



PUBLIC DRAFT INITIAL STUDY

City of Oceanside California

1. **PROJECT:** Loma Alta Slough Wetland Enhancement Project
2. **LEAD AGENCY:** City of Oceanside
3. **CONTACT PERSON & PHONE:** Justin Gamble, City of Oceanside Senior Environmental Specialist, (760) 435-5093
4. **PROJECT LOCATION:** The Loma Alta Slough Wetland Enhancement Project (Proposed Project) is located in the City of Oceanside at the mouth of the Loma Alta Creek. The project would occur across seven parcels (Assessor Parcel Numbers 153030290, 1530304800, 1530304900, 1530304100, 1530304200, 1530110600, and 1530304300). Refer below to the Project Description for more details on the Project Site location.
5. **APPLICANT:** City of Oceanside
6. **GENERAL PLAN DESIGNATION:** Coastal Open Space (C-OS), Coastal Dependent, Recreational & Visitor Commercial (C-VC), Coastal General Commercial (C-GC), Coastal Transportation and Utility (C-TU), Coastal Light Industrial (C-LI)
7. **ZONING:** Open Space (Coastal) (O), Visitor Commercial (Coastal) (VC), General Commercial (C2), Public Utility and Transportation Zone (PUT), Light Industrial (Coastal) (M1)
8. **PROJECT DESCRIPTION:**

Project Overview

The Loma Alta Slough Wetlands Enhancement Project (Proposed Project) involves enhancement of the existing marsh in the Loma Alta Slough (Slough) and restoration of marsh and transitional uplands in the adjacent properties over two phases (which are both analyzed in their entirety in this document). The Slough is a locally and regionally important natural resource that provides nesting and foraging habitat for marsh and shoreline birds. Common aquatic species likely to occur in the fresh and brackish habitats of Loma Alta Slough may include mosquitofish (*Gambusia affinis*), insect larvae, oligochaetes, clams, and snails. However, watershed urbanization, decreased sediment yield, hardening of the channel, degraded water quality, and wetland fill have degraded the health of the Slough. Additionally, the Slough itself has been filled to create developed areas, reducing the overall area available for wetland habitat.

In addition to the physical loss of wetland area, water quality issues resulting from urbanization have been ongoing since the 1960s. Currently, both Loma Alta Creek and Slough are on California's Clean Water Act 303(d) list of impaired water bodies for a variety of inhibiting constituents, most notably indicator bacteria, eutrophic conditions and benthic community impairments. Dry-weather flows from the watershed provide a continuous source of freshwater that contains fertilizers and other contaminants that reduce water quality by causing eutrophic conditions and the growth of algae and bacteria. Typically, water quality problems are exacerbated when the Slough is disconnected from the Pacific Ocean by the sand berm that forms naturally at Buccaneer Beach during dry periods.

The City of Oceanside (City) as the applicant for the Proposed Project has acquired grant funds from the State Coastal Conservancy (SCC) to plan, design, and permit the Proposed Project. The Proposed Project will provide multiple benefits by improving and restoring habitat for native species, providing increased habitat resiliency to sea-level rise, improving water quality in the Slough, and enhancing recreational enjoyment of the area.

Environmental Setting

Project Location

The Slough is a small coastal estuarine wetland located at the mouth of Loma Alta Creek (Creek) next to Buccaneer Beach Park (**Figure 1**). The Slough is located in the City of Oceanside in north San Diego County, California. The 5.8-acre Project Site extends between S. Coast Highway and Pacific Street, and is divided into three subareas by the railroad bridge and the creek (**Figure 2**) in addition to the creek itself:

- Existing northwest marsh area (along La Salina Wastewater Treatment Plant [WWTP], owned by the City, and west of the railroad bridge in the North County Transit District [NCTD] right-of-way) (1.7 acres)
- Northeast area (owned by the City, except for the former Buel Property, which would be acquired by the City prior to the start of the Project, and the Parent Family Trust Property, which would be acquired by the City prior to Phase 2 of the Project. The Project area also includes lands east of the railroad bridge in the NCTD right-of-way) (2.7 acres)
- Southeast area (triangular marsh, owned by the City) (0.2 acres)
- Loma Alta Slough (no work proposed within the creek, but included in Project Site for continuity) (1.2 acres)

Surrounding Uses

The Project Site is located in an urbanized and built-out area in the southern coastal portion of the City of Oceanside, located south of the La Salina WWTP and north of Buccaneer Beach Park. The Project Site is bounded to the west by Pacific Street and to the east by S. Coast Highway. Adjacent land uses also include the Paradise by the Sea Recreational Vehicle (RV) Park to the south, and commercial facilities to the north with outdoor storage.

Project Site Characteristics

The Project Site consists of the terminus of Loma Alta Creek, associated wetland (which make up the Slough), pedestrian trails associated with Buccaneer Beach Park, and the North County Transit District (NCTD) railroad crossing, which crosses through the center of the Project Site in a north-south direction.

The Slough has intermittent connection to the Pacific Ocean as a result of natural mouth closing and opening—the mouth closes naturally from sand deposited by ocean waves and currents in the spring and usually remains closed until storm flows breach the sand berm during the wet-weather season (September to April). The City manages the height of the sand berm and water levels to keep the Slough closed during the summer months and prevent dry weather flows from impacting water quality at Buccaneer Beach. Water level is managed by intermittently pumping Slough water into an ultraviolet (UV) treatment plant at the La Salina property which is then discharged to Buccaneer Beach. The City does not dredge open the mouth of the Slough unless there is an emergency flood risk to properties upstream during major storm events.

The Slough is a 40- to 50-foot-wide, riprap-lined channel, extending 1,300 feet from the Pacific Street crossing to the South Coast Highway bridge. There are three bridges that cross Loma Alta Slough within the Project area, progressing from west to east: The Pacific Street bridge at the mouth of the Slough and Buccaneer Beach; the NCTD railroad bridge which divides the western and eastern Project Site; and the South Coast Highway bridge marking the upper (eastern) end of the Project Site. The Pacific Street bridge spans the width of the channel, although the mouth of the Slough often closes under this bridge as shown in **Figure 3**. The railroad bridge has four 13-foot-wide supporting piers within the Slough. The South Coast Highway bridge spans the width of the channel.

The elevations of the Slough are low, allowing for tidal inundation in the northwestern area and riverine flooding of the rest of the site during storm events. The back of the existing marsh slopes steeply up to the La Salina WWTP parcel. The area northeast of the Slough is at a higher elevation and is not typically inundated during non-storm conditions. The berm at the mouth of the Slough fluctuates dramatically, and can reach elevations within 3 feet of the bottom of the Pacific Street bridge.



Loma Alta Slough Wetlands Enhancement Project

Figure 1

Loma Alta Slough Project Site



Looking north (towards La Salina Wastewater Treatment Plant) from Buccaneer Park



Looking north from footpath



Looking west (towards triangular parcel) from footpath





Pacific Street Bridge



Railroad Bridge



S. Coast Highway Bridge

D:\181419.00 - Loma Alta Slough Restoration\05 Graphics-GIS-Modeling\Illustrator

SOURCE: ESA, 2020

Loma Alta Slough Wetland Enhancement Project

Figure 3
Bridges over Loma Alta Slough

The La Salina WWTP is adjacent to the Slough, north of the existing marsh. An access ramp from the WWTP goes into the Slough at the northwest corner of the Site, just upstream of the Pacific Street bridge (**Figure 4**) and adjacent to the gravity intake structure that feeds Slough water to the UV treatment system. The access ramp is protected by riprap on either side. The WWTP is slated for decommissioning as soon as the new Buccaneer Lift Station is active. The new lift station is currently at a 30%-complete level of design.

The City of Oceanside received a State Water Resources Clean Beaches Initiative (CBI) grant in 2006 to construct the UV treatment system to reduce fecal indicator bacteria exceedances at the heavily used Buccaneer Beach. During the summer months when the sand berm blocks the Slough from tidal flows, the City operates the pumping system and UV treatment plant to collect and treat water within the Loma Alta Slough prior to discharge at the beach. This system collects water that accumulates in the Slough from dry weather flows through an inlet structure located at the western end of the Project Site. Water is piped from this inlet within the Project Site to a wet well outside the Project Site that then pumps the Slough water to the UV treatment plant. The City operates the pumps and UV treatment plant on a seasonal basis as dry weather flows from the watershed accumulate in the Slough. The City uses a water level gauge to determine timing of pump operation and treatment duration. The UV treatment system does not treat storm flows during the wet season as runoff from the watershed exceeds the designed capacity of the system.

Project Components

The Proposed Project would be implemented in two phases. In Phase 1, the Proposed Project would excavate perpendicular tidal channels from the creek into the existing marsh to improve drainage (**Figure 5**). East of the railroad bridge and south of the creek, the triangular parcel adjacent to Paradise by the Sea RV Park would be graded to improve drainage to the Creek. North of the creek, disturbed infill would be excavated to wetland, transitional, and upland elevation zones. The Site would be graded to marsh elevations with a 50-foot buffer separating the marsh from adjacent development. Perpendicular tidal channels would be excavated to encourage improved flushing of the new marsh. Rip-rap would be strategically removed from some areas along the existing marsh and along the proposed marsh in the northeast of the Project Site.

A new trail would be constructed from South Coast Highway through the upland buffer in the northeast area. The trail would traverse the north of the Project Site and continue west under the railroad bridge to connect to the future Coastal Rail Trail (as proposed under a different project in preliminary design). The trail would be approximately parallel to the adjacent access road north of the Project Site, with a vegetated buffer to help create a separation between the trail and the road. The vegetated buffer will likely be comprised of a selection of lower growing native plants from the upland habitat community, and potentially supplemented with other species to blend with adjacent streetscapes. An overlook would be constructed within the Buel Property to provide views of the marsh.

In Phase 2, the Parent Family Trust property would be graded down to marsh elevations (up to 5 feet of excavation from existing ground elevations) with a 50-foot buffer on the north of the Site (**Figure 6**). The buffer area constructed in Phase 1 would be excavated down to marsh to increase the habitat connection between the properties.

The Proposed Project would also include a Zone Amendment, a General Plan Amendment, and a Local Coastal Program Amendment. As shown in **Figure 7**, the existing General Plan land use designations for the Project Site include: Coastal Open Space (C-OS), Coastal Dependent, Recreational & Visitor Commercial (C-VC), Coastal General Commercial (C-GC), Coastal Transportation and Utility (C-TU), and Coastal Light Industrial (C-LI). The Proposed Project would include a General Plan Amendment to change the land use designations of the eastern Coastal General Commercial (C-GC) designation (in Phase 1) and the Coastal Light Industrial (C-LI) designation (in Phase 2) to Coastal Open Space (C-OS).

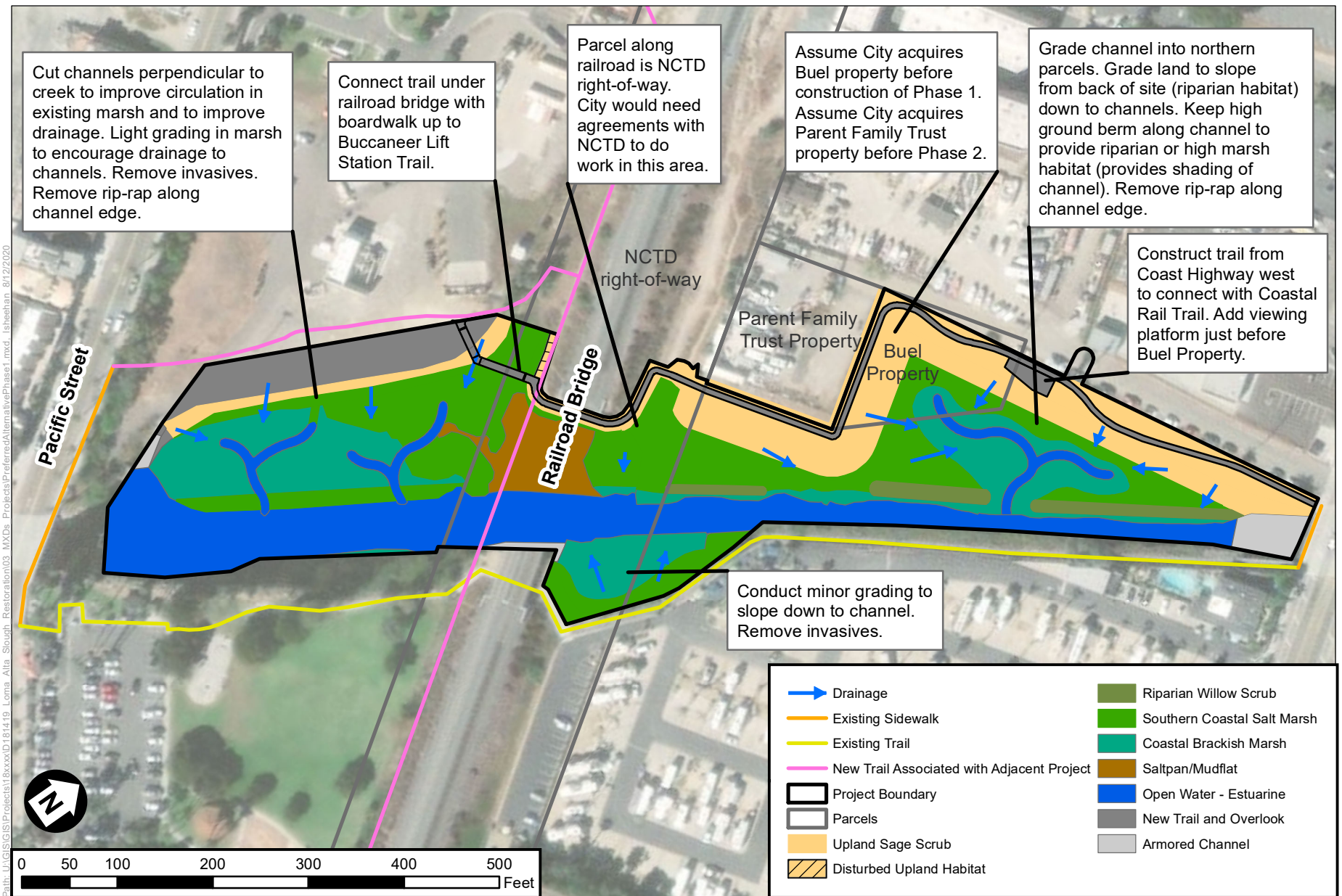


D:\181419.00 - Loma Alta Slough Restoration\05 Graphics-GIS-Modeling\Illustrator

SOURCE: ESA, 2020

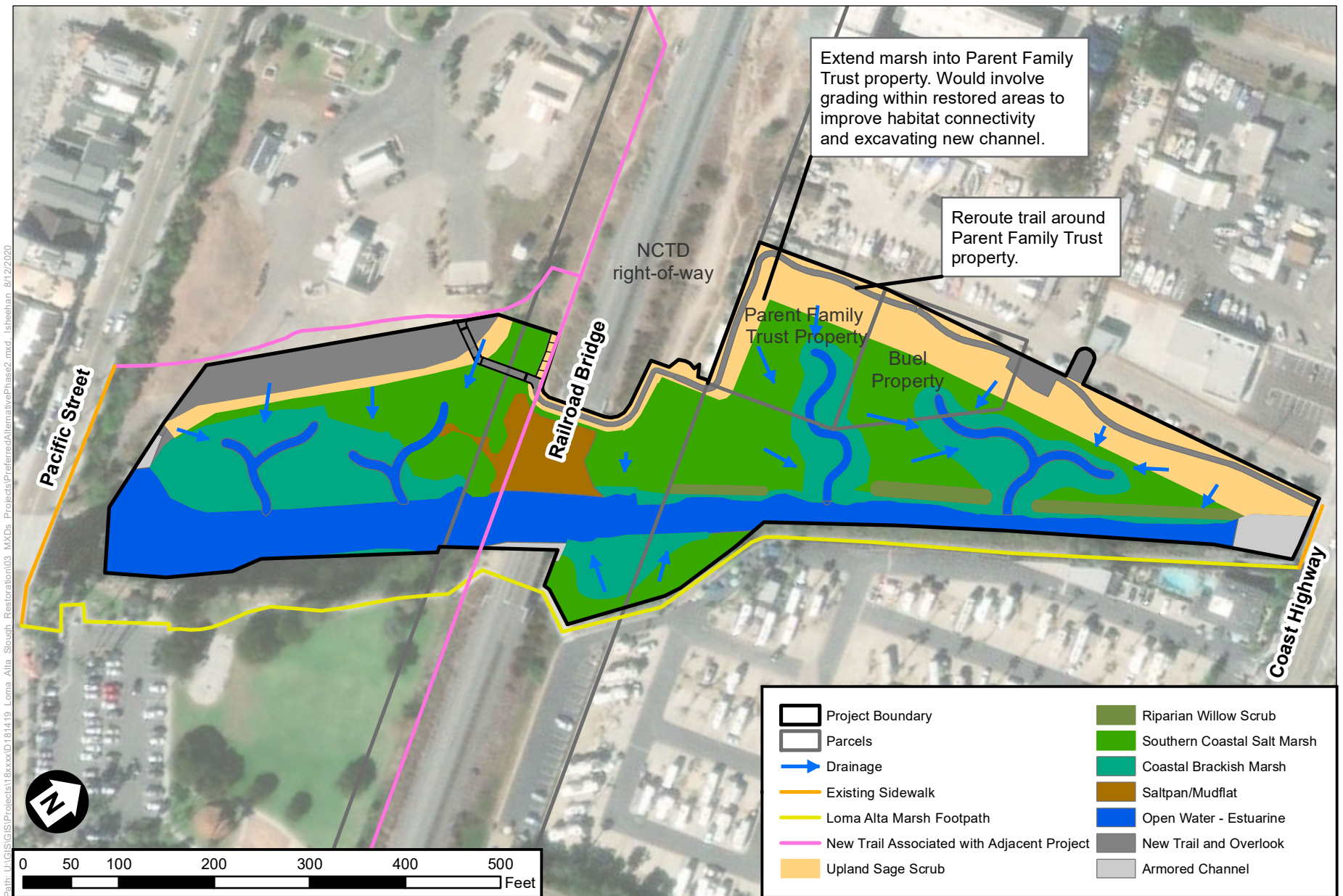
Loma Alta Slough Wetland Enhancement Project

Figure 4
La Salina WWTP Access Ramp into the Slough



Loma Alta Slough Wetland Enhancement Project

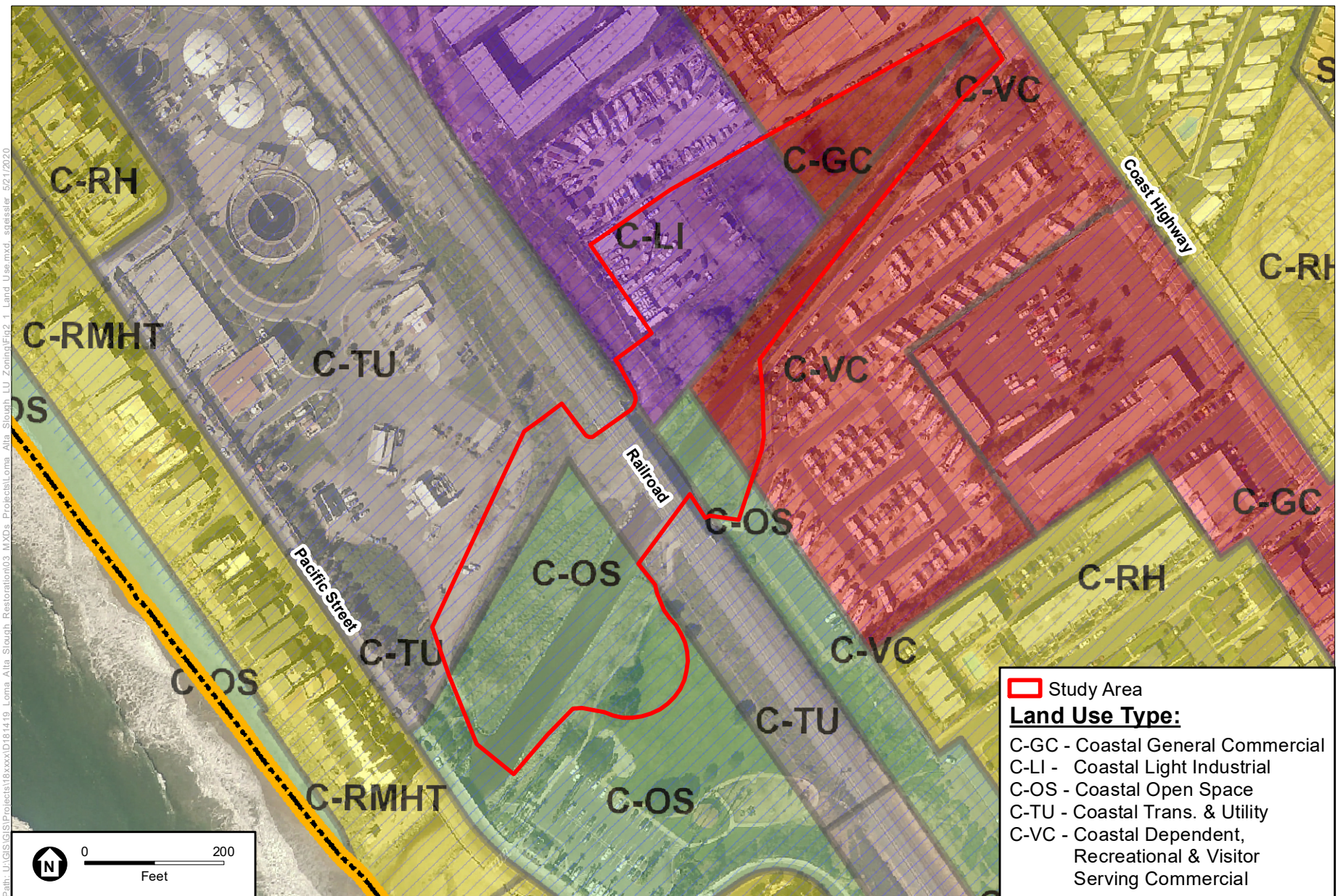
Figure 5
Proposed Project, Phase 1



NOTE: Trail layout is approximate and final design will refine this within the buffer zone.

Loma Alta Slough Wetland Enhancement Project

Figure 6
Proposed Project, Phase 2



SOURCE: City of Oceanside.

