



THE CITY OF SAN DIEGO

ADDENDUM TO AN ENVIRONMENTAL IMPACT REPORT

Project No. 697735
Addendum to CA Dept of Parks & Recreation EIR
SCH No. 2017121036

SUBJECT: LOS PEÑASQUITOS LAGOON RESTORATION PHASE 1: The Los Peñasquitos Lagoon Restoration Phase 1 Project (Project) proposes a Site Development Permit for salt marsh restoration and rehabilitation, freshwater management, sediment management, habitat enhancement of the riparian corridor, upgrades to five existing storm drains, flood management, access road, new channels/terraces, and elevated grade control/dry weather diversion feature, covering 146 acres within the Los Peñasquitos Lagoon. Ground-disturbing activities would include approximately 360,000 cubic yards of excavation volume. Excavation depth would range from 3 to 8 feet in portions of the salt marsh restoration, with shallower excavation depths for other restoration and enhancement activities. The Project area is located Designated State Natural Preserve as part of the Torrey Pines State Natural Reserve in the IL-3-1 (Industrial – Light), IH-2-1 (Industrial – Heavy), and OP-1-1 (Open Space) zones. The Project is within the University & Torrey Pines Community Planning Areas. The project is located within the Multi-Habitat Planning Area (MHPA) and within the Coastal Zone, both in Coastal Commission Jurisdiction and Non-Appealable Area 1. (LEGAL DESCRIPTION: Pueblo Lands, Torrey Pines Science Park Unit #3, Sorrento Lands & Townsite Vacated Pors, PM03392, and Pacific Sorrento Industrial Park) APPLICANT: City of San Diego Engineering & Capital Projects.

I. SUMMARY OF PROPOSED PROJECT

Los Peñasquitos Lagoon has been subject to conversion and loss of historical salt marsh, excess sediment loading, increased freshwater inputs, establishment of invasive plant species, impacts from trash, increased mosquito breeding habitat, flooding, and inlet closures. To remediate some of these adverse conditions, the Los Peñasquitos Lagoon Enhancement Plan (LPLEP) was developed (ESA 2018), and in August 2021, a Final Program Environmental Impact Report (LPLEP PEIR), was adopted by the San Diego Coast District of California State Parks (State Parks). The LPLEP envisions implementation of numerous habitat restoration, public access improvements, and vector remediation projects that will improve the sustainability of this important habitat preserve and public recreation area under climate change.

As part of implementation of the LPLEP, the City of San Diego has developed a design for the Phase 1 Los Peñasquitos Lagoon Restoration Project (Project) that includes salt marsh restoration and rehabilitation, freshwater management, sediment management, habitat enhancement of the riparian

corridor, storm drain upgrades, and flood management covering 146 acres within the Los Peñasquitos Lagoon. A location map for the Project is provided as Figure 1.

The restoration of 49 acres of historic tidal and non-tidal salt marsh habitat has an estimated construction completion timeline of 2024–2028, followed by a 5-year adaptive management and monitoring period. The 49-acre restoration area is in the downstream western portion of the Project site and includes construction of new tidal channels and grading to increase tidal inundation extent and frequency to the restored historical salt marsh. The restoration would remove established non-native ryegrass within the degraded historical salt marsh limits and revegetate these areas with native salt marsh vegetation. These areas include non-tidal salt marsh habitat.

The Project includes sediment reduction measures in the upstream portion of the site to reduce coarse-grained sediment depositing and impacting the downstream salt marsh restoration. These measures are located adjacent to the current stream channels and use natural floodway processes to slow storm flows and allow coarser sediments to drop out and be periodically removed. Three floodplain enhancement sediment management measures and enhancement to an existing drainage ditch are planned. Freshwater management components include a new continuous channel that connects upstream creek flows to downstream tidal channels. Secondary channels would also be constructed to reduce the extent and duration of freshwater ponding in historical tidal and nontidal salt marsh habitats and convey persistent dry weather flows away from the salt marsh restoration.

The Project also includes flood management measures in Sorrento Valley that integrate with the three floodplain enhancements and include storm flow diversions, new channels, and backflow control devices. Upgrades to five existing storm drains are planned to address freshwater ponding, sediment accumulation, and trash at the storm drain outfalls. Most of the Project site is located within the Los Peñasquitos Marsh Natural Preserve) that is part of the Torrey Pines State Natural Reserve.

The Project has been developed to address impairment of Los Peñasquitos Lagoon function, loss of native habitats, and degraded ecosystem services caused by urbanization that include beneficial uses identified in the San Diego Basin Plan. Without the implementation of the Project, these existing conditions will result in further impairment of the Lagoon, and compliance targets and timelines of the Sediment TMDL will not be met. The Sediment TMDL is enforced through the Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) draining the watersheds within the San Diego Region (MS4 Permit).

Phase 1 is part of a two-phase project. Phases are derived from the selected alternative in the Updated Los Peñasquitos Lagoon Enhancement Plan (LPLEP, 2016). Phase 1 and Phase 2 lagoon enhancement projects will involve distinct areas of the upper Lagoon. Phase 1 lagoon enhancement will take place southwest of the railroad berm. It will include restoration of historic salt marsh, sediment reduction measures, and freshwater management. Phase 1 (the Project) will restore approximately 49 acres of salt marsh habitat with an estimated construction completion timeline of 2024-2028 followed by 5 years of adaptive management and monitoring. Phase 2 is a future phase located to the northeast of the railroad embankment, opposite side to Phase 1. The Phase 2 lagoon enhancement design will be based on the adaptive management and monitoring of the Phase 1 Project and on further assessment of the effects of sea level rise. The findings of the adaptive management of the Project will inform the

approach to meet the compliance target of moving toward 84 acres of salt marsh restoration by 2035. Sea level rise will convert existing transition zones to tidal salt marsh habitats in the upper Lagoon as the extent of tidal influence expands to these areas of degraded and converted historical non-tidal salt marsh (LPLEP 2016). Phase 1 Project components are in Figure 2A.

1.1 Project Components

As shown on Figure 2B the Project will be implemented in three construction sub-phases. Each sub-phase consists of key Project components that are needed prior for the success and sustainability of the lagoon restoration. The sub-phases are not stand-alone projects, but rather are implemented in an order that address sediment and freshwater impacts prior to implementing the salt marsh restoration. Dividing the required Project elements into construction periods would address restrictions during bird nesting periods. Each construction sub-phase is estimated to be completed in 5 to 6 months from September 1 to January 31 with the third sub-phase likely to require an extension into the following year. Sub-phase 1A will be implemented first and includes upstream sediment management through the construction of floodplain enhancements that are needed to capture coarse sediment that could impact downstream restoration efforts. Sub-phase 1B will consist of the construction of freshwater management measures to improve conveyance of dry weather and storm flows to reduce contact time with planned salt marsh restoration areas, as well as deepening of the tidal channel to increase tidal exchange into the salt marsh restoration area. These sediment and freshwater management measures that will be completed in Sub-phases 1A and 1B are needed prior to implementing the restoration of degraded salt marsh vegetation under Sub-phase 1C.

Table 1 provides approximate construction footprint areas for each construction sub-phase and the Project components within those sub-phases, which are each described in more details below.

Table 1: Project Construction Sub-Phase and Project Component Acreages

Proposed Project Components	Approximate Footprint (acres)
Construction Sub-phase 1A	
Floodplain Enhancement 1	2.4
Floodplain Enhancement 2	3.7
Enhancements to Dunhill Ditch	0.4
New Primary and Secondary Channels/	8.2
Temporary Construction and Adaptive Management Roads	0.7
Riparian and Wetland Enhancement	1.2
Storm Drain Outfall Upgrades	3.0
Permanent Access Road	0.4
1A Subtotal	20.7
Construction Sub-phase 1B	
New Primary and Secondary Channels/Terraces	24.1
Riparian and Non-Tidal Salt Marsh Enhancement	15.2
Adjacent Riparian and Wetland Monitoring Area	31.7
Elevated Grade Control Feature/Dry Weather Diversion	1.4
Tidal Channel – Sediment Sill Removal	4.12

Permanent Access Road	3.1
Temporary Construction and Adaptive Management Roads	5.9
1B Subtotal	90.0
Construction Sub-phase 1C	
Salt Marsh Restoration	23.6
Salt Marsh Enhancement	2.3
Floodplain Enhancement 3	1.8
Storm Drain Diversion and Upgrades	2.8
Permanent Access Road	1.5
Permanent Stockpile	3.4
1C Subtotal	35.5
Total	145.6

In order to facilitate site grading (both planned excavation and filling), select existing utility poles within the Phase 1 Project are planned to be relocated or modified in manner that minimizes land disturbance and impacts to environmental resources.

1.1.1 Construction Sub-Phase 1a – Upstream Sediment Management and Riparian Corridor Enhancement and Rehabilitation

Sub-phase 1A encompasses approximately 19 acres and involves implementing sediment reduction measures in the upstream area of the Project site. These measures are situated outside the existing stream channels and will utilize natural floodway processes to decrease storm flows, facilitating the settling and periodic removal of larger sediments. Additionally, three floodplain enhancement sediment management features and improvements to the drainage ditch along Dunhill Street (known as Dunhill Ditch) are planned to enhance sediment management capacity. Stormwater diversions from Flintkote Channel and the Dunhill Ditch are planned for both sediment and flood management. Sub-phase 1A also provides upgrades to storm drain outfalls that discharge into the Lagoon, and construction of a permanent access road to these outfalls for long-term maintenance that includes removal of sediment, trash, and erosion repair. No access is currently available due to the location of these outfalls adjacent to the railroad berm.

Sediment Management – Floodplain Enhancements

Long term sediment loading from the watershed has impacted the riparian corridors and historical salt marsh habitats. In order to address these impacts and meet TMDL sediment load reduction targets and timelines, sediment management measures are planned upstream of the Torrey Pines Reserve prior to reaching the Lagoon. The sediment management measures include three floodplain enhancements. The floodplain enhancement features will increase the maintained channel width and incorporate vegetated gabion structures that will reduce water surface elevations and flow velocity to increase sediment capture.

Various design elements were considered within each floodplain enhancement feature to promote sediment capture, reduce flow velocity, and increase channel conveyance, habitat function and operation and maintenance access. These are needed to reduce the sediment loads that would otherwise be transported to the downstream salt marsh restoration site.

These design elements are as follows:

Bioengineered Grade-Control Structures: Gabion structures are flexible welded wire boxes that provide stability, erosion protection, and energy dissipation, while also serving as a permeable obstruction that can capture sediment and still allow water to pass through. For this Project, these structures will have stone as a base and then be earthen-filled and vegetated in the upper layer to provide a more natural bioengineered approach and added habitat value. Vegetation that will be included as part of these bioengineered grade control structures will be black willow (*Salix gooddingii*) and/or arroyo willow (*Salix lasiolepis*). These bioengineered grade control structures are intended to reduce velocities throughout the floodplain enhancement feature which will allow for coarse sediment to settle. As flow continues to move downstream, sediment will accumulate at each gabion and flow will pass through the structure and continue downstream. Spacing and height of the gabion structures are provided on the Permit Level Design Drawings. Discussion of operation and maintenance for the floodplain enhancement features is presented below.

Open Cell Articulated Concrete Blocks: Articulated concrete blocks are proposed to facilitate operation and maintenance needs within the floodplain enhancement features. The purpose of each floodplain enhancement is to capture sediment and as a result will require frequent cleaning activity to maintain efficiency. Articulated concrete block will provide erosion control as large sediment deposits accumulate within the flood enhancement features and provides a drivable surface to remove sediment accumulations. Additionally, the inclusion of articulated concrete blocks will provide a consistent baseline condition for routine maintenance activity (i.e., providing a defined maintenance area and clear guidance for maintenance activity parameters). Open cell articulated concrete blocks will be planted with native grasses such as creeping wild rye (*Elymus triticoides*), giant wild rye (*Elymus condensatus*), and deergrass (*Muhlenbergia rigens*). Incorporation of native vegetation into floodplain enhancement areas will increase aquatic functions, wildlife value, and reduce mitigation requirements. Discussion of operation and maintenance for each floodplain enhancement feature is discussed below.

Floodplain Enhancement 1

Floodplain Enhancement 1 (approximately 1.6 acres in size) is located adjacent to Carroll Canyon Creek upstream of the confluence of Carroll Canyon Creek and Los Peñasquitos Creek and downstream of the existing concrete channel. The area currently consists of well-established, dense native and non-native vegetation. The Floodplain Enhancement 1 footprint is mostly within a City of San Diego easement.

The proposed improvements include expanding the channel width at the convergence of the existing Carroll Canyon Creek concrete channel with the narrow earthen bottom channel to promote peak stormwater flow into the floodplain enhancement. The floodplain enhancement 1 design allows for low dry season flow to continue to pass through the existing low-flow channel that parallels the southwest side of Floodplain Enhancement 1. The banks of the existing low-flow channel on the side of the floodplain enhancement will be laid back to improve establishment of planted native riparian vegetation. Non-native plant species will be removed from both banks and revegetated with native riparian plantings to improve the existing condition of the channel that is characterized by steep, incised banks with invasive plant species.

Bioengineered grade-control structures within the floodplain enhancement will reduce flow velocity and capture sediment within the series of cells. Greater sediment deposition will occur in the first cells, and as these cells fill with accumulated sediment, additional sediment will accumulate in the downstream cells. This sequential accumulation of sediment in maintainable cells allows for segmented maintenance that minimizes the maintenance area being disturbed at any one time. Bioengineered grade control features (i.e., gabions) placed perpendicular to the channel flow will be planted with native riparian vegetation. Similar gabion features running parallel to the floodplain enhancement that enclose the cells will remain unvegetated for the purpose of capturing sediment as flow moves downstream. Bioengineered grade-control features will be placed at an approximate spacing of 150 feet to reduce velocities and capture sediment. A trash capture device using open chain-linked fencing or similar approach will be installed on the grade-control structure.

The bottom of the floodplain enhancement feature is proposed as open cell articulated concrete blocks. The articulated block will allow for maintenance access and will provide a defined baseline area for routine maintenance.

The upstream limit of Floodplain Enhancement 1 begins at the end of the existing concrete lined channel. There is an existing access ramp located near the intersection of Roselle Street and the Southbound I-5 on-ramp where a connection from the existing concrete-lined channel will transition to the proposed Floodplain Enhancement 1 with articulated concrete blocks.

Floodplain Enhancement 2

Floodplain Enhancement 2 (approximately 2.4 acres in size) is located at the confluence of Carroll Canyon Creek and Los Peñasquitos Creek. The area is relatively flat with dense riparian vegetation. There is a defined channel that favors the west side of the proposed enhancement feature that serves to convey flow. The Floodplain Enhancement 2 footprint is within three private parcels and will require acquiring easements from the private owners. This design feature is needed to reduce the sediment loads to the downstream salt marsh restoration.

The proposed design balances impacts to existing natural resources with the need to optimize sediment and debris removal at this upstream location. Without the floodplain enhancement feature, sediment and trash would be transported downstream and impact the lagoon and salt marsh restoration. Existing natural resources within the area include riparian habitat and a wildlife corridor for listed light-footed Ridgway's rail (*Rallus obsoletus levipes*). With these design goals, the design for Floodplain Enhancement 2 will direct stormwater flows from Los Peñasquitos Creek into the feature and allow for dry-season low flows to enter into the realigned low-flow channel to be located along the northeastern side of the floodplain enhancement and serve as a light-footed Ridgway's rail wildlife movement corridor. This configuration allows for a larger, 60- to 80-foot-wide wildlife corridor and higher sediment removal efficiencies than maintaining the current location of the low-flow channel adjacent to the industrial development. The channel that leads from Los Peñasquitos Creek to the floodplain enhancement will require bank and channel bottom stabilization to address expected peak stormwater velocities. Channel stabilization techniques will include articulated concrete block, vegetated soil lifts, and other bioengineering features. The realigned low-flow channel will have an earthen bottom. Existing non-native plant species will be removed, and the habitat will be enhanced with replanted native vegetation that is appropriate for light-footed Ridgway's rail passage.

Within the Floodplain Enhancement 2 feature, bioengineered grade-control structures will be placed perpendicular to flow to reduce velocities and capture sediment from Los Peñasquitos Creek and Carroll Canyon Creek. The bottom of the Floodplain Enhancement 2 will be articulated concrete block to allow for periodic removal of the sediments.

Access to Floodplain Enhancement 2 will be from Estuary Way and on a new access road that uses an existing “paper” street easement along the eastern side of the floodplain enhancement feature. Maintenance frequency estimates will be developed as part of the operations and maintenance plan.

Floodplain Enhancement 3

Floodplain Enhancement 3 (approximately 1.9 acres in size) is located at the corner of Flintkote Avenue and Estuary Way within the City of San Diego-owned parcel. There is a culvert crossing at Flintkote Avenue that conveys approximately 70 acres of tributary area to the Lagoon. Floodplain Enhancement 3 is sparsely vegetated and consists of disturbed areas that were formally used for stockpile and equipment storage by the City. The portion of the floodplain enhancement that will direct flows from the Flintkote outfall is more densely vegetated and contains extensive sediment accumulation due to the lack of a defined connection to the Lagoon from the Flintkote Avenue culvert crossing.

Floodplain Enhancement 3 is divided into thirds by bioengineered grade control structures, with the northern two-thirds receiving stormwater from the Flintkote Avenue outfall and the southern third receiving flows from the Flintkote channel stormwater diversion, with its outfall along Estuary Way. The existing stormwater conveyance at Flintkote Avenue, between Estuary Way and Tower Drive, consists of a 30-inch reinforced concrete pipe (RCP) spanning Flintkote Avenue conveying approximately 45 acres of tributary area. The existing 30-inch RCP discharges to a concrete-lined ditch that cuts directly through the business park with a culvert crossing at Roselle Street, before reaching the ultimate outfall location at Carroll Canyon Creek. The stormwater diversion will capture stormwater flows before entering the Flintkote Channel and divert these flows through an underground culvert along Flintkote Avenue to Floodplain Enhancement 3.

Floodplain Enhancement 3 will serve to capture additional sediment-laden runoff, which will pass through the bioengineered grade control structures to the middle third of the proposed detention area before discharging through a riser into a proposed low-flow connector channel that connects to the Lagoon. The northern and southern third of the basin will be lined with articulated concrete block which will serve as erosion control at the outfall locations, as a means for maintenance access, and to define the baseline maintenance area. The basin will include a monitoring pole with markers that indicate when maintenance will be necessary. Maintenance frequency estimates will be developed as part of the operations and maintenance plan. An access ramp will run along Flintkote Avenue with additional access surrounding the proposed basin within the property line.

Floodplain Enhancement 3 area will be used as a temporary stockpile and equipment laydown area during the Project construction. Therefore, Floodplain Enhancement 3 construction will occur when excavation and material management is completed in construction Sub-phase 1C.

