Pier	Not Applicable	Not Applicable
4.8-9	Impacts associated with reconfiguration of the marinas or for dredging and filling of the navigation channels.	Not Applicable	Not Applicable
4.8-10	Impacts to disturbed coastal sage scrub, non-native grassland, mulefat scrub/riparian scrub, southern coastal salt marsh, disturbed riparian, and disturbed seasonal pond as a result of grading for project-level and program level elements within the Port's jurisdiction.	Port: A. Prior to the commencement of grading for development in each phase that impacts riparian habitat or sensitive vegetation communities, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan for impacts to riparian habitat and sensitive vegetation communities in accordance with the mitigation requirements presented in Table 4.8-6. Prior to the commencement of Phase I grading that impacts riparian habitat or sensitive vegetation communities, the Port shall coordinate	Consistent – This report serves as a project-level assessment of potential impacts. BIO-1 or if necessary BIO-1 Alternative included in the report, quantifies project impacts and associated mitigation, as well as requires preparation of a conceptual mitigation plan to offset significant impacts. A 3:1 mitigation ratio has been applied for permanent impacts to Diegan coastal sage scrub, not 1.5:1 as presented in the Final EIR Table 4.8-6. A 3:1 ratio would ensure consistency with Development Policy 5.19.

MM Number	Summary of Significant Impact	MM Text	Consistency
		with the wildlife agencies for the preparation and approval of a detailed restoration plan within the Port's jurisdiction. The restoration plan shall be prepared by a qualified biologist, and the plan shall be approved by the Port. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; shall propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; shall establish performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within 3 months or start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in	A standalone mitigation plan has been prepared to detail the compensatory mitigation plan.

MM Number	Summary of Significant Impact	MM Text	Consistency
		consultation with the regulatory agencies. B. Prior to initiating any construction activities in each phase that would affect riparian habitat or sensitive vegetation communities, including clearing and grubbing associated with program level phases, an updated project- level assessment of potential impacts shall be made based on a specific project design. The Port or project developer(s), as appropriate, shall retain a qualified, Port-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation measures to reduce impacts to below a level of significance. This updated assessment shall be submitted to the Port for review and approval.	
4.8-11	Impacts to disturbed coastal sage scrub, non-native grassland, southern coastal salt marsh, and mulefat scrub/riparian scrub in the City's jurisdiction.	City: A. Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that would affect riparian habitat or sensitive vegetation communities, the project developer(s) shall acquire mitigation credits or prepare and initiate implementation of a restoration plan for impacts to riparian habitats and sensitive vegetation communities in accordance with the acreages identified in Table 4.8-7. Mitigation credits shall be secured in a City-approved mitigation bank or land acquisition shall be provided at an approved location. Verification of mitigation credits or a restoration plan shall be provided to the City for review and approval prior to issuance of any clearing and grubbing or grading permits.	Consistent – This report serves as a project-level assessment of potential impacts. BIO-1 or if determined necessary BIO-1 Alternative included in the report, quantifies project impacts and associated mitigation, as well as requires preparation of a conceptual mitigation plan to offset significant impacts. A 3:1 mitigation ratio has been applied for permanent impacts to Diegan coastal sage scrub (comprised of Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and in-progress non-compensatory restoration), not 1.5:1 as presented in the Final EIR Table 4.8-7. A 3:1 ratio would ensure consistency with Development Policy 5.19. A standalone mitigation plan has been prepared to detail the compensatory mitigation plan.

MM Number	Summary of Significant Impact	MM Text	Consistency
		The project developer(s) shall prepare and implement a detailed restoration plan to the satisfaction of the City and the regulatory agencies. B. Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that affect riparian habitat or sensitive vegetation communities associated with the program-level development phases, an updated assessment of potential impacts shall be made based on a specific project design. The project developer(s) shall retain a City-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation consistent with the City's MSCP Subarea Plan. This updated assessment shall be submitted to the City for review and approval. C. Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that affect riparian habitat or sensitive vegetation communities, the project applicant shall be required to obtain an HLIT permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan.	As detailed in Section 3.3.1 of this report, the Project would result in significant impacts to approximately 2.22 acre of Diegan coastal sage scrub (all forms). Of this amount, approximately 0.51 acre occurs within City of Chula Vista jurisdiction. Impacts to Diegan coastal sage scrub within the City's jurisdiction would require coordination with City staff in support of the HLIT permit process. If the Bid Alternates are implemented, approximately 2.56 acres of Diegan coastal sage scrub (all forms) would be impacted. Of this amount, approximately 0.62 acre occurs within City of Chula Vista jurisdiction. Impacts to Diegan coastal sage scrub within the City's jurisdiction would require coordination with City staff in support of the HLIT permit process.
4.8-12	Impacts to USACOE wetlands and non-wetland waters as a result of program-level development within the Port's jurisdiction. Impacts to USACOE wetlands and	Not Applicable	Not Applicable. Implementation of the Project would not impact jurisdictional resources.