Loma Alta Slough Wetland Enhancement Project

Figure 7
City of Oceanside Land Use Map

As shown in **Figure 8**, the existing zoning designations for the Project Site include: Open Space (Coastal) (O), Visitor Commercial (Coastal) (VC), General Commercial (C2), Public Utility and Transportation Zone (PUT), and Light Industrial (Coastal) (M1). The Proposed Project would include a Zone Amendment to change the eastern General Commercial (C2) designation (in Phase 1) and the Light Industrial (Coastal) (M1) designation (in Phase 2) to Open Space (Coastal) (O).

Phasing

The restoration activities would be phased over time based on land acquisition. The City owns all of the land in the Project Site except the Parent Family Trust and Buel properties in the northeast area. Acquisition of the Buel parcel is expected prior to Phase 1 implementation as the City is currently in negotiations with the property owner. The first phase of the Proposed Project would involve restoration of the City-owned properties. If the City is able to acquire the Parent Family Trust property in the future, a second phase of restoration would be conducted to incorporate the property into the rest of the restored site. The timing of construction for the second phase is dependent on multiple variables, including property transfers, removal of infrastructure and related facilities, availability of funding, and permit approvals. While restoration activities would be phased, the Project in its entirety is evaluated in this IS/MND.

Ecosystem Restoration

Marshplain Grading

In the northeast area, the Proposed Project would include excavation of fill to lower grades down to marshplain elevations. The restored marsh would be constructed as a bench, gradually sloping up from the Slough bank through intertidal and supratidal elevations, providing a range of open water depths and wetland habitat. Tidal channels would be excavated to increase drainage and circulation. The channels would be allowed to dynamically erode and deposit sediment within the restored habitat and the confines of any new or existing armoring.

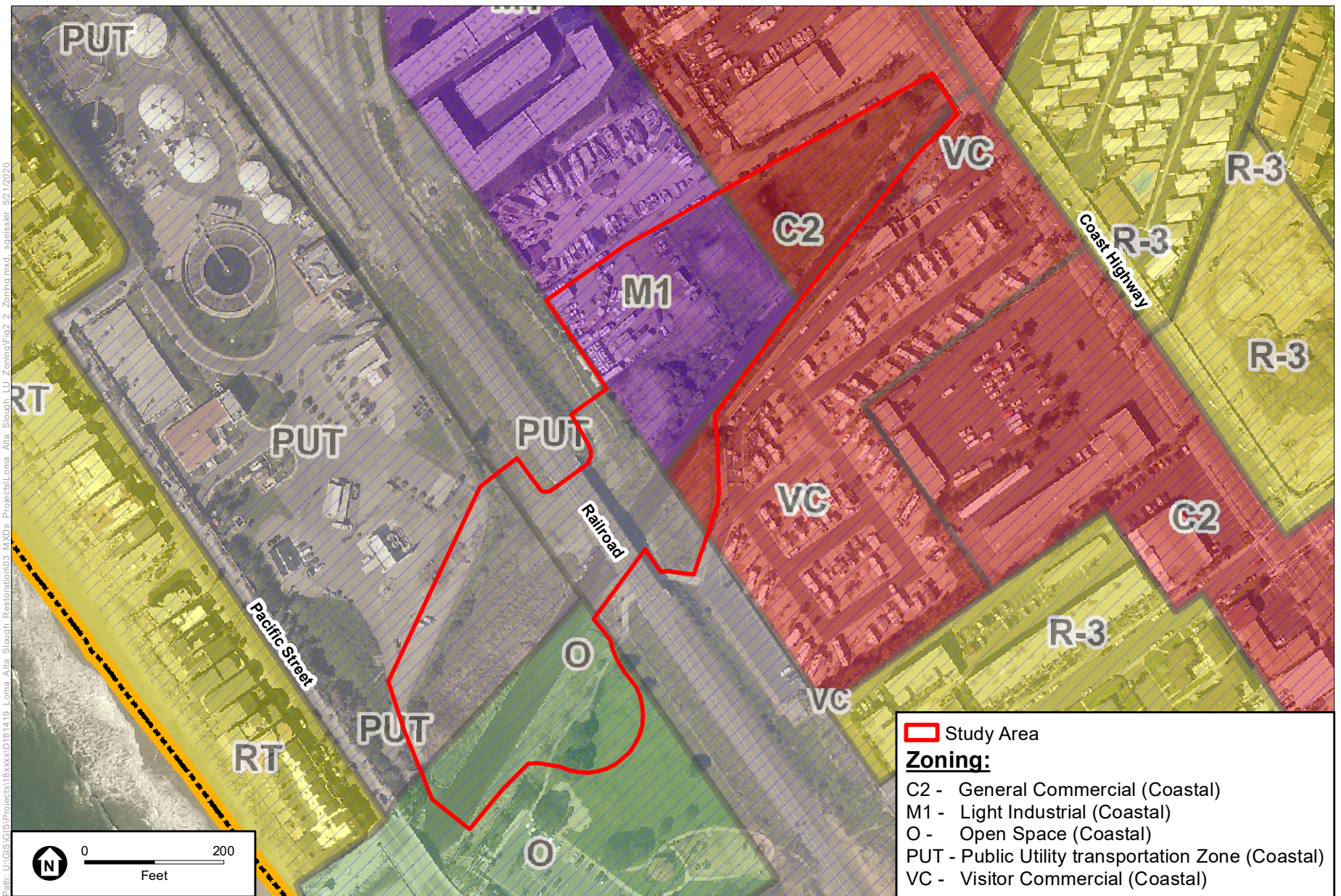
Focused grading would occur in the southeast area to improve drainage and reduce ponded water and stagnation and mosquito breeding conditions frequently observed in that area. Tidal channels would be excavated in the northwest area to increase drainage and circulation with existing marsh avoided as much as possible.

Restored Habitats

The restored wetland areas would be re-vegetated through a combination of seeding and installation of nursery grown container stock. Invasive species would be removed and some planting of marsh species would be done to ensure adequate seed source and to stabilize areas susceptible to erosion. The high marsh, transition zone, and riparian areas would be planted. Temporary irrigation would be installed for high marsh, transition zone, and riparian areas. Restored habitat targets and acreages by phase are presented in **Table 1**.

Upland Transition Buffer Grading

The northern edge of both the existing northwest marsh and the restored marsh in the northeast area would slope up through a 50-foot transitional upland habitat. A 50-foot habitat buffer is required by the City of Oceanside's Subarea Plan between all wetlands and any development. The habitat buffer would provide protection of the restored habitat from more intensive human uses, although trails are allowed within the buffer per the Subarea Plan. Additionally, wetland-upland transition zones provide many ecosystem services, including providing space for wetlands to migrate into with sea-level rise.



SOURCE: City of Oceanside.

Loma Alta Slough Wetland Enhancement Project

Figure 8
City of Oceanside Zoning Map

TABLE 1
PROPOSED HABITAT TYPES BY ALTERNATIVE WITHIN THE SURVEY AREA

Vegetation Community/Land Cover Type	Existing Conditions (acres)	Phase 1 (acres)	Phase 2 (acres)
Riparian and Wetlands	3.09	3.8	4.5
Wetland ¹	1.25	2.3	2.9
Disturbed Wetland	0.33	0.01	0.01
Saltpan/Mudflats ²	0.26	0.2	0.2
Open Water – Estuarine ²	1.17	1.3	1.3
Developed – Concrete/Riprap Channel	0.08	0.08	0.08
Uplands	2.68	1.9	1.3
Upland	0	1.0	0.8
Disturbed Upland	1.65	0.03	0.01
Urban/Developed	1.04	1.0	0.5
Total Acres	5.78	5.8	5.8

¹ Includes coastal brackish marsh and southern coastal salt marsh.

² In calculating the habitat acreages for the Project, mudflats and open water were defined by elevation, which varies from the field methods used to define open water and mudflat under existing conditions. As a result, the Proposed Project appears to increase saltpan/mudflat habitat at the expense of open water.

Note: numbers are rounded to the nearest hundredth of an acre for the table, so totals do not necessarily equal the individual categories.

Grading of Riparian Berms

Berms are common features along the length of riverine and tidal channels in natural settings. This is due to the sediment that drops out of the water column when the channel overtops and inundates the marsh or floodplain. As the water expands into the floodplain, it slows down, and sediment that was transported in the water falls out of suspension. Overtime, this can build up to form a berm. To mimic this natural process, riparian berms would be graded up to 1 to 1.5 feet above the marshplain along the channel in the northeast area of the Project Site.

Based on the salinity data and existing fringing marsh vegetation, which indicates freshwater species can establish in this area (as detailed in the Hydrologic and Hydraulic Study in Appendix A), it is expected that the eastern (upstream) area of the Project Site could support willows, which would provide some channel shading and a unique habitat for the area. Shading can provide a water quality benefit by lowering the water temperature, and, therefore, reducing algae growth in the Slough. While willows are not part of a typical marshland planting palette, the unique hydrology of the Site is expected to support them at Loma Alta Slough. The willows would be planted along the riparian berms in the northeast area of the Project Site.

Tidal Channel Excavation

New channels, approximately 10-feet wide, would be excavated to between 2 – 4 feet below the marshplain to create a sinuous and branching network of channels extending from the Slough through the wetlands. The location of the new channels is shown in Figure 5. The channels would likely be intertidal when the mouth of the Slough is open (e.g., fully drain at low tide), but pond and retain water when the mouth of the Slough is closed. New channels proposed for the existing marsh areas would be strategically placed to maximize drainage and habitat benefit through regular ebb and flow of the Slough waters into the back marsh area. This feature would aid in reducing stagnation of the back marsh in the summer months that contributes to poor water quality and vector concerns from mosquito breeding.

Riprap Removal or Improvement

Results of the scour analysis at the Site (Hydrologic and Hydraulic Study in Appendix A) suggest that in many locations vegetation is likely sufficient to stabilize the channel banks and overbanks, and riprap would not be needed along the marsh edge. In areas where the channel shear stresses are greater and could result in erosion, a combination of rock slope protection (buried as feasible) and vegetated channel banks (including brush mats) would be used to provide both channel stability and improved habitat. The Proposed Project would:

- Leave riprap in place to protect bridge piers and the access ramp from La Salina WWTP
- Leave riprap in place on the southeast channel bank to protect the existing trail and Paradise by the Sea RV park.

Public Access

Public access improvements and visitor amenities would include construction of new pedestrian trails, educational or interpretive features, and viewing areas with overlooks (Figures 5 and 6). These improvements would develop and enhance public access, recreation, and educational opportunities within the Project Site, while balancing the need for protection of sensitive habitats.

Trails and Boardwalk

As previously mentioned, the Proposed Project would include a new trail along the north boundary of the northeast area, which would connect under the railroad bridge to the future Coastal Rail Trail. The proposed trail would connect to Coast Highway. The trail would be 6 feet wide and 1,050 feet long and made of decomposed granite paving. Where the trail is parallel to the adjacent road, a vegetated buffer or security barrier (such as a fence or wall) would be used to provide a physical and visual separation from the streetscape. The buffer would be composed primarily of low-growing native upland vegetation to blend into the restoration area, while preserving views into the restoration area to enhance public safety.

Just west of the railroad abutment, the trail would connect to a boardwalk 90 feet long across the marsh, sloping up to meet the trail for the Buccaneer Lift Station project. The boardwalk would be 8 feet wide to accommodate a handrail, if needed. The boardwalk surface would be approximately 2.5 feet above the lowest ground elevation of the wetland to accommodate water elevation fluctuations under normal (non-storm) flow conditions.

The trail network would be designed to meet Americans with Disabilities Act (ADA) guidelines for accessible paths of travel, which includes consideration of trail width, slope, surface stability, landings at intersections, and other elements. Trail slopes less than 5% in the direction of travel, with less than 2% cross slope should be easily achievable along the north section of the site. The trail up to meet the Coastal Rail Trail will traverse a steeper slope, which may require a series of ramps and landings with handrails to meet ADA guidelines.

Overlook

The Proposed Project would include a marsh overlook platform in the northeast area within the Buel Property. The overlook would be positioned along the trail to provide views and include educational information about Loma Alta Slough. The overlook would include interpretive signage and provide a stopping point for pedestrians along the trail. The overlook and trail providing access to it would be built in compliance with ADA guidelines. The overlook would be designed to provide a minimum 60-inch clear area for resting and viewing located off of the trail. Vertical level changes between the trail and the overlook should be less than ½-inch, with a beveled edge to smooth the transition.

Educational or Interpretive Features

Areas along the trail would be designated in the northeast area to provide visitors with opportunities to learn about wetland habitats, animals, and the larger Loma Alta Creek watershed. Educational art pieces may also be included. This feature provides continuity with the existing Loma Alta Marsh Footpath on the

southern perimeter of Loma Alta Slough. ADA guidelines would also be included in the design of educational or interpretive features.

Construction Process

Construction would include: mobilization and demobilization, site preparation, clearing and grubbing, earthwork, riprap removal, soil transport across and off-site, soil remediation (if necessary), revegetation, construction of trails and the overlook, and installation of signs and art. Earthwork would include excavation, grading, and fill placement to create marshplain, tidal channels, upland transition buffer, and berm habitats.

Schedule

Construction of the Project is anticipated to occur in the summer to early fall of 2021 (depending on winter storm flow conditions) and would take 2 to 4 months for Phase 1 and up to 2 months for Phase 2 to complete. Phase 2 would be constructed after the Parent Family Trust property is acquired by the City. **Table 2** shows the proposed construction schedule for the Proposed Project. Each phase would take one season to complete construction activities, but multiple years may occur between phases.

TABLE 2
RESTORATION SCHEDULE

Phase	Activity	2021			
		July	August	September	October
Phase 1	Site Preparation				
	Earthwork				
	Riprap removal				
	Soil Off Haul				
	Revegetation				
	Trail Construction				
<i>Timing of Phase 2 is dependent on City acquisition of the Parent Family Trust Property and is expected to be several years after Phase 1 is completed.</i>					
Phase	Activity	2022 or later			
		July	August	September	October
Phase 2	Site Preparation				
	Earthwork				
	Soil Off Haul				
	Revegetation				
	Trail Realignment & Construction				

Earthwork Quantity Estimates

Table 3 summarizes the earthwork quantity estimates for the Proposed Project by phase. The final volume of fill excavation would depend on the final design and the actual conditions during restoration (e.g., the compatibility of excavated soils). A range of potential fill volumes are analyzed in this document.

TABLE 3
APPROXIMATE EARTHWORK SOIL VOLUME

Phase	Area	Estimated Earthwork Volumes in cubic yards		
		Cut	Fill From On Site	Cut/Fill Balance Transport (Cut minus Fill)
Phase 1	Northwest	400 to 800	(200) to (300)	100 to 600
	Northeast	8,600 to 17,000	(1,000) to (1,500)	6,900 to 16,000
	Southeast	200 to 1,000	0 to (100)	100 to 1,000
	<i>Subtotal</i>	<i>9,200 to 18,800</i>	<i>(1,200) to (1,900)</i>	<i>7,300 to 17,600</i>
Phase 2	Northeast	1,200 to 3,000	(300) to (600)	600 to 2,700
	<i>Subtotal</i>	<i>1,200 to 3,000</i>	<i>(300) to (600)</i>	<i>600 to 2,700</i>
Total		10,400 to 21,800	(1,500) to (2,500)	7,900 to 20,300

Excavation in the Project Site to lower the area to marshplain is expected to generate between 7,900 and 20,300 cubic yards of soil, depending on final marshplain grading. In Phase 1, approximately 7,300 to 17,600 cubic yards of soil would be excavated and offhauled. In Phase 2, approximately 600 to 2,700 cubic yards of soil would be excavated and offhauled. Export would occur via trucks with disposal at local landfills, the most likely of which could include the El Sobrante Landfill in Corona, California.

Construction Methods and Equipment

Construction of the Proposed Project would begin with site preparation, including clearing and grubbing and installation of wildlife exclusion fencing to isolate the work area from adjacent habitat as needed. Material generated during clearing and grubbing would be stockpiled for future placement in the upland buffer or berms as possible, or hauled to an offsite disposal area. Following site preparation, construction would continue with the excavation and grading of tidal channels and marshplain. Hydrologic controls such as flow diversion structures, weirs, or coffer dams are not expected to be required for construction (see Construction Equipment). Once site grading is complete, revegetation of marshplain and upland habitats would occur, as well as installation of the trail surfacing, overlook structure, and other public access features.

Clearing and Grubbing

Vegetation would be biologically monitored, cleared, and grubbed prior to grading. Native plants and seeds/cuttings may be salvaged and reused for revegetation of restored areas. Invasive-nonnative plants would be stockpiled on the Project Site and treated (e.g., composted). If possible, the preferred approach would be to bury non-native plant material in upland fill areas at a depth below which the nonnative vegetation or seedbank could reestablish. Non-native plant material may also be exported and disposed of off-site as described above.

Earthwork and Off-Haul

Earthwork within the site consists of excavation to create marshplain and tidal channels and placement of excavated material to create upland transition habitat and public access features. As noted above, the restoration grading is not balanced onsite and will require offsite disposal. Depending on the lagoon and groundwater elevations during construction, drying of the excavated material may be required prior to hauling the material for disposal. A temporary staging and loading area would be established by the contractor within the project grading footprint.

Riprap Removal

Removal of riprap would likely be conducted from the landside with excavators reaching into the water to remove the rock. In the existing marsh in the northwest area, an access road may need to be constructed along the south edge of the marsh (along the creek) to allow equipment to move back and forth along the bank. Mats would be used if possible. Aquatic equipment could be used to avoid impacts to the existing marsh, but would likely result in impacts to the creek bottom. The UV treatment plant pumps could be used to lower water levels for this work. Additionally, the lagoon could be breached to lower water levels, with permitting agency approval, if needed.

Soil Remediation

Based on the Phase I Environmental Site Assessment¹ findings at the Buel Property, there is the potential that the Project Site has been impacted from past land uses. These include the potential presence of metals, petroleum hydrocarbons and byproducts in on-site soils and sediment. Impacted soils may therefore require management and potential remediation depending on constituent concentrations and regulatory action levels. The concentration and extent of impacted soils will be better defined as part of further investigations prior to start of construction of Phase 1. Potential remediation activities may include in-situ treatment/remediation, removal and disposal at a permitted facility, and/or stabilization and containment. Potential remediation approaches, if required, would be developed in accordance with state and federal regulations to further define the levels and extent of potential contamination that will inform the project design and remediation approach.

Revegetation

Planting, seeding, and other revegetation techniques would be used after grading to create a mosaic of native wetland and upland transition habitats that would provide valuable ecosystem functions (refer to the Habitat Restoration Plan in Appendix B for revegetation palette details). Planting actions would include planting of sod fragments, rhizomes and plugs, planting container plants, and seeding. Graded areas would be planted as rapidly after construction as feasible to stabilize the newly graded soil while also being timed with late fall/early winter rain events. Areas not planted with salvaged plants or container stock, would be drill seeded, broadcast seeded, or hydroseeded as appropriate to each habitat. If seed is not applied until just before the onset of winter rains, the seeded areas would be covered with straw mulch, tacked down and monitored throughout the first rainy season. If seed is applied earlier, it would be irrigated such that vegetation is sufficiently established to protect against erosion by the onset of winter rains.

Water Sources for Restoration and Irrigation

Temporary irrigation would be installed for high marsh, transition zone, and riparian areas until vegetation is established (e.g., for 3-5 years after restoration). Water sources for the irrigation could come from either the existing domestic water main along the public road west of S. Coast Highway adjacent to the northeast area, or from a temporary recycled water connection from the La Salina WWTP property in the northwest area. The water source used is highly dependent on the status of the La Salina WWTP decommissioning at the time of Project implementation.

Domestic Water Meters

Water meters can be installed by the City of Oceanside's Water Utilities Department from the existing domestic water main in the middle of the road to the north of the Project Site. Construction impacts would be limited to the one to two days required for a meter and lateral installation.

Recycled Water Meters

A meter service connection to existing recycled water mains could be provided, if the recycled water main is expanded closer to the Project Site before construction begins. Alternatively, a temporary surface connection routed from the La Salina WWTP site owned by the City could supply recycled water to the

¹ Environmental assessments of soils are conducted in two phases.

restoration planting areas. The quality of the recycled water is intended for irrigation use and meets California Title 22 standards. Depending on the tolerance of the proposed plant palette for the quality of recycled water available, the water service lifespan could be continued during the plant establishment period.

Construction Equipment

Table 4 summarizes the construction equipment needed for the Proposed Project. Much of the Proposed Project's earthwork would be accomplished by traditional land-based equipment (e.g., scrapers and excavators); however, wetland restoration earthwork may also require some special equipment and implementation methods, as high groundwater and weak soils can preclude use of traditional land equipment. To facilitate construction of the Project elements, the following equipment may be utilized:

- Low ground pressure (LGP) equipment: smaller, lighter equipment with large surface area tires or treads that reduce bearing pressure.
- Mats: Timber planks lashed together or PVC mats used for access across soft soils
- Long reach excavator: Track or wheel mounted excavator with a long arm to allow extended reach to over 40 feet.

Soil transport within the project site would be accomplished using track pulled scrapers, conventional big wheel scrapers, loaders, haul and wheel dump trucks, track excavators and dozers, trucks, or other low ground pressure equipment. Off-haul of excess material would be accomplished with wheel dump trucks.

Additional equipment anticipated for construction includes: mowers, short reach excavators, water trucks, compactors, drill seeders, and hydroseeders.

**TABLE 4
CONSTRUCTION EQUIPMENT**

Construction Element	Equipment	Description
Site Preparation	Mower	Clear vegetation
	Track Pulled Scraper Conventional Scraper Bulldozer	Clear and grub excavation and fill placement areas Haul clear and grub material
	Hand tools	Remove vegetation in sensitive habitats, install exclusion fencing
Earthwork and Off-Haul	Excavator	Excavate channels and marshplain
	LGP Track Dump Truck Wheeled Dump Truck	Haul material within project site and for offsite disposal
	Track Pulled Scraper Conventional Scraper Bulldozer/Grader	Place fill material, finished grading
	Compactor	Compact Material
	Water Truck	Moisture condition fill material
Riprap Removal	Excavator	Remove riprap and regrade channel banks
Revegetation	Drill Seeder Hydroseeder	Revegetation

Operation and Maintenance Activities

Operation and maintenance activities could include monitoring and as-needed maintenance of restored habitat and vegetation and Loma Alta Slough and the continuation of other routine operation and maintenance activities (e.g., pick up of trash, maintenance of trails).