Enhancements to Dunhill Ditch

Enhancement to the existing drainage ditch along Dunhill Street are planned to increase sediment management and flood flow capacity of the ditch (approximately 0.4 acres in size). The existing

drainage ditch receives sediment laden storm flow from the upstream 217-acre tributary area and conveys these flows to the ditch and then into a 54-inch RCP culvert that discharges into Carroll Canyon Creek. Due to the elevation of the culvert outfall and ditch inlet compared to the water elevation in the creek during storm flows, the system experiences backflow conditions, and the capacity of the ditch to retain and manage sediment and convey stormflows becomes constrained. Enhancements to Dunhill Ditch from a long-term maintenance standpoint is the implementation of a new stormwater diversion culvert that conveys the flows from the Dunhill Ditch to a new outfall farther downstream where surface water elevations are lower. The ditch enhancements include grading to increase capacity and installation of asbestos cement pipe (ACP) on the bottom and sides of the ditch to facilitate sediment management similar to the floodplain enhancements.

These sediment management measures are integral to the success of the salt marsh restoration to address impacts from sediment accumulation in restored areas.

Operations and Maintenance of Floodplain Enhancements

The frequency of sediment removal from the Floodplain Enhancements will depend on the number and intensity of the storm events during the wet season. It is estimated that removal of sediment from the floodplain enhancements and Dunhill Ditch will be needed at least annually prior to the storm season and at least once following a larger storm event. The frequency will be based on the amount of sediment accumulated and will be specified in the operation and maintenance plan to be included with the permit applications. The amount and level of vegetation maintenance within the floodplain enhancements will depend on the vegetation growth and sediment accumulation. On an annual basis the floodplain enhancements and Dunhill Ditch will be inspected, and maintenance will be conducted to meet performance criteria. Maintenance may also be conducted in phases by segments of the floodplain enhancements. Less frequently, sediment removal from the low-flow channel adjacent to Floodplain Enhancement 1 will be required. It is estimated that sediment removal from the low-flow channel will be required every 3 to 5 years. The side slopes and banks of the low-flow channel along Floodplain Enhancement 1 will not require maintenance and will be enhanced with the removal of invasive plants and replacement with native riparian vegetation. Removal of sediment in the floodplain enhancements and the low-flow channel is needed to control migration of coarser sediment to the planned restoration area and ensure sustainability of the restored salt marsh habitat. Limited maintenance (every 5 years) is anticipated in the realigned low-flow channel along Floodplain Enhancement 2.

Riparian Corridor Enhancement and Wildlife Corridor

Riparian rehabilitation (~ 3.5 acres) and enhancement (~ 2.8 acres) is proposed in construction Sub-phase 1A. The riparian corridor along the southwestern side of Floodplain Enhancement 2 to downstream of the "pilot channel" at the "sediment plug" has been degraded with accumulated coarse sediments and the introduction of non-native and invasive plants. This riparian corridor will be rehabilitated through the removal of accumulated sediment and invasive plants and the revegetation with native riparian species. Areas adjacent to the new freshwater management channel will be graded to provide for long-term sediment accumulation to reduce future maintenance and habitat disturbance. Due to the narrowing of the marsh plain at this location, sediment accumulation will continue but at a lower rate due to the upstream floodplain enhancements. The segment of riparian corridor enhancement from the downstream end of Floodplain Enhancement 2 to the narrowing of

the marsh plain is planned for Sub-phase 1B. This segment may be scheduled for implementation during Sub-phase 1A to accelerate the timeline for habitat enhancement efforts to address habitat impacts from the construction of Floodplain Enhancements 1 and 2. Riparian corridor habitat enhancement planned for Sub-phase 1A includes the slopes of the existing low-flow channel along Floodplain Enhancement 1, along the former low-flow channel, and along the realigned channel along Floodplain Enhancement 2.

Habitat enhancement for Sub-phase 1A will extend up into the Los Peñasquitos Creek to the railroad embankment and along the realigned low-flow channel along northeastern side, with select removal of invasive plants and replacement with native riparian vegetation. The habitat enhancement of the area along the realigned low-flow channel adjacent to the Floodplain Enhancement 2 will provide for a wider and more directly connected wildlife corridor that connects with the upstream Los Peñasquitos Creek corridor. This wildlife corridor will be vegetated with plants that encourage the movement of light-footed Ridgway's rail from the upstream creek corridor to the Lagoon.

Storm Drain Outfall Upgrades

Upgrades to storm drain outfalls that directly discharge to the Lagoon within Phase 1 are part of Sub-phase 1A in order to mitigate the accumulation of sediment and trash from these outfalls into the Lagoon and remove scour ponds that are favorable habitat for mosquito breeding. These include the Tripp Court, Industrial Court/Carmel Mountain/Carmel Mountain North and Flintkote Road outfalls (approximately 6.0 acres in total size). The Industrial, Carmel Mountain and Carmel Mountain North storm drains will all discharge at the same location at the downstream side of the existing railroad bridge. The existing open channel from the Industrial Court outfall will be replaced with an underground culvert to reduce impacts from vegetation clearing that is currently needed to maintain this ditch. Upgrades to these outfalls include removal of accumulated sediment, filling in scour ponds and providing stabilization/energy dissipation (riprap) to address future scouring and ponding at the outfalls and connecting the outfalls to the freshwater channels to address ponding. Existing riprap at the Tripp Court and Carmel Mountain outfall will be used to minimize impacts. Upgrades include installing trash capture devices on the upstream side of the outfalls. Upgrades to the drainage pipe upstream of the outfalls to address sediment buildup and capacity issues is planned for the Industrial Court and Carmel Mountain Outfalls. A permanent access road (2.5 acres in size) is planned from Floodplain Enhancement 2, along the toe of the railroad embankment, up to the new Industrial Court and Carmel Mountain Outfalls to facilitate ongoing maintenance.

The existing storm drain system at Flintkote Avenue currently accumulates large amounts of sediment, resulting in sediment overtopping the road and ponded water near the outfall location. Frequent maintenance is required to maintain road access along Flintkote Avenue. The existing outfall location is within the State Coastal Conservatory property. The proposed storm drain improvement includes realigning the storm drain spanning Flintkote Avenue to outfall into the proposed northern third of Floodplain Enhancement 3, proposed within the City of San Diego property line. The culvert is proposed as a single-cell, 6-foot-wide by 3-foot-high reinforced box culvert (RCB) to replace the existing 36-inch RCP. Roadway improvements will be required along Flintkote Avenue to facilitate the construction of the RCB along Floodplain Enhancement 3, including changes to the road elevation (raising of the road). The outfall location within Floodplain Enhancement 3 will be lined with articulated concrete blocks to prevent scour and provide maintenance access for sediment removal. Realigning

the storm drain to outfall directly into Floodplain Enhancement 3 allows for the capture of sediment before entering the connector channel to the Lagoon. As Floodplain Enhancement 3 will be used as a stockpile area during Sub-phases 1A and 1B, upgrades to the culvert on the upstream western side of the road and under the road may be completed in Sub-phase 1A, with the downstream outlet tied into the Floodplain Enhancement in Sub-phase 1C.

1.1.2 Construction Sub-Phase 1B – Freshwater Management – New Primary and Secondary Freshwater Management Channels

Construction Sub-phase 1B will be implemented following completion of the construction Sub-phase 1A Floodplain Enhancement features and encompasses approximately 73.4 acres of the Project boundary. Without the completion of Floodplain Enhancements 1 and 2, the new channel could rapidly accumulate sediment during storm events and move sediment further down into the Lagoon, further impacting sensitive habitat. Sub-phase 1B will consist of constructing the primary and secondary freshwater conveyance channels (approximately 46.9 acres in size). Riparian and wetland habitat enhancement (approximately 12.7 acres in size) is also planned adjacent to the new freshwater management channels where habitats have been degraded with invasive and non-native plant species and conversion from increased freshwater inputs within Sub-phase 1B. The alignment of the new freshwater management channels will follow these areas of degraded habitat, leaving existing established riparian corridors intact to the extent feasible to minimize habitat impacts.

Sub-phase 1B will improve the connectivity of the upstream Carroll Canyon Creek and Peñasquitos Creek channels with the Lagoon to provide enhanced conveyance of stormwater and dry-weather freshwater and stormwater flows away from wetland conversion zones. The freshwater channels will provide effective conveyance through the upper lagoon and reduce the duration of storm flow inundation within planned salt marsh restoration areas. This includes conveying stormflow more effectively in the area of degraded non-tidal salt marsh that will be restored by removing invasive plants and approximately 6 to 8 inches of sediment that contains the seed bank of the invasive Italian ryegrass within this area.

Freshwater management will be achieved with the implementation of a primary freshwater management channel that connects the upstream pilot channel with the downstream tidal channel. Secondary freshwater management channels are also planned to reduce the retention times of storm flows that inundate the marsh plain and promote habitat conversion. The reduction in retention times will reduce the conversion of historical tidal and non-tidal salt marsh to degraded salt marsh and freshwater marsh. The primary channel section from the pilot channel to the mid-Project areas will be a 4.5-foot-deep trapezoidal channel with a 10-foot bottom width and varying from 2:1 to 10:1 side slopes. The channel section will vary in depth and width (between the top of banks) as it is adjusted for existing grades and to address potential scouring and sediment accumulation. Vegetated soil lifts (bioengineered reinforced channel banks) will be used in several sections to address potential scouring. The channel section will be cut 1 to 2 feet deeper than the previous channel to provide a consistent channel slope. Secondary channels and existing channels will help convey larger storm flows through the area while also helping to drain the mid-Project area after inundation during larger events. Outfalls penetrating the railroad berm, including the Tripp Court and Carmel Mountain Road outfalls, will be served by secondary channels, which will connect to the primary channel and further reduce the ponding of freshwater and the duration of inundation after storm events.

As flows reach the salt marsh restoration area (Sub-phase 1C), secondary channels will converge to the primary channel, and an elevated grade control feature will parallel the channel to contain dry weather flow and smaller storm events within the channel and away from the planned salt marsh restoration (approximately 1.7 acres in size). Currently, persistent dry weather flows inundate the Sub-phase 1C salt marsh restoration area, and storm event flows are retained and ponded within the area, resulting in conversion and degradation of the salt marsh habitat. The proposed grade control feature will serve to reduce the depth and duration of freshwater storm flows within the Sub-phase 1C restoration area, similar to the effect of the existing berm of the former wastewater pond. Groundwater levels are close to the surface in these areas and will not be impacted by the new channels. In addition, the grade control feature will convey sediment around the planned restoration area and maintain sediment loading to the salt marsh restoration area below current loading conditions.

During the 5-year adaptive management period, maintenance of the freshwater conveyance channels will likely require select removal of accumulated sediment and control of vegetation. Temporary access roads will be maintained for channel maintenance in the segment from Floodplain Enhancement 2 to the end of the Coastal Conservancy parcel, where an existing hydraulic restriction will continue to promote sediment accumulation. To reduce the frequency of channel maintenance in the next downstream segment from this hydraulic restriction to the grade control feature, rounded cobbles will line the channel bottoms to provide a substrate that will retard the establishment of woody vegetation that could reduce channel conveyance capacity. Riparian vegetation will be established outside of the conveyance channel banks to provide a continuous riparian corridor up to the limits of the new tidal influence. The use of cobbles is to reduce the impact from frequent maintenance and vehicle access in this segment, where construction access roads will be removed and not maintained into the adaptive management period. Long-term maintenance of this segment of the channel will depend on observations during the adaptive management period, the successful establishment of non-tidal and tidal salt marsh vegetation in the restoration areas, and planned dry weather diversions on Carroll Canyon and Los Peñasquitos Creeks. This segment may return to a braided system in the long term. Maintenance of the freshwater management channel from the grade control feature to the tidal channel will be conducted during the adaptive management period to maintain dry weather and storm flow capacity and address erosion from larger storm events. The adaptive management period access road along the grade control feature will be used for both periodic maintenance of this segment of the freshwater management channel and the salt march restoration areas. Long-term maintenance will depend on the results of the monitoring and assessment during the adaptive management period and is expected to occur in perpetuity by or at the direction of State Parks staff. In general, the freshwater management channels, enhancement areas, and tidal salt marsh restoration areas are all expected to become naturalized and require minimal long-term maintenance, similar to other natural areas within the State Park.

Site Outfall Improvements at Downstream Pinch Point

The primary freshwater conveyance channel will be graded to allow connection with future Phase 2 channel improvements located under the two railroad trestles. However, higher Phase 2 topography presently limits flow under these trestles during storm events. Therefore, the primary outfall for Phase 1 freshwater will be through the “pinch point,” a narrow opening between the railroad embankment and the toe of the upland bluff. Historically, there has been limited flow through the pinch point area

that has caused upstream ponded water, resulting in longer residence time within the proposed Sub-phase 1C salt marsh restoration area. The Project includes both deepening and widening the channel through the constricted pinch point area to the point where bathymetry data shows the existing channel as sufficiently wide (this is a portion of the approximately 46.9 acres of channel grading described above). The area of the pinch point will also be graded to extend the existing tidal channel into the Sub-phase 1C restoration. Areas adjacent to the pinch point channel will be graded to -2 feet National Geodetic Vertical Datum 1929 (NGVD29) to allow high-tide flows to reach the planned restoration and provide sufficient flow capacity to allow effective passage of combined freshwater flows and tidal flows through the pinch point. The tidal channel will be excavated to -3 feet NGVD29 to bring salinity levels to the planned salt marsh restoration similar to the channel in the lower lagoon.

Removal of the Sediment Sill in the Tidal Channel

Based on the results of the bathymetry survey of the tidal channel from the pinch point to the Lagoon inlet, there is a sediment sill in the channel downstream of the pinch point that limits tidal exchange into the planned salt marsh restoration. Hydrodynamic modeling of the current conditions further demonstrated that this sediment sill limits high tide flows into the planned restoration area and traps freshwater in the upper channel, significantly reducing tide water salinity levels in the planned restoration area. The salinity levels at the pinch point are substantially lower than the tide water reaching tidal channels observed in other portions of the Lagoon. Reduced tide water salinity would negatively impact the establishment and sustainability of the proposed Sub-phase 1C salt marsh restoration. Based on these results, Sub-phase 1B channel conveyance will include dredging the tidal channel from the pinch point to the lagoon inlet to an elevation of -3 feet NGVD29 (about 4.2 acres).

Habitat Rehabilitation and Enhancement

Sub-phase 1B includes habitat enhancement in areas adjacent to the primary and secondary freshwater conveyance channels (about 12.7 acres). The alignment of the conveyance channels has been designed to coincide with areas of degraded habitat and to avoid existing established riparian corridors to reduce existing biological resource impacts. There are isolated and continuous areas of degraded habitat due to the introduction of non-native and invasive plant species within riparian corridors, freshwater marsh, and wetland conversion zones. The most prevalent non-native species in freshwater wetland/riparian habitats include giant reed (*Arundo donax*), pampas grass (*Cortaderia selloana*), castor-bean (*Ricinus communis*), hoary cress (*Lepidium draba*), fennel (*Foeniculum vulgare*), English ivy (*Hedera helix*), and periwinkle (*Vinca* sp.). Additional non-native species include poison hemlock (*Conium maculatum*), bottlebrush (*Callistemon* sp.), and eucalyptus (*Eucalyptus* sp.). In other wetland conversion zones, including areas of former salt marsh habitat, the most prevalent non-native species include perennial ryegrass (*Festuca perennis*), hoary cress, and pale yellow iris (*Iris pseudacorus*). These areas are upstream and outside the extent of the Sub-phase 1C salt marsh restoration. However, the areas adjacent to the Sub-phase 1C restoration provide a further extension of restoration activities within the wetland conversion zones that will improve overall habitat function. Treatments within riparian habitat enhancement areas will include the removal of invasive plants, possible soil amendments, and replanting with native vegetation consistent with the surrounding habitat function. These habitat enhancement areas are not part of the planned conveyance channel grading areas and revegetation with native plants associated with the freshwater channels,

bioengineered grade control structure upstream of Sub-phase 1C, and the floodplain enhancement features. Herbicides may be used where appropriate.

Restoration of historical salt marsh habitat is also planned within a large, relatively contiguous area of degraded non-tidal salt marsh predominated with non-native ryegrass. Restoration of this degraded non-tidal salt marsh will include clearing and grubbing of existing non-native vegetation, removal of 6 to 8 inches of coarse sandy soils and non-native plant seeds, fine grading to establish positive drainage to the freshwater conveyance channels, hydroseeding, and native plant container planting. Restoration may include addition of topsoil and soil amendments to improve conditions for reestablishing native salt marsh vegetation. These areas will be revegetated with native vegetation appropriate for the desired habitat function.

About 2.9 acres of permanent access roads are proposed to maintain design features for sediment and freshwater management to provide a sustainable and resilient salt marsh restoration; the remaining portion of the Project footprint will be revegetated with native plant species, including areas degraded by invasive plant species and historical sediment accumulation.

1.1.3 Construction Sub-phase 1C – Historical Salt Marsh Restoration

Sub-phase 1C (about 51.5 acres) will follow Sub-phases 1A and 1B, which address freshwater management and sediment loading that may impact the planned downstream restoration of the historical coastal salt marsh located to the southwest of the railroad berm. Sub-phase 1A and 1B are needed for the success and sustainability of the salt marsh restoration in Sub-phase 1C. Using the management measures identified in the LPLEP, the restoration will include enhancement of the tidal connection and tidal inundation through extension and expansion of the existing tidal channel through focused grading. The Sub-phase 1C restoration will be monitored during the 5-year adaptive management period to confirm the successful conversion of the currently degraded salt marsh and converted freshwater habitats to a functioning native salt marsh area.

Salt marsh habitat restoration (45.5 acres) includes the removal of non-native perennial ryegrass and excavation and grading to remove historically accumulated surface sediments to increase the tidal extent and inundation. Site grading also includes the extension of tidal channels through the restoration site to increase the tidal connection, extend the tidal flows further into the site, and accelerate the passage of freshwater through the restoration area. The salt marsh restoration grading approach allows for the establishment of the salt marsh restoration within the anticipated schedule while enabling transition areas for future sea level rise adaptation.

To support the sustainability of the restored salt marsh habitat, the downstream section of the salt marsh restoration area will include deeper and wider graded channels, along with broad, gently sloped benches. These modifications aim to increase tidal inundation and frequency, as well as enhance the tidal prism. To limit the amount of dry weather freshwater flow entering the restoration area, the new primary tidal channel will connect to the existing tidal channel downstream of the railroad trestles and the new freshwater management channel connection. The new primary tidal channel will be 10 feet wide and graded to -3 feet NGVD29. Adjacent benches to this channel will be graded below high-tide elevations to allow for tidal inundation, which will establish the water salinity levels needed to support high-salt marsh habitat. This area of greater excavation and tidal inundation

will extend to the limits of the high marsh and corresponds to the limits of the historical salt march defined from aerial photographs from 1973 (LPLEP 2016).

The new tidal channels will be limited in number and have limited dendritic branches to provide for greater ponding and detention of high-tide flows with the goal of increasing the salinity of sediment in this area to promote the establishment and sustainability of the restored salt marsh vegetation. Salt marsh vegetation remains predominant in the areas within the former wastewater pond, and grading and disturbance will be limited to preserve these areas to the greatest extent feasible.