MM Number	Summary of Significant Impact	MM Text	Consistency
	non-wetland waters as a result of establishment of ecological buffer on OP-2A, reconfiguration of the harbor and marine, and bridges on HP-5.		
4.8-13	Impacts to CDFW streambed and associated riparian.	Not Applicable	Not Applicable
4.8-14	Impacts to CCC wetland as a result of: E Street improvements, S-1 adjacent to the roadway at Bay Boulevard and E Street, bridge on E Street over the inlet to the F&G Street Marsh as part of the circulation element, and bridge to cross the HP-5 drainage ditch in the Harbor District.	Not Applicable	Not Applicable.
4.8-15	Impacts to CCC wetland as a result of two addition bridges in the Otay District; riprap removal and bulkhead placement as a component to the Chula Vista Marina improvements (HW-1, HW-3, H-12) within the Harbor District; and re-channelization of Telegraph Canyon Channel in Otay District.	Not Applicable	Not Applicable
4.8-16	Impacts to CCC wetland as a result of establishment of the ecological buffer on OP-2A.	Not Applicable	Not Applicable
4.8-17	Impacts to CCC wetland as a result of additional road extensions in the Otay District	Not Applicable	Not Applicable

MM Number	Summary of Significant Impact	MM Text	Consistency
4.8-18	Impacts to CCC wetland on HP-13B.	Not Applicable	Not Applicable
4.8-19	Impacts to CCC wetland as a result of park development on OP-1B.	Not Applicable	Not Applicable
4.8-20	Impacts to CCC wetland as a result of development on O-4.	Not Applicable	Not Applicable
4.8-21	Impacts to waters under the jurisdiction of RWQCB.	Not Applicable	Not Applicable
4.8-22	Impacts to southern coastal salt marsh, mulefat/riparian scrub as a result of: bridge proposed across HP-5 drainage ditch, improvement to the existing E Street in the Sweetwater District, and development within the road easement on SP-4.	Not Applicable	Not Applicable
4.8-23	Impacts to avian flight patterns and habitat use as a result of: RCC on H-3, residential on H-13, hotel on H-23, buildings on H-15, and buildings between 100 and 200 feet high along the project frontage.	Not Applicable	Not Applicable
4.9	*Marine Biological Resources*		
4.9-1 through 4.9-8	Impacts associated with marinas, harbors, navigation channel, H Street Pier, and bulkhead replacement on HW-3	Not Applicable	Not Applicable

3.3.5. Cumulative Impacts

Implementation of the Project mitigation to mitigate direct impacts to Diegan coastal sage scrub (all forms) would reduce impacts to less than cumulatively significant. Onsite mitigation would be focused on establishment of maritime succulent scrub and Diegan coastal sage scrub to offset impacts to Diegan coastal sage scrub. Mitigation will be governed by both a site-specific restoration plan and a broader comprehensive framework plan for integration of habitat connectivity and sea level rise adaptation throughout the Chula Vista Bayfront (M&A 2017).

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APPENDIX 1. GENERAL OVERVIEW PHOTOS OF THE BIOLOGICAL STUDY AREA

Photo Point 1. Photo taken from the northeastern edge of the BSA (located just south of the roundabout). Photo directed west and taken on 9/16/21.

Photo Point 2. Photo taken from the northeastern edge of the BSA (located just south of the roundabout). Photo directed southwest and taken on 9/16/21.

Photo Point 3. Photo taken from the northwestern edge of the BSA (adjacent to the mitigation implemented for the Costa Vista RV Park Project). Disturbed habitat within view will converted for habitat mitigation. Photo directed south and taken on 9/16/21.

Photo Point 4. Photo taken from the man-made berm (western portion of the Project site). Dormant California encelia is in the center view of the photo. This portion of the berm would be impacted by the Project. Photo directed north and taken on 9/16/21.

Photo Point 5. Photo taken from the same general location of Photo Point 4 but photo directed northeast. Area to be impacted by the Project. Photo taken on 9/16/21.

Photo Point 6. Photo taken from the same general location of Photo Point 4 but photo directed west toward San Diego Bay. Area in the foreground (man-made berm and disturbed habitat west of the berm) is to be impacted by the Project (for park use and habitat mitigaiton). The Project will not encroach into the 200-foot No Touch Buffer Zone. Photo directed north and taken on 9/16/21.

Photo Point 7. Photo taken from the southern portion of the BSA where eucalyptus were cut (stumps are re-sprouting). Area to be impacted by the Project. Photo taken on 9/16/21 and directed east.

Photo Point 8. Photo taken from the southern portion of the BSA. Diegan coastal sage scrub is in view. A portion of the habitat will be impacted by the Project. Portions of the sage scrub community would not be impacted but would be enhanced via where needed (e.g., removal of invasive plants and replacement planting with native species). Photo directed south and taken on 9/16/21.