Monitoring and Adaptive Management

The complexity of a wetland lagoon restoration, with the presence of sensitive habitats and species, requires implementation of restoration within a monitoring and adaptive management framework. The adaptive management approach relies on monitoring data to regularly assess progress of the site towards achieving the Project goals. If the data shows the Project is off-track, certain actions are taken (e.g., tweaking techniques) to achieve the Project goals.

Restoration areas will likely be subject to a long-term vegetation and biological monitoring program as a condition of the discretionary approvals and permits that apply to the Project (refer to the Habitat Restoration Plan in Appendix B for revegetation details). These activities may include but are not limited to sensitive species surveys, quantitative vegetative success criteria, and water quality monitoring.

Habitats

Vegetation maintenance, irrigation, and weeding would be required for all habitats after restoration (refer to the Habitat Restoration Plan in Appendix B for revegetation details). Removal of invasive species would occur on the Project Site in perpetuity, possibly through the combination of a volunteer program and long-term management of the Site using methods similar to those used during implementation.

Erosion

Some gradual channel migration and periodic localized bank erosion and sedimentation would be expected to occur as is typical for natural creek and estuary systems. The restoration would be designed so that (1) this level of change would be acceptable for the habitat restoration and flood risk management and (2) the channel would not require regular maintenance.

In locations where armoring would be installed or left in place, the scour protection would be inspected and maintained as-needed. In the event that any buried armoring becomes exposed after a storm, natural processes would be allowed to rebury/revegetate those areas (e.g., vegetation recruitment in remaining soils, encouraging deposition) and no maintenance would be required. During extreme storm events (e.g., 100-year storm), erosion may occur that could require maintenance (as it could under existing conditions as well).

Trash

Trash removal would occur as needed within the restored wetlands by hand. Trash removal would likely be needed after major storm events or the first storm of the season when trash is washed from the watershed down to the Slough. Following restoration activities, trash removal would be carried out primarily by hand labor without the use of mechanized equipment to prevent impacts and/or displacement of sensitive biological resources. Any activities requiring the use of mechanized equipment or vehicles to access the area may require approval by applicable resource agencies.

Vector Control

Vector control activities currently occur within the existing wetland in the northwest area of the Project Site, known as Site 336. Site 336 is part of the County's Department of Environmental Health (DEH) and is routinely treated for mosquitoes. Typically, standing water is present in several areas of the northern bank of the existing marsh within the Project Site. County DEH representatives have identified mosquito larvae in these ponded areas.

The restored and enhanced wetlands would be designed to provide improved drainage and tidal flushing (when the mouth of the lagoon is open) to support tidal wetland functions, which would also discourage vector breeding; however, it is possible that vector control within certain areas of the restored wetland may need to continue. New tidal channels installed as a component of the Project will be strategically placed to assist with regular flushing and water movement in areas historically subject to stagnation.

Public Access

Maintenance and repair of trails and the overlook would be performed as needed. As the restoration habitat matures, vegetation management may be necessary to maintain open trail corridors and good sight lines for user safety. Minor repairs and light grading work to the 6-foot wide decomposed granite trail may be required following multiple years of use and exposure to winter rains.

9. SURROUNDING LAND USE(S) & PROJECT SETTING: See detailed Project Description above.

10. OTHER REQUIRED AGENCY APPROVALS:

Restoration activities associated with the Proposed Project would require discretionary approval from multiple agencies. These agencies and their permits/approvals are described in **Table 5**.

**TABLE 5
REQUIRED PERMITS AND APPROVALS**

Approving Agency	Approval
City of Oceanside	Adoption of the Final IS/MND; zone amendment; general plan amendment, development plan approval; issuance of grading permits and encroachment permits
San Diego Regional Water Quality Control Board	Section 401 Permit, National Pollution Discharge Elimination System Construction General Permit, Storm Water Pollution Prevention Plan
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement
North County Transit District	Encroachment permits, easement or property transfer
California Coastal Commission	Consolidated Coastal Development Permit
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit, Rivers and Harbors Act Section 10 Permits

11. PREVIOUS ENVIRONMENTAL DOCUMENTATION: None

12. CONSULTATION: *(INSERT ALL APPLICABLE PERSONS/AGENCIES CONSULTED IN THE DOCUMENTS PREPARATION)*

California Department of Transportation (Caltrans), NCTD, and applicable California Native American tribes.

13. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The project would not affect any environmental factors resulting in a Potentially Significant Impact or Potentially Significant Impact Unless Mitigated. A summary of the environmental factors potentially affected by this project, consisting of a Potentially Significant Impact or Potentially Significant Impact Unless Mitigated, include:

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Tribal Cultural Resources |

14. ENVIRONMENTAL CHECKLIST

This section analyzes the potential environmental impacts which may result from the proposed project. For the evaluation of potential impacts, the questions in the Initial Study Checklist (Section 2) are stated and answers are provided according to the analysis undertaken as part of the Initial Study. The analysis considers the project's short-term impacts (construction-related), and its operational or day-to-day impacts. For each question, there are four possible responses. They include:

1. No Impact. Future development arising from the project's implementation will not have any measurable environmental impact on the environment and no additional analysis is required.
2. Less Than Significant Impact. The development associated with project implementation will have the potential to impact the environment; these impacts, however, will be less than the levels or thresholds that are considered significant and no additional analysis is required.
3. Potentially Significant Unless Mitigated. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.
4. Potentially Significant Impact. Future implementation will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

	Potentially Significant	Potentially Significant Unless Mit.	Less than Significant	No Impact
14.1 AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Have a substantial adverse effect on a scenic vista?* **Less Than Significant Impact.**

According to the City's General Plan, the City has identified views of the Pacific Ocean as an important scenic resource (City of Oceanside 2002b). Views of the ocean are visible from several vantage points within the Project Site (specifically along the trail near Buccaneer Park and from Coast Highway), while slightly obstructed by bridges and intersecting development. The Proposed Project would enhance and restore the Loma Alta Slough in two phases, through the creation of tidal channels, restoration of marsh areas, rip rap removal, and construction of new trails and a marsh overlook platform. Construction of the Proposed Project would require the use of land- and water-based construction equipment, which would be considered a temporary, short-term visual effect. Once construction is complete, the Project Site would be returned to a naturalized state. Periodic required maintenance may occur on the Project Site, however,

these activities would be temporary, minimal in nature, and would not have a substantial adverse effect on a scenic vista. Therefore, less than significant impacts would occur related to a substantial adverse effect on a scenic vista.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? **Less Than Significant Impact.***

The State Scenic Highway Program is managed by the Department of Transportation (Caltrans) in order to protect and enhance California's natural scenic areas along portions of the state highway system. The nearest highways to the Project Site are State Route (SR-) SR-78, SR-76 and I-5. SR-78 is located approximately 0.9 miles southeast of the Project Site, SR-76 is located approximately 2 miles north of the Project Site, and I-5 is located approximately 0.6 miles east of the Project Site. The portion of SR-78 that runs southeast of the Project Site does not have a scenic highway designation. However, SR-76 and I-5 are both eligible for becoming a state scenic highway but are not officially designated. Although these highways are eligible for a state scenic highway designation, the Project Site is not visible from these highways. In addition, as detailed within Response 14.1(a) above, once construction is complete, the Project Site would be returned to a naturalized state consisting of marsh areas, side channels, and trails. Therefore, the Project would not substantially damage scenic resources along a state designated scenic highway, and impacts would be less than significant.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings? **Less Than Significant Impact.***

The Proposed Project would enhance and restore the Loma Alta Slough. The Project Site is located in an urbanized and built-out area in the southern coastal portion of the City of Oceanside. Existing land uses in the surrounding area are primarily industrial, commercial, and open space. During construction, the Project Site would include construction equipment and earth moving activities, however, this change in visual character would be temporary and would not substantially degrade the existing visual character or quality of the Project Site. Once construction is completed, the existing and expanded Slough would be naturalized with native vegetation and recreation trails along the perimeter. The Project would also include an overlook platform positioned along the trail to provide views and include educational information about Slough. Other interpretive art and educational features would be placed along the trail, which would enhance the visual character of the Project Site and surrounding areas. As the Proposed Project would enhance and restore the Slough, impacts would be less than significant related to the degradation of the existing visual character or quality of the Project Site and its surroundings.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **No Impact.***

The Proposed Project would enhance and restore native habitat throughout the Project Site. Construction would include site preparation, clearing and grubbing, earthwork, revegetation, and other activities. No nighttime construction is anticipated. Once construction is complete, the Project Site would be revegetated and include recreational trails with an overlook and educational features. The Proposed Project would not include any reflective surfaces, and would not create substantial light or glare during the day. Further, the Proposed Project would not include lighting (including along the recreational trails), and therefore would not create any potential impacts regarding new sources of substantial light. Thus, no impact would occur related to a new source of light or glare which would adversely affect day or nighttime views in the area.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.2 AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA. Resources Agency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No Impact.***

The Project Site is located within an urbanized area primarily surrounded by commercial, industrial, and open space uses. No farmland, agricultural uses, or related operations are present within the Project Site or surrounding areas. According to the California Department of Conservation San Diego County Important Farmland 2016 Map, pursuant to Farmland Mapping and Monitoring Program (FMMP), there are no farmlands located within the vicinity of the Project Site (DOC 2016). Therefore, the Project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and no impact would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? **No Impact.***

The Proposed Project is located in an area zoned as Open Space (Coastal), Visitor Commercial (Coastal), General Commercial, Public Utility and Transportation Zone, and Light Industrial. Agricultural designations do not occur within the Project area and no Williamson Act contracts apply. Therefore, implementation of the Proposed Project would not result in any conflicts with existing zoning for agricultural use or a Williamson Act Contract, and no impact would occur.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? **No Impact.***

According to the California Department of Fish and Wildlife (CDFW) Timberland Conservation Program Map, the Project Site does not contain timberland or timberland zoned Timberland Production (CDFW 2015). As discussed above in Response 14.2(b) above, the Project Site is not zoned as forest land or timberland. As such, there would be no conflict with existing zoning for timberlands or timberland zoned Timberland Production, and no impact would occur.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?* **No Impact.**

As discussed above in Response 14.2(c), the Project Site does not contain any forest land. The Proposed Project involves enhancement and restoration of the Loma Alta Slough. The Proposed Project would not result in the loss of forest land or convert any forest land to non-forest use. Therefore, no impact would occur.

e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?* **No Impact.**

As previously stated, the Project Site does not include agricultural uses or forest land. Thus, implementation of this Project would not result in changes in the environment, which would result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.3 AIR QUALITY. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under the applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Conflict with or obstruct implementation of the applicable air quality plan?* **Less Than Significant Impact.**

The Project Site is located within the San Diego Air Basin (SDAB), which is governed by the San Diego Air Pollution Control Board (SDAPCD). The SDAPCD is responsible for regulating most air pollution sources as the local agency, with the exception of those that are regulated by the California Air Resources Board (CARB) or United States Environmental Protection Agency (USEPA), like motor vehicles. The SDAPCD is also responsible for operating and maintaining ambient air quality stations throughout the county, which are used to monitor ambient air pollution levels. These air pollution levels for the "criteria air pollutants" are compared against the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). These standards are designed to for the protection of human health.

The San Diego Association of Governments (SANDAG) is the agency responsible for public planning, transportation and research for use in policy development related to growth, transportation planning and construction, environmental management, housing and other topics. SANDAG and the SDAPCD are tasked with producing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB.

A consistency determination is important in local agency project review by comparing local planning projects to the Regional Air Quality Strategy (RAQS) in several ways. It fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans and significantly unique projects need to go under a consistency review due to the RAQS being based on projections from local General Plans. Therefore, projects that are consistent with the local General Plan and do not create significant air quality impacts are considered consistent with the air quality-related regional plan. Specifically, the Proposed Project would be consistent with Goal I, Air Quality, of the General Plan's Environmental Resource Management Element, in which the City would continue to

cooperate with County, State, and federal agencies in continuing programs of air quality improvement. Because the Proposed Project is consistent with the goals of the City of Oceanside General Plan, and would not produce long-term significant quantities of criteria pollutants or violate ambient air quality standards, the Proposed Project is considered to be consistent with the RAQS and a more detailed consistency analysis is not warranted.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? **Less Than Significant Impact.***

The following conservative calculations demonstrate that the potential air emissions associated with construction and operations of the Proposed Project, when compared to screening level emissions thresholds in the County of San Diego CEQA guidance, would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under any applicable federal or state ambient air quality standard. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to calculate construction and operation emissions associated with the Proposed Project.

Construction Emissions

The 5.8-acre Project Site extends between S. Coast Highway and Pacific Street. Construction of the Project would occur July through October 2021 for Phase 1 and September through October 2022 for Phase 2 pending acquisition of the Phase 2 properties by the City of Oceanside.

Construction would include: mobilization and demobilization, site preparation, clearing and grubbing, earthwork, riprap removal, soil transport across and off-site, soil remediation (if necessary), revegetation, construction of trails and the overlook, and installation of signs and art. Earthwork would include excavation, grading, and fill placement to create marshplain, tidal channels, upland transition buffer, and berm habitats. Construction emission sources are generally limited to offroad equipment, haul trucks and worker vehicles.

Excavation in the Project Site to lower the area to marshplain is expected to generate between 7,900 and 20,300 cubic yards of soil, depending on final marshplain grading. In Phase 1, approximately 7,300 to 17,600 cubic yards of soil would be excavated and offhauled. In Phase 2, approximately 600 to 2,700 cubic yards of soil would be excavated and offhauled. Export would occur via trucks with disposal at local landfills, the most likely of which could include the El Sobrante Landfill in Corona, California. The upper boundary of expected soil excavation and removal was assumed as a conservative basis for emissions calculations purposes. **Table 6**, below, shows the worst-case summer or winter daily criteria pollutant emissions produced from construction of the Proposed Project as calculated using CalEEMod.² Since Phase 1 and Phase 2 could potentially overlap, Table 6 shows the combined construction emissions expected from the potential overlapping construction schedules.

TABLE 6
PROPOSED PROJECT CONSTRUCTION CRITERIA POLLUTANT EMISSIONS (PHASE 1 AND 2 OVERLAPPING)

	ROG	NOx	CO	SO2	PM10	PM2.5
Construction Emissions (lb/day)	13.3	144.8	86.7	0.17	53.7	30.0
SD County Thresholds (lb/day)	75	250	550	250	100	55
Exceed Threshold?	no	no	no	no	no	no

Note: Since Phase 1 and Phase 2 could potentially overlap, this table shows the combined construction emissions expected from the potential overlapping construction schedules.

Source: ESA 2020 (Appendix C)

² In CalEEMod, earthwork, riprap removal and soil offhaul were grouped under a phase titled "earthwork" and revegetation and trail construction were grouped under a phase titled "trail CSTN".

Table 6 shows that the worst-case, conservatively estimated construction criteria air pollutant emissions would not exceed the corresponding CEQA emissions thresholds for any day of construction. As a result, potential worst-case construction emissions impacts would be less than significant. For more information, related to air quality emission calculations, including CalEEMod input parameters and output files, please refer to Appendix C.

Operations Emissions

The Proposed Project is expected to produce minimal long-term increase in criteria pollutant emissions associated with the operations of the Proposed Project. The increase is primarily due to a small increase in emissions from Project-generated vehicle trips to the wetlands (both for visitors and general maintenance). **Table 7**, below, shows the worst-case summer or winter daily criteria pollutant emissions produced from operations of the Proposed Project as calculated using CalEEMod defaults. The CalEEMod defaults were assumed to be conservative for the "City Park" land use because it assumes higher peak daily traffic for weekend trips, which is then compared to the corresponding CEQA threshold.

TABLE 7
PROPOSED PROJECT OPERATIONS CRITERIA POLLUTANT EMISSIONS

	ROG	NOx	CO	SO2	PM10	PM2.5
Operations Emissions (lb/day)	0.22	0.83	2.20	0.01	0.60	0.17
SD County Thresholds (lb/day)	75	250	550	250	100	55
Exceed Threshold?	no	no	no	no	no	no

Note: The CalEEMod defaults were assumed to be conservative for the "City Park" land use because it assumes higher peak daily traffic for weekend trips, which is then compared to the corresponding CEQA threshold.

Source: ESA 2020 (Appendix C)

Table 7 shows that the worst-case, conservatively estimated operations criteria air pollutant emissions would not exceed the corresponding CEQA emissions thresholds. Therefore, potential operations emissions impacts would be less than significant. For more information, related to air quality emission calculations, including CalEEMod input parameters and output files, please refer to Appendix C.

It should be noted that these construction and operation emissions are conservative in nature and do not incorporate any potential emissions reductions associated with idling limitations, ground watering, etc., associated with local, state or federal regulations (like SDAPCD dust regulations). This analysis also does not include any potential air quality benefits associated with restoring the Project Site into a wetland. Therefore, the Proposed Project emissions are likely to be less than those presented in Tables 6 and 7. It should also be noted that CalEEMod implements the Emission FACTor (EMFAC) model version 2014 (or EMFAC2014) factors for use in onroad emission calculations associated with construction and operation. A newer version of the model, EMFAC2017, has recently been adopted by the CARB; however, it has not yet been implemented into CalEEMod. Because onroad emissions are a relatively small contributor to the Proposed Project, the conclusions in Tables 6 and 7 are not expected to change with any potential slight increase or decrease in onroad emissions calculated using the EMFAC2017 emission factors.

c) *Expose sensitive receptors to substantial pollutant concentrations?* **Less Than Significant Impact.**

Sensitive populations (i.e., children, senior citizens and acutely or chronically ill people) are more susceptible to the effects of air pollution than are the general population. Land uses considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. There are some sensitive receptors in proximity to the Project Site. Construction activities would occur nearby to residences (Paradise by the Sea RV park) to the southeast of the Proposed Project.

There are no stationary sources of criteria pollutant emissions generated by operation of the Proposed Project, and very limited additional vehicle traffic as estimated in Table 7. Site preparation, grading and

other construction activities of the Proposed Project could generate emissions of fugitive dust (PM₁₀ and PM_{2.5}) and diesel exhaust; however, these emissions are temporary and less than significant. Additionally, construction of the Proposed Project would comply with SDAPCD's Rule 55 for fugitive dust control, which requires the implementation of specific measures to minimize fugitive dust emissions. The Proposed Project would also comply with SDAPCD's Rule 50 for visible emissions, Rule 51 for nuisance and Rule 52 for particulate matter. As discussed above, the potential emissions reductions resulting from these rules and regulations were conservatively excluded from the emission calculations presented in Table 6 and 7, which still correspond to less than significant impacts.

Construction activities would include the use of diesel equipment that generate emissions of diesel particulate matter (DPM), which the California Air Resources Board (CARB) has categorized as a human carcinogen. Any usage of diesel-powered construction equipment would be temporary and episodic, and would move throughout the Project Site during the construction period. The duration of exposure would be short (a total of approximately 4 months), and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments (HRAs) are typically associated with longer-term exposure durations of 30 years.³ Based on the short 4-month construction, the exposure would be approximately 1.1% percent of the total 30-year exposure duration used for health risk calculation.

Due to the minimal size of the Proposed Project relative to other developments, the less than significant daily emissions and the short 4-month duration of construction, DPM generated by project construction and operation is not expected to produce health risk. Therefore, impacts to sensitive receptors would be less than significant.

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots could potentially violate state and federal CO standards at intersections, even if the basin is in attainment for federal and state levels. CO hotspots occur nearly exclusively at signalized intersections operating at level of service (LOS) E or F. It is recommended to perform detailed air quality dispersion modeling for projects that may worsen traffic flow at any signalized intersections operating at LOS E or F. None of the intersections in the project vicinity are expected to produce a CO hotspot based on the minimal vehicle traffic produced by the Proposed Project. Therefore, no CO hot spots are anticipated due to project-related traffic and a less than significant impact would occur.

Health Impacts from Regional Emissions (Friant Ranch Case)

The EPA and CARB have established the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively, at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts, like the SDAPCD, have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates. Accordingly, elevated levels of criteria air pollutants as a result of a project's emissions could cause adverse health effects associated with these pollutants. The San Diego Air Basin is designated as non-attainment for O₃ (8-hour) under the NAAQS and non-attainment for O₃ (1-hour and 8-hour), PM₁₀ and PM_{2.5} under the CAAQS.⁴

In *Sierra Club v. County of Fresno (S219783) (Sierra Club)* the California Supreme Court held that CEQA requires environmental impact reports to either (i) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (ii) explain why such an analysis is infeasible.⁵ However, the Court also clarified that CEQA "does not mandate" that environmental studies include "an in-depth risk assessment" that provides "a detailed comprehensive analysis ... to evaluate and predict the dispersion of hazardous substances in the

³ Office of Environmental Health Hazard Assessment. February 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. Available at: <https://oehha.ca.gov/media/downloads/crntr/2015guidancemanual.pdf>

⁴ San Diego Air Pollution Control District. *Attainment Status*. Accessed August 5, 2020. Available at: <https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html>

⁵ 6 Cal.5th at 1165-66

environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure".⁶

As expressed in the amicus curiae brief submitted for the Sierra Club v. County of Fresno case, the air districts established and recommend CEQA air quality analysis of criteria air pollutants use significance thresholds that were set at emission levels tied to the region's attainment status, based on emission levels at which stationary pollution sources permitted by the air district must offset their emissions. Such offset levels allow for growth while keeping the cumulative effects of new sources at a level that will not impede attainment of the NAAQS and CAAQS. The health impacts associated with exposure to criteria pollutants are evaluated on a regional level, based on the region's attainment of the NAAQS and CAAQS. Because of the complexity of ozone formation and design of ozone modeling tools for the regional scale (not individual projects), a general description of adverse health effects from project-level criteria pollutants is all that can be feasibly provided at this time. As shown in Table 6 and Table 7, above, construction and operation of the Proposed Project would not exceed the mass regional emissions threshold and would not cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels. Therefore, the health impacts from regional emissions would be less than significant.

d) *Create objectionable odors affecting a substantial number of people?* **Less Than Significant Impact.**

Diesel-operated construction equipment can potentially produce some odors when in use; however, any emissions generally dissipate quickly and are not expected to affect a substantial number of people. There are no other sources of odor expected with the Proposed Project. Therefore, the Proposed Project would not create objectionable odors affecting a substantial number of people.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.4 BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game (DFG) or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁶ Health and Safety Code, § 44306

- a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the USFWS? Less Than Significant Impact with Mitigation Incorporated.*

A Biological Resources Report was prepared for the Project and is included as Appendix D. The Biological Resources Report analyzed three alternative designs of the Project. After the Biological Resources Report was prepared, the City moved forward with the Proposed Project, which is most similar to Alternative 2 within the Biological Resource Report. After preparation of the Biological Resources Report, some further refinements have been made to the Project design. The analysis below includes updates to the data provided in the Biological Resources Report.