Excavation depth in this area would range from 3 to 8 feet. Based on the sediment investigation, there is a layer of sand overlying fine-grained soils in this former salt marsh area. Excavation within the salt marsh restoration will remove the sand and expose the underlying fine-grained soil necessary for salt marsh plant establishment. This sandy material will be used for beach replenishment if feasible. Dredged material from the removal of the sill in the downstream channel will be stockpiled as part of Sub-phase 1B and allowed to dewater for use as topsoil in Sub-phase 1C, as needed. This dredged material has high salinity and will help establish the native salt marsh plants.

Grading will gradually decrease in depth further upstream, corresponding to the planned non-tidal salt marsh. Excavation depth would range from 1 to 4 feet in this area. This portion of the restoration area includes areas currently dominated by non-native ryegrass in the former non-tidal salt marsh. For areas where non-native grasses are dominant, it will be necessary to remove these grasses and some of the accumulated sandy materials to capture the non-native grass seed bank. The graded areas will be revegetated with native mid-salt marsh vegetation to achieve the desired conversion and control the spread and reestablishment of non-native species. This area may be subject to periodic King High Tides but will also rely on freshwater exclusion and future sea level rise to sustain the salt marsh habitat. Periodic "managed" saltwater inundation (higher-saline water pumped from tidal channels or from brackish groundwater in this area) may be used to promote salt marsh establishment. This approach would facilitate the development and implementation of measures that could be tested via an adaptive management framework with lessons learned applied to Phase 2, where there are extensive former non-tidal salt marsh areas.

The most upstream (southern) portion of the salt marsh restoration area provides transition zones for future sea level rise. Minimal excavation will occur in this area, which extends upstream as a transitional freshwater habitat. This area is anticipated to be subject to future tidal inundation based on the estimated Year 2100 sea level rise. This approach allows for adaptive management to address future sea level rise.

The restoration includes the removal of the berm around the former wastewater pond. The removal of the berm will increase the area of salt marsh vegetation without impacting existing native wetlands. As stated previously, the area within the former pond that is predominantly native salt marsh vegetation will have limited grading and disturbance. Upstream sediment management and new freshwater conveyance channels combined with increased tidal exchange to this area will maintain salt marsh habitat within the former bermed area. A grade control feature is also planned along the freshwater channel to exclude persistent dry weather freshwater flows from the salt marsh restoration area and convey sediment around the planned restoration area. The results of the sediment transport modeling have indicated that this feature is needed to maintain sediment loading to the salt marsh restoration area below current loading conditions. The feature will extend along the

entire length of the salt marsh restoration area. The new tidal channel will also increase tidal inundation to the Sub-phase 1C area to better sustain salt marsh restoration.

The estimated acreage of restored salt marsh habitat, including mudflat, mid-marsh, high-marsh, and non-tidal marsh is approximately 49 acres under post-construction tidal conditions. This includes both Phase 1B and Phase 1C restoration efforts. Phase 1B focuses on non-tidal salt marsh restoration adjacent to the Phase 1C restoration area.

1.1.4 Diversions for Sediment/Flood Management

The following diversions are planned to further reduce sediment loading to the Lagoon and to reduce flood inundation in the business park during more frequent events. These diversions will be implemented during Sub-phases 1B and 1C and are quantified under the Storm Drain Improvements component in Table 1. The diversions to Floodplain Enhancement 3 will be implemented during the construction of Sub-phase 1C.

Flintkote Avenue/Roselle Street Stormwater Diversion

The existing 30-inch RCP discharges to a concrete-lined ditch that cuts directly through the business park with a culvert crossing at Roselle Street before reaching the ultimate outfall location at Carroll Canyon Creek. Under existing conditions, flooding frequently occurs due to existing flood conveyance capacity and sediment accumulation, as well as backflow from Carroll Canyon Creek at the outfall location. A diversion is planned at Flintkote Avenue to outfall to the southern third of Floodplain Enhancement 3 along Estuary Way to reduce sediment loading to the Lagoon and to reduce flooding during more frequent events.

Roselle Street/Estuary Way

The Roselle Street and Estuary Way intersection is one of three low points in the business park area. An existing dual 18-inch asbestos cement pipe (ACP) serves to convey approximately 11 acres of local business park drainage from Roselle Street and Estuary Way to Los Peñasquitos Creek. However, backflow from the creek typically occurs and floods at the sump location. Street improvements and a transition structure will be made along the northern curb to provide a connection to a low-flow connector channel to the Lagoon. The low-flow connector channel will converge with the channel from the outfall of Floodplain Enhancement 3 before connecting to the main channel enhancement area.

Dunhill Ditch Stormwater Diversion

The planned diversion will move the existing 54-inch RCP that receives storm flow from the Dunhill ditch to farther down Carroll Canyon Creek. This farther downstream outfall has a lower water elevation allowing for greater capacity for sediment and stormwater management in the Dunhill ditch. The relocated underground culvert will run along the existing maintenance road.

1.1.5 Temporary and Permanent Access Roads

Sub-phase 1A Access Roads

Fifteen-foot-wide permanent access roads will be provided to the three floodplain enhancement areas. The permanent access roads will be lined with articulated concrete block to provide structural stability and a defined maintenance path for the entire enhancement area. For Floodplain Enhancement 1, the permanent access road will begin from the existing concrete channel near the existing access ramp, located near the intersection of Roselle Street and Southbound I-5 on-ramp. It will provide access to the length of Floodplain Enhancement 1 before terminating near the convergence of Los Peñasquitos Creek and Carroll Canyon Creek. A permanent access road for Floodplain Enhancement 2 will begin along the Estuary Way parcel line and then along the southwestern side of Floodplain Enhancement 2 (the existing low-flow channel will be realignment to the opposite side of the Floodplain Enhancement 2). This permanent access road from Estuary Way will continue to cross the realigned low-flow channel along the eastern side of Floodplain Enhancement 2 and serve as a permanent access road to the Tripp Court, Industrial Court/Carmel Mountain Road/Carmel Mountain Road North outfalls. It will also be used as a construction access road for the outfall upgrades. Portions of the permanent access road will run parallel to the railroad and will be within the San Diego Metropolitan Transit System (MTS) right-of-way in order to balance access with any compensatory habitat mitigation. Encroachment permits and easement agreements with MTS will be needed. There is currently no access to these outfalls to conduct regular maintenance activities that include the removal of accumulated sediment and repair from erosion at the outfall.

Sub-phase 1B Access Roads

There will be four access roads to construct the freshwater management channels. Access Road 1 is along the northern perimeter of the Project, begins at the Sub-phase 1A permanent access road to Floodplain Enhancement 2, crosses the creek, and then continues to the Tripp Court and Carmel Mountain Road Outfalls. This segment of the access road will be a permanent road for maintenance of the floodplain enhancement and outfalls. The access road continues from the Carmel Mountain Road outfall to the first railroad trestle along the toe of the slope of the railroad berm to minimize the temporary impact to sensitive habitat and compensatory mitigation. This segment will be temporary but remain for Sub-phase 1C construction and into the adaptive management period of the restoration, which is estimated at approximately 5 years. Following the adaptive management period, the temporary access road will be removed, and the habitat will be restored.

Access Road 2 is along the southern perimeter of the Project and will utilize the existing paved Flintkote Road from Estuary Way to the State Park Ranger's Residence, followed by an upgraded 15-foot access road using the existing road. The existing road is paved but has been subject to erosion and will need to be upgraded for construction vehicle traffic by filling in ruts, improving drainage, expanding from approximately 10 feet to 15 feet in width, and covering with aggregate. In addition, portions of this road and adjacent disturbed upland habitat may be utilized for onsite permanent soil disposal where approved by State Parks, creating a more elevated road. Soil placement adjacent to the Marsh Trail will be revegetated with native upland species. This access road will terminate at an existing turnaround area at the beginning of the Marsh Trail. This segment of the access road will remain as a vehicle access road through Sub-phase 1C and into the adaptive management period of

the restoration, which is estimated at approximately 5 years. Following the adaptive management period, the access road will be converted to a 15-foot-wide trail. Upgrades will remain, and a crushed granite surface will be added for multi-recreational use and fire control.

From the existing turnaround at the Marsh Trailhead, temporary Access Road 3 will be constructed along the 2- to 4-foot-wide Marsh Trail. A temporary 15-foot-wide construction access road will be constructed along the Marsh Trail to the former industrial pond. This segment of the access road will be temporary but will remain for Sub-phase 1C construction and into the adaptive management period of the restoration, which is estimated at approximately 5 years. Following the adaptive management period, the temporary access road will be removed, and a 4-foot-wide hiking trail will remain. The habitat outside the hiking trail will be restored. The Marsh Trail will be restored in this segment with improvements to control slope erosion and protect biological resources.

Access Road 4 will be from the upgraded Flintkote Avenue access road close to the turnaround that will follow the toe of the slope and use the top of the grade control features on the upstream end of the Sub-phase 1C restoration as a temporary access road. This segment will be temporary but remain for Sub-phase 1C construction and into the adaptive management period of the restoration, which is 5 years. Following the adaptive management period, the temporary access road will be removed, and the top of the grade control structure will be restored to native wetland habitat.

Access Road 5 will be from the paved Flintkote Avenue that connects to the temporary construction access roads along the freshwater management channels from the pilot channel to the grade control feature and channels from Floodplain Enhancement 3 and the Estuary Road outfall. The temporary construction road along the freshwater channel from hydraulic constriction near the downstream end of Coastal Conservancy property to the grade control feature will be removed after construction as this segment will contain cobble to retard the growth of woody vegetation that can impact the capacity of these channels to convey dry weather flow. The habitat within these temporary construction roads will be restored with native vegetation after the removal of road materials. Access roads from Floodplain Enhancement 3 along the secondary channel to the primary channel and along the primary channel to the hydraulic restriction will remain during the adaptive management period for periodic sediment removal in this area.

Sub-phase 1C Access Roads

The access roads that are used for Sub-phase 1B will also be used for Sub-phase 1C. Access to the marsh plain for the construction of new channels and grading will be from the two main access roads implemented in Sub-phase 1B and then using the alignment of new channels and areas that contain non-native rye grass. To best sustain the remaining salt marsh, access to the existing salt marsh that has not been degraded by non-native grasses will be avoided unless located where new tidal channels are planned to increase tidal inundation and frequency.

1.1.6 Temporary Stockpile Areas

Five temporary stockpile areas are planned. The stockpiles will serve to dry and stage material for fill or haul-off. Floodplain Enhancement 3, a disturbed area that is owned by the City, will be the stockpile area for Sub-phases 1A, 1B, and 1C (Stockpile 1). Stockpile 2 area for Sub-phase 1B will be located at the upstream end of the secondary freshwater management channel within an area that is

predominately degraded salt marsh. The temporary Stockpile 3 area will be located off of the temporary access road near the western berm of the former wastewater pond in an area containing ice plant and non-native ryegrass. Two additional stockpile areas (4 and 5) are planned in the upstream end of the Sub-phase 1C area. The larger area will hold dredged material from the removal of the sill sediments from the tidal channel from the downstream end of Sub-phase 1C to the inlet. The tidal channel dredging will be performed during Sub-phase 1B. The dredged material will be placed in this stockpile for use in final grading during Sub-phase 1C.

1.1.7 On-Site or Off-Site Sediment Placement Sites

Based on the geotechnical analysis of sediment samples within the Phase 1 area, excavated materials are potentially suitable material for both beach replenishment and near-shore placement to control beach erosion. Materials excavated from the Phase 1 Project that meet the criteria for geotechnical and chemical properties per the permit requirements may be beneficially used and placed along the beach and/or near-shore area of the Torrey Pines State Beach. Materials containing a higher percentage of coarse material may be beneficially used and placed on the beach for beach replenishment. These beneficial uses will be implemented to the extent feasible.

Sediments from the floodplain enhancements for sediment management that are not suitable for beach replenishment will be taken to the City's Miramar Landfill or another approved solid waste facility. The timing of beach replenishment activities is expected to align with the maintenance schedule for floodplain enhancements. Sediment removal from the floodplain enhancements and Dunhill Ditch will be determined by the frequency and intensity of storm events during the wet season. It is projected that sediment removal will be necessary at least once a year before the storm season and at least once after a major storm event. The need for removal will depend on the amount of sediment accumulated. Details regarding the timing and duration of these activities are outlined in the Permit Level Operations and Maintenance Plan.

1.2. Project Approvals and Discretionary Actions

Anticipated Project approvals and discretionary actions include:

- City of San Diego: Site Development Permit (SDP)
- California Department of Parks and Recreation: Right of Entry Permit
- California Coastal Conservancy: Right of Entry Permit
- U.S. Army Corps of Engineers (USACE): Section 404/10 Permit/USFWS Section 7 Consultation
- California Department of Fish and Wildlife (CDFW): Streambed Alteration Agreement
- California Coastal Commission (Coastal Commission): Coastal Development Permit (CDP)
- Regional Water Quality Control Board (RWQCB): 401 Certification
- RWQCB: Dewatering Permit

II. ENVIRONMENTAL SETTING

The Project site is located within the upper portion of Los Peñasquitos Lagoon (Lagoon) and the upstream riparian corridor within Sorrento Valley in the City of San Diego, San Diego County, California (Figure 1). The Lagoon is part of the Torrey Pines Reserve located in coastal north county San Diego

and is owned and managed by State Parks. The Lagoon lies primarily within the jurisdictional boundary of the City, but the Cities of Del Mar, Poway, and the County of San Diego are also included in the Lagoon watershed.

The Lagoon and its associated uplands provide important habitat for five listed bird species and 35 sensitive and rare plant species. The Lagoon also serves as an important refuge for migratory birds using the Pacific Flyway and is the closest coastal estuary to the La Jolla State Marine Conservation Area and San Diego–Scripps State Marine Conservation Area. The Lagoon is almost entirely within the City of San Diego’s Multi-Habitat Planning Area (MHPA). The MHPA is a regional preserve area designated by a Habitat Conservation Plan called the Multiple Species Conservation Program (MSCP).

Primary regional access to the Project area is provided by I-5, which runs north–south and is located east of the Project area. Sub-regional access is provided via Roselle Street and Flintkote Avenue. Access to the Lagoon is limited to protect rare species and habitats in accordance with the Lagoon’s status as a State Natural Preserve. Passive recreation along the Lagoon boundaries is permitted. Current public access is available along trails, as well as roadways that border the Lagoon, including Highway 101, Carmel Valley Road, Sorrento Valley Road, Roselle/Flintkote Road, and the Marsh Trail.

The Project Area is characterized topographically by steeply sloping bluffs on the west, south, and north boundaries and a narrow, moderately sloped floodplain. The bluffs reach up to 450 feet NAVD, while the floodplain ranges in elevation from 8 to 26 feet NAVD. Carroll Canyon Creek is contained in a concrete channel until just after the I-5 overpass, where it transitions to a soft-bottom channel. Los Peñasquitos Creek joins Carroll Canyon Creek, where Sorrento Valley turns north and separates from the railroad alignment. Beyond the confluence, the channel continues into property owned by the California Coastal Conservancy and ends in a “pilot channel.” Due to sediment accumulation, the end of the constructed “pilot channel” has become discontinuous and is not connected to downstream channels. The endpoint of the “pilot channel” is identified as the “sediment plug.” This creates an area of wide sheet flows and disconnected former creek channels. At the confluence of Carmel Creek and the Lagoon, the channel enters a channel downstream of the I-5 bridge culvert and then empties into a heavily vegetated freshwater marsh area. Persistent dry weather flows occur in all three creeks entering the lagoon.

III. SUMMARY OF ORIGINAL PROJECT

The LPLEP includes a series of conceptual actions developed to restore salt marsh and other habitats historically present in Los Peñasquitos Lagoon (Lagoon), improve public access and public safety around the Lagoon’s perimeter, and present a “natural system approach” for more effective vector management. The LPLEP utilizes a phased approach for each concept to facilitate adaptive management, respond to the availability of funding, and meet regulatory requirements that include a lagoon compliance target for the Los Peñasquitos Lagoon Watershed Management Area Sediment Total Maximum Daily Load (Sediment TMDL). This phased approach is presented in the following format: Phase 1 (0–5 years), Phase 2 (5–25 years), and Phase 3 (25–50 years). Ongoing maintenance and management activities are expected to continue throughout the three phases because the urban land use surrounding Los Peñasquitos Lagoon has rendered it a managed system, although the magnitude and frequency of management may vary over time. New efforts and key activities identified in the LPLEP to occur during the three phases and within all management zones include the following:

- Protect and preserve native species within Los Peñasquitos Lagoon and the habitats that support them through efforts that include improved hydrology, maintaining existing buffer

zones, and (where possible) creation of additional buffer zones in new areas or through expansion of existing ones. Emphasis is given to protecting and preserving sensitive species, many of which are rare and endangered.

- Integrating salt marsh restoration and enhancement with vector management through hydrologic improvements and improved public access where project footprints overlap and funding is available.
- Monitoring project performance to see if success criteria for each project concept are being met and to inform adaptive management.

The LPLEP, as proposed in the adopted PEIR, includes a number of potential infrastructure and restoration projects described programmatically (Table 1). The proposed Los Peñasquitos Lagoon Restoration Phase 1 Project (Project) includes a subset of these infrastructure and restoration projects within a defined area (Table 2). The LPLEP, as proposed in the adopted PEIR, also includes a number of Project Design Features (PDFs) and Standard Construction Procedures (SCPs) that are applicable to the project (Table 3 and Table 4, respectively).

Table 2: Project Components Identified in Los Peñasquitos Lagoon Enhancement Plan and Proposed as part of Los Peñasquitos Lagoon Restoration Project – Phase 1

Los Peñasquitos Lagoon Enhancement Plan Project Component	Proposed under Phase 1 Project?
Floodplain Enhancement/Sediment Management	Yes
Riparian Corridor Enhancement	Yes
Channel Improvements	Yes
Focused Grading	Yes
Wetland Conversion Restoration	Yes
Salt Marsh Restoration	Yes
Inlet Improvements	No
Cordgrass Establishment	Yes
Floodplain Restoration	Yes
Treatment Wetlands	No
Salt Marsh Enhancement and Expansion	Yes
Living Shore	No
Marsh Trail Realignment	No
Northwest Trailhead Marsh Trail Access	No
Southeast Trailhead Marsh Trail Access	No
Hilltop Trail Education Overlook and Marsh Trail Connection	No
Highway 101 Improvements	No
Carmel Valley Road Improvements	No
Sorrento Valley Road Improvements	No
Improving Flow through McGonigle Road Culvert (Zone 2)	No
Storm Outfall Modification to Reduce Impoundment of Discharged Waters near VCP Site 626 (Zone 2)	No
Dewatering of VCP Site 577	No
Modification to Storm Drain Outfalls at Tripp Court and Sorrento Valley Road (Zone 4)	Yes

Note: VCP = Vector Control Program.

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
PEIR PDFs				
1	Manufactured slopes would be planted with appropriate native vegetation and maintained, and drainage would be installed in order to reduce erosion. Slope irrigation would be limited to the amount required to support vegetation cover and would only be required until vegetation is established.	Reduce potential for erosion of exposed soils.	During construction	Contractor
2	Until adequate erosion-control native vegetation is established on exposed soils. Erosion and sediment control devices used for the project, including fiber rolls and bonded fiber matrix, would be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.	Reduce potential for erosion of exposed soils.	During construction	Contractor
3	Exposed soil at the disposal site would be hydroseeded and/or planted with appropriate native vegetation once the material is placed and appropriately compacted.	Reduce potential for erosion of exposed soils.	During construction	Contractor
4	Recommendations of the geotechnical reports for the project would be incorporated into the design of manufactured slopes, berms, or other features.	Ensure geologic stability of manufactured features.	Engineering and design	Engineer
5	Simultaneous use of the trails by construction equipment and recreationalists would not be allowed and affected trail segments would be closed to public use when construction would occur. Signs would be placed at the trail heads to notify trail users of these closures.	Minimize public safety hazards due to construction vehicle use of trails.	During construction	Contractor
6	Restrict public access at sand placement sites during active construction as necessary.	Ensure public safety during construction.	During construction	Contractor, in coordination with State Parks lifeguards
7	Maintain alternative access to beaches adjacent to placement sites and portions of beach access trails not under active construction.	Minimize impact on public access.	During construction	Contractor
8	Prior to opening areas of beach with placed materials, spread the materials and check for potential hazards (e.g., foreign objects in the sand). Removal and relocation or disposal of hazards would be coordinated with LPLF and State Parks.	Reduce risks to public health and safety.	During construction	Contractor
9	Maintain horizontal and vertical access on either side of the active sand placement area if public safety is not compromised.	Maintain public beach access.	During construction	Contractor
10	Temporarily relocate mobile lifeguard towers, if necessary.	Ensure public safety during construction.	During construction	Contractor, in coordination with State Parks lifeguards

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
11	Unless directed otherwise, sand would be placed along the waterline on Torrey Pines State Beach between Lifeguard Tower 4 and Lifeguard Tower 3. Sand placed on the upper beach or on top of exposed rip rap would avoid blocking line-of-sight at lifeguard towers. Sight lines from the viewing platforms of the lifeguard towers would be maintained. Beach disposal planning and implementation would be coordinated with LPLF and State Parks. Beach profile monitoring and grain-size analysis may be required based on the scale of disposal efforts to assess potential impacts to the lagoon inlet, beach and nearshore habitats and processes. Monitoring for western snowy plover within and adjacent to the beach disposal site(s) would be required with the appropriate avoidance measures put in place should this species be observed.	Ensure public safety during construction.	During construction	Contractor, in coordination with State Parks lifeguards
12	Prior to initiating construction, identify sensitive “no construction zones” and fence or flag those areas. Limit construction equipment and vehicles to within these limits of disturbance.	Reduce public safety hazards.	During construction	Contractor
13	Contractors shall maintain equipment and vehicle engines in good condition and properly tuned per manufacturers’ specifications.	Minimize air quality impacts and greenhouse gas (GHG) emissions.	During construction	Contractor
14	Native or sensitive habitats outside and adjacent to the construction limits would be designated as Environmentally Sensitive Areas (ESAs) on project maps. ESAs would be temporarily fenced during construction with orange plastic snow fence or orange silt fencing along staging areas and access routes, and with stakes and flagging in areas of flowing water and active construction zones. No personnel, equipment, or debris would be allowed within the ESAs. Fencing and flagging would be installed in a manner that does not impact habitats to be avoided and such that it is clearly visible to personnel on foot and operating heavy equipment. Access routes/staging areas adjacent to identified sensitive bird species habitat may require special fencing or barriers (e.g., stacked straw bales) pursuant to recommendations and requirements set forth by State Parks in consultation with Wildlife Agencies. Access routes used for vector management would require approval by LPLF and State Parks and meet conditions set by a Right of Entry Permit and the Lagoon’s status as a State Natural Preserve.	Minimize impacts to sensitive habitat areas.	Prior to construction Prior to vector management	Qualified biologist/contractor
15	Site staging areas and access roads at existing access points and previously disturbed areas.	Minimize impacts to	Final design	Engineer

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
		native habitat and reduce site preparation requirements.		
16	<p>Restrict vegetation clearing and grubbing, and material placement, to the extent possible, to outside the special-status bird breeding season (February 15– September 15). Work conducted during the breeding season would be designed to avoid or minimize disturbances to breeding birds. Such measures could include maintaining effective buffers to active nests and would require the on-site presence of a qualified biologist before and during clearing and grubbing activities and other manipulations of habitat. Work conducted outside of breeding season may require monitoring and avoidance measures for special-status birds; this would be determined by State Parks in consultation with Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife). Proposed clearing and grubbing along with monitoring and avoidance measures would be reviewed and approved by State Parks in consultation with Wildlife Agencies prior to the commencement of clearing and grubbing, or habitat manipulation within TPSNR.</p>	Minimize impacts to sensitive wildlife species and their habitats.	During construction	Contractor/qualified biologist
17	<p>Have a qualified biological monitor on site prior to and during construction to coordinate with contractors to minimize impacts to habitat and wildlife; frequency may vary depending upon activity but could be daily during breeding season or every other week at other time periods. Monitor vegetation clearing activities and flush wildlife prior to clearing, as appropriate, and in compliance with the ESA where applicable.</p>	Confirm implementation of biological permit conditions, design features, mitigation measures, and applicable construction specifications.	During construction	Qualified biologist
18	<p>Stockpile high-quality topsoil from previously undisturbed areas for placement on top of fill areas after soil placement to facilitate planting success.</p>	Aid in successful revegetation.	During construction	Contractor
19	<p>Incorporate soil amendments in saline soils prior to capping and/or planting, as needed.</p>	Aid in successful revegetation.	During construction	Contractor
20	<p>Use temporary irrigation of freshwater for planted areas, as required.</p>	Aid in successful revegetation.	During and post construction	Contractor
21	<p>No invasive non-native plant species shall be planted, seeded, or otherwise introduced to habitats adjacent to the project site. Plant material shall be native species</p>	Reduce/avoid impacts to special-status	During construction	Contractor

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
	appropriate to the site and approved by State Parks. Perennial plants used in restoration shall be from genetic stock at TPSNR. For wide-ranging perennial species, plants may be from sources within 3 miles from the coast between Camp Pendleton and Mission Bay if none are readily available from Los Peñasquitos Lagoon. Annual plants used in restoration shall be from locally collected propagules within the Lagoon. A qualified biologist shall review landscape plans before approval.	plant species on site.		
22	Equipment would be cleaned prior to transport to the project site to prevent potential non-native plant species and other foreign matter, such as sediment and debris, from entering the site.	Minimize the potential to introduce non-native species into the site.	Prior to construction	Contractor
23	The following measures would be implemented as necessary to reduce fugitive dust emissions associated with off-road equipment and heavy-duty vehicles: exposed surfaces (e.g., unpaved access roads) shall be watered; sweepers and water trucks shall be used to control dust and debris at public street access points; dirt storage piles shall be stabilized by chemical binders, tarps, fencing, or other suppression measures; sufficient perimeter erosion control shall be provided to prevent washout of silty material onto public roads; haul trucks shall be covered or at least 12 inches of freeboard shall be maintained to reduce blow-off during hauling; and a 15-mph speed limit on unpaved surfaces shall be enforced.	Reduce fugitive dust.	During Construction	Contractor
24	The project would coordinate with State Parks and consult the Wildlife Agencies on conservation measures to assure that impacts to native habitat and wildlife are avoided and minimized to the maximum extent practicable.	Minimize impacts to habitat and wildlife	Project planning	Project proponent
25	Construction and maintenance activities that require mechanized equipment would be at least 500 feet from active special-status avian nests. Biological surveys would be conducted within the project footprint, which includes staging and access routes, and at least 500 feet outside the project footprint to determine the location of sensitive avian species. If these buffers between construction activity and conditions cannot be met, the project would work with State Parks and consult the Wildlife Agencies to determine the best approach to avoid/minimize/offset impacts to nesting or roosting birds. Such approaches may include considering the distance to the project limits and local topography, monitoring to evaluate whether the birds are disturbed by construction, flushing wildlife out of the active work area, and relocating nests.	Avoid impacts to special-status avian species	Prior to and during construction	Contractor and biological monitor
26	A qualified biologist would be on site during project construction and during maintenance activities that require mechanized equipment. The biological monitor must be	Minimize impacts to	Prior to construction	Biological monitor

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
	<p>familiar with wetland, coastal sage scrub, and dune biology, ecology, associated native species, and the conservation measures identified for the project. The biological monitor would be available during pre-construction and construction phases to conduct biological surveys, address protection of sensitive biological resources, monitor ongoing work, and maintain communications with construction personnel to facilitate the appropriate and lawful management of issues relating to biological resources.</p> <p>The qualified biologist would have the ability to temporarily halt construction and maintenance activities, if necessary, to avoid unanticipated impacts to special status species and noncompliance with conservation measures. The avian biological monitor or qualified biologist would coordinate with LPLF or State Parks to determine appropriate measures to protect special status-species with regards to the operation of vehicles and heavy equipment.</p>	habitat and wildlife	and during construction	
27	<p>All participants and contractors for the project would receive educational training concerning special-status species within the project area and sign an agreement to comply with the conservation measures or conditions. The program would be conducted during all project phases and would cover the potential presence of listed species; the requirements and boundaries of the project; the importance of complying with avoidance, minimization, and compensation measures; and problem reporting and resolution methods.</p>	Minimize impacts to habitat and wildlife	Prior to construction and during construction	Biological monitor and contractor
28	<p>To avoid adverse impacts to special-status bird species, on-site vehicle operators shall drive no more than 15 miles per hour within the project footprint in areas identified as occupied habitat. The avian biological monitor or qualified biologist have the authority to further reduce the speed limit temporarily, if necessary, to avoid adverse impacts to special-status bird species. The avian biological monitor or qualified biologist would coordinate with LPLF or State Parks to determine appropriate measures to protect special-status species with regards to the operation of vehicles and heavy equipment.</p>	Minimize impacts to habitat and wildlife	During construction	Contractor
29	<p>During project construction, invasive species included on the National Invasive Species Management Plan, the State of California Noxious Weed List, and the California Invasive Plant Council's Invasive Plant Inventory list (Cal-IPC 2006) found growing within the project impact area would be removed. Special care would be taken during transport, use, and disposal of soils containing invasive weed seeds and weedy vegetation removed during construction would</p>	Minimize impacts to habitat and wildlife	Prior to construction and during construction	Biological monitor and contractor

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
	be properly disposed of to prevent spread into areas outside of the construction area.			
30	Equipment maintenance, staging, and dispensing of fuel, oil, coolant, or other such activities would be restricted to staging areas. A Spill Prevention, Control, and Countermeasure Plan would be prepared for hazardous spill containment.	Minimize impacts to habitat and wildlife	Prior to construction and during construction	Contractor
31	All construction equipment used for the project would be equipped with properly operating and maintained mufflers and engines on dredging equipment would be housed to the greatest extent possible.	Minimize impacts to habitat and wildlife	Prior to construction and during construction	Contractor
32	If nighttime construction is necessary, lighting used at night for project construction would be selectively placed and directed at the immediate work area and away from adjacent sensitive habitats. Light glare shields would be used to reduce the extent of illumination into sensitive habitats.	Minimize impacts to habitat and wildlife	During construction	Contractor
33	The Applicants would prepare and implement a Stormwater Pollution Prevention Plan, Stormwater Management Plan, Hydromodification Management Plan, and Low Impact Development Best Management Practices, as appropriate, to confirm that the limits of disturbance would be maintained within the identified project footprint.	Minimize impacts to habitat and wildlife	Prior to construction	Contractor
34	Erosion and sediment control devices used for the project, including fiber rolls and bonded fiber matrix, would be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.	Minimize impacts to habitat and wildlife	During construction	Contractor
35	The project site would be kept as clear of debris as possible. Food-related trash items would be enclosed in sealed containers and regularly removed from the site to avoid attracting scavengers/predators of sensitive birds. Spoils and materials disposal would be disposed of properly.	Minimize impacts to habitat and wildlife	During construction	Contractor
36	Project personnel will be prohibited from bringing domestic pets to construction sites to avoid disturbance and depredation of wildlife by domestic pets in adjacent habitats.	Minimize impacts to habitat and wildlife	During construction	Contractor
37	Public access facilities (trails, signage, etc.) would be placed in existing trails where impacts to habitat can be avoided. Trails would not go through wetland habitat but instead would move around the perimeter of the wetlands.	Minimize impacts to habitat and wildlife	Planning	Project Proponent
38	Development of success criteria would be coordinated with and approved by LPLF and State Parks prior to disturbance to soils, hydrology or vegetation within and adjacent to the Torrey Pines State Natural Reserve.	Minimize impacts to habitat and wildlife	Planning	Project Proponent
39	Development of monitoring and maintenance plans would be coordinated with and approved by LPLF and State Parks prior to disturbance to soils, hydrology or vegetation within	Minimize impacts to	Planning	Project Proponent

Table 3: LPLEP PEIR Project Design Features

PDF #	Project Design Feature	Purpose	Timing	Responsibility
	and adjacent to the Torrey Pines State Natural Reserve. Monitoring plans must be integrated into or at least be consistent with the current long-term monitoring program employed at Los Peñasquitos Lagoon and currently conducted by scientist from the Tijuana River National Estuarine Research Reserve unless this requirement is waived by LPLF and State Parks. Maintenance would be in perpetuity unless State Parks, in consultation with LPLF, determines that success criteria has been met and no further maintenance is required.	habitat and wildlife Improve measures of success in meeting success criteria Support and facilitate adaptive management Assure long-term success of habitat restoration		
40	Permanent fencing and/or signage replaced or installed as part of the project would be consistent with styles and requirements of fencing and signage present within Torrey Pines State Reserves. Approval from State Parks would be required before installation.	Compliance with policies and requirements of State Parks	Planning & construction	Project Proponent/contractor
41	A performance bond or letter of credit for grading, planting, irrigation, maintenance and monitoring of wetland/riparian and upland mitigation would be required and would include a 20 percent contingency to be added to the total costs. This bond or letter of credit is to guarantee the successful implementation of the mitigation construction, maintenance, and monitoring. A draft bond or letter of credit with an itemized cost list would be provided to LPLF and CPS for approval at least four weeks prior to initiating project impacts. The applicant would submit the final bond or letter of credit for the amount approved by State Parks within 60 days of receiving State Parks approval of the draft bond.	Assure successful completion of the project	Planning & construction	Project Proponent/contractor
42	If impacts to species identified as a candidate, sensitive, or special-status species in the MSCP are identified, specific management priorities would be undertaken as part of MSCP implementation requirements to ensure that covered species are adequately protected.	Minimize impacts to habitat and wildlife	Planning & construction	Project Proponent

Notes: PDF = Project Design Feature; PEIR = Programmatic Environmental Impact Report; LPLF = Los Peñasquitos Lagoon Foundation; TPSNR = Torrey Pines State Natural Reserve; ESA = federal Endangered Species Act; mph = miles per hour; MSCP = Multiple Species Conservation Program; NTP = Notice to Proceed; dB(A) = A-weighted decibels.

Table 4: Standard Construction Procedures

SCP No.	Procedure Description
1	Implement a public information program to assist Park users and the surrounding community in understanding the purpose of the project and disseminate pertinent project information, including a project website with current construction schedule.
2	Coordinate with utility service providers for avoiding utilities infrastructure and/or relocating infrastructure.
3	Have Resident Engineer or designee on site during construction to confirm compliance with permit conditions and construction specifications.
4	Remove sources of impounded water resulting from construction equipment (if any) and confirm compliance with construction specifications regarding no ponding.
5	Restrict access to active construction areas and staging yards to maintain public safety (e.g., portions of trails).
6	During off working hours, secure heavy equipment and vehicles in staging areas or areas with restricted access.
7	Conduct equipment fueling and maintenance at designated staging and fueling stations away from publicly accessible areas.
8	Prepare project Storm Water Pollution Prevention Plan (SWPPP) and implement best management practices (BMPs) and monitoring requirements identified in SWPPP (e.g., dust control measures).
9	Require heavy equipment operators to be trained in appropriate responses to accidental fires.
10	Provide fire suppression equipment on board vehicles and at the worksite.
11	Provide emergency communication equipment for site personnel.
12	Ensure the construction contractors minimize idling times by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage would be provided for construction workers at access points.
13	Site staging areas and access roads at existing access points and previously disturbed areas.
14	Prepare work zone Traffic Control Plans for projects that would disrupt traffic flow on local roadways prior to construction. The work zone Traffic Control Plans shall be prepared by the contractor in accordance with the California Manual of Uniform Traffic Control Devices, Caltrans Standard Plans (2010), and current standards and best practices of the reviewing and approving agencies.
15	Coordinate with applicable agencies regarding construction and maintenance schedules and worksite Traffic Control Plans including, but not limited to, local fire and police departments.
16	Maintain one lane of circulation on public roadways and access to neighboring commercial establishments during project construction.
17	Ensure temporary speed limit reduction for the traffic detour approaches and exits conforms to safe highway design speeds.
18	Have a flag person present to coordinate north-south traffic during those limited times that only a single lane is open.
19	Post signs advising the public of the presence of steep sand slopes (e.g., scarps) should they develop on beaches where sand is placed.
20	As part of permanent erosion control, protect lagoon channel cross sections with erosion control products (e.g., riprap or bioengineering solutions) and vegetated material to stabilize soils and foster natural recruitment from restoration planting, thus managing erosion during higher-velocity storm flows and preventing damage.

Table 5 shows all additional Phase 1-specific Project Design Features that will be added to this specific Phase 1 restoration as conditions to the Site Development Permit, to ensure the beneficial uses of the Project, clarify how compliance with the MSCP will be implemented, and minimize disturbance.