Special-Status Plants

The Project area does not contain any recorded occurrences of federal or state threatened, endangered, or candidate plant species. Within the Project area, Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) was the only special-status plant species that was observed. Southwestern spiny rush is a California Rare Plant Rank (CRPR) 4 species. CRPR 4 species are watch list species of limited distribution. This species is not yet considered to be rare in California, but is on a watch list to ensure that it is monitored regularly for population declines. The loss of these plants would be less than significant because adequate habitat for this species within the region is conserved by the Multiple Habitat Conservation Program (MHCP)⁷ and Project impacts are not expected to substantially reduce the viability of this species. No other special-status plant species are expected to occur due to a lack of suitable habitat and/or lack of occurrences within the Project vicinity.

Special-Status Wildlife

The Project area does not contain any recorded occurrences of federal or state threatened, endangered, or candidate wildlife species or designated critical habitat.

If construction were to occur during the general bird breeding season (January 15 and September 15), the Project could result in direct impacts to nesting birds, such as Cooper's hawk (*Accipiter cooperii*), from the accidental destruction of nests through removal of vegetated habitats within the Project area or indirect impacts from the abandonment of nests adjacent to the Project site due to construction disturbance and noise. Impacts to nesting birds protected under California Fish and Game Code and the Migratory Bird Treaty Act, including Cooper's hawk, would be considered significant. Mitigation Measure **MM-BIO-1** would be implemented to reduce these impacts to less than significant.

Special-status bird species with the potential to forage in the Project area include the white-tailed kite (*Elanus leucurus*), a state fully-protected species; Brown pelican (*Pelicanus occidentalis*), a state fully-protected species; and California least tern (*Sternula antillarum browni*), a state endangered and fully-protected species. White-tailed kite (*Elanus leucurus*) and Brown pelican (*Pelicanus occidentalis*) were observed at the Project Site during biological surveys conducted 2018 and 2019 (Appendix D). The Proposed Project is not anticipated to result in any direct or indirect impacts to these species due to the lack of suitable nesting habitat within or adjacent to the Project impact area.

Additional special-status bird species considered for potential to occur included the Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), a state endangered species, and light-footed Ridgway's rail (*Rallus longirostris levipes*), a state and federal endangered species. The site was considered inadequate to support breeding or resident Belding's savannah sparrows due to the lack of previously recorded occurrences at the Slough and the small and fragmented patch sizes of salt marsh habitat totaling less than 0.06 acre of suitable low coastal salt marsh habitat. For this reason, the Proposed Project is not anticipated to result in impacts to Belding's savannah sparrow.

⁷ The Project site is located within the North County MHCP, a regional conservation plan established to protect sensitive species and habitats in northwestern San Diego County. Each jurisdiction that is a signatory to the MHCP implements the program through their respective subarea plan. Although the City of Oceanside's Draft MHCP Subarea Plan (2010) has not been finalized, the City uses the plan to guide development and mitigation in the city.

The site is expected to be inadequate to support breeding or resident light-footed Ridgway's rails primarily based on the following factors (1) The largest contiguous vegetated marsh habitat area is 0.97 acres (0.39 hectares, and the entire channel and adjacent wetlands upstream to S. Coast Highway is 6.44 acres (2.61 ha) while marshes highly associated with occurrence of this species are greater than 24 acres; (2) The marsh is surrounded by high levels of disturbance, including a park and water treatment facility and is accessible to urban predators such as raccoons and feral cats; and (3) the site lacks previous records of occurrence. While this species is not expected to occur due to these habitat factors, if present, impacts to this species could be potentially significant without mitigation. Under **MM-BIO-2**, a habitat assessment would be prepared evaluating the potential for Ridgway's rails to occur within the Project area. If there is potential for Ridgway's rails to occur in the Project area, additional measures would be implemented as determined through the subsequent Endangered Species Act consultation conducted by the U.S. Army Corps of Engineers (USACE) with the U.S. Fish and Wildlife Service (USFWS) to ensure that the Project would not result in substantial adverse effects to threatened or endangered species as part of obtaining the Clean Water Act Section 404 authorization for the Project. Therefore, with implementation of **MM-BIO-2**, impacts to this species would be less than significant.

Additionally, the Project will ultimately increase habitat value for Belding's savannah sparrow and light-footed Ridgway's rail by providing a larger contiguous area of salt marsh; providing a native upland habitat buffer; and increasing the species diversity and extent of salt marsh vegetation within the slough.

Oblivious tiger beetle (*Cicindela latesignata obliviosa*), an MHCP narrow endemic insect species that occurs in mud flat habitat, was considered to have a low potential to occur. Mudflat habitat occurs in the Project area, but the Project area was considered unlikely to support significant populations of this species due to the ephemeral and restricted nature of potential habitat. Additionally, the survey area does not support a critical population of this species as identified by the MHCP. Therefore, the Proposed Project is not anticipated to result in significant impacts to this species.

The Southern tidewater goby (*Eucyclogobius kristinae* [formerly *newberryi*]), a federally endangered and CDFW fish species of special concern, is not expected to occur in the Project area. The only known extant populations of this species occur at Marine Corps Base Camp Pendleton, and this species has never been documented as occurring in Loma Alta Slough. University of California, Los Angeles has conducted DNA sampling surveys for this species at Loma Alta Slough multiple times since 2015 (B. Spies, pers. comm. 2019). Additionally, the nearest localities are likely extirpated with the last detections at San Luis Rey River in 2010 and Buena Vista Lagoon in 1955. However, habitat for this species may be present in the Project area. If this species were present in the Project area, impacts could be potentially significant without mitigation. Under **MM-BIO-3**, a focused tidewater goby survey would be conducted within the Project area using a USFWS-approved methodology. If tidewater gobies are detected during the survey, additional measures would be implemented as determined through the subsequent Endangered Species Act consultation conducted by the U.S. Army Corps of Engineers (USACE) with the U.S. Fish and Wildlife Service (USFWS) to ensure that the Project would not result in substantial adverse effects to threatened or endangered species as part of obtaining the Clean Water Act Section 404 authorization for the Project. Therefore, with implementation of **MM-BIO-3**, impacts to this species would be less than significant.

Mitigation Measures:

MM-BIO-1: Special-Status and Nesting Birds. Construction activities involving ground disturbance or vegetation removal shall be initiated outside of the bird and raptor breeding season (January 15 to September 15). If vegetation removal is unavoidable during the bird and raptor breeding season, then pre-construction surveys shall be conducted within one week prior to work in suitable nesting bird habitat to document breeding activity of nesting and migratory birds within or immediately adjacent to the proposed work areas. If an active bird nest is found, the nest will be flagged and mapped on the Project plans along with an appropriate buffer, which will be determined by the biologist based on the biology of the species. The buffer will be delineated by temporary fencing and will remain in effect as long as construction occurs or until the nest is vacated and the juveniles have fledged. The nest area will be demarcated in the field with flagging and stakes or construction fencing.

Note that grading within the Coastal Zone is prohibited during the rainy season (October 1–April 1); however, the October 1st grading season deadline may be extended with the approval of the City Engineer subject to implementation of special erosion control measures designed to prohibit discharge of sediments offsite during and after the grading operation (City of Oceanside 2010). If any of the responsible resource agencies prohibit grading operations during the summer grading period in order to protect endangered or rare species or sensitive environmental resources, then grading activities may be allowed during the winter by a coastal development permit or permit amendment, provided that appropriate best management practices (BMPs) are incorporated to limit potential adverse impacts from winter grading activities.

MM-BIO-2: Light-Footed Ridgway's Rail. Prior to Project construction, a light-footed Ridgway's rail habitat assessment shall be prepared evaluating the potential for light-footed Ridgway's rails to occur within the Project area. If potentially suitable habitat for light-footed Ridgway's rail is present based on the results of the habitat assessment, additional measures shall be implemented as determined through the subsequent Endangered Species Act consultation conducted by the U.S. Army Corps of Engineers (USACE) with the U.S. Fish and Wildlife Service (USFWS) as part of obtaining the Clean Water Act Section 404 authorization for the Project. These measures may include the following:

- If potentially suitable nesting habitat is present, initiation of Project construction shall avoid the Ridgway rail's nesting season (March 15 through September 15) to the maximum extent feasible.
If nesting season avoidance is not feasible, focused pre-construction surveys shall be conducted using a USFWS-approved methodology. If the results of pre-construction surveys determine rails are present, appropriate measures shall be determined in consultation with USFWS.
- If potentially suitable foraging, cover, or dispersal habitat for Ridgway's rails is present within the Project area, a pre-construction clearance survey and monitoring during vegetation clearing within potentially suitable habitat shall be conducted with a biologist walking ahead of construction equipment within suitable habitat areas that cannot be cleared visually to flush birds out of the path of construction equipment. If Ridgway's rails are observed, construction activities will be halted and USFWS consulted.

MM-BIO-3: Southern Tidewater Goby. Prior to Project construction, a focused tidewater goby survey shall be conducted using a USFWS-approved methodology. If tidewater gobies are detected during the survey, additional measures shall be implemented as determined through the subsequent Endangered Species Act consultation conducted by the U.S. Army Corps of Engineers (USACE) with the U.S. Fish and Wildlife Service (USFWS) as part of obtaining the Clean Water Act Section 404 authorization for the Project.

- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game (DFG) or U.S. Fish and Wildlife Service?* **Less Than Significant Impact With Mitigation Incorporated.**

Riparian habitats and sensitive natural communities in the Project area and Project effects by phase are summarized in **Table 8**. Direct, temporary impacts would include crushing, removal, and disturbance of vegetation and substrate due to construction equipment access and regrading. Direct, permanent impacts would occur due to tidal channel excavation, grading of riparian berms, marshplain grading, riprap removal, and the addition of a boardwalk.

TABLE 8
VEGETATION COMMUNITIES AND PROJECT EFFECTS BY PHASE (ACRES)¹

Vegetation Communities and Cover Types	Baseline	Phase 1		Phase 2	
		Impacts (Temp/Perm)	Establishment & Enhancement	Impacts (Temp)	Establishment
Riparian and Sensitive Natural Communities					
Southern Coastal Salt Marsh	0.46	0.08/0.08	1.27	0.14	0.55
Coastal Brackish Marsh	0.79	0.43/-	0.90	0.01	0.18
Southern Coastal Salt Marsh - disturbed	0.21	0.18/0.03			
Disturbed Habitat (floodplain)	0.12	0.11/-			
Riparian Willow Scrub			0.13	0.03	
Saltpan/Mudflats	0.26	0.06/-	0.20		
Open Water - Estuarine	1.17	0.25/-	1.25		0.05
Developed - Concrete/Riprap channel	0.08				
Coastal Sage Scrub			0.96	0.37	0.24
Other Cover Types					
Disturbed Upland	1.65	1.61/-		0.02	
Urban/Developed	1.04	0.55/0.01		0.49	0.05
Total	5.78	3.26/0.12	4.70	1.06	1.07

¹ Totals may not sum exactly due to rounding

As shown in Table 8, impacts to riparian habitat and sensitive natural communities would be offset by a net gain in acreage and function of these resources.

Adverse impacts could result from erosion or sediment from Project activities within riparian habitats and sensitive natural communities; however, as detailed previously under the discussion of water quality, compliance with the MS4 Permit, General Construction Permit, and SWPPP would ensure that construction activities would not result in substantial erosion or siltation on- or off-site. As a result, impacts would be less than significant.

Adverse impacts to riparian habitat and sensitive natural communities could result from direct accidental disturbance outside of construction limits, disturbance from dust created by Project activities, and a lack of native vegetation recruitment and establishment of invasive species within disturbance areas. These impacts would be mitigated to less than significant with implementation of **MM-BIO-4** and **MM-BIO-5**.

Mitigation Measures:

MM-BIO-4: Fencing. Prior to the initiation of any construction activities, construction limits will be clearly delineated with temporary fencing, such as silt fencing or fiber rolls and orange construction fencing to ensure that construction activity remains within the defined Project limits. Additionally, best management practices to address dust, erosion, and excess sedimentation will be installed as illustrated in the construction plans. A qualified biologist will monitor fence installation, initial vegetation clearing, and construction activities adjacent to the construction limits to avoid unauthorized impacts.

MM-BIO-5: Restoration of Temporary Impacts. Following Project implementation, restoration of temporary impacts shall occur in accordance with the Habitat Restoration Plan that is being prepared for the Project. The Habitat Restoration Plan includes: (a) a schematic depicting the restoration areas; (b) the plant species to be used, container sizes, and seeding rates;

(c) the plant material's sources and lead time; (d) a planting schedule; (e) a description of installation requirements, irrigation sources and methodology, erosion control, maintenance and monitoring requirements; (f) measures to properly control exotic vegetation on site; (g) site-specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) a summary of the annual reporting requirements.

- c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
Less Than Significant Impact With Mitigation Incorporated.

State or federally protected wetlands or waters in the Project area include those protected under the Federal Clean Water Act, State Porter-Cologne Water Quality Control Act, California Coastal Act, and Section 1602 of the California Fish and Game Code. While implementation of the Proposed Project would ultimately restore wetlands within the Project area, the Proposed Project would have a potentially significant impact on state and federal wetlands during construction. Aquatic and wetland habitats within the Project Area such as coastal brackish marsh or southern coastal salt marsh would be altered or otherwise disturbed. As described above for riparian and sensitive natural communities, adverse impacts could also result from direct accidental disturbance outside of construction limits, disturbance from dust or erosion from Project activities, and lack of native vegetation recruitment and establishment of invasive species within disturbance areas.

It is expected that all impacts related to temporal habitat loss would be offset through Project design with onsite habitat restoration and creation to improve habitat over existing conditions. Final mitigation ratios would be determined in coordination with the regulatory agencies (USACE, Regional Water Quality Control Board [RWQCB], CDFW, and California Coastal Commission [CCC]), and would ensure that no net loss of wetland occurs. As such, impacts to jurisdictional wetlands would be less than significant with implementation of Project design features and **MM-BIO-2** through **MM-BIO-6**.

Mitigation Measures:

MM-BIO-6: Aquatic Resources Permits. Prior to initiating Project activities that may impact state and federal wetlands and other jurisdictional aquatic resources, appropriate permits from the regulatory agencies (i.e., USACE, RWQCB, CCC, and CDFW) will be obtained. Permanent loss of wetlands habitat will be offset with equal or better habitat function at ratios ranging from 1:1 to 4:1. Final mitigation ratios for specific habitat types will be determined based on the quality and quantity of resources impacted in coordination with the regulatory agencies. Temporary impacts to wetlands habitat will be offset through the restoration of temporarily impacted areas to pre-construction contours and vegetation types at a minimum 1:1 ratio. Proposed habitat types by Project alternative are summarized in **Table 9** and would include a net gain of wetland habitats. In addition, the Project shall comply with all measures to minimize, avoid, or mitigate potential impacts to federally threatened or endangered species that result from the Endangered Species Act consultation process as part of obtaining Clean Water Act Section 404 authorization. These measures shall include conducting additional assessment of habitat suitability for light-footed Ridgway's rail and southern tidewater goby. If warranted based on the results of the species-focused habitat assessments, additional measures may include conducting focused pre-construction surveys and implementing additional minimization and avoidance measures.

TABLE 9
AQUATIC RESOURCES IMPACTS AND MITIGATION (ACRES)¹

Vegetation Communities and Cover Types			Phase 1		Phase 2		Net Gain
	Temp Impact	Perm Impact	Creat.	Enhanc.	Temp Impact	Creat.	
Wetland Waters of the U.S./State (USACE/RWQCB), CDFW streambed/riparian, and CCC wetlands	0.51	0.08	1.28	0.90	0.15	0.73	1.93
Southern Coastal Salt Marsh	0.08	0.08	0.77	0.50	0.14	0.55	1.24
Coastal Brackish Marsh	0.43		0.51	0.39	0.01	0.18	0.69
Non-Wetland Waters of the U.S. (USACE), State Wetlands (RWQCB), CDFW streambed/riparian, and CCC wetlands	0.06			0.20			0
Saltpan/Mudflats	0.06			0.20			0
Non-Wetland Waters of the U.S./State (USACE/RWQCB), CDFW streambed/riparian, and CCC wetlands/waters	0.35		0.15	1.10		0.05	0.20
Open Water - Estuarine	0.25		0.15	1.10		0.05	0.20
Disturbed Habitat (floodplain)	0.11						
Developed - Concrete/Riprap channel							
CDFW streambed/riparian and CCC wetlands/waters	0.18	0.03	0.13		0.03		0.09
Southern Coastal Salt Marsh - disturbed	0.18	0.03					- 0.03
Riparian Willow Scrub			0.13		0.03		0.13
Upland	2.16	0.01	0.85	0.10	0.89	0.29	1.13
Upland Sage Scrub			0.85	0.10	0.37	0.24	1.09
Disturbed Upland	1.61				0.02		
Urban/Developed	0.55	0.01			0.49	0.05	0.04
Total	3.26	0.12	2.40	2.29	1.06	1.07	3.35

¹ Totals may not sum exactly due to rounding

- d. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
Less Than Significant Impact.

The Project area is not located within an identified habitat linkage or regional wildlife movement corridor identified in the City's MHCP Subarea Plan (City of Oceanside 2010). Though it is reasonable to assume that wildlife movement may occur locally within the Project area, the Project area as a whole does not provide a throughway for wildlife species and, therefore, does not function as a significant habitat linkage. Thus, the Project is not anticipated to interfere with wildlife movement and impacts are would be less significant.

- e. *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?* **No Impact.**

The City's General Plan Environmental Resource Management Element and the City Code of Ordinances do not contain specific policies or ordinances protecting biological resources within these documents that would be applicable to the Project. No impact would occur.

- f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? **No Impact.***

Although the City of Oceanside's Draft MHCP Subarea Plan has not been finalized or adopted, the City uses the plan to guide development and mitigation in the city. As discussed above, the Project would not conflict with the City of Oceanside's Subarea or preclude adoption of the Subarea Plan. Therefore, no impact would occur.

The Proposed Project is not within the Wildlife Corridor Preservation Zone (WCPZ) or the boundaries of any Pre-Approved Mitigation Area (PAMA) of the Oceanside Subarea Plan. The Project would substantially comply with the requirements of the Subarea Plan; however, due to the Project's substantial restoration efforts within sensitive habitats, the Project would require a reduction of the mitigation ratios stipulated in the Subarea Plan, pending the review and approval of CDFW and USFWS. Reduced mitigation ratios are warranted due to the functional lift and net gain in acreage of high value habitats that the Proposed Project would provide.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.5 CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of CEQA?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of CEQA?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of CEQA? **Less Than Significant Impact With Mitigation Incorporated.***

A Cultural Resources Assessment Report (Appendix E) was prepared for the Project. As part of the assessment, a records search was conducted at the California Historical Resources Inventory System (CHRIS) South Coastal Information Center (SCIC). The records search included a review of the California Points of Historical Interest, the California Historical Landmarks, the California Register, the National Register, the Archaeological Determinations of Eligibility, and the Built Environment Resource Directory. According to the Cultural Resources Assessment, no cultural resources were identified on the Project Site, and as a result the Project would not result in historic properties affected.

Although no built historic resources would be impacted by the Project, the geoarchaeological review of the Project Site indicates that Holocene-age alluvium underlies the Project Site and has moderate potential to contain subsurface archaeological deposits, including those that may qualify as a historical archaeological resource under CEQA (Appendix E). The historic map and aerial photograph review indicates that the Project Site has experienced a high degree of past disturbances associated with industrial and recreational development in the Project area, including construction of the La Salina WWTP, construction of Buccaneer Beach Park, and development of the northeastern parcels. Project-related ground disturbing activities would extend to depths of 7 or 8 feet, possibly exceeding the depths of previous disturbances, which range from 5 to 12.5 feet below the ground surface. As such, Project-related ground disturbing activities could extend into undisturbed native soils containing archaeological deposits in some areas. Should intact archaeological deposits be encountered during Project implementation, they may qualify as historical resources. As such, Mitigation Measures **MM-CUL-1** through **MM-CUL-4** would reduce impacts to less than significant levels.

Mitigation Measures:

- MM-CUL-1:** Prior to the start of ground-disturbing activities, the City will retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior, 2008) to carry out all mitigation related to cultural resources.
- MM-CUL-2:** Prior to start of ground-disturbing activities, the qualified archaeologist will conduct cultural resources sensitivity training for all construction personnel. Construction personnel will be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City will ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.
- MM-CUL-3:** An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor will observe all ground-disturbing activities that extend beyond 4 feet below the ground surface, the minimum known depth of fill. The qualified archaeologist, in coordination with the City, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring will be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project area. The Native American monitor will be selected from amongst the Native American groups identified by the NAHC as having affiliation with the Project area. The archaeological monitor will be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The archaeological monitor will keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist will prepare a monitoring report that details the results of monitoring. The report will be submitted to the City and any Native American groups who request a copy. A copy of the final report will be filed at the SCIC.
- MM-CUL-4:** In the event of the unanticipated discovery of archaeological materials, the contractor will immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction should not resume until the qualified archaeologist has conferred with the City on the significance of the resource. The USACE will also be afforded the opportunity to determine whether the discovery requires addressing under Section 106 Post-Review Discoveries provisions provided in 36 CFR 800.13.

If it is determined that the discovered archaeological resource constitutes a historical resource under CEQA or a historic property under Section 106 of the NHPA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan will be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the

archaeological resource. The qualified archaeologist and City will consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.