Table 5: Los Peñasquitos Lagoon Restoration Phase 1 Project Design Features

PDF #	Project Design Feature
PDF-BIO-1	<p>Biological Resource Protection during Construction</p> <p>I. Prior to Construction</p> <p>A. Biologist Verification. The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a project biologist (Qualified Biologist) as defined in the City's 2018 Biology Guidelines has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.</p> <p>B. Preconstruction Meeting. The Qualified Biologist shall attend the pre-construction meeting, discuss the project's biological monitoring program, and arrange to perform any follow-up mitigation measures and reporting, including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.</p> <p>C. Biological Documents. The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports, including but not limited to maps, plans, surveys, survey timelines, or buffers, are completed or scheduled per City Biology Guidelines, the Multiple Species Conservation Program, the Environmentally Sensitive Lands (ESL) Ordinance, project permit conditions, the California Environmental Quality Act (CEQA), the Endangered Species Acts, and/or other local, state, or federal requirements.</p> <p>D. BCME. The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) that includes the biological documents in I.C above. In addition, restoration/revegetation plans, plant salvage/relocation requirements, avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City's Assistant Deputy Director (ADD)/MMC will be included. The BCME shall include a site plan, a written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.</p> <p>E. Avian Protection Requirements. To avoid any direct impacts to nesting coastal California gnatcatcher, least Bell's vireo, light-footed Ridgway's rail, Belding's savannah sparrow, yellow warbler, yellow-breasted chat, Clark's marsh wren, Cooper's hawk, or any species identified as listed, candidate, sensitive, or special status in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting for coastal California gnatcatcher, least Bell's vireo, light-footed Ridgway's rail, Belding's savannah sparrow, yellow warbler, yellow-breasted chat, Clark's marsh wren, Cooper's hawk, and/or any other special-status bird species in the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The Applicant shall submit the results of the pre-construction survey</p>

PDF #	Project Design Feature
	<p>to the City's Development Services Department for review and approval prior to initiating any construction activities. If nesting activities for any of the above-mentioned special-status bird species are detected, a letter report in conformance with the City's Biology Guidelines and applicable state and federal law (e.g., appropriate follow-up surveys, monitoring schedules, construction, and noise barriers/buffers) shall be prepared and shall include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC section or Resident Engineer and Biologist shall verify and approve that all measures identified in the report are in place prior to and/or during construction.</p> <p>F. Resource Delineation. Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize the attraction of nest predators to the site.</p> <p>G. Education. Prior to the commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas).</p> <p>II. During Construction</p> <p>A. Monitoring. All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed, as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSV). The CSV shall be emailed to MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.</p> <p>B. Subsequent Resource Identification. The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species-specific local, state, or federal regulations have been determined and applied by the Qualified Biologist.</p> <p>III. Post-Construction Measures</p> <p>In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA Guidelines, and other applicable local, state, and federal laws. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.</p>
PDF-BIO-2	<p>Coastal California Gnatcatcher</p> <p>Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director</p>

PDF #	Project Design Feature
	<p>(or appointed designee) shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:</p> <p>No clearing, grubbing, grading, or other construction activities shall occur between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the Deputy Director (or appointed designee):</p> <ul style="list-style-type: none"> A. A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the coastal California gnatcatcher. Surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met: <ul style="list-style-type: none"> i. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and ii. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing a current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City representative at least 2 weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16). <p>*Note: Construction noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.</p>

PDF #	Project Design Feature
	<p>B. If coastal California gnatcatchers are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the Deputy Director (or appointed designee) and applicable resource agencies that demonstrates whether or not mitigation measures, such as noise walls, are necessary between March 1 and August 15, as follows:</p> <ul style="list-style-type: none"> <li data-bbox="354 380 1421 478">i. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then condition A.iii shall be adhered to, as specified above. <li data-bbox="354 495 1421 558">ii. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.
<p>PDF-BIO-3</p>	<p>Crotch's Bumble Bee Should this species no longer be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no avoidance measures shall be required.</p> <p>Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the following project requirements regarding the Crotch's bumble bee are shown on the construction plans:</p> <ul style="list-style-type: none"> <li data-bbox="282 810 1421 1289">A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the colony active period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the colony active period, a Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of Crotch's bumble bee nesting within the proposed area of disturbance and follow the methodology developed consistent with the California Department of Fish Wildlife (CDFW) Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). If any bumble bees are determined to be present, then a photographic survey following CDFW guidance (i.e., CDFW Survey Conservations for CESA Candidate Bumble Bee Species) shall be required. If additional activities (e.g., capture or handling) are deemed necessary based on photographic surveys, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Conservations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable. Alternative methods of surveys may be approved by CDFW on a project-by-project basis. <li data-bbox="282 1310 1421 1465">B. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee. <li data-bbox="282 1486 1421 1585">C. The pre-construction survey shall be conducted by the Qualified Biologist within 30 calendar days prior to the start of construction activities (including removal of vegetation) and shall include a minimum of three (3) visits, a minimum of one (1) week apart. <li data-bbox="282 1606 1421 1696">D. The Qualified Biologist/owner permittee shall submit the results of the pre-construction survey to City DSD (Mitigation Monitoring and Coordination) City Planning Department (MSCP) staff and CDFW for review and written approval prior to initiating any construction activities. <li data-bbox="282 1717 1421 1831">E. If pre-construction surveys identify active Crotch's bumble bee nest colonies or foraging individuals, the Qualified Biologist shall notify CDFW in writing and establish, monitor, and maintain no-work buffers around the nest(s) and any associated floral resources. The size and configuration of the no-work buffer shall be based on best professional judgment of the Qualified

PDF #	Project Design Feature
	<p>Biologist in consultation with CDFW. At a minimum, the buffer shall provide at least 50 feet of clearance from construction activities around any nest entrances and maintain disturbance-free airspace between the nest and nearby floral resources. Construction activities shall not occur within the no work buffers until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony).</p> <p>F. If Crotch's bumble bee are identified during species-specific surveys, the City shall pursue an Incidental Take Permit. Mitigation for direct impacts to Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. If foraging individuals are detected and an Incidental Take Permit will not be pursued, compensatory mitigation for loss of foraging habitat will be provided at a 1:1 replacement ratio.</p>
PDF-BIO-4	<p>Grunion Monitoring and Avoidance Plan. If sand placement activities are necessary below the high tide line during the grunion spawning season (March 1 through August 31 of any year), sand placement sites and a 100-foot buffer shall be surveyed for spawning grunion during high tide of a full or new moon for 3 nights, beginning with the nearest grunion run prior to commencement of sand placement activities. Monitoring shall be conducted by a qualified biologist and California Department of Fish and Wildlife (CDFW) published dates for grunion runs should be utilized. Sand placement shall not occur within the 4 days of a full or new moon event (see CDFW grunion run calendar). Grunion monitoring shall be conducted by a qualified biologist for 30 minutes prior to, and 2 hours following, the predicted start of each daily spawning event. Sufficient qualified biologists shall be employed to ensure that the entire proposed sand placement site is monitored during the predicted grunion run. Monitoring is not necessary in areas where there is no sand, such as areas supporting 100% cobble or bluff-backed beaches with no sand exposed during high tide.</p> <p>The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale. Every individual fish (males and females) shall be counted each night (3 nights total), with the greatest numbers being utilized to determine the Walker Scale value (e.g., 0, 1, 2, 3, 4, or 5) of each 300-foot segment within the proposed work area. Sand placement activities shall be modified according to the following plan:</p> <p>A. If a grunion run consisting of 0–100 individual fish per 300-foot segment (Walker Scale 0 or 1) is reported within 2 weeks prior to, or during, sand placement work, the Contractor does not need to take any avoidance action for grunion eggs. No mature grunion may be buried or harmed as a result of sand placement.</p> <p>B. Within 2 weeks prior to proposed work, if a grunion run consisting of 100 or more individual fish per 300-foot segment (Walker Scale 2, 3, 4, or 5) is reported, the Contractor shall avoid work on the respective beach segment(s) and truck route and additionally, shall avoid a 100-foot buffer on either side of the segment(s) and route for a minimum of 2 weeks, to ensure that no grunion eggs are buried or disturbed. These areas shall be memorialized through multiple GPS coordinates and marked with irrigation flags for a minimum of 2 weeks or when the next scheduled grunion run will be monitored. The Contractor shall adapt the sand placement schedule to avoid operations on such beach segments and their associated buffers. No mature grunion may be harmed as a result of sand placement.</p> <p>C. If sand placement has already commenced, and a grunion run consisting of 100 to 500 individual fish in one or more 300-foot segments (Walker Scale 2) in the work area is reported, the Contractor shall avoid impacts to grunion eggs to the greatest extent feasible and then</p>

PDF #	Project Design Feature
	<p>shall minimize impacts to grunion eggs through such measures as alteration of the truck route, sand discharge points, sand spreading areas, and sand placement locations.</p> <p>D. If sand placement has already commenced, and a grunion run consisting of 500 or more individual fish per segment (Walker Scale 3, 4, or 5) is reported, the Contractor shall avoid work on the respective beach segment(s) and truck route and additionally, shall avoid a 100-foot buffer on either side of the segment(s) and route for a minimum of 2 weeks, to ensure that no grunion eggs are buried or disturbed. These areas shall be memorialized through multiple GPS coordinates, and marked with irrigation flags for a minimum of 2 weeks when the next scheduled grunion run will be monitored. The Contractor shall adapt the sand placement schedule to avoid operations on such beach segments and their associated buffers. No mature grunion may be harmed as a result of sand placement.</p>
<p>PDF-BIO-5</p>	<p>Belding's Savannah Sparrow Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the Multi-Habitat Planning Area boundaries and the following project requirements regarding the Belding's savannah sparrow are shown on the construction plans:</p> <p>No clearing, grubbing, grading, or other construction activities shall occur between February 1 and August 1, the breeding season of the Belding's savannah sparrow, until the following requirements have been met to the satisfaction of the Deputy Director (or appointed designee):</p> <p>A. A qualified biologist (with demonstrable Belding's savannah sparrow survey experience) shall survey those habitat areas within suitable habitat that would be subject to construction noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average for the presence of the Belding's savannah sparrow. Surveys for the Belding's savannah sparrow shall be conducted pursuant to the protocol survey guidelines established by the California Department of Fish and Wildlife within the breeding season prior to the commencement of any construction. If sparrows are present, then the following conditions must be met:</p> <ul style="list-style-type: none"> i. Between February 1 and August 1, no clearing, grubbing, or grading of occupied sparrow habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and ii. Between February 1 and August 1, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied sparrow habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City representative at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the Belding's savannah sparrow. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is

PDF #	Project Design Feature
	<p>achieved or until the end of the breeding season (August 1).</p> <p>*Note: Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.</p> <p>B. If Belding's savannah sparrows are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the Deputy Director (or appointed designee) and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between February 1 and August 1 as follows:</p> <ul style="list-style-type: none"> i. If this evidence indicates the potential is high for Belding's savannah sparrow to be present based on historical records or site conditions, then condition A.iii shall be adhered to as specified above. ii. If this evidence concludes that no impacts to this species are anticipated, no additional measures would be necessary.
PDF-BIO-6	<p>Least Bell's Vireo Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the least Bell's vireo are shown on the construction plans:</p> <p>No clearing, grubbing, grading, or other construction activities shall occur between March 15 and September 15, the breeding season of the least Bell's vireo, until the following requirements have been met to the satisfaction of the Deputy Director (or appointed designee):</p> <p>A. A Qualified Biologist (possessing a valid endangered species act section 10(a)(1)(A) recovery permit) shall survey those wetland areas that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service within the breeding season prior to the commencement of construction. If the least Bell's vireo is present, the following conditions must be met:</p> <ul style="list-style-type: none"> i. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and ii. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied least Bell's vireo or habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the Deputy Director (or appointed designee) at least two weeks prior to the commencement of construction activities. Prior to the commencement of any

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	<p>construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or</p> <p>iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).</p> <p>*Note: Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the Deputy Director (or appointed designee), as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.</p> <p>B. If least Bell's vireo are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the Deputy Director (or appointed designee) and applicable resource agencies which demonstrated whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows:</p> <p>i. If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then condition A.iii shall be adhered to.</p> <p>ii. If this evidence concludes that no impacts to this species are anticipated, no additional measures would be necessary.</p>
PDF-BIO-7	<p>Light-Footed Ridgway's Rail (Federally Endangered, State Endangered, State Fully Protected). Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the MHPA boundaries and the following project requirements regarding the light-footed Ridgway's rail are shown on the construction plans:</p> <p>No clearing, grubbing, grading, or other construction activities shall occur between March 1 and September 15, the breeding season of the light-footed Ridgway's rail, until the following requirements have been met to the satisfaction of the Deputy Director (or appointed designee):</p> <p>A. A Qualified Biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those habitat areas within suitable habitat that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the light-footed Ridgway's rail. Surveys for the light-footed Ridgway's rail shall be conducted pursuant to the protocol survey</p>

PDF #	Project Design Feature
	<p>guidelines established by the U.S. Fish and Wildlife service within the breeding season prior to the commencement of any construction. If rails are present, then the following conditions must be met:</p> <ul style="list-style-type: none"> i. Between March 1 and September 15, no clearing, grubbing, or grading of occupied rail habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist. The location and extent of occupied rail habitat shall be verified through additional surveys by a Qualified Biologist conducted the day immediately prior to the initiation of work and once a week during construction in the breeding season; and ii. Between March 1 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied rail habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City representative at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the light-footed Ridgway's rail. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16). <p>*Note: Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.</p> <ul style="list-style-type: none"> B. If light-footed Ridgway's rails are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the Deputy Director (or appointed designee) and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and September 15 as follows: <ul style="list-style-type: none"> i. If this evidence indicates the potential is high for light-footed Ridgway's rail to be present based on historical records or site conditions, then condition A.iii shall be adhered to as specified above.

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	<p>ii. If this evidence concludes that no impacts to this species are anticipated, no additional measures would be necessary.</p>
<p>PDF-BIO-8</p>	<p>American Peregrine Falcon. Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the MHPA boundaries and the following project requirements regarding the American Peregrine Falcon are shown on the construction plans:</p> <p>No clearing, grubbing, grading, or other construction activities shall occur between March 1 and June 30, the breeding season of the American Peregrine Falcon, until the following requirements have been met to the satisfaction of the Deputy Director (or appointed designee):</p> <p>A. A Qualified Biologist shall survey those habitat areas within suitable habitat that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the American Peregrine Falcon. Surveys for the American Peregrine Falcon shall be conducted within the breeding season prior to the commencement of any construction. If falcons are present, then the following conditions must be met:</p> <p>i. Between March 1 and June 30, no clearing, grubbing, or grading of occupied falcon habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist. The location and extent of occupied falcon habitat shall be verified through additional surveys by a Qualified Biologist conducted the day immediately prior to the initiation of work and once a week during construction in the breeding season; and</p> <p>ii. Between March 1 and June 30, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied falcon habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City representative at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or</p> <p>iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the American Peregrine Falcon. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).</p> <p>*Note: Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City representative, as necessary, to reduce</p>

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	<p>noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.</p> <p>B. If American Peregrine Falcon are not detected during the pre-construction nesting survey, no additional measures would be necessary.</p>
<p>PDF-BIO-9</p>	<p>White-Tailed Kite (State Fully Protected). Fully protected species may not be taken or possessed except with take permit authorization from CDFW, and only under specific circumstances. Prior to the issuance of any Notice to Proceed, or pre-construction meeting, the City Deputy Director (or appointed designee) shall verify that the MHPA boundaries and the following project requirements regarding the White-Tailed Kite are shown on the construction plans:</p> <p>Impacts to white-tailed kite individuals shall be fully avoided. A qualified biologist shall remain on site during all vegetation clearing and perform periodic site inspections (1-2 times/week) during grading and vegetation removal activities. Should a white-tailed kite nest be detected, a buffer of a minimum of 500 feet shall be established, and no activity shall occur within the buffer zone until the biologist determine, and CDFW confirms, that all chicks have fledged and are no longer reliant on the nest site.</p>
<p>PDF-BIO-10</p>	<p>Caulerpa. The City shall retain a qualified biologist to conduct a <i>Caulerpa</i> spp. survey to identify the potential existence of invasive <i>Caulerpa</i> spp. within the tidal dredging area in accordance with the Caulerpa Control Protocol: https://media.fisheries.noaa.gov/2021-12/caulerpacontrol-protocol-v5.pdf (October 2021) prior to initiation of tidal channel dredging. Any sightings of <i>Caulerpa</i> spp. shall be reported within 24 hours to CDFW (Caulerpa@wildlife.ca.gov) and the National Marine Fisheries Service (NMFS) at (562) 980-4037 and nmfs.wcr.caulerpa@noaa.gov.</p>

IV. ENVIRONMENTAL DETERMINATION

State Parks previously prepared and certified the LPLEP Program Environmental Impact Report (LPLEP PEIR) SCH No. 2017121036. Based on all available information in light of the entire record, the analysis in this Addendum, and pursuant to Section 15162 of the State CEQA Guidelines, the City has determined the following:

- There are no substantial changes proposed in the project that will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes have not occurred with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- There is no new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete or was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous environmental document;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous environmental document;
 - c. Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives that are considerably different from those analyzed in the previous environmental document would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Based upon a review of the current Project, none of the situations described in Sections 15162 and 15164 of the State CEQA Guidelines apply. No changes in circumstances have occurred, and no new information of substantial importance has manifested, which would result in new significant or substantially increased adverse impacts as a result of the Project. Therefore, this Addendum has been prepared in accordance with Section 15164 of the CEQA State Guidelines. Public review of this Addendum is not required per CEQA.

V. IMPACT ANALYSIS

The following includes the Project-specific environmental review pursuant to the CEQA. The analysis in this document evaluates the adequacy of the EIR relative to the Project. Based on the following analysis and information, there is no evidence that the Project would require a major change to the EIR. The Project would not result in any new significant impact, nor would a substantial increase in the severity of impacts from that described in the EIR result.

5.1. LAND USE

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Result in physical division of an established community; or
- 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?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would not divide an established community or result in environmental impacts related to conflicts with applicable land use plans, policies, or regulations, including the City's Multiple Species Conservation Program (MSCP), the City's ESL Regulations, or the California Coastal Act. Restoration and enhancement activities outlined in the LPLEP would be planned in accordance with the goals and guidelines of the MSCP and would restore wetlands, riparian corridors, and other sensitive natural communities and habitat for wildlife consistent with the goals and objectives of the MHPA. The proposed enhancement and restoration activities would also be consistent with applicable requirements and restrictions of the ESL Regulations as they would enhance the biological resources within Los Peñasquitos Lagoon and improve the hydraulic function within the floodplain. Regarding the California Coastal Act, many of the policies contained therein were determined not to apply to the restoration and enhancement activities of the LPLEP PEIR as there would be no development of permanent structures that could affect coastal resources. Additionally, restoration and enhancement activities would be permitted in accordance with Coastal Commission regulations. Finally, uses permitted in wetlands as outlined in the City's Municipal Code Section 143.0130(d) specifically include wetland restoration projects where the primary purpose is restoration of habitat.

Project

The Project would involve restoration and enhancement activities within the Lagoon to provide better hydrological and habitat function and long-term sustainability but would not change the overall size, location, or function of the Lagoon. The Project would not create a new physical division of any established community. Therefore, impacts would be **less than significant (Threshold A)**.

The Project site currently functions as an open space/reserve area, and Project implementation would not result in the conversion of the Lagoon from riparian and wetland area to another land use. The Project site and greater Lagoon area are identified in applicable planning documents as an area to be preserved and protected as open space. Thus, the restoration and enhancement activities of the Project would not alter the Lagoon's use or function in a manner inconsistent with applicable regulations and laws or existing and future local land use plans.

The Project has been planned in accordance with the goals and guidelines of the MSCP SAP and would restore wetlands, riparian corridors, and other sensitive natural communities and habitat for wildlife consistent with the goals and objectives of the MHPA. As discussed in Section V.6, Biological Resources, and in the Biological Technical Report (BTR) "Biological Technical Report – FINAL Los Peñasquitos Lagoon Restoration Phase 1" prepared by Blackhawk Environmental, Inc. and Dudek on April 2024, the Project would not conflict with any local policies or ordinances protecting biological resources, nor would the Project conflict with the County MSCP, the City's MSCP SAP, or any other approved local, regional, or state habitat conservation plans. The Project is located within the Coastal Zone and would be required to obtain a CDP from the Coastal Commission, which would ensure Project compliance with the California Coastal Act. Therefore, the Project would not cause conflicts with any land use regulations or policies that could result in substantial adverse environmental effects. Impacts would be **less than significant (Threshold B)**.

5.2. PUBLIC ACCESS AND RECREATION

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Include recreational facilities or require the construction or expansion of recreational facilities which may have an adverse physical effect on the environment; or
- B. Result in loss of recreational use areas or lessen recreational use?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would result in less than significant environmental impacts related to the construction or expansion of recreational facilities and related to the loss of recreational use areas or lessened recreational uses. Restoration and enhancement projects do not include or require the construction of new or expanded recreational facilities. Additionally, because no recreation is allowed within the Lagoon, the restoration and enhancement activities proposed within the Lagoon would not directly disrupt or interfere with existing recreation opportunities that exist around the perimeter and surrounding the area.

The LPLEP PEIR also determined that while the majority of construction associated with restoration and enhancement would be contained within the Lagoon itself, it is possible that some temporary trail or pathway closures may be necessary for public safety. However, while the potential for short-term trail or pathway closures associated with construction for Lagoon restoration and enhancement

activities may lessen the ability to use perimeter trails for a short period, the PEIR concluded that this temporary minor disruption would not be substantial within the overall local trail system.

Project

The Project would implement Phase 1 of the Lagoon Restoration and Enhancement concept of the LPLEP Final EIR. Project components include salt marsh restoration, freshwater management, sediment management, habitat enhancement of the riparian corridor, storm drain upgrades, and flood management. The restoration of 49 acres of historic salt marsh habitat has an estimated construction completion timeline of 2024–2028 that will be implemented in three sub-phases (Phases 1A, 1B, and 1C) followed by 5 years of adaptive management and monitoring. The Lagoon is not accessible or available as a recreation area. Various public access trails and recreational areas exist around the Lagoon, including the Marsh Trail along the southern perimeter of the Project. A segment of the Marsh Trail alignment will be used during construction and the adaptive management period as a temporary access road. Upon completion of the salt marsh restoration, this segment of the Marsh Trail will be restored to a 4-foot-wide hiking trail.

The partially paved Marsh Trail from the Rangers Station to the turnaround will be widened, and drainage infrastructure will be installed to address erosion scouring for use during construction and the adaptive management period. This segment will be maintained with a gravel cover into the long-term maintenance period. Impacts of the temporary access road and Marsh Trail are analyzed in relevant sections of this document, including Biological Resources and Cultural Resources. Additionally, surrounding trails and pathways or other recreational facilities would not be modified by restoration and enhancement activities. Restrictions on public access within the Lagoon would remain with implementation of the Project. Therefore, the Project would not result in an adverse physical effect on the environment due to the construction or expansion of recreational facilities, and impacts would be **less than significant (Threshold A)**.

While the Lagoon is not accessible or available as a recreation area, public access and recreation opportunities exist around the Lagoon on trails (officially established and user-established) and local roadways, including Highway 101/North Torrey Pines Road, Carmel Valley Road, Sorrento Valley Road, and Roselle/Flintkote Road. Because no recreation is allowed within the Lagoon, the Project would not directly disrupt or interfere with existing recreation opportunities. Temporary and permanent access roads would be established for each of the three sub-phases. During Phase 1A, 15-foot-wide permanent access roads would be provided to the three floodplain enhancement areas and storm drain outfalls. Three temporary access routes would also be constructed during Phase 1B to complete the construction of the freshwater management channels.

One temporary access road would utilize the existing paved Flintkote Road from Estuary Way to the State Park Ranger's Residence, followed by an upgraded 15-foot-wide access road using the existing partially paved Flintkote/Marsh Trail to the turnaround. Another temporary access road would be constructed along segments of the existing 2- to 4-foot-wide Marsh Trail hiking trail. Discussions and input from State Parks on this temporary access road have resulted in the realignment of the access road to preserve most of the existing Marsh Trail. These segments of temporary construction access would remain as vehicle access roads through Sub-phase 1C and then be restored after construction

is completed. Upgrades to the partially paved, 15-foot-wide Flintkote/Marsh Trail would remain, and a crushed granite surface would be added for multi-recreational use. A temporary access road from the upgraded Marsh Trail along the grade control feature/low-flow diversion will be maintained during the adaptive management period, and then this alignment will be restored with native vegetation. It is possible that some temporary trail or pathway closures may be necessary for public safety.

Although the Project would include access roads that use existing trails surrounding the Lagoon and may require additional trail closure for public safety, construction for Lagoon restoration and enhancement activities would be temporary, and public trails used for access roads would be restored upon Project completion, resulting in no permanent loss of recreational trails. Short-term trail or pathway closures would be a minor disruption considering the fragmented nature of the perimeter trails surrounding the Lagoon, which would not be substantial within the overall local trail system. Therefore, the Project would result in a **less than significant** impact related to the loss of recreational use areas or lessened recreational uses (**Threshold B**).

5.3. HYDROLOGY

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Result in a substantial increase in impervious surfaces and associated increased runoff;
- B. Lead to substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes;
- C. Cause substantial alteration of the existing drainage pattern of the site, including through the alteration of the course of a stream or river or increase in flow velocities, in a manner which would result in substantial scour or erosion that causes instability of slopes, river control berms, adjoining roadway embankments, or bridge abutments;
- D. Result in substantial increase in the flow rate or amount (volume) of surface runoff in a manner that would result in flooding on- or off-site, causing damage to structures or exposing the public to substantial risk;
- E. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
- F. Increase risks of damage to coastal resources, including inundation by storm surge, wave uprush or sea level rise?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would not result in a substantial increase in impervious services or associated increased runoff. It also found that there would not lead to substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes or cause substantial alteration of the existing

drainage pattern of the site. Furthermore, it determined that there would not be a substantial increase in the flow rate or amount (volume) of surface runoff in a manner that would increase flooding or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, eliminating the potential risks of damage to coastal resources. Drainage patterns within the Lagoon would be intentionally modified through restoration and enhancement activities to increase hydrologic connectivity with the ocean. No additional runoff would be added to the system by these changes, and the LPLEP Final EIR included PDF #1, requiring areas identified for localized protection against scour or erosion to be appropriately designed to avoid slope or structure instability (refer to Table 2 for PDFs). Ultimately, the LPLEP Final EIR determined that all hydrology impacts from proposed restoration and enhancement activities would be less than significant because these activities would actively improve the hydrology of the Lagoon.

Project

A Water Quality and Hydrology Environmental Assessment Report” was prepared by Anchor QEA, Tidal Influence, Burns and McDonnell, River Focus and Rick Engineering Company on June 2022 for the proposed Project. A Tidal Hydraulic and Salinity Modeling Memorandum, “Phase 1C - 90% Design Hydrologic and Hydraulic Report - Final Salt Marsh Restoration,” has also been prepared by Anchor QEA, inc. September 2023. These reports concluded the Project would actively enhance the fluvial and tidal efficiency of the Lagoon by creating channels to convey flows, thereby reducing impoundment of dry weather freshwater inflows to the Lagoon from urban areas, attenuation of flood waters from storm runoff, and increasing tidal extent from the ocean into the interior of the Lagoon. The Project does not include any new impervious surfaces that could result in increased runoff. **No impacts** would result **(Threshold A)**.

The floodplain enhancements will be lined articulated block that will allow for infiltration and native grasses to be establish. As discussed previously, the floodplain enhancements reduce flood levels in the flood channel and adjacent developed areas. New permanent access roads will be constructed using geotextile for subbase stability and aggregate that will allow for infiltration. These design features will also reduce peak flows for more frequent storm events by increasing the overall channel capacity. The implementation of the freshwater management channels and the bioengineered grade-control structure/low-flow diversion located on the upstream limits of the salt marsh restoration will reduce the retention times for larger storm events to accumulate in the Lagoon while still allowing for inundation of the marsh plain. As a result, the implementation of the Project would result in **less-than-significant** impacts **(Thresholds B)**, related to increases in surface water rates or flow that could cause flooding.

The Project includes the construction of floodplain enhancements for sediment management and new channels for freshwater management. The floodplain enhancements are designed to capture and collect sediment for the purpose of reducing sediment loading to the restoration area for its success and sustainability. The new freshwater management channels are designed to control erosion using vegetated banks and, where needed, vegetated soil lifts. These bioengineered structures will be used where the velocity, based on modeling, indicates potential for erosion. Segments of the freshwater management channels will also be lined with natural cobble to control erosion, and the

establishment of woody vegetation that would limit the capacity of the channel to convey dry-weather flows through the Lagoon. The hydraulic analyses of the Project features indicate that planned erosion control measures provide sufficient stabilization to address the anticipated design storm peak velocities and associated erosive stresses. The design analysis also has identified segments of potential siltation and have been modified. Therefore, the Project would result in **less-than-significant** impacts (**Threshold C**) related to the alteration of the existing drainage channel and causing erosion and siltation.

The Project includes two stormwater diversions that will augment the existing capacity of the flood management channel in Sorrento Valley. The results of the hydraulic analysis indicate that implementation of these diversions will result in a reduction in flood levels for more frequent storm events within the channel and adjacent developed areas. The two stormwater diversions will further augment the capacity of existing drainage channels that flow into the flood management channel that conveys flow from Carroll Canyon Creek and Los Peñasquitos Creek. No additional runoff water would be added to the system through the implementation of lagoon enhancement activities. As a result, the Project would result in a **less-than-significant** impact (**Thresholds D and E**) related to the existing capacity of the existing stream's stormwater conveyance system. The Project would also not provide substantial additional sources of polluted runoff.

The Project does not include any new structures, residential units, or new developments that would increase the risk from tsunamis, inundation by storm surge, wave uprush, or sea level rise due to the location of the Project within the coastal zone. Materials disposal from sediment excavation and/or inlet maintenance may result in sand placement on the beach or in the nearshore. Adding sand to the system and/or creating a nearshore structure to reduce wave action on the beach/shoreline would reduce storm surge inundation and wave uprush and would provide some temporary additional protections against the effects of sea level rise on adjacent roadways/parking facilities. **No impacts (Threshold F)** would occur due to increased risks of damage to coastal resources.

5.4. WATER QUALITY AND SEDIMENT MANAGEMENT

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Result in a violation of water quality standards or waste discharge requirements or degradation of beneficial uses in Los Peñasquitos Lagoon;
- B. Substantially degrade water quality in the lagoon by increasing sedimentation, leading to a violation or degradation of water quality standards or beneficial uses; or generate pollutions in violation of such standards; or
- C. Alter circulation patterns in the lagoon in a way that inhibits mixing or promotes stagnation?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would not result in a violation of water quality standards or waste discharge requirements or the degradation of beneficial uses in the Lagoon, nor would circulation patterns in the Lagoon inhibit mixing or promote stagnation. These activities would be designed to address existing water quality issues within the Lagoon, reducing the potential for water quality standards violations and degradation of beneficial uses in the Lagoon. Ultimately, the LPLEP Final EIR concluded that circulation in the Lagoon would be enhanced for both tidal and fluvial flows, and areas of stagnation or freshwater impoundment would be reduced and/or eliminated.

However, because the Lagoon has a defined TMDL for sedimentation, the LPLEP Final EIR determined temporary turbidity within Lagoon channels generated by restoration and enhancement activities, most specifically the removal of sediment within wetland areas during construction, would be considered a potentially significant temporary impact. Accordingly, the LPLEP Final EIR included Mitigation Measure Water Quality-1 to reduce this potentially significant temporary impact to below a level of significance (refer to Section VIII, Mitigation Monitoring and Reporting Program, for mitigation measures). Mitigation Measure Water Quality-1 requires compliance with regulatory requirements intended to address turbidity impacts (e.g., Construction General Permit, Municipal Permit) and monitoring of permit compliance through the construction monitoring program.

Additionally, the LPLEP Final EIR concluded that post-construction water quality in the Lagoon would be improved compared to existing conditions, including with respect to sedimentation. Completion of restoration and enhancement activities would not substantially degrade water quality in the Lagoon by increasing sedimentation, leading to a violation or degradation of water quality standards or beneficial uses, nor generate pollution in violation of such standards.

Project

The Project will improve water quality through reduction of sediment loading to the Lagoon. This improvement in water quality is achieved through the implementation of three floodplain enhancements and two stormwater diversions as part of the design features of the Project. These design features are needed to ensure the success and sustainability of the salt marsh restoration through the reduction of sediment loading to the restoration area. Floodplain enhancements located on Carroll Canyon Creek and the confluence of Carroll Canyon Creek and Los Peñasquitos Creek will reduce sediment loading from these tributaries through a series of bioengineered grade-control structures. Floodplain Enhancement 3 will reduce sediment loading from adjacent drainage areas through the diversion of these storm flows into the floodplain enhancement, which also contains bioengineered grade-control structures that allow storm flows to slow down and capture sediment. The Project would result in improvement in water quality within the Lagoon and would not violate any water quality standards or waste discharge requirements. The Project would also implement all actions described under LPLEP Final EIR Mitigation Measure Water Quality-1 as part of Project compliance regulatory requirements that are intended to address turbidity impacts (e.g., Construction General Permit, or CGP, and Municipal Permit) and the monitoring of permit compliance through the construction monitoring program. PDFs #1, #2, and #3 (Table 2) require the implementation of revegetation and erosion control methods for exposed soils during construction activities to minimize sediment movement and erosion potential.

With the implementation of the City of San Diego Whitebook Standards practices, compliance with the project CGP, and implementation of PDFs , the proposed Project would result in **no impact (Threshold A)** related to water quality standards and waste discharge requirements.

Completion of the freshwater management channels will be sequenced to control sediment from entering downstream tidal channels. Within areas of excavation and grading, erosion and sediment control measures will be implemented in accordance with the SWPPP. The SWPPP includes the specific methods, phasing, and measures to control erosion and the migration of sediments into the Project waterways.

Load reductions in sediment to the Lagoon are targeted by the Sediment TMDL. The Project includes measures to reduce sediment loading into the Lagoon from upstream tributaries of Carroll Canyon and Los Peñasquitos Creeks. These measures include the construction of three floodplain enhancements that use restored floodplain processes upstream of the Lagoon using a similar approach to existing permitted sediment measures operating on Los Peñasquitos Creek. Additional measures include stormwater diversions and upgrades to storm drain outfalls that include sediment and trash interceptor devices before these enter the Lagoon. Without the sediment management and riparian enhancement elements of the Project, impacts to water quality and the beneficial uses for not only the Carroll Canyon Creek but the Los Peñasquitos Lagoon will continue. Therefore, the Project would result in **no impact (Threshold B)**.

Circulation in the Lagoon would be enhanced for both tidal and fluvial flows, and areas of stagnation or freshwater impoundment (e.g., storm drains or nuisance dry weather freshwater inflows) would be reduced and/or eliminated. Therefore, the Project would result in **no impact (Threshold C)**.

5.5 GEOLOGY AND SOILS

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Expose people or structures (including infrastructure) to geologic hazards such as earthquakes due to rupture of a known earthquake fault delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist or any other known faults, landslides, mudslides, ground failure, or similar hazards;
- B. Result in a substantial increase in wind or water erosion of soils, either on or off the site; or
- 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?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would result in less-than-significant impacts related to geologic hazards such as

earthquakes, fault rupture, landslides, mudslides, ground failure, or similar hazards. While the potential for seismic-related risks such as rupture, ground shaking, or ground failure exists at and around Los Peñasquitos Lagoon, the proposed restoration and enhancement activities were determined not to increase the potential for seismic activity or resulting geologic hazards. Grading activities may create terraced or sloping terrain to accommodate habitat needs but would not create or modify steep slopes. Additionally, built structures that accommodate public activities that could be subject to seismic risks were not proposed. Ultimately, these activities would be required to adhere to applicable codes and regulations relative to seismic safety.

The LPLEP PEIR also concluded that with adherence to permit requirements and SWPPP BMPs, restoration and enhancement activities would result in a less-than-significant impact related to a substantial increase in wind or water erosion of soils, either on or off the site. Additionally, the implementation of PDF #23 (Table 2) would also reduce fugitive dust during construction activities to manage wind erosion. Although soils outside the Lagoon's floodplain are considered to have "severe" erosion potential, most ground-disturbing activities would occur in the interior of the Lagoon basins and channel areas, and the Construction General Permit requires the development of a Project SWPPP that identifies BMPs to minimize erosion during construction. Further, PDFs #1, #2, and #3 (Table 2) require the implementation of revegetation and erosion control methods for exposed soils during construction activities to minimize sediment movement and erosion potential. As part of permanent erosion control, specific areas of Lagoon channel cross sections subject to erosion would be protected with erosion control products (i.e., riprap) and vegetated material, as necessary, to stabilize soils and foster natural recruitment from restoration planting, thus managing erosion during higher-velocity storm flows and preventing damage.

Finally, restoration and enhancement activities were concluded to result in a less-than-significant impact related to unstable geologic conditions, including on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Although geologic formations surrounding the Lagoon were identified in the LPLEP PEIR as highly susceptible to erosion and other geologic hazards such as landslide and slope failures, restoration, and enhancement activities would not change or modify the type or conditions of the underlying soils and geology that could increase the susceptibility of the Project site to unstable conditions. BMPs would also be developed as part of the permitting process to address any soil constraints. Ultimately, all geology and soil impacts were determined to be less than significant in the LPLEP PEIR.

Project

Burns & McDonnell Engineering, Inc. and Allied Geotechnical Engineers, Inc. prepared, "Report of Geotechnical Services for Los Peñasquitos Lagoon Restoration Phase 1 Design Project – City of San Diego" January 2021. Revised June 2022. As detailed in the LPLEP PEIR, the Lagoon is not within an Alquist-Priolo Earthquake Fault Zone but is underlain by mapped faults and is approximately 2.5 miles northeast of the active Rose Canyon Fault (DOC 2021). While the potential for seismic-related risks such as rupture, ground shaking, or ground failure exists at and around the Lagoon, restoration and enhancement activities were determined not to increase the potential for seismic activity or resulting geologic hazards at a program level. With additional Project-level details provided in Section II, the Project would be consistent with the determination of the LPLEP PEIR. Ground-disturbing activities

would occur during Project construction, including approximately 360,000 cubic yards of excavation volume over all three sub-phases. Excavation depth would range from 3 to 8 feet in portions of the salt marsh restoration, with shallower excavation depths for other restoration and enhancement activities. Grading activities would be focused on removing historically accumulated surface sediments, increasing tidal inundation and exposure of more saline sediment, and removing invasive plants to enhance habitat areas. Grading activities would not create or modify steep slopes that would be susceptible to landslides or increase the risk for landslides on or off-site. Finally, built structures that accommodate public activities that could be subject to seismic risks are not proposed. Design of enhancement and restoration components would be required to adhere to applicable codes and regulations relative to seismic safety. The Project would also be required to comply with LPLEP PEIR PDF #4 (Table 2), which requires incorporation of recommendations of the Phase 1 Geotechnical Report into the design. Therefore, impacts related to geologic hazards would be **less than significant (Threshold A)**.