- b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of CEQA? **Less Than Significant Impact With Mitigation Incorporated.***

As detailed above, the Cultural Resources Assessment Report's geoarchaeological review indicates that the Holocene-age alluvial deposits underlying the Project Site have a moderate potential for subsurface archaeological deposits (Appendix E). In addition, many of the comments received from Native American groups express concern that project-related ground disturbance may impact subsurface archaeological deposits. While the historic map and aerial photograph review indicates that the Project area has experienced a high degree of past disturbances in the Project area, Project-related ground disturbing activities could exceed the depths of previous disturbance. As such, Project-related ground disturbing activities could extend into undisturbed native soils containing archaeological deposits in some areas. Therefore, Mitigation Measures **MM-CUL-1** through **MM-CUL-4**, detailed above, would reduce impacts to less than significant levels.

- c. *Disturb any human remains, including those interred outside of formal cemeteries? **Less Than Significant Impact With Mitigation Incorporated.***

No known human remains exist within the Project Site. As discussed in Response 14.5(a) and 14.5(b) above, Project-related ground disturbing activities could exceed the depths of previous disturbance. As such, while unlikely, there is potential to encounter unknown buried human remains on the Project Site. In the unlikely event that human remains are encountered, Mitigation Measure **MM-CUL-5** would be implemented, and reduce potential impacts to less than significant.

Mitigation Measures:

MM-CUL-5: If human remains are encountered, the contractor will halt work in the vicinity (within 100 feet) of the discovery and contact the San Diego County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The City and USACE will also be notified. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate an MLD for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, the contractor will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.6 ENERGY. Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? **Less Than Significant Impact.***

The Proposed Project could potentially impact energy resources during construction and operation. Potentially-impacted energy resources include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts with a focus on minimizing or eliminating inefficient, wasteful, and unnecessary energy consumption.

Electricity is a man-made resource that is produced by the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. Electricity is delivered to consumers through a network of transmission and distribution lines commonly called a power grid. Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source for electricity generation, cooking, water heating, space heating, industrial processes and as a transportation fuel. Petroleum-based fuels are the source of the majority of transportation energy usage in California. However, efforts for developing strategies to reduce petroleum use are ongoing in the state. California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector and reduce vehicle miles traveled (VMT). As a result, consumption of petroleum-based fuels in California has declined.

Construction Electricity Usage

Construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

The Proposed Project is expected to comply with the City's guidelines and requirements related to any electrical infrastructure modification, and limit any impacts associated with grading or construction. There will not be any construction of any electrical infrastructure, so the Proposed Project will not adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction Natural Gas Usage

Construction at the Proposed Project is expected to consume zero or negligible amounts of natural gas to support construction activities. As a result, construction will not produce a demand for natural gas.

Construction Transportation Energy Usage

Petroleum-based fuel usage is expected to yield the highest amount of transportation energy potentially consumed during construction, which would be used in off-road and on-road equipment. The Proposed Project construction activities would be required to adhere to State and SDAPCD regulations for off-road equipment and on-road trucks, which provide fuel efficiency standards. Therefore, the Proposed Project will minimize the transportation energy usage associated with construction.

Because there is limited construction activities and compliance with regulations is presumed, the potential impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources during construction of the Proposed Project would be less than significant.

Operation Electricity, Natural Gas and Transportation Energy Usage

There are minimal operation activities, like maintenance, expected with the Project that would consume energy. The potential impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources during operations of the Proposed Project is presumed to be less than significant.

- b. *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? **Less Than Significant Impact.***

The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The City of Oceanside Energy Climate Action Element (EACP) and Oceanside Climate Action Plan (CAP) were recently adopted as part of a General Plan Update. These Plans are consistent with the State's Title 24 Part 6 Building Energy Efficiency Standards. The amount of construction and development

associated with the Proposed Project will be minimal and not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the Proposed Project would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.7 GEOLOGY AND SOILS. Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(i) rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist, or based on other substantial evidence of a known fault (Refer to DM&G Pub. 42)?; or,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) strong seismic ground shaking?; or,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) seismic- related ground failure, including liquefaction?; or,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18- 1-B of the 1994 UBC, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- (i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. **No Impact.***

There are no known active or potentially active faults within the City of Oceanside (City of Oceanside 2002b). According to the Preliminary Geotechnical Feasibility Report for the Project (Appendix F), the nearest known active faults are the Newport-Inglewood Fault and the Rose Canyon Fault, both of which are located in the Pacific Ocean approximately 2.1 miles southwest of the Project Site (Taylor Group 2020). According to the Preliminary Geotechnical Feasibility Report, there are no known active or potentially active faults crossing the Site. In addition, the Site is not located within a mapped Alquist-Priolo Earthquake Fault Zone. Since there are no known active or potentially active faults within the Project Site, there is considered to be no potential for ground rupture. As such, no impact would occur related to rupture of a mapped Alquist-Priolo earthquake fault.

(ii) *Strong seismic ground shaking? **Less Than Significant Impact.***

The Project Site may be subjected to strong ground motions during an earthquake on any of several known active fault systems, most specifically those identified in Response 14.7(a)(1). Due to their close proximity to the Project Site, the Rose Canyon Fault and Newport–Inglewood Fault pose the most significant ground shaking hazard at the Project Site. According to the Preliminary Geotechnical Feasibility Report, both the Newport-Inglewood and Rose Canyon faults are right lateral strike-slip faults and are considered to be capable of producing an earthquake of magnitude 6.9 (CDMG 2003).

The Proposed Project would restore and enhance the existing Loma Alta Slough, which would result in geological conditions similar to that of the existing environment. In addition, with the exception of the overlook platform, the Project does not propose to construct any aboveground structures. According to the Geotechnical Feasibility Report (Appendix F), grading activities at the Project Site would not be expected to create a life safety consideration with respect to seismic hazards. In the event of strong seismic ground-shaking, damage to the Project Site would only consist of earth movement, which would not expose substantial numbers of people to risks of seismic ground-shaking. Further, the Project would not contain any habitable structures, and would not exacerbate the potential risk of loss on the Project Site. As such, impacts would be less than significant.

(iii) *Seismic-related ground failure, including liquefaction? **Less Than Significant Impact***

Liquefaction is the loss of strength of cohesionless soils when the pore water pressure in the soil becomes equal to the confining pressure. Liquefaction generally occurs as a “quicksand” type of ground failure caused by strong groundshaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure, and the intensity and duration of groundshaking. Liquefaction may result in sinking, tilt, distortion, destruction of structures, rupture of underground pipelines, and cracking and spreading of the ground surface (also called lateral spread).

According to the Preliminary Geotechnical Feasibility Report (Appendix F), the Project Site is underlain by younger alluvial soils which include medium dense silty sands, sands or silts with low plasticity. In addition, groundwater occurs at depths between approximately 5 and 8.5 feet below ground surface, which represent subsurface conditions that may be consistent with those necessary for the occurrence of liquefaction during an earthquake on a local or regional fault (Appendix F). Therefore, soils may be prone to liquefaction, seismically induced settlement, lateral spreading, surface manifestations, and loss of bearing strength. However, according to the Preliminary Geotechnical Feasibility Report, implementation of the Proposed Project would not be expected to warrant a life safety consideration with respect to liquefaction and seismic hazards, as no habitable structures are proposed (Appendix F).

Prior to the issuance of a grading permit, the contractor of the Project would be required to submit grading plans, applications and applicable technical reports to the City of Oceanside Development Services Department for review to demonstrate compliance with the City’s grading ordinance as well as any additional applicable recommendations contained in the Preliminary Geotechnical Feasibility Study. Prior to issuance of a grading permit, a comprehensive final geotechnical report would be required to be prepared to provide recommendations for all earthwork associated with the Project. The construction contractor would be required to comply with the recommendations identified in the comprehensive final geotechnical report prepared for the Project.

Operation of the site would not pose a significant risk to property or life as the Project would enhance and restore the Loma Alta Slough and surrounding areas. No habitable structures would be developed on the Project Site. With incorporation of recommendations and compliance with the City of Oceanside Grading Ordinance, Project-related impacts associated with liquefaction would be less than significant.

(iv) *Landslides? **Less Than Significant Impact.***

Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. According to the City of Oceanside General Plan, the Project Site is not located within a known or highly suspected landslide

area (City of Oceanside 2002b). Further, according to the Preliminary Geotechnical Feasibility Report, no known landslides or slope failures exist on the Site (Appendix F).

Maximum planned slope gradients on the marshplain on the order of 4:1 (horizontal:vertical) or flatter, with a maximum height of 15 feet, are anticipated for the Proposed Project. Steeper slopes on the order of 1:1 are planned for the side channels, but some sloughing and adjustment of these slopes is natural and expected as they equilibrate. Cut slopes would be expected to expose existing fill and/or natural alluvial soils. According to the Geotechnical Feasibility Report, based on the anticipated slope gradients and heights for most of the Project, the potential for landslides would be low. However, depending on the final configuration of the Project, slopes could potentially be exposed to erosion by the Slough channel (Appendix F). This could affect the stability of the slopes, which could result in landslides.

As discussed above, the contractor of the Project would be required to demonstrate compliance with the City's grading requirements and follow applicable recommendations contained in the Preliminary Geotechnical Feasibility Study. Prior to issuance of a grading permit, a comprehensive final geotechnical report would be required to be prepared to provide recommendations for all earthwork associated with the Project. In accordance with the City's Erosion Control Requirements, the Engineer of Work would certify that erosion control measures have been implemented (Oceanside Engineering 2020). Operational impacts would not occur, as the Project would not contain any habitable structures. As such, Project-related impacts regarding landslides would be less than significant.

*b) Result in substantial soil erosion or the loss of topsoil? **Less Than Significant Impact.***

Grading during construction of the Project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. However, impacts resulting in soil erosion or topsoil loss would be temporary, as the Proposed Project would restore wetland habitats within the Project area, and re-vegetation efforts would stabilize the soil over time.

During construction of the Project, the contractor would be required to comply with standard engineering practices for erosion control, including the submittal of grading plans in compliance with the City Grading Ordinance. In addition, prior to issuance of a grading permit, a comprehensive final geotechnical report would be required to be prepared to provide recommendations for all earthwork associated with the Project that would be required to be implemented. These recommendations include the use of fill soils less susceptible to erosion, placement of vegetation in areas susceptible to erosion, and potentially placement of rip rap and/or other structural means of edge protection. In accordance with the City's Erosion Control Requirements, the Engineer of Work would certify that erosion control measures have been implemented (Oceanside Engineering 2020).

Operation of the Project would result in increased pedestrian traffic from the use of the recreational trails. However, these trails would consist of decomposed granite paving and would be regularly maintained. As such, impacts resulting in soil erosion or loss of topsoil during construction and operation would be less than significant.

*c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? **Less Than Significant Impact.***

As detailed above in Response 14.7(a) the Project would result in a less than significant impact related to landslides.

As detailed above in Response 14.7(a), subsurface conditions present at the Project Site may be prone to liquefaction, specifically in the form of dynamic settlement, surface manifestation, and lateral spread towards the creek edge and/or the Pacific Ocean (Appendix F). However, according to the Preliminary Geotechnical Feasibility Report, implementation of the Proposed Project would not be expected to warrant a life safety consideration with respect to liquefaction and seismic hazards, as no habitable structures are proposed. Prior to the issuance of a grading permit, the contractor of the Project would be required to submit grading plans to the City of Oceanside Development Services Department for review to demonstrate compliance with the City's grading requirements. Prior to issuance of a grading permit, a comprehensive

final geotechnical report would be required to be prepared to provide recommendations for all earthwork and foundation design associated with the Project. The construction contractor would be required to comply with the recommendations identified in the comprehensive final geotechnical report prepared for the Project. Therefore, impacts related to unstable soil would be less than significant.

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial direct or indirect risks to life or property? **Less Than Significant Impact.***

Expansive soils can damage surface improvements by uplift, as expansive soils swell with moisture increases. The Project Site contains undocumented fill at depths of 5 to 12.5 feet and young alluvium below the fill. According to the Geotechnical Report, these soils, which are considered granular, possess a very low to low expansion character (Appendix F). Some clayey soils were encountered during the Preliminary Geotechnical Feasibility Investigation, which may or may not be expansive. However, as the Project does not propose the construction of any habitable building structures that could be affected by expansive or swelling soils, impacts associated with expansive soils would be less than significant.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **No Impact.***

The Proposed Project does not include the implementation of septic tanks or alternative wastewater disposal systems. Therefore, no potential impacts associated with septic tanks or alternative wastewater disposal systems would occur.

- f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less Than Significant Impact With Mitigation Incorporated.***

Ground disturbing activities associated with the Project would include grading and excavations extending to depths of 7 to 8 feet. Geotechnical testing indicates a layer of undocumented fill extending from the surface to depths of 5 to 12.5 feet (Appendix F). According to the Paleontological Assessment prepared for the Project (Appendix G), artificial fill has no paleontological potential, therefore excavations in this unit would not impact paleontological resources. However, the fill is likely underlain by Holocene to Pleistocene-age alluvial deposits and old paralic deposits, which have low-to-high and high paleontological potential, respectively. Additionally, the Miocene-age Sespe and Vaqueros Formations, which have high paleontological potential, may underlie the Project area at depth as well. Excavation into Holocene-age soils is not expected to encounter fossils at least in the uppermost layers (which may have even been removed as a result of past disturbance), but deeper excavation could uncover paleontological resources. As such, grading and excavation beyond 5 feet may have the potential to intrude into soils that have potential to contain paleontological resources per the Society of Vertebrate Paleontology procedural guidelines. Therefore, there exists the potential for Project-related ground disturbance to encounter unknown and undiscovered paleontological resources. Implementation of Mitigation Measures **MM-PAL-1** through **MM-PAL-4** would reduce impacts related to paleontological resources to less than significant.

Mitigation Measures:

MM-PAL-1: Retain Qualified Paleontologist. Prior to the start of construction activities, the City shall retain a Qualified Paleontologist that meets the standards of the Society of Vertebrate Paleontology (2010) to carry out all mitigation measures related to paleontological resources.

MM-PAL-2: Paleontological Resources Sensitivity Training. Prior to start of any ground disturbing activities, the Qualified Paleontologist shall conduct pre-construction worker paleontological resources sensitivity training. The Qualified Paleontologist shall contribute to any construction worker paleontological resources sensitivity training either in person or via a training module. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other

potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The City shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

MM-PAL-3: Paleontological Monitoring. The Qualified Paleontologist shall supervise a paleontological monitor meeting the Society for Vertebrate Paleontology standards (2010) who shall be present during all excavations reaching or exceeding 5 feet, the minimum depth of disturbed fill. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened standard sediment samples (up to 4.0 cubic yards) of promising horizons for smaller fossil remains (SVP, 2010). Per the Society for Vertebrate Paleontology standards (2010), once 50 percent of excavations or other ground disturbing activities are complete within geologic units assigned high paleontological sensitivity and no fossils are identified, monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist in consultation with the City. Monitoring activities shall be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction and shall be provided to the City within six (6) months of Project completion. If fossil resources are identified during monitoring, the report will also be filed with the San Diego County Natural History Museum.

MM-PAL-4: Inadvertent Discoveries. If a paleontological resource is discovered during construction, the paleontological monitor shall be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing and evaluation of the find. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the San Diego County Natural History Museum, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.8 GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* **Less Than Significant Impact.**

The earth's temperature is regulated by greenhouse gases (GHGs) in the atmosphere. Over time, the concentrations of GHGs in the atmosphere has increased from combustion sources like vehicles and electricity generation. An increased concentration of GHGs in the atmosphere has corresponded to an increase in the global temperature and global climate change. GHGs are typically represented as carbon dioxide equivalents (CO₂e), but are primarily comprised of carbon dioxide (CO₂), methane (CH₄), nitrous

oxide (N₂O), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. CO₂e is calculated in terms of metric tons per year.

The Proposed Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. The Proposed Project would result in GHG emissions from construction activities and long-term operational emissions after construction is completed from people visiting the Project Site and from maintenance activities. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to quantify GHG emissions associated with construction of the Proposed Project, as well as long-term operations, like vehicle trips. CalEEMod incorporates local energy emission factors and GHG emissions are reported as carbon dioxide equivalents (CO₂e). GHG emissions generated from construction and operational activities are presented in **Table 10**.

TABLE 10
PROPOSED PROJECT GHG EMISSIONS

	Bio CO ₂	nBio CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions (MT/yr)	0.0	170.8	170.8	0.05	0.0	172.1
Operation Emissions (MT/yr)	0.1	60.8	60.8	0.01	0.0	61.21

Source: ESA 2020 (Appendix C)

The Proposed Project is within the boundary of the City of Oceanside and local jurisdictions have the authority and responsibility to reduce GHG emissions. The City's Climate Action Plan (CAP) provides a policy framework for the City of Oceanside to meet the State of California's 2050 GHG reduction targets. The CAP builds on past and current GHG reduction efforts to reasonably meet these targets.

The CAP recommends a GHG emissions screening thresholds of 900 metric tons (MT) of CO₂e per year (as published by CAPCOA), with additional analysis and significance criteria required for projects exceeding 900 MT. However, as seen in **Table 11**, the annual GHG emissions, assuming a 20-year amortization of construction emissions,⁸ is well below the 900 MT CO₂e per year threshold. Therefore, impacts would be less than significant.

TABLE 11
PROPOSED PROJECT ANNUAL GHG EMISSIONS

	CO ₂ e
Total Construction GHG Emissions (MT/yr)	172.1
20-Year Amortized Construction GHG Emissions (MT/yr)	8.6
Annual Operations GHG Emissions (MT/yr)	61.2
Total Annual Amortized GHG Emissions (MT/yr)	69.8
Threshold (MT/yr)	900
Exceed Threshold?	no

Source: ESA 2020 (Appendix C)

- b. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Less Than Significant Impact.***

The applicable plan for the Proposed Project is the City's CAP, which was approved by the City of Oceanside in April 2019. The CAP serves as the blueprint for the City of Oceanside to comply with California Assembly Bill 32, the California Global Warming Solutions Act of 2006 (AB 32). AB 32 establishes

⁸ As recommended in the SCAQMD GHG Working Group, November 19, 2009.

regulatory, reporting and market mechanisms to quantify GHG emissions and reductions in order to reduce GHG emission to 1990 levels by 2020 (which the City is on track to do according to the CAP) and to 80 percent below 1990 levels by 2050.

The Proposed Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs. As shown in Table 11 above, the potential GHG emissions are well below the screening threshold and thus assumed to be in compliance with the City's CAP as well as AB 32. Further, the Proposed Project is expected to comply with all applicable CAP Measures. Therefore, the Proposed Project would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.9 HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **Less Than Significant Impact With Mitigation Incorporated.**

The City owns all of the land in the Project Site except the Parent Family Trust and Buel properties in the northeast area. Acquisition of the Buel parcel is expected prior to Phase 1 implementation as the City is currently in negotiations with the property owner. The first phase of the Proposed Project would involve restoration of the City-owned properties. If the City is able to acquire the Parent Family Trust property in the future, a second phase of restoration would be conducted to incorporate the property into the rest of the restored site.

In 2015, a Phase I Environmental Site Assessment (ESA) was prepared for the western portion of the Buel parcel (Appendix H). According to the Phase I ESA, the eastern portion of the Buel parcel, which is currently vacant, was formerly Ace Welding which was demolished and removed sometime between late 2010 and late 2012 according to historic aerial photographs (Netronline, 2020). According to the San Diego County Hazardous Materials Management Division (HMMMD) database, Ace Welding received numerous violations for inactive permits. In addition, violations issued for Ace Welding under the inactive permit violation include

not determining whether generated waste was hazardous, not closing hazardous waste containers while in storage, not minimizing hazardous waste releases to the environment, improperly managing hazardous waste storage containers, not having the storage waste inspected weekly, obstructing aisle space, and not labeling or improperly labeling waste containers. No additional site closure information was available for the Ace Welding site. ESA reviewed the State Water Resources Control Board's GeoTracker database for data on hazardous materials sites in the surrounding area. There are 10 nearby properties within one-half mile of the project site. The H. G. Fenton site is located immediately north of the project site at 1517 S. Coast Highway and is listed as a Leaking Underground Storage Tank site currently under Site Assessment status as of October 2015. Based on the existing files for the H.G. Fenton site, shallow groundwater samples collected from borings and also from the shallow groundwater sample collected from monitoring well (MW)1 were reported to contain concentrations of petroleum hydrocarbons and volatile organic compounds (VOCs) including but not limited to ethylbenzene, naphthalene, and methyl tert-butyl ether (MTBE). Based on the available data for the H.G. Fenton site, the shallow groundwater impacts observed in borings and well MW1 are considered to likely be from onsite sources associated with former underground storage tanks (USTs). Lateral control of the extent of shallow groundwater impacts was provided by the groundwater samples collected from soil borings which coupled with the interpreted groundwater flow direction to the southwest beneath the H.G. Fenton site indicates there is a low likelihood for impacts to offsite shallow groundwater or to the adjacent Loma Alta Creek (SCS Engineers, 2019). The other nine hazardous materials release sites would not pose a risk to the project site related to hazardous materials, because of distance to the project site or because the sites maintain a case-closed status and were remediated.

In addition to the Buel parcel, the Parent Family Trust parcel is currently being used as a storage yard, with shipping containers and cars in various states of disrepair. The motor vehicles and storage drums located on the Parent Family Trust parcel are stored on unpaved soil. Therefore, metals present on the parcel may leach into the soil during the corrosion process and contaminate soil and/or groundwater on the Project Site. Further, oil and/or fuels could potentially leak onto the soil. Prior to the City's acquisition of the Parent Family Trust parcel, a Phase I ESA would be required to be prepared, and the Parent Family Trust parcel would be cleared in accordance with recommendations in the Phase I. At this time, it is unknown what spills or chemicals have leaked into the ground. Impacted soils may therefore require management and potential remediation depending on constituent concentrations and regulatory action levels.

Given the historical uses on a portion of the project site as a welding operation and vehicle storage, excavation activities may encounter contaminated soil and groundwater. As the status of the soil and groundwater is unknown on the Project Site, a potentially significant impact related to the routine transport, use, or disposal of hazardous materials could occur. With compliance with federal and state regulations, as well as implementation of Mitigation Measures **MM-HAZ-1**, **MM-HAZ-2**, and **MM-HAZ-3**, the Project would result in less than significant impacts regarding the transport, use, and/or disposal of hazardous materials.