Construction activities would be coordinated with erosion control and surface water diversion to prevent soil loss, channel instability, discontinuity of water supply during dry weather season, and flood damage during major wet season events. A water quality management plan would be developed as part of the Construction SWPPP and implemented from the onset of construction to post-construction. The CGP also requires the Project SWPPP to identify BMPs that would be used to minimize erosion during construction. The BMPs contained in the SWPPP would be developed and implemented by the Project contractor in compliance with applicable regulations, and implementation of those appropriately designed BMPs would reduce erosion potential by protecting the susceptible soils. The Project would also be required to comply with all PDFs and SCPs included in the LPLEP PEIR, including PDFs #1, #2, and #3, to reduce the potential for erosion of exposed soils, and PDF #23, to reduce fugitive dust and manage wind erosion (Table 2). Moreover, as included as SCP #20 (Table 3), as part of permanent erosion control, specific areas of Lagoon channel cross sections subject to erosion would be protected with erosion control measures (e.g., bioengineering solutions that include vegetated lifts) and vegetated material to stabilize soils and foster natural recruitment from restoration planting, thus managing erosion during higher-velocity storm flows and preventing damage. Freshwater management channels will be lined with natural cobble to reduce erosion and control the accelerated establishment of woody vegetation that would reduce the capacity of the channels to convey persistent dry weather flows away from the salt marsh restoration. Finally, articulated concrete blocks are proposed to facilitate operation and maintenance needs within the floodplain enhancement areas. Articulated concrete block would provide erosion control as large sediment deposits build up within the flood enhancement areas as well as a drivable surface to maintain each flood enhancement area. Therefore, with adherence to permit requirements, SWPPP BMPs, and applicable PDFs and SCPs, the Project would not result in a substantial increase in wind or water erosion of soils, either on or off the site, and impacts would be **less than significant (Threshold B)**.

As identified in the LPLEP PEIR, the underlying geologic formations surrounding the Lagoon are highly susceptible to erosion and other geologic hazards such as landslide and slope failures. Although the Project would involve ground-disturbing activities during construction and sediment removal from the Lagoon basins and channels, these actions would not change or modify the type or conditions of the underlying soils and geology that could increase the susceptibility of the Project site to unstable

conditions. Consistent with the LPLEP PEIR, BMPs specific to the condition of each area would be developed as necessary during the permitting process to address potential constraints. Adherence to permit requirements, SWPPP BMPs, and applicable PDFs and SCPs would ensure that the Project results in a **less-than-significant** impact related to unstable geologic conditions, including on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse (**Threshold C**).

5.6. BIOLOGICAL RESOURCES

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWS);
- B. Have a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- C. Have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian) through direct removal, filling, hydrological interruption, or other means;
- 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, including linkages identified in the MSCP, or impede the use of native wildlife nursery sites;
- E. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- F. Introduce development in areas adjacent to the MHPA that would result in adverse edge effects;
- G. Conflict with any state or local policies or ordinances or public resources codes protecting biological resources; or
- H. Introduce invasive species of plants into a natural open space area?

The LPLEP PEIR concluded that restoration and enhancement activities would temporarily impact a variety of vegetation types and wetlands that could support sensitive species; however, over the long term, Lagoon functions would be enhanced and improved.

Temporary impacts to sensitive wildlife species present in the Lagoon, and/or those with a high potential to be present, are characterized by impacts to their habitat. The primary concern for temporary loss of habitat is reduced availability of food and shelter for resident and migratory species that rely on the habitat afforded by the Lagoon. While PDFs that limit temporary impacts through biological construction monitoring, site design restrictions and requirements, breeding season avoidance, and contractor education were incorporated into the LPLEP PEIR (i.e., PDFs #14 through #28, as detailed in Table 2), they would remain during temporary construction activities and post-restoration while habitat establishes or indirectly converts. The restoration and enhancement activities are expected to benefit special-status species from the enhancement and/or expansion of their habitats. However, in the short term, the potential temporary loss of habitat used by sensitive species during the construction of restoration and enhancement activities would be considered substantial. Thus, a temporary significant impact related to a substantial adverse impact on sensitive species would result.

Potential impacts to sensitive habitats would occur in the process of creating higher value habitats that would be resilient in the long term and high functioning within the Lagoon with no feasible way to avoid disturbance. Impacts to those existing sensitive habitats would be temporary and are considered an acceptable trade-off with higher value habitat creation. Overall, the restoration and enhancement activities would result in a substantial net gain of higher-functioning sensitive habitats. The restoration and enhancement activities for conversion of lower tier habitats to higher value tiered habitats, may require localized impacts to occur, to enhance the overall function of wetland habitats within the Lagoon. As specified in Threshold B, a significant impact would result from the restoration and enhancement activities if it were to cause a substantial adverse impact on designated sensitive habitats. However, improvements would be designed to avoid impacts to sensitive habitats to the extent feasible. Potential impacts to non-native grassland habitat, as well as other wetland and riparian habitat areas, would occur in the process of creating higher value habitats that would be resilient for the long term and high functioning within the Lagoon with no feasible way to avoid disturbance. Thus, a temporary significant impact related to a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, Tier IIIB Habitats, or other identified sensitive natural community would result.

As specified in Threshold C, a significant impact would result from the project if it were to cause a substantial adverse impact on wetlands (e.g., marsh, vernal pool, riparian). Although the LPLEP would impact wetlands through the restoration activities, impacts are expected to enhance the hydrological system that sustains these wetlands and would not result in a net removal, fill, or loss of wetland habitats on the program level. Thus, the short-term impact to wetlands is not considered substantially adverse but rather an acceptable temporary condition in the process of restoration. Furthermore, individual projects that would directly alter wetland habitat under the jurisdiction of USACE, CDFW, and/or RWQCB would be subject to permit conditions extended by those agencies. Therefore, a less-than-significant impact related to a substantial adverse impact to wetlands would result.

During restoration and enhancement activities, various portions of the Lagoon would be under construction at any one time, allowing for wildlife use and passage through other adjacent areas. The phasing and staged timeframe of the LPLEP, as well as the implementation of PDFs that include biological monitoring, construction restrictions, and Contractor education (PDFs #14, #15, #17, #23,

#24, #26, and #27; Table 2), would limit the potential for wildlife movement to be substantially impeded. Furthermore, the LPLEP is expected to benefit wildlife corridors in the long term by enhancing and expanding available habitat for wildlife. Therefore, a less-than-significant impact related to wildlife movement would result.

The LPLEP project area is within the MHPA. Because the overall goal of the LPLEP is the enhancement and restoration of habitat, it would not conflict with the City's MSCP or other local policies or ordinances protecting biological resources, and a less-than-significant impact would result. Although the specific habitat distributions within the Lagoon may change from baseline conditions, the overall goal of the project is to restore and enhance the functions and values of the habitat within the Lagoon. Restoration and enhancement activities would not introduce development (e.g., residential/commercial development, lighting, transportation) in areas adjacent to the project site that could result in adverse edge effects to the MHPA, and less-than-significant impacts related to edge effects would result.

The LPLEP PEIR outlined numerous key measures for the removal of invasive species from the riparian areas of the Lagoon. During implementation, construction vehicles visiting the project site have the potential to introduce invasive species of plants. However, PDF #22 (Table 2) would be implemented, which would ensure that construction equipment is free of non-native plant species and other foreign matter before entering the project site. Therefore, a less-than-significant impact related to the introduction of invasive species to the Lagoon would result.

Project

The following analysis of the proposed Project was derived from the BTR for the Los Peñasquitos Lagoon Restoration – Phase I, prepared by Blackhawk Environmental Inc. (September 2023), and the Addendum to the Biological Technical Report – Lagoon and Marine Survey and Essential Fish Habitat Assessment for the Los Peñasquitos Lagoon Restoration Phase 1, prepared by Dudek (February 2024).

Sensitive Vegetation Communities

Project-related construction and restoration activities would result in the modification of 113.9 acres, either through the permanent loss of resources or functions (18.1 acres), temporary impacts related to the construction of restoration components (72.9 acres), or restoration (22.9 acres) (BTR Figure 5-1). Table 6 summarizes impacts to wetlands, and Table 7 discusses impacts to sensitive uplands. Impacts would be significant and would require mitigation. Acreages are separated for a 5.3-acre pre-mitigated area related to the prior permitted Sorrento Channel maintenance area that has been mitigated through successful implementation of the El Cuervo and Famosa Slough mitigation projects, and therefore Project components within this area would not result in significant impacts to wetlands.

**Table 6: Impacts to Wetlands with the Project –
Inside and Outside of the MHPA**

City Habitat Types	Inside MHPA (acres)			Outside MHPA (acres)			Total
	Perm.	Temp.	Restore	Perm.	Temp.	Restore	
Outside Pre-Mitigated Area							
Salt marsh/panne ^a	0.04	5.53					5.57
Salt marsh – disturbed ^b		25.65	15.55				41.20
Riparian forest	2.96	13.77		2.62	0.77		20.12
Riparian scrub ^c	0.06	6.04		0.15			6.26
Freshwater marsh	0.04	4.15		0.04			4.22
Freshwater marsh – disturbed		0.12					0.12
Natural flood channel ^d		4.70		0.03	0.34		5.08
Disturbed wetland – invasive ^e	0.48	1.05	2.18	0.49	0.17	0.22	4.59
<i>Subtotal: Outside Pre-Mitigated Area</i>	<i>3.58</i>	<i>61.01</i>	<i>17.73</i>	<i>3.33</i>	<i>1.28</i>	<i>0.22</i>	<i>87.15</i>
Within Pre-Mitigated Area							
Riparian forest	0.36	1.92		0.22	0.09		2.60
Freshwater marsh	0.29	0.17		0.06			0.52
Natural flood channel ^d	0.61	0.70		0.08	0.19		1.57
Disturbed wetland – invasive ^e	0.13	0.28	0.03	0.06	0.03	0.05	0.57
<i>Subtotal: Within Pre-Mitigated Area</i>	<i>1.39</i>	<i>3.07</i>	<i>0.03</i>	<i>0.42</i>	<i>0.31</i>	<i>0.05</i>	<i>5.27</i>
Total	4.97	64.08	17.76	3.75	1.59	0.27	92.42

Notes:

- ^a Consists of alkali meadow, alkali seep, coastal brackish marsh, saltpan/mudflats, and southern coastal salt marsh vegetation communities.
- ^b Consists of southern coastal salt marsh – degraded vegetation community.
- ^c Consists of mulefat scrub and southern willow scrub vegetation communities.
- ^d Consists of non-vegetated channel and open water land covers.
- ^e Consists of Arundo, disturbed wetland, pampas grass, and tamarisk vegetation communities.

**Table 7: Impacts to Uplands with the Project –
Inside and Outside of the MHPA**

City Habitat Types	Inside MHPA (acres)			Outside MHPA (acres)			Total
	Perm.	Temp.	Restore	Perm.	Temp.	Restore	
Tier II							
Coastal sage scrub ^a	0.60	4.96	1.49	0.02			7.07
Coastal sage scrub – disturbed	1.08		0.13	0.26		0.03	1.49
Tier IIIB							
Non-native grassland	0.23	1.83	2.86	0.01			4.92
Tier IV							
Disturbed land ^c	2.47	0.41	0.39	4.74		0.02	8.03
Total	4.38	7.20	4.87	5.03	0.00	0.05	21.53

Notes: All impacts occur outside the pre-mitigated area.

- ^a Consists of blue elderberry series and Diegan coastal sage scrub vegetation communities.
- ^b Consists of developed, disturbed habitat and ice plant land covers/vegetation community.

Special-Status Plant Species

Per the City's Significance Determination Threshold guidelines, any impacts to federally or state-listed plant species, as well as all narrow endemic plant species, are considered significant (City of San Diego 2016). Listed or narrow endemic plant species have not been observed within the approximately 243-acre biological study area (BSA),¹ nor do any species under these considerations have a moderate or high potential to occur in the BSA. Therefore, there are no significant impacts associated with this Project on federally listed, state-listed, and/or narrow endemic plant species. Potential effects on special-status plant species related to construction and restoration would be **less than significant**.

Special-Status Wildlife

State- and/or federally listed wildlife species that are known to occur within the BSA include white-tailed kite (*Elanus leucurus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), coastal California gnatcatcher (*Polioptila californica californica*), light-footed Ridgway's rail, and least Bell's vireo (*Vireo bellii pusillus*). Light-footed Ridgway's rail is a state fully-protected species. The American peregrine falcon (*Falco peregrinus anatum*) has a high potential to occur as a foraging species within the BSA. Crotch's bumble bee (*Bombus crotchii*) is a state candidate for listing and has a moderate potential to forage or nest within upland habitats in the BSA. Direct impacts to upland species (coastal California gnatcatcher, Crotch's bumble bee, and American peregrine falcon) are not anticipated with the incorporation of PDFs-BIO-1 through PDF-BIO-7 (Table 4). The Project includes avoidance and minimization measures that will ensure that construction of the Project would have a **less-than-significant** effect on special-status wildlife species.

MSCP-covered species that were found present in the BSA include coastal California gnatcatcher, Cooper's hawk (*Accipiter cooperii*), Belding's savannah sparrow, least Bell's vireo, light-footed Ridgway's rail, mule deer (*Odocoileus hemionus*), northern harrier (*Circus hudsonius*), orange-throated whiptail (*Aspidoscelis hyperythra*), saltmarsh skipper (*Panoquina errans*), and white-faced ibis (*Plegadis chihi*). Temporary impacts to habitats supporting these species are considered **less than significant**, provided coverage conditions of the MSCP are met. Additional discussion regarding these conditions is included below under "MSCP Consistency" and in Section 4.4 of the BTR. While the MSCP conditions of coverage are met through the restoration of temporary impacts and the overall net benefits of the Project for habitat function and resilience, a portion of the temporary impacts are subject to additional temporal loss (due to use as construction roads, adaptive management roads, or staging/stockpiling) or will have reduced function (due to lining channel bottoms with cobble or periodically removing vegetation within channels to ensure freshwater conveyance capacity is maintained. Approximately 11.1 acres of the total 69.1 acres of temporary impacts to potential habitat for special-status wildlife species is subject to some level of additional temporal loss or reduced function. These impacts would be significant if they adversely affect occupied habitat for listed species in a manner that jeopardizes, even temporarily, the life cycle of those species. The temporary impacts occur in the marsh plain, primarily in Sub-phases 1B and 1C, where the listed species present is limited to Belding's savannah sparrow and light-footed Ridgway's rail. Most of these temporary impacts will occur in riparian and natural flood channel habitat, which are not preferred by these species. The 5.57 acres of marsh

¹ The BSA is bordered to the east by the North County Transit District railway line and to the west by the steep-sided cliffs below Torrey Pines Road, extending from the west side of southbound I-5 northwest into the Lagoon.

impacts occur sporadically over a large area (approximately 1 linear mile) within narrow (typically 15-foot-wide) patches of habitat. Based on the configuration of temporal impacts to suitable habitat for Belding's savannah sparrow and light-footed Ridgway's rail and the size of the temporary loss relative to available habitat in the Lagoon (less than 5%), these temporary impacts to special-status wildlife are considered **less than significant**.

In summary, the loss of habitat associated with temporary (i.e., restoration) impacts associated with the Project are not expected to result in severe adverse effects on species currently utilizing those habitats within the BSA. Belding's savannah sparrow occurs primarily in the downstream portion of the BSA (adjacent to the tidal channel) and in the northern portion of the Lagoon. Temporary loss of habitat within the Project area may result in a short-term shift or reduction of the overall Lagoon species population, but restored habitat within the Project area will provide higher value habitat and may support a larger population compared with pre-Project levels. Light-footed Ridgway's rail also primarily occurs outside the BSA in the northern portion of the Lagoon and in Los Peñasquitos Canyon. It is estimated that one breeding pair may occur in the middle portion of the Project site. Temporary loss of habitat within the Project area may result in a shifting of breeding populations into other suitable habitat areas, but restored habitat within the Project area will provide higher value habitat and may support a larger population compared with pre-Project levels. A similar temporary shift in habitat usage may occur for other resident and nesting species. Riparian species that are only known to migrate and not breed within the Lagoon, such as least Bell's vireo, are expected to shift usage to another suitable riparian habitat in the region, but will also likely benefit from exotic removal and understory plant diversity that is expected to occur because of the Project.

Permanent impacts to wetland (Table 5) and Tier II and IIIB habitats (Table 6) supporting special-status wildlife species would be a **potentially significant impact** due to the loss of habitat.

Temporary indirect impacts to special-status and MSCP-covered species can occur due to increased noise, vibration, lighting, construction dust, and/or loss of foraging habitat. Permanent indirect impacts associated with the long-term operations and maintenance of the Project may include similar impacts to those resulting from construction, such as noise generated by operations and maintenance activities. However, with the implementation of the Project avoidance and minimization measures, including PDF-BIO-1 and PDF-BIO-2 (Table 3), indirect effects to special-status wildlife species are considered **less than significant** for MSCP-covered species. Indirect impacts to wetland-dependent MSCP-covered species may result in take, which is not authorized under the MSCP; therefore, the Project has been designed with Project Design Features (as detailed in Table 3) that include pre-construction nesting surveys and implementation of appropriate barriers and species protections. Therefore, the Project as designed would have a **less than significant** effect.

The Project has limited potential for temporary direct and indirect impacts on wildlife movement that may be deterred from using the Project site due to increased noise, human activity, and temporary disturbances to habitat because there is ample surrounding habitat for these species to utilize during construction. Therefore, the Project would not result in temporary impacts to wildlife movement.

Temporary indirect impacts to MSCP-covered species would include the loss of foraging and/or breeding habitat because of the Project during the preparation and reestablishment periods. However, because this loss is consistent with the overall MSCP goals to restore, maintain, enhance,

and preserve salt marsh and wetland function within the MHPA, these impacts are considered **less than significant**. In addition, there is ample habitat available for these species in areas surrounding the proposed Project disturbance footprint.

Although some special-status species that have been documented on the Project site are not covered by the MSCP, temporary indirect impacts to these species are anticipated but are considered less than significant because these species are strongly associated with other MSCP-covered species that are expected to benefit from habitat restoration and improved wetland function proposed by the Project consistent with the overall goals of the MSCP. In addition, adjacent open space will remain throughout Project activities, which individuals can use for foraging; therefore, the populations of these species will experience a **less than significant** impact related to temporal loss.

Wetland/Jurisdictional Resources

Project-related effects to jurisdictional resources include permanent and temporary impacts associated with floodplain enhancement, salt marsh restoration, access road construction, outfall improvements, and enhancement areas. Project components are categorized as resulting permanent impacts, temporary impacts, or restoration. Permanent impacts are further divided into those that will result in a loss of jurisdictional area or significant loss of function (i.e., permanent access roads, outfall improvements, and floodplain enhancements) and additional permanent impacts where the loss of function is expected to be limited (i.e., regrading, cobble-lining, and permanent as-needed maintenance of Carroll Canyon Creek). Temporary impacts are further divided into those that will be restored within 1 year of impact and those that may result in greater temporal loss (i.e., construction and adaptive management roads, staging and stockpile areas). Impacts/restoration acreages are provided both outside and within the pre-mitigated area.