Mitigation Measures:

MM-HAZ-1: Prior to construction and any associated soil disturbing activities at the location of the previous welding site and Parent Family Trust Parcel, the construction contractor(s) shall retain and consult a qualified environmental professional to conduct a soil sampling assessment, in accordance with applicable regulations. It is anticipated the soil samples would be analyzed for TPH gasoline, TPH diesel, TPH oil, VOCs, and total metals. The soil analytical results shall be compared to applicable screening levels established by the appropriate regulating agencies. In the event elevated contaminant levels are reported that exceed applicable regulatory standards, Mitigation Measures HAZ-2 and HAZ-3 would be implemented.

MM-HAZ-2: Before the start of ground-disturbing activities, including grading, trenching, or excavation, the construction contractor(s) shall retain a qualified professional to prepare a site-specific Health and Safety Plan (HSP) in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Section 5192).

The HSP shall be implemented by the construction contractor to protect construction workers, the public, and the environment during all ground-disturbing activities. HSPs shall be submitted to the City of Oceanside, and any applicable oversight regulatory agency (if regulatory oversight is required) for review before the start of construction activities and as a condition of the grading and/or construction permit(s). The HSP shall include, but not be limited to, the following elements:

- Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site HSP.
- A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals.
- Specified personal protective equipment and decontamination procedures, if needed.
- The requirement to prepare documentation showing that HSP measures have been implemented during construction (e.g., tailgate safety meeting notes with sign-up sheet for attendees).
- A requirement specifying that any site worker who identifies hazardous materials has the authority to stop work and notify the site safety and health supervisor.
- Emergency procedures, including the route to the nearest hospital.
- Procedures to follow if evidence of potential soil or groundwater contamination is encountered (such as soil staining, noxious odors, debris or buried storage containers). These procedures shall be followed in accordance with hazardous waste operations regulations and specifically include, but not be limited to, immediately stopping work in the vicinity of the unknown hazardous materials release; notifying the regulatory agency overseeing site cleanup, if any; and retaining a qualified environmental firm to perform sampling and remediation.

MM-HAZ-3: In support of the HSPs described in Mitigation Measure MM-HAZ-2, prior to any ground-disturbing activity, the project contractor(s) shall develop and implement a Soil and Groundwater Management Plan (SGMP) for the management of soil, soil gas, and groundwater. The SGMP includes a materials disposal plan specifying how the construction contractor(s) will remove, handle, transport, and dispose of all excavated materials and dewatering effluent in a safe, appropriate, and lawful manner. The SGMP shall be prepared for the entire project site. This includes parcels where the Phase I assessments did not identify known or potential contamination issues; given the history of industrial use, the applicant may encounter unanticipated soil, groundwater, and/or soil gas contamination; undocumented fuel or oil tanks, and other unanticipated environmental issues. The SGMP shall include the following, at a minimum:

- Site description, including the hazardous materials that may be encountered.
- Roles and responsibilities of on-site workers, supervisors, and the regulatory agency.
- Training for site workers focused on the recognition of and response to encountering hazardous materials.
- Protocols for the materials (soil and/or dewatering effluent) testing, handling, removing, transporting, and disposing of all excavated materials and dewatering effluent in a safe, appropriate, and lawful manner.
- Confirmation sampling to verify that the remaining soil and/or groundwater at the site does not have chemical concentrations above screening levels for the applicable planned land use (specifically at the previous welding location and Family Trust Property parcels).
- Identification of licensed disposal sites permitted to accept the waste materials.
- Reporting requirement to the overseeing regulatory agency, documenting that site activities were conducted in accordance with the SGMP.

SGMPs for parcels with soil, soil gas, and/or groundwater above environmental screening levels shall be submitted to the City of Oceanside to inform their permit approval process before the start of construction activities and as a condition of the grading and/or construction permit(s). The Contract specifications shall mandate full compliance with all applicable federal, state, and local regulations related to the identification, transportation, and disposal of hazardous materials.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? **Less Than Significant Impact With Mitigation Incorporated.***

As detailed above in Response 14.9(a), soil and/or groundwater contamination may be present in areas with former industrial and commercial uses located within the Parent Family Trust and Buel parcels. Impacted soils may therefore require management and potential remediation depending on constituent concentrations and regulatory action levels. Therefore, Project implementation has the potential to create a hazard to the public or the environment. However, with compliance with federal and state regulations, as well as implementation of Mitigation Measures **MM-HAZ-1** through **MM-HAZ-3**, the Project would result in less than significant impacts regarding reasonably foreseeable upset and accident conditions.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **No Impact.***

No existing or proposed school facilities are located within a one-quarter mile radius of the Project Site. The nearest school is South Oceanside Elementary, located at 1806 South Horne Street, approximately 0.5 miles from the Site. Therefore, the Project would not emit hazardous emissions or handle waste within one-quarter mile of an existing or proposed school, and there would be no impact.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Less Than Significant Impact With Mitigation Incorporated.***

As part of the environmental review for the Proposed Project, a preliminary review of hazardous materials databases, compiled pursuant to Government Code Section 65962.5 was conducted, including a review of the Department of Toxic Substances Control (DTCS) EnviroStor database and the California State Water Resources Control Board GeoTracker database. The results of the database review concluded that the Project Site is not included on any of the lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

However, as detailed in Response 14.9(a) above, according to the 2015 Phase I ESA, one nearby property was listed in the database search as being located up-gradient to the Project Site, with potential for contaminated groundwater to have migrated from upgradient properties to the Project Site. A Project-specific Phase I ESA and Phase II ESA would be required to be prepared prior to any ground disturbing activities on the Project Site, which will include an updated and detailed review of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As construction at the Project Site has the potential to create a hazard to the public or the environment, implementation of Mitigation Measures **MM-HAZ-1** through **MM-HAZ-3** would be required.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? **No Impact.***

The Project Site is not located within an airport land use plan or within two miles of a public airport. The closest airport to the Project Site is Oceanside Municipal Airport, which is located approximately 2.7 miles from the Site. Therefore, the Proposed Project would not result in a safety hazard for people residing or working in the Project area and there would be no impact.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?* **Less Than Significant Impact.**

The City of Oceanside Emergency Operations Plan is a combination of the San Diego County Operational Area Emergency Plan combined with information specific to the City of Oceanside (City of Oceanside 2016). The San Diego County Emergency Operations Plan Annex Q identifies primary evacuation routes consisting of major interstates, highways, and prime arterials within San Diego County. The dedicated evacuation routes are based on the shortest route to the designated destination areas, the road capacity, ability to increase capacity and traffic flow using traffic control strategies, and which roads may be blocked or have their capacity reduced by disaster conditions (County of San Diego 2018). Similarly, the City of Oceanside Public Safety Element provides emergency response and evacuation procedures for the City in lieu of firm routes of evacuation (City of Oceanside 2002b). The nearest identified evacuation route from the Project Site is S. Coast Highway, located east of the Project Site.

The Proposed Project could require a temporary closure along the road west of S. Coast Highway adjacent to the northeast area of the Project Site while irrigation facilities are being constructed. However, any delays caused by such a closure would be temporary and would be managed following the temporary traffic control requirements set forth in the California Manual on Uniform Traffic Control Devices (Caltrans 2014). Although the Proposed Project may present temporary road closures along the access road to the Project Site, it is not anticipated that this road closure would affect operations of S. Coast Highway. The Proposed Project would not include any alterations of existing roadway features (e.g., road realignment) that would create a permanent change to access for emergency vehicles. As such, the Project would not impair the City's adopted emergency response plan or evacuation routes, and a less than significant impact would occur.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?* **No Impact.**

According to CAL FIRE's Very High Fire Hazard Severity Zones in Local Responsibility Area map of Oceanside, the Project Site is not located in a very high fire hazard severity zone, and thus would not expose people or structures to a significant risk of wildland fires (CalFire 2009). Further, the Project consists of enhancing and re-naturalizing the Loma Alta Slough, and would not construct any uses such as structures that would exacerbate risks of wildland fires on the Project Site. Therefore, the Project would not directly or indirectly expose people or structures to wildfire, and there would be no impact.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.10 HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? **Less Than Significant Impact.***

As detailed within the Project-specific Water Quality Technical Report (Appendix I), the Loma Alta Slough has existing water quality issues, including low and widely variable levels of dissolved oxygen (DO) (ESA 2020). The Loma Alta Slough was placed on the 1996 CWA Section 303(d) list of impaired water bodies for excessive eutrophic conditions. In response to the very low levels of DO in the system and the Slough's status on the CWA 303(d) list, the San Diego Regional Water Quality Control Board (SD-RWQCB) developed a Total Maximum Daily Load (TMDL) for the Loma Alta Slough. A TMDL serves as a planning tool and potential starting point for restoration or protection activities with the ultimate goal of attaining or maintaining water quality standards. The City is tasked with monitoring the progress of targets consistent with the SD-RWQCB. The findings of the TMDL are that dry season Total Phosphorus (TP) loads from the watershed were the primary pollutant loads of concern for the Slough. In June 2014, Resolution R9-2014-0020 was adopted as an alternative to the TMDL, to use the existing San Diego Regional Municipal Separate Storm Sewer System (MS4) NPDES Permit and associated Carlsbad Watershed Management Area Water Quality Improvement Plan (WQIP) to improve and monitor the eutrophic conditions of Loma Alta Slough. In each of the years of 2008, 2016, 2017, and 2018, monthly TP loads were far in excess of the TMDL target of TP per month. However, it should be noted that the SD-RWQCB alternative process to the TMDL (using the MS4 Permit to improve conditions at the Slough) included alternative biological standards to measure progress towards restoring water quality in the Slough. This includes algae biomass and cover as a proxy for the eutrophication impairment. As of 2018 and 2019, those alternative water quality numeric targets are being met according to the City's monitoring program.

Construction activities associated with the Proposed Project would require ground disturbance, vegetation removal, and grading to restore and enhance the Loma Alta Slough. Exposure and removal of soils during construction could generate sediment that, if mobilized by stormwater runoff or runoff from applied water during construction, could expose sediments to erosion and could potentially mobilize contaminated sediments that adversely affects water quality of receiving waters.

While the excavation of the tidal channels is expected to extend below the water table, no dewatering processes are anticipated, because low ground pressure equipment, mats, and long reach excavators would be used for construction. The construction activities for the Project would be required to comply with the Construction General Permit and Municipal Separate Storm Sewer System (MS4) Permit required as part of the permitting process, as the Project would disturb greater than one acre of ground. Compliance with the General Construction Permit would ensure any discharged water would not be discharged in such a way to result in direct or indirect degradation of surface water beyond existing conditions. In addition, a Stormwater Pollution Prevention Plan (SWPPP) would be required to be prepared and implemented. Stormwater best management practices (BMPs) would be required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Compliance with the MS4 Permit, General Construction Permit, and SWPPP would ensure that construction activities would not degrade the surface water quality of receiving waters to levels below standards listed in the Water Quality Control Plan for the San Diego Basin (Basin Plan). As a result, impacts during construction would be less than significant.

According to the Project-specific Water Quality Technical Report (Appendix I), after completion of construction, the Proposed Project is anticipated to enhance biological function, restore historical coastal wetlands, and improve wildlife and recreational opportunities. According to the results of the Water Quality Technical Report, the Proposed Project's wetland restoration design would help improve water quality within the Slough, particularly phosphorus, which is the basis for the TMDL for the Slough (ESA 2020). While the wetland system is not specifically designed for water quality improvements, wetlands have a long and well-documented ability to improve water quality by filtering out particulate forms of various contaminants, and by creating the conditions that allow for biogeochemical processes that reduce impact of anthropogenic contaminants. Therefore, the Proposed Project would be beneficial to the Slough's water quality.

The Project would reconnect the marsh floodplain in the northeast area with Loma Alta Creek and remove the riprap lining the northwest, northeast, and part of the southeast areas. Reconnection of the creek with the floodplain would change the flow patterns and velocity within the creek, with flows slowing down as they expand over the floodplain and speeding up as they reenter the channel through the railroad bridge. During a large storm event, the new flow pattern could increase scour or erosion within the creek, which could re-suspend sediment within the lagoon, increasing turbidity. According to the Project-specific Hydrologic and Hydraulic Study (Appendix A), which included a scour analysis of the Project, vegetation is likely sufficient to stabilize the channel banks and overbanks, and riprap would not be needed along the marsh edge. In areas where the channel shear stresses are greater and could result in erosion, a combination of rock slope protection (buried as feasible) and vegetated channel banks would be used to provide both channel stability and improved habitat. These Project features would reduce the amount of erosion during a large storm event. Additionally, an increase in sediment erosion during large, infrequent storm events is typical in natural systems. Any increase in turbidity caused by the Project during storm events would only be for the limited time as the storm flows pass through. Thus, implementation of the Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? **Less Than Significant Impact.***

Construction of the Proposed Project would include the use of water trucks for dust control during earthwork activities. Water trucks would use the local water supply, which is served by the City of Oceanside Water Utilities Department. The City as of 2020, purchases approximately 78 percent of its water supply from the San Diego County Water Authority (SDCWA), and the remaining 22 percent comes from groundwater within the Mission Basin (which accounts for approximately 10 percent), recycled water produced at the San Luis Rey Waste Water Treatment Plant, and advanced treated water (City of Oceanside 2015). Therefore, construction water demand could be met through the use of groundwater supplies. However, construction water supply needs would be temporary and are unlikely to be substantial. Therefore, construction associated with the Project would not adversely affect groundwater supplies or sustainable groundwater management of the basin.

During operation of the Project, temporary irrigation would be installed for high marsh, transition zone, upland, and riparian areas until vegetation is established (e.g. for 3-5 years after restoration). Water sources for the irrigation would come from either the existing domestic water main along the road west of S. Coast Highway adjacent to the northeast area, or from a temporary recycled water connection from the La Salina WWTP property. As detailed in the City of Oceanside Urban Water Management Plan, the City of Oceanside water supplies would meet projected demand through 2040 (even in future dry years through 2035). Therefore, considering the different sources of water supply for the City and the projected demands, the Project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin.

During operation of the Project, the ground in the northeast area would be lowered to marshplain elevations, and the floodplain would be reconnected to Loma Alta Creek. By lowering the area around the Creek to marshplain elevations, the extent of tidal influence would increase. The increased extent of tidal influence would increase the infiltration of salt water into the groundwater table in the northeast area and could result in the inland advancement of sea water intrusion. According to the Preliminary Geotechnical Feasibility Report, the groundwater beneath the Project site is shallow (Appendix F) and likely tidally influenced. Generally, freshwater from the inland water table flows toward the coast and mixes with salty groundwater making groundwater that is brackish (a mixture of salty and fresh water). The brackish groundwater in these estuarine, shallow water table aquifers is non-potable. As it is non-potable, there are no wells in the vicinity of the Project site that draw groundwater from the shallow water table for domestic or municipal use (DWR 2020). The Project would increase tidal inundation through the marsh in the northeast and possibly cause the extent of brackish water to migrate inland. If this were to occur, the change to water quality is not considered to have an adverse impact on water resources because the groundwater in this area is not used for domestic or municipal supply. The inland migration of the brackish groundwater would likely be limited and not extend much beyond the northeastern limits of the Project area. While the increased inundation could cause more salt water to infiltrate to the water table, it would be infiltrating into an already brackish, estuarine water table that is not used for public or private supply. Furthermore, the properties surrounding the Project area are serviced by the City's municipal water supply so it is unlikely there would be a need for additional domestic groundwater wells that could be impacted by brackish groundwater. Therefore, the Project would not substantially impede sustainable groundwater management of the basin.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:*

- 1) *Result in substantial erosion or siltation on- or off-site? **Less Than Significant Impact.***

As detailed in Response 14.10(a), construction activities for the Proposed Project would be required to comply with the Construction General Permit, SWPPP, and MS4 Permit required as part of the permitting process. Stormwater BMPs would be required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Compliance with the MS4 Permit, General Construction Permit, and SWPPP would ensure that construction activities would not result in substantial erosion or siltation on- or off-site. As a result, impacts during construction would be less than significant.

The Project would reconnect the marsh floodplain in the northeast area with Loma Alta Creek and remove the riprap lining the northwest, northeast, and part of the southeast areas. Reconnection of the creek with the floodplain would change the flow patterns and velocity within the creek, with flows slowing down as they expand over the floodplain and speeding up as they reenter the channel through the railroad bridge. During a large storm event, the new flow pattern could increase scour or erosion within the creek, which could re-suspend sediment within the lagoon, increasing turbidity. As discussed under Response 14.10(a), vegetation is likely sufficient to stabilize the channel banks and overbanks, and riprap would not be needed along the marsh edge (Appendix A). During large storm events, any increased export from Loma Alta Creek under Project conditions could increase the deposition of fine sediments on the beach. However, this would be considered merely a temporary nuisance condition and wave action would wash fines out to the bay. With implementation of the Project erosion control features, the Project would not substantially increase erosion or siltation on- or off-site.

- 2) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less Than Significant Impact.***

As detailed in Response 14.10(a), construction activities for the Proposed Project would be required to comply with the Construction General Permit, SWPPP, and MS4 Permit required as part of the permitting process. Stormwater BMPs would be required to limit and control stormwater runoff during construction activities. Compliance with the MS4 Permit, General Construction Permit, and SWPPP would ensure that construction activities would not result in substantial rates of surface runoff in a manner which would result in flooding on- or off-site. As a result, impacts during construction would be less than significant.

The Project would include construction of an overlook structure for public access, which would increase runoff, although the rest of the site would remain native soil coverage. The overlook structure would be 900 square feet. During an 85th percentile rainfall event,⁹ the Project area would receive 0.65 inches of rain (San Diego County 2020). For this infrequent event, that would equate to 49 cubic feet of runoff over the 24-hour period or 0.0006 cubic feet per second. For comparison, during the 2-year storm event (i.e., 50% annual chance storm), the peak flow in Loma Alta Creek is 190 cubic feet per second. Therefore, the Creek would be expected to convey the additional runoff from the overlook without resulting in flooding on- or off-site. Therefore, operation of the Project would not result in surface runoff in a manner which would result in flooding on- or off-site, and impacts would be less than significant.

- 3) *Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Less Than Significant Impact.***

As detailed in Response 14.10(a), construction activities for the Proposed Project would be required to comply with the Construction General Permit, SWPPP, and MS4 Permit required as part of the permitting process. Stormwater BMPs would be required to limit and control stormwater runoff during construction activities, which would limit water entering existing stormwater drainage systems. Compliance with the MS4 Permit, General Construction Permit, and SWPPP would ensure that construction activities would not result in substantial rates of surface runoff, and in turn ensure runoff water would not exceed the capacity of the existing stormwater drainage system. As a result, impacts during construction would be less than significant.

The Project would include an overlook structure for public access, which would create additional runoff. The runoff would drain to the creek, which would provide stormwater drainage to the ocean. As discussed in Issue 14.9(c(2)), the overlook would not substantially increase the rate or amount of surface runoff. The overlook would not trigger Priority Development Project BMP requirements under the City's ordinance or the Regional MS4 Permit to control for increased runoff and pollutant control. Therefore, runoff caused by the Project would not exceed the capacity of Loma Alta Slough or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

- 4) *Impede or redirect flood flows? **Less Than Significant Impact.***

As detailed in Response 14.10(a), construction activities for the Proposed Project would be required to comply with the Construction General Permit, SWPPP, and MS4 Permit required as part of the permitting process. Stormwater BMPs would be required to limit and control stormwater runoff during construction activities, which would limit the impediment or redirection of flood flows. As a result, impacts during construction would be less than significant.

Operation of the Project would reconnect Loma Alta Creek to the restored wetland floodplain by grading the northeast area to marshplain elevations. Hydraulic modeling evaluated any changes to flood water elevations that would result due to the Project. Modeling was conducted for both existing and Project conditions. The results showed that the Project would result in the same or lower water levels compared to existing conditions, due to the widening of the creek channel and floodplain (Appendix A). Therefore,

⁹ The 85th percentile is a 24-hour rainfall total. It represents a value such that 85% of the observed 24-hour rainfall totals will be less than that value.

the Project would not substantially increase, impede, or redirect flood flows, and a less than significant impact would occur.

- d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?* **Less Than Significant Impact.**

The Project Site is not located adjacent to an enclosed or semi-enclosed water body such that there would be no risk of seiche waves that could affect the Project Site.

According to the California Emergency Management Agency's Tsunami Inundation Map, the Project Site is located in a tsunami inundation area (California Emergency Management Agency 2009). Further, the Project Site is within a 100-year flood hazard area, as mapped on FEMA's Flood Insurance Rate Map (FEMA 2012). However, the Project does not involve the development of any permanent structures within a flood zone. In addition, there would not be any storage of substantive quantities of hazardous material anywhere within the project site that would be at risk of release from inundation. The Project would restore the existing wetland on the project site, which provides protection from tsunamis and tidal surges and would thus help mitigate potential damage from a tsunami event. Therefore, impacts would be less than significant related to risk of release of pollutants due to project inundation.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?* **No Impact.**

As detailed previously in Issue 14.9(a), the Loma Alta Slough is listed as an impaired water body on the CWA 303(d) list for excessive eutrophic conditions and, in response, the SD-RWQCB developed a TMDL for the Slough. In June 2014, Resolution R9-2014-0020 was adopted as an alternative to the TMDL, to use the existing MS4 Permit and associated Carlsbad WQIP to improve and monitor the eutrophic conditions of Loma Alta Slough. According to the results of the Project-specific Water Quality Technical Report (Appendix I), the Proposed Project's wetland restoration design would help improve water quality within the Slough, particularly phosphorus, which is the basis for the TMDL for the Slough (ESA 2020). While the wetland system is not specifically designed for water quality improvements, wetlands have a long and well-documented ability to improve water quality by filtering out particulate forms of various contaminants, and by creating the conditions that allow for biogeochemical processes that reduce impact of anthropogenic contaminants. Therefore, the Proposed Project would be beneficial to the Slough's water quality. As a result, the Project would not conflict or obstruct implementation of the Carlsbad WQIP (and would actually be a benefit to the plan), and no impact would occur.

As detailed above in Issue 14.9(b), water demand for construction and operation of the Project would be served by the City of Oceanside Water Utilities Department. Approximately 10 percent of the City's water supply comes from groundwater within the Mission Basin. No groundwater management plan is currently in place for the Mission Basin. As a result, the Project would not conflict or obstruct implementation of a sustainable groundwater management plan, and no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.11 LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Physically divide an established community?* **No Impact.**

The Project Site is located in an urban and built-out area of the City. The Site is located south of the La Salina WWTP, north of Buccaneer Beach Park, west of Coast Highway, and east of the Pacific Ocean. Other adjacent land uses include an RV Park to the south, and commercial facilities to the north. The Project consists of enhancements and restoration to the existing wetland Slough, which would result in similar naturalized area within the community compared to existing conditions. Therefore, no impacts would occur related to the division of an established community.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?* **Less Than Significant Impact.**

As detailed above in the Project Description, the Proposed Project would include a Zone Amendment, a General Plan Amendment, and a Local Coastal Program Amendment (however, the Local Coastal Program Amendment is exempt from CEQA and not further discussed). As shown in Figure 7, the existing General Plan land use designations for the Project Site include: Coastal Open Space (C-OS), Coastal Dependent, Recreational & Visitor Commercial (C-VC), Coastal General Commercial (C-GC), Coastal Transportation and Utility (C-TU), and Coastal Light Industrial (C-LI). The Proposed Project would include a General Plan Amendment to change the land use designations of the eastern Coastal General Commercial (C-GC) designation (in Phase 1) and the Coastal Light Industrial (C-LI) designation (in Phase 2) to Coastal Open Space (C-OS).

As shown in Figure 8, the existing zoning designations for the Project Site include: Open Space (Coastal) (O), Visitor Commercial (Coastal) (VC), General Commercial (C2), Public Utility and Transportation Zone (PUT), and Light Industrial (Coastal) (M1). The Proposed Project would include a Zone Amendment to change the eastern General Commercial (C2) designation (in Phase 1) and Light Industrial (Coastal) (M1) designation (in Phase 2) to Open Space (Coastal) (O).

As the Project is restoring and enhancing the Slough, and not adding any structures or changing uses of the Site, the Project would be consistent with the current and proposed zoning and land use designations. Specifically, the Project is consistent with Land Use Policy 2.241 of the General Plan, in that the Project would provide coastal dependent, recreational, and visitor serving uses and facilities (City of Oceanside 2002c).

The City has adopted Community Planning Areas in order to provide neighborhood implementation of citywide policies, and conceptual Neighborhood Areas within the Community Plan Areas. According to the City's General Plan, the Project Site is located within Community Planning Area D, and the South Oceanside Neighborhood Area. However, there are no applicable community plan policies for these specific areas (City of Oceanside 2002c).

The Project Site is within the Coastal Zone, as defined by the Local Coastal Program (LCP) and the California Coastal Commission (City of Oceanside 1985). The LCP Land Use Plan (LUP) provides goals and policies for the preservation of coastal resources, maintenance of existing flood channels, and access to public beaches (City of Oceanside 1985). The Project would be consistent with the LCP LUP because the Project does not propose any uses which would restrict beach access, nor would the Project be detrimental to coastal resources. The Project would result in a re-naturalized creek system, which would include passive recreational uses and increased biological function.

As the Project would be consistent with current and proposed zoning designations, the General Plan, and LCP, the Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project, and impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.12 MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* **No Impact.**

According to the City of Oceanside General Plan, the Project Site is not located within a Mineral Resource Area (City of Oceanside 2002b). In addition, according to the United States Geological Survey, the Project area is not identified as having a history of mineral extraction uses (USGS 2016). Therefore, the Project Site is not considered to contain mineral resources of significant economic value. The Proposed Project would not result in the loss of available, known mineral resources of value to the region, or result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan. Thus, no impact would occur related to mineral resources.

- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?* **No Impact.**

Refer to Response 14.12(a), above.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.13 NOISE. Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* **Less than Significant Impact.**

Chapter 38 of the City of Oceanside Municipal Code (Noise Ordinance) governs operational noise and contains the maximum 1-hour average sound levels for various land uses for operational noise. The Noise Ordinance sets an allowed level for single-family and medium density residential areas of 50 dBA Leq from 7:00 a.m. to 9:59 p.m., and 45 dBA Leq from 10:00 p.m. to 6:59 a.m. High-density residential areas are limited to 55 dBA Leq from 7:00 a.m. to 9:59 p.m. and 50 dBA Leq from 10:00 p.m. to 6:59 a.m. However,

Section 38.17 specifically prohibits the operation of any pneumatic or air hammer, pile driver, steam shovel, derrick, steam, or electric hoist, parking lot cleaning equipment, or other appliance, the use of which is attended by loud or unusual noise, between the hours of 10:00 p.m. and 7:00 a.m. Section 38.16 prohibits nuisance noise as recommend in the General Plan Noise Element. It is unlawful for any person to make, continue, or cause to be made or continued, within the limits of the City, any disturbing, excessive, or offensive noise that causes discomfort or annoyance to reasonable persons of normal sensitivity.

Pursuant to the City's Noise Control Ordinance (Chapter 38 of the City Municipal Code) and the City's General Plan Noise Element, construction activities would be limited to daytime hours (7:00 a.m. to 6:00 p.m. Monday through Friday, or from 8:30 a.m. to 4:30 p.m. on Saturday) for the duration of construction. The Noise Element states that it shall be unlawful for any person to operate construction equipment at a level in excess of 85 A-weighted decibels (dBA) at 100 feet from the source.

The Project Site is located in an urbanized and built-out area in the southern coastal portion of the City of Oceanside, located south of the La Salina WWTP and north of Buccaneer Beach Park. The Project Site is bounded to the west by Pacific Street and to the east by S. Coast Highway. Adjacent land uses also include the Paradise by the Sea RV Park to the south, and commercial facilities to the north with outdoor storage.

The restoration activities would be phased over time based on land acquisition. The City owns all of the land in the Project Site except the Parent Family Trust and Buel properties in the northeast area. Acquisition of the Buel parcel is expected prior to Phase 1 implementation as the City is currently in negotiations with the property owner. The first phase of the Proposed Project would involve restoration of the City-owned properties. If the City is able to acquire the Parent Family Trust property in the future, a second phase of restoration would be conducted to incorporate the property into the restored site. The timing of construction for the second phase is dependent on multiple variables, including property transfers, removal of infrastructure and related facilities, availability of funding, and permit approvals. Therefore, in addition to Buccaneer Beach Park and Sea Recreational Vehicle Park, Phase 1 Project construction could also impact the Parent Family Trust Property. Phase 2 Project construction would only affect the two offsite sensitive land uses, Buccaneer Beach Park and Sea Recreational RV Park. Both of these two offsite land uses are approximately 50 feet from the project's boundary where potential Project construction activity could occur.

Project Construction

Noise impacts from Project construction activities would be a function of the noise generated by construction equipment, the location of the equipment, the timing and duration of the noise-generating construction activities, and the relative distance to noise-sensitive receptors. Construction of the Project would include: mobilization and demobilization, site preparation, clearing and grubbing, earthwork, riprap removal, soil transport across and off-site, soil remediation (if necessary), revegetation, construction of trails and the overlook, and installation of signs and art. Earthwork would include excavation, grading, and fill placement to create marshplain, tidal channels, upland transition buffer, and berm habitats.

Construction of the Project would occur in the summer to early fall of 2021 and would take 2 to 4 months for Phase 1 and up to 2 months for Phase 2 to complete. Phase 2 would be constructed after the Parent Family Trust property is acquired by the City.

Excavation in the Project Site to lower the area to marshplain is expected to generate between 7,900 and 20,300 cubic yards of soil, depending on final marshplain grading. In Phase 1, approximately 7,300 to 17,600 cubic yards of soil would be excavated and offhauled. In Phase 2, approximately 600 to 2,700 cubic yards of soil would be excavated and offhauled. Export would occur via trucks with disposal at local landfills, the most likely of which could include the El Sobrante Landfill in Corona, California.

Construction of the Project would begin with site preparation, including clearing and grubbing and installation of wildlife exclusion fencing to isolate the work area from adjacent habitat as needed. Material generated during clearing and grubbing would be stockpiled for future placement in the upland buffer or berms as possible, or hauled to an offsite disposal area. Following site preparation, construction would continue with the excavation and grading of tidal channels and marshplain. Hydrologic controls such as flow diversion structures, weirs, or coffer dams are not expected to be required for construction (see Construction Equipment). Once site grading is complete, revegetation of marshplain and upland habitats

would occur, as well as installation of the trail surfacing, overlook structure, and other public access features.

Each phase of construction would involve the use of various types of construction equipment and would, therefore, have its own distinct noise characteristics. Much of the Proposed Project's earthwork would be accomplished by traditional land-based equipment (e.g., scrapers and excavators); however, wetland restoration earthwork may also require some special equipment and implementation methods, as high groundwater and weak soils can preclude the use of traditional land equipment. (See Table 4 in the Project Description for a list of construction equipment by phase.)

The noise from construction equipment would generate both steady-state and episodic noise that could be heard within and adjacent to the Project Site. Construction noise levels fluctuate throughout a given workday as construction equipment move from one location to another within a project site. When construction equipment would be in use further away from a sensitive receptor location, construction noise levels would be lower than the calculated values provided herein, which assumes construction equipment would be in use nearest to a sensitive receptor location. Exposure to fluctuating construction noise levels that would at times be lower than the noise levels shown in the analysis below would not rise to the level (greater than 120 dBA) that would result in hearing loss¹⁰ or adverse health impacts.

Individual pieces of construction equipment that would be used for construction of the Project produce maximum noise levels of 74 dBA to 85 dBA at a reference distance of 50 feet from the noise source, as shown in **Table 12**.

TABLE 12
CONSTRUCTION EQUIPMENT NOISE REFERENCE LEVELS AND USAGE FACTORS

Type of Equipment	Acoustical Usage Factor ^a (%)	Reference Maximum Noise Levels at 50 Feet, ^{a,b} L _{max} (dBA)
Compactor (ground)	20	83
Dozer	40	82
Grader	40	85
Dump/Haul Truck	40	76
Excavator	40	81
Scraper	40	84
Tractor/Loader/Backhoe	40	80
Delivery Truck	40	74

Note: The Referenced Maximum Noise Levels are based on the FHWA RCNM User's Guide, which is a technical report containing actual measured noise data for construction equipment.

^a The usage factor is the percentage of time during a construction noise operation that a piece of construction is operating at full power.

^b Construction equipment noise levels are based on the FHWA RCNM.

Source: FHWA, Roadway Construction Noise Model User's Guide, 2006, Table 1.

These maximum noise levels would occur when equipment is operating under full power conditions (i.e., the equipment engine at maximum speed). However, equipment used on construction sites often operates under less than full power conditions or part power. For a worst case scenario, it is assumed that during each construction phase, all the pieces of equipment expected to be used would all be operating at the same time at a location that is nearest the off-site sensitive receptor of concern. This means that each equipment would generate the maximum noise level shown in Table 12 at the same time at a location nearest to any off-site receptor of concern.

¹⁰ United States Department of Labor, Occupational Safety and Health Administration, Occupational Safety and Health Standards Part 1910, Standard 1910.95.

Table 13 lists the potential construction noise levels at 100 feet from the active construction source(s), factoring in the number and type of construction equipment that would be in operation during the same period of time, and their individual maximum noise levels at 50 feet as shown in Table 12. A sample calculation is included in the footnote of the table that shows how the sound energy is combined into a logarithmic scale and summed up during which the equipment operates, assuming they all operate concurrently.

TABLE 13
CONSTRUCTION NOISE IN DIFFERENT PHASES

Construction Element	Equipment	Maximum Noise Level at 100 feet from Active Construction Area, dBA
Site Preparation	Mower	64. ^a
	Track Pulled Scraper Conventional Scraper Bulldozer	82
	Hand tools	n/a
Earthwork and Off-haul	Excavator	75
	LGP Track Dump Truck Wheeled Dump Truck	73
	Track Pulled Scraper Conventional Scraper Bulldozer/Grader	83 ^b
	Compactor	77
	Water Truck	70
Riprap Removal	Excavator	81
Revegetation	Drill Seeder Hydroseeder	81 ^c

^a Based on a noise level of 90 dBA at rider's level that is approximately 5 feet from the source.

^b Sample calculation. $Leq = 10 \log [(10^{8.4} + 10^{8.4} + 10^{8.5})] = 10 \log [818605052] - 6 = 10 \times 8.91 - 6 = 83 \text{ dBA}$

^c Based on a noise level of 84 dBA at 5 feet from the source, with two seeders working at the same time.

Source: ESA, 2020

Phase 1 Construction Noise

Phase 1 construction includes the following steps:

- In the area west of the railroad bridge: Cut channels perpendicular to creek to improve circulation in existing marsh and to improve drainage. Light grading in marsh to encourage drainage to channels. Remove rip-rap along channel edge.
- In the area along the northern boundary of the project site: Connect trail under railroad bridge to Coastal Rail Trail. Would require appropriate slope to match the Rail Trail elevation.
- In the area on the eastern portion of the project site near the Pacific Coast Highway: Grade channels into northern parcels. Grade land to slope from back of site (riparian habitat) down to channels. Keep high ground berm along channel to provide riparian or high marsh habitat (provides shading of channel). Remove rip-rap along channel edge.
- In the area along the northern boundary of the project site: Construct trail from Coast Highway west to connect with Coastal Rail Trail. Add marsh overlook platform at Buel Property.
- In the area near the middle-southern boundary of the project site: Conduct minor grading to slope down to channel. Remove invasive species.

Since the offsite sensitive land uses, Buccaneer Beach Park and Paradise by the Sea RV Park, are both located to the south, Project construction near the southern boundary such as focused grading in the middle-southern part of the Project Site would result in higher noise levels at these offsite land uses compared to Project construction near the northern project boundary.

Table 13 shows that the noise levels associated with each construction phase would not exceed 85 dBA at a distance of 100 feet. Based on the calculations and due to the restricted hours and short period of construction, noise impacts resulting from construction related activities would be less than significant.

Phase 2 Construction Noise

Phase 2 includes the following steps:

- In the area near the northern project boundary: Extend marsh into Parent Family Trust property. Would involve grading within restored areas to improve habitat connectivity.
- In the area along the northern boundary of the project site: Reroute trail around Parent Family Trust property.

Table 13 shows that the noise levels associated with each of the construction phases would not exceed 85 dBA at a distance of 100 feet. In addition, construction is short-term and would last 6 months only. Therefore, based on the calculations and due to the restricted hours and short period of construction, no significant construction noise impacts would occur.

Further, noise abatement measures would help minimize the potential construction noise associated with the proposed project. Equipment would use available noise suppression devices and properly maintained mufflers. Construction noise would be reduced by using quiet or “new technology”, equipment, particularly the quieting of exhaust noises by use of improved mufflers where feasible. All internal combustion engines used at the Project Site would be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment would be maintained in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components. In addition, during all site preparation, grading, and construction, contractors would minimize the staging of construction equipment and unnecessary idling of equipment in the vicinity of noise sensitive land uses (Buccaneer Park and the Paradise by the Sea RV Park). Additionally, equipment staging would be situated so as to provide the greatest separation between construction-related noise sources and noise-sensitive receptors nearest the Project Site during all Project construction.

- b) *Generation of excessive groundborne vibration or groundborne noise levels?* **Less Than Significant Impact.**

The amounts of construction required for the Proposed Project is not anticipated to generate excessive groundborne vibrations or groundborne noise levels. Additionally, this Project is not anticipated to include pile driving activities, therefore, ground borne vibration is not expected to occur. Due to the temporary nature of construction activities, impacts in this regard are considered to be less than significant.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* **No Impact.**

The Project Site is not located within an airport land use plan or within two miles of a public airport. The closest airport to the Project Site is Oceanside Municipal Airport, which is located approximately 2.7 miles northeast of the Project Site. Therefore, the Proposed Project would not expose people residing or working in the project area to excessive noise levels, and no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.14 POPULATION & HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* **No Impact.**

The Proposed Project would not directly induce population growth in the region because the Project does not involve construction of new homes or businesses and would draw construction workers from the existing labor force within the region. In addition, the Proposed Project would not indirectly induce population growth in the region by removing an obstacle to growth or through the extension or expansion of major capital infrastructure. Therefore, no impact would occur related to the inducement of population growth either directly or indirectly.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?* **No Impact.**

No residences are located on the Project Site and the Proposed Project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur related to the displacement of substantial numbers of people or housing.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.15 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Fire protection? **Less Than Significant Impact.***

The Oceanside Fire Department provides fire and emergency services to the City of Oceanside. The fire station closest to the Project Site is Fire Station 2, approximately 0.4 mile east of the Project Site. While the Proposed Project would increase vegetation in the Project Site, Project components would not increase the incidence of fire hazards, as marshland vegetation would be adjacent to the existing creek. Further, temporary irrigation would be installed for the landscaped areas, which would reduce the potential for fire risks at the Site. While visitor use may slightly increase at the Project Site, the demand on the Oceanside Fire Department is not expected to be so great as to require new or physically altered fire facilities. Therefore, the impacts of the Proposed Project would not create a significant demand for the construction or alteration of government facilities in order to maintain acceptable service ratios, response times, or other performance objectives, and impacts would be less than significant.

b) *Police protection? **Less Than Significant Impact.***

The Oceanside Police Department provides law enforcement services throughout the city. The nearest police station to the Project Site is located at 3855 Mission Avenue, approximately 3.8 miles northeast of the Project Site. While there may be an increase of visitors using the Project Site, the potential increase in visitors would not create an increase in demand such that the construction or alteration of government facilities in order to maintain acceptable service ratios, response times, or other performance objectives would be necessary. Therefore, impacts to law enforcement services would be less than significant.

c) *Schools? **No Impact.***

The Oceanside Unified School District provides education services to the City of Oceanside. Because the Proposed Project would not be introducing a new resident population in or around the Project Site, the Project would not result in an increase in demand on schools. Therefore, no impact would occur to schools.

d) *Parks? **No Impact.***

The Proposed Project would result in the creation of trails and a marsh overlook platform for passive recreational uses. Potential construction impacts resulting from the recreational component of the Project are evaluated in this document. Implementation of the Proposed Project would not affect any existing park facilities nor increase the demand for additional recreational facilities. Therefore, no impacts to parks are anticipated as a result of this Project.

e) *Other public facilities? **No Impact.***

The Oceanside Public Library System provides library services to the City of Oceanside through three permanent locations and two "traveling" libraries. Because the Proposed Project would not introduce new residents to the City, no increase in demand on library services would occur. No significant impacts to other public facilities are anticipated to occur with Project implementation.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.16 RECREATION. Would the project:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* **No Impact.**

Implementation of the Proposed Project would restore the Loma Alta Slough and would include the creation of trails and a marsh overlook platform for passive recreational uses. The Proposed Project would accommodate the local community, and could alleviate demand at other passive recreational facilities. The Project would not generate an increase in demand on existing public or private parks or other recreational facilities that would either result in or increase physical deterioration of the facility, as the Project would not result in an increase of local population either directly or indirectly. Therefore, there would be no impact.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* **Less Than Significant Impact With Mitigation Incorporated.**

As detailed above in Response 14.16(a), the Proposed Project would result in the creation of trails and a marsh overlook platform for passive recreational uses. Since construction of the recreational component is part of the Proposed Project, the proposed construction impacts are evaluated in this document. Mitigation measures are recommended to reduce potentially significant impacts to a less than significant level with regard to biological resources, cultural resources, paleontological resources, hazards and hazardous materials, and noise. With implementation of Mitigation Measures MM-BIO-1 through MM-BIO-5, MM-CUL-1 through MM-CUL-5, MM-PAL-1 through MM-PAL-4, and MM-HAZ-1 and MM-HAZ-2, the Proposed Project would not have an adverse physical effect on the environment and impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.17 TRANSPORTATION. Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?* **Less Than Significant Impact.**

Regional access to the Project Site is provided by Interstate 5 (I-5), which is located approximately 0.5 miles to the east; State Route (SR) 78, located approximately 1.0 miles to the east; and SR 76, located approximately 2.0 miles to the north. Based on the most recent data available from the California Department of Transportation (Caltrans), average daily traffic (ADT) on regional facilities near the Project Site are as follows (Caltrans, 2018):

- I-5: 210,000
- SR 78: 79,000
- SR 76: 51,000

Local access is provided by S. Coast Highway to the east and Pacific Street to the west (see Figure 1). Based on the most recent data available from the City, ADT on local facilities near the Project Site are as follows (IBI, 2017):

- South Coast Highway: 19,100
- Pacific Street: 3,600

The Proposed Project is not expected to cause a large increase in recreational visitors, and operation and maintenance activities would be similar to existing conditions (i.e., as needed maintenance of habitat and vegetation, trash pick-up, trail maintenance). For this reason, the focus of the analysis of potential transportation impacts is on Project construction.

Local Roadways

As proposed, the Proposed Project would not conflict with any applicable plans, ordinances, or policies establishing measures for effectiveness of the performance of the circulation system, such as the City of Oceanside General Plan Circulation Element (2012), the City of Oceanside Bicycle Master Plan (2017) or the City of Oceanside Pedestrian Master Plan (2009). The increase of visitors or frequency of the use of the trails would be negligible. In accordance with the City of Oceanside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (2020), a local transportation analysis is not warranted because the Proposed Project would not generate more than 200 average daily trips.

Estimates of truck hauling and worker vehicle trips were developed as part of the Proposed Project design. As stated in the Project Description, construction would include: mobilization and demobilization, site preparation, clearing and grubbing, earthwork, riprap removal, soil transport across and off-site, soil remediation (if necessary), revegetation, construction of trails and the overlook, and installation of signs and art. Earthwork would include excavation, grading, and fill placement to create marshplain, tidal channels, upland transition buffer, and berm habitats. Construction of the Project would occur in the summer to early fall of 2021 and would take 2 to 4 months for Phase 1 and up to 2 months for Phase 2 to complete. From a transportation standpoint, the peak of construction activity would occur during a one-month period of Phase 1, during which a maximum of approximately 30 one-way construction worker trips and 40 one-way truck trips would be generated daily. While the construction worker vehicle trips could be concentrated during a one-hour period at the beginning of the work shift (i.e., 15 inbound vehicle trips) and a one-hour period at the end of the work shift (i.e., 15 outbound vehicle trips), the haul truck trips would be spread throughout course of the workday.

In relation to the existing traffic volumes on study area roadways shown above, the addition of project-generated haul truck and construction worker trips would represent less than a one-percent increase in traffic on study area roadways. The changes in daily traffic are within the typical daily fluctuations experienced on roadways (plus or minus 5 percent) and therefore, do not represent a substantial increase in traffic.

Construction vehicles would use the above-mentioned local roadways to deliver materials and haul waste to/from the Project Site. Construction staging would occur on-site and would not affect traffic operations on adjacent roadways. Roadway users could experience temporary delays from material deliveries, but these delays would be both brief and infrequent. The Proposed Project could, however, require a temporary closure along the road west of S. Coast Highway adjacent to the northeast area of the Project Site while irrigation facilities are being constructed. However, any delays caused by such a closure would be temporary and would be managed following the temporary traffic control requirements set forth in the California Manual on Uniform Traffic Control Devices (Caltrans 2014). In summary, construction activities would not impede non-motorized travel or public transportation in the project vicinity. As such, impacts would be less than significant.

Congestion Management Program Facilities

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). Although the SANDAG provided regular updates for the state CMP from 1991 through 2008, the San Diego region elected to opt out of (be exempt from) the state CMP in October 2009. As such, there is no relevance of the Proposed Project to potential conflicts with an applicable CMP, and no impact would occur.

Transit, Bicycle, and Pedestrian Facilities

The Proposed Project would not result in any physical changes to transportation facilities adjacent to or nearby the Project Site. As such, it would not directly or indirectly eliminate alternative transportation corridors or facilities (e.g., bus stops, bicycle lanes). In addition, the Proposed Project would not preclude increased alternative transportation services. Therefore, the Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. As mentioned above, the Proposed Project would not impede non-motorized travel or public transportation in the project vicinity; it would not decrease the performance or safety of such facilities. As a result, impacts would be less than significant. The Proposed Project would result in a minor increase in vehicular trips as a result of the construction and operational activity for the proposed project. Anticipated traffic impacts would be minor and short-term project construction. Therefore, less the significant impacts are anticipated.

- b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?* **Less Than Significant Impact.**

In accordance with Senate Bill (SB) 743, the CEQA Guidelines Section 15064.3, subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts are primarily focused on

projects within transit priority areas, and shifts the focus from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses. Vehicle miles traveled, or VMT, is a measure of the total number of miles driven to or from a development and is sometimes expressed as an average per trip or per person.

The newly adopted guidance provides that a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. The City formally adopted its updated transportation significance thresholds and its updated transportation impact analysis procedures in August 2020. According to the City's VMT screening process, a quantitative VMT analysis is not warranted for the Proposed Project because it would generate less than 200 daily vehicle trips. Therefore, a less-than-significant VMT impact would be presumed for the Proposed Project.

- c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* **No Impact.**

An impact would occur if a project would substantially increase roadway hazards due to a geometric design feature or the introduction of incompatible uses (i.e., farming equipment). As noted above, the Proposed Project would not result in any physical changes to transportation facilities adjacent to or nearby the Project Site, and access to the Project Site would be the same as under existing conditions. Furthermore, implementation of the Project would not introduce incompatible uses into the surrounding roadway network. Therefore, impacts would be less than significant related to roadway hazards.

The Proposed Project would use the same access point as existing conditions. No public roadways are proposed as part of the Project, therefore, no impacts regarding design features or incompatible uses would occur.

- d) *Result in inadequate emergency access?* **No Impact.**

A significant impact would occur if the design of the Proposed Project would not satisfy local emergency access requirements. The Proposed Project would not include any alterations of existing roadway features (e.g., road realignment) that would create a permanent change to access for emergency vehicles. As such, inadequate emergency access would not occur as a result of Project implementation.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.18 TRIBAL CULTURAL RESOURCES.				
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
- 1) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
 - 2) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? **Less Than Significant Impact.***

California Assembly Bill (AB) 52, through its implementing regulations, requires that lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project and who have requested in writing to be informed by the lead agency of proposed projects in the tribe's geographic area (PRC Section 21080.3.1[b] and [d]).

A Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC) on June 18, 2019, indicates Native American cultural resources are located in the Proposed Project's vicinity, but did not provide any details. The NAHC recommended contacting the La Jolla Band of Luiseño Indians for more information regarding the resources. The NAHC also provided a list of Native American contacts.

As part of the Cultural Resources Assessment Report (Appendix E) prepared for the project, the 31 Native American representatives indicated by the NAHC were contacted via letter on March 4, 2020 as part of scoping efforts conducted in support of Section 106 of the National Historic Preservation Act for the Army Corps of Engineers' use as part of the project's 404 permit application. Follow-up phone calls were conducted on March 11, 2020 and follow-up emails were sent on April 6, 2020.

As a result of the Section 106 Native American Outreach, five formal responses were received from the following tribal groups: Agua Caliente Band of Cahuilla Indians (Agua Caliente), Rincon Band of Luiseño Indians, the San Luis Rey Band of Mission Indians (San Luis Rey), Pala Band of Mission Indians (Pala), the San Pasqual Band of Band of Mission Indians (San Pasqual). Agua Caliente and San Pasqual deferred to tribal groups in closer proximity to the Proposed Project. Rincon expressed concern the Proposed Project could impact cultural resources and/or human remains and stated the Luiseño place named, 'éngxalash, is located within 1 mile of the Proposed Project. San Luis Rey stated cultural resources are located within close proximity to the Proposed Project, recommended a Luiseño Native American monitor be present during all ground disturbing activities and cultural resource surveys, and requested a meeting. Pala stated the Proposed Project is out of their Traditional Use Area, but asked to be kept apprised of the Proposed Project's progress and recommended Native American monitor be present during all ground disturbing activities. The La Jolla Band of Luiseno Indians were contacted as part of the outreach per the NAHC's recommendation, but no response has been received to date.

Based on the outreach, San Luis Rey and Pala were included on the Proposed Project's CEQA mailings/distribution list and Native American monitoring has been included in mitigation measure MM-CUL-3 as part of this document's cultural analysis.

On February 18, 2021, the City sent notification of the Proposed Project to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project and who have requested in writing to be informed by the lead agency of proposed projects in the tribe's geographic area. The letter notified the tribes of the Proposed Project, provided a description of the Proposed Project and location information, and invited the tribes to respond within 30 days with their interest in AB 52 consultation. The AB 52 consultation is on-going and the analysis will be updated to include the results of the consultation prior to the final draft of this document.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.19 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and responsibly foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? **Less Than Significant Impact.***

As detailed in the Project Description, the Proposed Project includes the installation of temporary irrigation for high marsh, transition zone, and riparian areas until vegetation is established (e.g., 3-5 years after restoration). Water sources for the irrigation would come from either the existing domestic water main along the public road west of S. Coast highway adjacent to the northeast area, or from a temporary recycled water connection from the La Salina WWTP property in the northwest area (which would result in minor construction to tie into the main water line). The local water supply is provided by the City of Oceanside Water Utilities Department (City of Oceanside 2015). According to the City of Oceanside's Urban Water Management Plan, the City's water demand in 2015 was 116 gallons per capita per day (GPCD), which was below the 2015 target of 154 GPCD. Although the demand analysis of the UWMP anticipates increased water demand through the year 2040, the City has demonstrated through previous drought conditions, that the City is capable of maintaining reliability in its water service, as they have never reported a water shortage (City of Oceanside 2015). Although the Project Site would require water for irrigation of re-vegetated areas, irrigation would be minimal. If a drought would occur, irrigation supply to the Project Site would be reduced, in compliance with the City's Water Conservation Program and Drought Response ordinance, which mandates reductions of irrigation supply if severe drought affects water supply (City of Oceanside 2008). Therefore, the Proposed Project would not significantly increase water demand in the City, and the Project would not require the construction of new or expanded water facilities.

The Proposed Project would not require expanded wastewater treatment or telecommunications facilities as the Project consists of re-naturalizing the existing Loma Alta Slough and does not involve the construction of any habitable structures, restrooms, or telecommunication facilities. In addition, the Project would not require the expansion of storm drainage facilities, as runoff would naturally flow into the existing Slough. As discussed above in Response 14.10(a), the construction activities for the Project would be required to comply with the Construction General Permit and MS4 Permit related to drainage patterns. After completion of construction, the Proposed Project would result in similar and enhanced drainage conditions.

In regards to electric power facilities, there will not be any construction of any electrical infrastructure, and the Project would not adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

As such, the Project would not require or result in the relocation or construction of new or expanded utility facilities that could cause environmental effects, and impacts would be less than significant.

- b) *Have sufficient water supplies available to serve the project and responsibly foreseeable future development during normal, dry, and multiple dry years? **Less Than Significant Impact.***

As detailed in the Project Description, the Proposed Project includes the installation of temporary irrigation for high marsh, transition zone, and riparian areas until vegetation is established (e.g., 3-5 years after restoration). Water sources for the irrigation would come from either the existing domestic water main along the public road west of S. Coast highway adjacent to the northeast area, or from a temporary recycled water connection from the La Salina WWTP property in the northwest area.

As discussed above in Response 14.19(a), the City of Oceanside has previously maintained water service reliability through multi-year drought conditions. In the event that a water shortage was to occur within the City's service area, the City has four ordinances in place that address water shortages and give the City the authority to prohibit water waste and encourage water use efficiency, which include:

- Water Conservation Program and Drought Response Conservation Measures for Mandatory Water Reductions (Ordinance No. 08-OR0439-1)
- Updates to Water Conservation Program and Drought Response Conservation Measures (Ordinance No. 15-OR0276-1)
- Water Efficient Landscaping (Ordinance No. 10-OR0412-1)
- Recycled Water (Ordinance No. 14-OR0565-1)

Further, the City anticipates no reduction of groundwater supplies, as the City's projected extraction is below the normal year safe yield. Both advanced treated potable reuse supplies and tertiary water supplies are drought-proof, which would remain available during drought conditions (City of Oceanside 2015).

As detailed above in Response 14.19(a), although the Project would require water for dust suppression and irrigation of re-vegetated areas, water use would be minimal. If a drought occurs, irrigation supply to the Project Site would be reduced, in compliance with the City's Water Conservation Program and Drought Response ordinance, which mandates reductions of irrigation supply if severe drought affects water supply (City of Oceanside 2008). Therefore, the Proposed Project would not significantly increase water demand in the City, and the City would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant.

- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **No Impact.***

Construction workers would use portable sanitary units during construction activities for the Proposed Project. All wastewater generated in portable toilets would be collected by a permitted portable toilet waste hauler and appropriately disposed of at an identified liquid waste disposal station. Wastewater generated during construction would be minimal and would not require the construction of new wastewater treatment facilities. During operation of the Project, no wastewater would be produced as no restrooms or habitable structures would be associated with the Project. Therefore, the Proposed Project would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the Project's demands, and no impact would occur.

- d) *Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? **Less Than Significant Impact.***

The Project's construction activities would generate solid waste primarily from excavated soil that would be exported from the site. As described in the Project Description, soils would be exported off-site via trucks with disposal at local landfills, the most likely of which would include the El Sobrante Landfill, located approximately 42 miles from the Project Site in Corona, California. According to CalRecycle, the El Sobrante Landfill has a remaining capacity of 143,877,170 cubic yards and is projected to remain open

until 2051 (CalRecycle 2020). The Project is anticipated to dispose a total of 7,900 to 20,300 cubic yards of soils during both Project phases. This disposal would result in a fraction of a percent compared to the remaining capacity at the El Sobrante Landfill. Based on the available capacity, the landfill would have the capacity to accept all of the solid waste associated with implementation of the Proposed Project. Therefore, construction and operational activities of the Proposed Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? **Less Than Significant Impact.***

As discussed above, implementation of the Proposed Project would generate solid waste, primarily soil during construction. The City of Oceanside has adopted the California Green Building Standards Code (CalGreen), which requires 65 percent waste diversion of construction and demolition materials from new construction. To comply with the City's waste diversion requirements, the Project would be required to submit a Waste Management Plan prior to issuance of grading permits. The Proposed Project would comply with all federal, State, and local statutes related to solid waste disposal. Therefore, the Project would result in less than significant solid waste impacts.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.20 WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan? **Less Than Significant Impact.***

As described in Response 14.9(f) above, S. Coast Highway, which is the City's main evacuation route, is located directly east of the Project Site. The Proposed Project could require a temporary closure along the road west of S. Coast Highway adjacent to the northeast area of the Project Site while irrigation facilities are being installed. However, any delays caused by such a closure would be temporary and would be managed in accordance with the temporary traffic control requirements set forth in the California Manual on Uniform Traffic Control Devices (Caltrans 2014). Although the Proposed Project may present temporary road closures along the access road to the Project Site, it is not anticipated that this road closure would affect operations of S. Coast Highway. The Proposed Project would not include any alterations of existing roadway features (e.g., road realignment) that would create a permanent change to access for emergency vehicles. As such, the Project would not impair the City's adopted emergency response plan or evacuation routes, and a less than significant impact would occur.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?* **No Impact.**

As detailed above in Response 14.9(g), the Project area is not located in a very high fire hazard severity zone (CAL FIRE, 2009). The Project area is located in a highly urbanized area with generally flat terrain. Therefore, the Proposed Project would not exacerbate wildfire risks due to slope, prevailing winds or other factors, and thereby expose Project visitors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and no impact would occur.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?* **No Impact.**

The Project would not involve the installation or maintenance of roads, fuel breaks, power lines, or emergency water sources. However, the Proposed Project includes the installation of an irrigation line to serve the re-landscaped Project Site, which would be served by either an existing potable water main or a recycled water main. Irrigation at the Project Site would not exacerbate wildfire risks. Therefore, no impact would occur related to an exacerbated fire risk.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?* **No Impact.**

The Project Site is not located in a very high fire hazard severity zone (CAL FIRE, 2009). Further, the Project does not propose any habitable structures that would potentially be at risk of property damage or loss of life as a result of wildfires. Therefore, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and no impacts would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.21 MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a. Does the project have 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 decrease below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effect of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will have substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Does the project have 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 decrease below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory? **Less Than Significant Impact With Mitigation Incorporated.***

The Proposed Project would not degrade the quality of the environment. The Project would result in a re-naturalized Slough with passive recreational improvements, which would provide benefits to the environment, including through the provision of open space and trails, water quality enhancements, and restoration of wetland habitats. Upon implementation and successful establishment of the new wetland area, temporary impacts (specifically related to biological resources) would be offset through a wetland system that has enhanced function and value over existing conditions.

The Project would not result in any impacts to or eliminate important examples of major periods of history or prehistory. Implementation of the Project would not cause any fish or wildlife species to drop below self-sustaining levels. As detailed within Response 14.4, implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6 would reduce potential impacts to special status and nesting birds, riparian habitats, and jurisdictional waters. With implementation of these mitigation measures, impacts to habitat and wildlife species would be reduced to a less than significant level.

- b) *Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effect of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)? **Less Than Significant Impact With Mitigation Incorporated.***

A cumulative impact would occur if the Proposed Project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area.

As indicated above, there are a number of environmental issue areas for which the Project would have no impact. These issues include agricultural and forestry resources, mineral resources, as well as population and housing. For these issue areas, as the Proposed Project would have no impact, the Proposed Project would not contribute to a cumulatively significant impact. The Proposed Project would result in a less than significant impact in certain environmental issue areas (aesthetics, air quality, greenhouse gases, hydrology and water quality, land use and planning, public services, utilities and service systems, transportation, and wildfire), but because of the location and nature of the Proposed Project, the Proposed Project would not contribute to a cumulatively significant impact. However, the Proposed Project could contribute to a cumulatively significant impact when considered together with other past, present, or reasonably foreseeable projects in the vicinity of the Project Site for those areas in which a potentially significant impact has been identified. However, with implementation of MM-BIO-1 through MM-BIO-6, MM-CUL-1 through MM-CUL-5, MM-PAL-1 through MM-PAL-4, and MM-HAZ-1 through HH-HAZ-3, the Proposed Project would be reduced to less than significant impacts.

With implementation of mitigation measures, the Project would not result in an incrementally considerable contribution to a significant cumulative impact. Therefore, with implementation of mitigation measures, a less than significant cumulative impact would occur.

- c) *Does the project have environmental effects which will have substantial adverse effects on human beings, either directly or indirectly? **Less Than Significant With Mitigation Incorporated.***

As described above, the Proposed Project would not result in any significant and unmitigable impacts that would result in an adverse effect on human beings, either directly or indirectly. As discussed in the other sections of this checklist, potentially significant environmental impacts could occur to biological resources, cultural resources, geology and soils, and hazardous materials. These impacts would be mitigated through the implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6, MM-CUL-1 through MM-CUL-5, MM-PAL-1 through MM-PAL-4, and MM-HAZ-1 through HH-HAZ-3. Therefore, with implementation of mitigation measures, the Project would have a less than significant impact related to a substantial adverse effect on human beings.

15. **PREPARATION.** The initial study for the subject project was prepared by:

Staff person, title

16. **DETERMINATION.** (To be completed by lead agency) Based on this initial evaluation:

- [] I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- [X] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described herein have been included in this project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- [] I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

17. **DE MINIMIS FEE DETERMINATION** (Chapter 1706, Statutes of 1990-AB 3158)

- [] It is hereby found that this project involves no potential for any adverse effect, either individually or cumulatively, on wildlife resources and that a "Certificate of Fee Exemption" shall be prepared for this project.
- [] It is hereby found that this project could potentially impact wildlife, individually or cumulatively, and therefore fees shall be paid to the County Clerk in accordance with Section 711.4(d) of the Fish and Game Code.

18. **ENVIRONMENTAL DETERMINATION:** The initial study for this project has been reviewed and the environmental determination, contained in Section V. preceding, is hereby approved:

Richard Greenbauer, Environmental Coordinator

19. **PROPERTY OWNER/APPLICANT CONCURRENCE:** Section 15070(b)(1) of the California Environmental Quality Act (CEQA) Guidelines provides that Lead Agencies may issue a Mitigated Negative Declaration where *the initial study identifies potentially significant effects, but, revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.* The property owner/applicant signifies by their signature below their concurrence with all mitigation measures contained within this environmental document. However, the applicants concurrence with the Draft Mitigated Negative Declaration is not intended to restrict the legal rights of the applicant to seek potential revisions to the mitigation measures during the public review process.

<name of property owner/applicant/authorized representative>

20. REFERENCES

- California Environmental Protection Agency (CalEPA). 2020. Cortese List Section 65962.5(a). Webpage. Available at <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>
- California Department of Forestry and Fire Protection (CalFire). 2009. FRAP Map Viewer. Available at <https://osfm.fire.ca.gov/media/5965/oceanside.pdf>
- California Department of Conservation, Division of Mines and Geology (2003), Fault Rupture Hazard Zones in California, Alquist-Priolo Special Studies Zone Act of 1972: California Division of Mines and Geology, Special Publication 42.
- CalRecycle. 2020. SWIS Facility Search: El Sobrante Landfill. Webpage. Available at <https://www2.calrecycle.ca.gov/swfacilities/Directory/33-AA-0217/>
- California Department of Fish and Wildlife (CDFW). 2015. California Forests and Timberlands Map. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109917&inline>
- City of Oceanside. 1985. Local Coastal Program Land Use Plan. July 10, 1985.
- City of Oceanside. 2002a. Local Coastal Program, Land Use Element. Available at <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?BlobID=24752>
- City of Oceanside. 2002b. Oceanside General Plan. Available at <https://www.ci.oceanside.ca.us/gov/dev/planning/general.asp>
- City of Oceanside. 2008. Water Conservation Program and Drought Response Conservation Measures for Mandatory Water Reductions (Ordinance No. 08-OR0439-1)
- City of Oceanside. 2010. Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation Plan. Available at <https://www.ci.oceanside.ca.us/gov/dev/planning/subarea.asp>
- City of Oceanside. 2015. Urban Water Management Plan. June 16, 2015. Available at <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=42608>
- City of Oceanside 2016. Emergency Operations Plan. Available at <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=31899>
- City of Oceanside. 2020a. Land Use and Zoning Map Viewer. Available at <http://oceansidefiles.com/uploads/Water/PlanningViewer/index.html>
- City of Oceanside. 2020b. City of Oceanside Zoning Ordinance. Available at <https://www.ci.oceanside.ca.us/gov/dev/planning/zoning.asp>
- City of Oceanside. 2020c. City of Oceanside Lighting Ordinance. Available at <https://www.ci.oceanside.ca.us/gov/dev/planning/zoning.asp>
- City of Oceanside Engineering (Oceanside Engineering). 2020. 2019-2020 Erosion Control Requirements. Available at <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=50376>
- County of San Diego. 2018. Emergency Operations Plan. Available at https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_opara.html
- County of San Diego. 2020. 85th Percentile Isopluvials. Available at https://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRAM/susmpdf/susmp_85precip.pdf

- Department of Toxic Substances Control (DTSC). 2020. Envirostor Database Search. Available at <https://www.envirostor.dtsc.ca.gov/public/>
- Department of Water Resources (DWR). 2020. Well Completion Report Map Application. <https://dwr.maps.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986eda28f8623b37>
- Federal Emergency Management Agency (FEMA). 2019. Flood Insurance Rate Map (FIRM). Available at <https://www.ci.oceanside.ca.us/gov/dev/planning/zoning.asp>
- Green Oceanside. 2017. Construction and Demolition Recycling Guide. Accessed <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=51362>
- Netronline. 2020. Historic Aerials. Available at <https://www.historicaerials.com/viewer>.
- Ready San Diego. 2020. Wildland Fire Map. Available at <https://www.readysandiego.org/content/oesready/en-us/wildfire-hazard-map.html>
- Rincon. 2015. Phase 1 Environmental Site Assessment for APN 153-030-16. December 9, 2015
- SCS Engineers. 2019. Subsurface Assessment Report, Livewire Investments, LLC, Accessor's Parcel Number 153-030-30, 1517 South Coast Highway, Oceanside CA, Case Number DEH2015-LSAM-000332. Available at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000007751
- State Water Resources Control Board (SWRCB). 2020a. Geotracker Webpage. Available at <https://geotracker.waterboards.ca.gov/>
- State Water Resources Control Board (SWRCB). 2020b. Solid Waste Sites Results. Available at https://www.waterboards.ca.gov/water_issues/programs/land_disposal/
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, http://www.vertpaleo.org/Impact_Mitigation_Guidelines.htm.
- United States Department of Interior (DOI). 2008. Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Available at https://www.nps.gov/history/local-law/arch_stnds_0.htm
- United States Department of Conservation (DOC). 2016. Important Farmland Finder. Available at <https://www.conservation.ca.gov/dlrp/fmmp>