All proposed activities (permanent impacts, temporary impacts, and restoration activities) within wetland jurisdictional areas require permit authorizations from regulatory agencies (See Addendum Section 1.2, Project Approvals and Discretionary Actions). The determination of which activities require compensatory mitigation will be determined by each agency and may consider the type of permanent impacts, potential for temporal loss within temporary impacts areas, and risk/uncertainty of proposed restoration. See preceding "Sensitive Vegetation Communities" section for the analysis of City of San Diego and Coastal Commission-defined wetlands.

Temporary indirect effects on wetland resources may result from the accidental discharge of oil, grease, and/or chemicals that may degrade the Lagoon during construction. Permanent indirect effects that may result from the Project include downstream habitat loss, alteration, or conversion resulting from the widening and alteration of the flow regime within the Lagoon; however, the Project design has considered a range of scenarios to preclude this possibility, so no such impacts are anticipated. The BSA is host to invasive species such as giant reed, which, if transported off site, may result in long-term conversion or degradation of additional habitat areas. Implementation of PDFs that include biological construction monitoring, site design restrictions and requirements, breeding season avoidance, and Contractor education (i.e., PDFs #14 through #28, Table 2) would reduce these potential indirect impacts. In addition, Project-specific PDF-BIO-1 (Table 3) is added to ensure compliance with the City's Biology Guidelines. With the implementation of the PDFs listed above, indirect impacts to wetlands would be **less than significant**.

City Wetlands within the Coastal Overlay Zone

The City's Biology Guidelines (2018a) and Municipal Code state that impacts to wetlands should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. Project implementation would result in the disturbance and modification of City-regulated wetlands within the Coastal Overlay Zone. Since Project-related disturbance to City wetlands would result from proposed large-scale wetland restoration with incidental public service infrastructure improvements that are required to support long-term sustainable wetland restoration, the proposed disturbance to City wetlands is permissible under Section 143.0130(d) of the Municipal Code. To be authorized under the City's guidelines and regulations, a project must: (1) demonstrate that impacts to wetlands are unavoidable; (2) present the least environmentally damaging alternative; (3) ensure that the project provides adequate mitigation; and (4) maintain adequate buffers to ensure wetland function. This Project meets all four criteria.

Wetland Avoidance Feasibility

Under the wetland avoidance alternative, all City wetland areas would be avoided. The upland areas of the Project would be modified, but core elements of the Project would not be completed, including major components of Sub-phases 1A, 1B, and 1C. Components of the Project eliminated under the wetland avoidance alternative include the following:

- Floodplain Enhancement 1
- Floodplain Enhancement 2
- Floodplain Enhancement 3
- Dunhill Ditch Enhancement
- Riparian and Non-Tidal Salt March Habitat Enhancement
- Improvements at Flintkote Av, Industrial Ct/ Carmel Mountain Rd N and Tripp Ct Outfalls
- New Freshwater Management Channels including Outfall Construction at the Pinch-Point
- Sediment Removal, Grubbing, and Fine Grading as Part of Habitat Restoration
- Construction of Long-Term Access Roads for Maintenance
- Dredging Extensions of Tidal Creeks to Improve Tidal Influence

If any components of the Project above were to be eliminated core goals of the Project would not be attained, which would eliminate the potential for long-term improvements to the Lagoon's ecological function. Without floodplain enhancement, it is uncertain whether Sub-phases 1B and 1C could be feasibly developed in a way that ensures long-term sustainability. Therefore, it is not feasible to avoid wetlands to achieve the Project goals of a restored wetland/marsh system with higher value and function when compared to the degraded conditions that currently exist within the BSA.

Least Environmentally Damaging Option

The Project involves core elements that require both disturbance to and modification of City wetlands. However, the Project has been designed with phased implementation and specific features to minimize and avoid adverse modifications to wetlands to the greatest extent possible. In Phase 1, approximately 0.90 acres of disturbed wetland, primarily invasive species such as giant reed, with lesser amounts of pampas grass and tamarisk, will be removed. These wetlands are located within the footprint of proposed permanent floodplain enhancement and outfall improvements. This

removal represents the least damaging option since this habitat offers the lowest-quality existing wetland habitat while still supporting the viability needed to achieve Project goals. To the greatest extent feasible, habitats known to support sensitive species, including least Bell's vireo and light-footed Ridgway's rail, have been minimized as part of the Project actions and the required mitigation measures. Where temporal loss is proposed to occur, such as to southern coastal salt marsh, southern willow scrub, and southern arroyo willow riparian forest habitat types, the project duration and proposed action will incorporate project elements that will minimize temporal loss and/or direct and indirect impacts to special-status plant and wildlife species. The LPLEP PEIR PDFs and PDF-BIO-1 (Table 2) include measures such as biological monitoring, pre-activity surveys, seasonal timing of work outside of breeding seasons, and reducing construction durations.

The Sub-phase 1A Floodplain Enhancement 1 and Floodplain Enhancement 2 project components have been designed to be located adjacent to the existing pilot channel. These features have been designed to minimize modifications of wetlands to the extent feasible while still reaching project goals and objectives. Further, the floodplain enhancement design includes 0.80 acres of disturbed wetland dominated by invasive species, which is considered low quality and represents a less environmentally damaging option than construction within higher-value habitats. Modifications of riparian habitats associated with floodplain enhancement will occur within areas of low function due to low flows contained within Carroll Canyon Creek. Floodplain Enhancement 3, which is proposed for siting within an area historically used for construction staging and currently consisting of disturbed coastal sage scrub that is not occupied by coastal California gnatcatcher, has been designed in combination with stockpile staging areas proposed for future phases of the project. This combination of project components has avoided additional disturbance of wetlands. Phasing of this design to develop Floodplain Enhancement 3 following the use of the area for stockpiling eliminates the need to disturb additional areas of wetlands.

Like floodplain enhancement, the majority of outfall improvements as part of Sub-phase 1A have been designed where outfall areas would be subject to routine maintenance. Design of these outfall improvements to use and improve existing facilities represents the least impactful option, as the design of new features would require novel development of outfalls in previously undisturbed areas. Where outfall improvements are proposed to encroach into wetland areas that are not currently maintained, the design will bisect wetland areas in the shortest manner possible as required for direct connection to the freshwater bypass to utilize the smallest feasible footprint.

Where Project roads have been designed with anticipated impacts to wetlands as part of Sub-phase 1B, the proposed roads have been sited to overlap with additional disturbance areas to the greatest extent feasible. These include the use of stockpiling areas and floodplain enhancement areas proposed for maintenance and outfall locations. Where roads cannot be collocated within other project design components, they have been designed to utilize existing access points within Torrey Pines State Park, such as an existing utility access road along the southern and western BSA boundary characterized as a developed and otherwise degraded habitat. Where road ingress to wetland areas is required for essential project components such as salt marsh restoration, roads are proposed perpendicular to the developed habitat to utilize the shortest possible route within wetlands or other ESL while also reducing fragmentation and possible edge effects. Where roads are proposed to parallel stretches of wetland areas, such as along the northern and eastern BSA, the modification of wetlands has been minimized through the design of these roads to parallel areas of existing

disturbance, such as railroad tracks. By paralleling the railroad tracks, the project would minimize impacts of the road by eliminating the need for additional areas of anthropogenic disturbance within the Lagoon, preventing additional habitat degradation or fragmenting, and reducing access points for trespass. Further, these permanent access roads are proposed within lower functioning freshwater riparian communities, avoiding higher functioning coastal salt marsh habitats, with only 0.05 acres of coastal salt marsh located within the proposed access routes. Considering that one of the primary goals of the project is to restore salt marsh value and function, the project and its associated design features, including limited permanent access roads, represent the least damaging option to biological resources within the project site. Where temporary access roads and stockpiling areas cannot avoid salt marsh habitat, the project has prioritized use of degraded salt marsh habitat rather than high-functioning salt marsh.

The Sub-phases 1B and 1C channel and salt marsh restoration components are included to restore the channel and the larger wetland functions of the Lagoon. The freshwater management channels within Sub-phase 1B have been realigned from earlier designs to avoid intact riparian habitat and are located within degraded freshwater and non-tidal salt marsh that have been impacted by accumulated sediment and invasive plant species. The design of freshwater management channels has been refined based on input from resource agency staff to include areas with 10:1 slopes, and proposed cobble-bottom sections are limited to only those areas where required to avoid erosion. Both habitat rehabilitation and enhancement are planned along the new freshwater channel corridors to improve overall wetland function and value. Within the Sub-phase 1C salt marsh restoration area, grading and disturbance will focus on the areas of degraded salt marsh where non-native ryegrass has established. Although these areas include disturbance and modification of extensive wetland habitat types, areas proposed for restoration have focused on restoration, rehabilitation, and enhancement of degraded wetland habitat. Existing high-functioning riparian and coastal salt marsh wetlands have been avoided to the greatest extent feasible.

Project Disturbance

Per the City Biological Guidelines, the City does not distinguish between temporary and permanent impacts to wetlands. The project would result in the modification of 92.4 acres of City wetland habitat. However, this area of disturbance is exclusively a direct result of activities required to restore target habitats and/or constitute non-functional or degraded wetlands (e.g., eliminating non-native riparian areas of giant reed, pampas grass and/or tamarisk and wetland/riparian habitat type conversions). The entire project involves a large-scale, historical salt marsh restoration that will benefit MSCP-covered species, other special-status species, and common species, and will restore sensitive habitats and hydrological functioning to support both biological and anthropogenic land uses.

Wetland Buffers

The project proposes to maintain existing physical wetland buffers. Existing buffer conditions in the BSA include an expanse of existing open space comprised of native habitat that buffers the western and northern portions of the project that will not be modified by project implementation. The BSA is currently buffered by developed areas to the east and south, and this interface has resulted in no existing functional buffer between the wetlands and existing development in these regions. Although the project proposes floodplain enhancement, outfall improvements, and permanent access along the eastern perimeter, these project components have been designed at the edge of existing

developed areas and do not represent a potential for substantial increases in long-term physical disturbance, noise, domestic animal intrusion, human encroachment and/or other activity above current ambient conditions. Although not directly related to the creation of physical buffers, the project has incorporated floodplain enhancement, outfall improvements, and channel restoration activities that will manage freshwater input to protect wetland functions, filter coarse sediment through biofiltration design components, and reduce erosion through bioengineered grade control structures in an environmentally superior manner than existing conditions. Overall, the Project is expected to enhance functional buffers related to water quality and floodwater management while maintaining existing physical buffers.

Marine Biological Resources

Marine biological resources are potentially affected by two Project components that are classified as having temporary impacts: tidal channel dredging and beach nourishment.

Tidal Channel Dredging

An Addendum to the Biological Technical Report – Lagoon and Marine Survey and Essential Fish Habitat Assessment was prepared by Dudek in February 2024, which concludes that marine fauna is expected to recover within approximately 1 year and will likely have improved function and diversity because of the Project. No direct impacts during tidal channel dredging are expected for fish species and mobile invertebrates inhabiting the water column. Benthic invertebrate species may not be as mobile and dredging activities could result in mortality. Benthic invertebrates in dredged areas are expected to recolonize the area within approximately 1 year after dredging (Wilber and Clarke 2007). Given the species assemblages noted on site, including non-native and freshwater-adapted species, overall impacts to species may be beneficial toward native and saline-adapted species and, therefore, are not considered to be significant.

The tidal channel supports approximately 0.087 acres (total vegetated and unvegetated areas) of eelgrass (*Zostera marina* and *Z. pacifica*) in four small beds. Although eelgrass may reestablish following tidal channel dredging, the potential net loss of eelgrass is considered potentially **significant impact**. Implementation of mitigation measure Biology-2 and MM-Bio-2.3 would ensure impacts remain less than significant.

Indirect impacts to adjacent eelgrass beds or other sensitive marine biological resources (including fish and invertebrates) adjacent to the tidal channel dredging areas would be reduced with the implementation of stormwater pollution prevention measures, including PDF #33 and SCP #8 (Tables 2 and 3). With the implementation of these measures, adverse indirect impacts, including reduced water quality due to increased turbidity, are expected to be avoided and minimized, resulting in a **less-than-significant** impact.

Construction noise would increase ambient noise levels at and surrounding the Project area. However, the tidal channel is not expected to support managed fish species and, therefore, construction noise would be unlikely to create significant impacts to any managed fish. The largely non-native fish and non-native invertebrate species population may be disrupted by increased ambient noise levels during construction, but because these are not sensitive species, these impacts are considered **less**

than significant. Further, tidal dredging is a one-time event expected to be conducted during daytime hours for approximately 6 to 8 weeks and, therefore, would have only temporary indirect noise impacts in a limited portion of the lagoon.

Beach Nourishment

Fish are anticipated to temporarily relocate during periods when turbidity increases following the placement of sediment on the beach, but invertebrates located on the beach may be covered by the sediment placement. This may result in the mortality of some benthic invertebrates; however, many will be able to burrow/move in the sediment. In addition, grunion utilize California beaches as spawning sites from March through August, and any beach nourishment during this time frame could negatively impact spawning success by smothering eggs or result in the temporary loss of spawning habitat due to disturbance. With the implementation of a grunion monitoring and avoidance plan (PDF-BIO-4, Table 4), direct impacts to marine species would be **less than significant**.

Construction noise would increase ambient noise levels at and surrounding the area where sediment is placed on the beach using heavy equipment. These noise impacts could adversely affect invertebrate species burrowed on the beach and fish that are in nearshore waters. These noise impacts are considered **less than significant** because they are temporary and would generally affect common invertebrate and fish species inhabiting the area (see separate analysis of effects on special-status and protected species below).

Short-term water quality impacts (e.g., turbidity) may temporarily (typically less than 72 hours) have minor effects on fish and invertebrate species in or adjacent to the sediment placement area; however, these impacts would likely not affect the success of populations due to the ability of the juvenile and adult fish and mobile invertebrate species to relocate to adjacent areas. Temporary relocation of these mobile species would not result in biologically significant impacts regarding competition, predation, or spawning. Less mobile species (such as benthic invertebrates) may be more severely affected by short-term water quality impacts; however, these impacts would occur in an area that is frequently subject to disturbance from wave action and storm events, and the species that inhabit this zone are generally adapted to such levels of disturbance. Therefore, indirect impacts to fish and invertebrate species would be **less than significant**.

Wildlife Movement

The Project would result in the disturbance and modification of Core Biological Resource Area 14: Los Peñasquitos Lagoon/Del Mar Mesa/Peñasquitos Canyon and associated linkages Del Mar Mesa-Black Mountain and Los Peñasquitos Creek west of Poway due to planned construction within the BSA. The City's Significance Determination Threshold guidelines state that interfering substantially with the movement of any established native wildlife species may result in the determination that impacts are significant (City of San Diego 2016). However, Project effects on Core Biological Resource Area 14 and associated linkages would be temporary and would result in the creation of enhanced and restored habitat that is aimed at improving habitat for wildlife that uses the area within the BSA.

The Project site is located within the Los Peñasquitos Lagoon/Del Mar Mesa/Peñasquitos Canyon Core Resource Area (City of San Diego 1998). It is also located approximately 5 miles west of two habitat

linkages (Del Mar Mesa – Black Mountain and Los Peñasquitos Creek west of Poway) (City of San Diego 1998). The Project does not overlap directly with land-supporting nursery sites. Wildlife would be able to move unobstructed through the local area during and following construction. Therefore, the Project would not result in any impacts to wildlife movement and nursery sites. **No impacts** would result.

The Project has retained and expanded the wildlife corridor from the Los Peñasquitos Creek to the upper Lagoon. A minimum 95-foot-wide wildlife corridor will be maintained along the eastern side of Floodplain Enhancement 2.

MSCP Consistency

Approximately 92% of the BSA is located within the MHPA. The only areas outside of the MHPA include the southern linear extent of the riparian forest, the concrete-lined channel, and the portions of the Project that occur on the railway and developed areas east of the overall Project boundary. The Project would comply with the MSCP's general management directives and specific management policies and directives for the northern habitat area and Appendix A of the City of San Diego MSCP Subarea Plan (1997). Species-specific management directives for each of the present MSCP-covered plant and wildlife species are discussed below.

Compatible Land Uses

Regarding compatible land uses within the MHPA, the Project would result in the disturbance of 113.9 acres within the Project site (including disturbed and developed habitats), to achieve a successfully restored wetland. Of these total impacts, 103.3 acres are within MHPA lands. The result of the Project, once all restoration success criteria thresholds and goals stipulated by the Restoration Plan/HMMP are met, would exceed the 90% preservation goal specified for MHPA lands. Furthermore, the Project includes the enhancement and/or restoration of disturbed habitats, non-native grasslands, and other degraded habitat types to native, highly functioning wetlands, riparian systems, and upland habitats, ensuring that well over 90% of the existing MHPA footprint within the Project site would be preserved with perpetual management directives specified in the Restoration Plan/HMMP.

General Planning Policies and Design Guidelines

Regarding general planning policies and design guidelines for roads and utilities, new developments are relegated only to outfall improvements and the minimal amount of permanent access roads necessary to access the site for long-term operations and maintenance activities. The areas that would be developed have been positioned as close to peripheral development as possible to maintain functionality without encroaching significantly into the natural lands of the Project site, leaving wildlife movement and corridor vitality intact. The Project design also minimizes habitat fragmentation by siting its developed components at and/or near the edges of developed areas.

Regarding fencing, lighting, and signage, no additional fencing, lighting, or signage are proposed, other than the minimum signage necessary to limit access, deter littering, and educate the public.

No materials storage, mining, extraction, and/or processing facilities are proposed. Therefore, no impacts associated with these types of activities would occur.

One central aspect of the Project is to control flooding by restoring the Lagoon through a large-scale restoration effort that would allow for ecological, geological, hydrological, and other natural processes to be restored under an approved Restoration Plan/HMMP with a perpetual management component. A series of technical studies on the Lagoon have been completed over many years with the goal of controlling flooding through a wetland restoration effort that involves preparatory earthwork, channelization creation, and existing channel enhancement. These studies have addressed impacts to upstream and downstream habitats, flood flow volumes, velocities and configurations, sea level rise, water availability, and changes to the water table, among other variables. The collective interpretation of these studies all supports the dual notions that flooding can be controlled and Lagoon functionality would improve through the implementation of the project.

Design features to control flooding include strategically placed unnatural materials (e.g., gabion structures and articulated concrete blocks) to direct and channel high-velocity flows. These structures would be vegetated with native plant species and incorporated into the Project design, consistent with MSCP directives.

Land Use Adjacency Guidelines

Regarding land use adjacency guidelines, all Project-related developments (e.g., outfalls, access roads) have been designed to facilitate annual cleaning efforts or at greater frequencies, if needed. Operations and maintenance activities include dredging accumulated sediments, removing exotic plant species, and maintaining proper drainage flows throughout the MHPA. Introduction of toxics is not proposed by the Project; all herbicides that could be used for the treatment of exotic plant species would be U.S. Environmental Protection Agency-approved for wetland usage and of minimal toxicity to the environment. No permanent lighting, noise-generating devices, new barriers, invasive plant species introductions, or brush management activities are proposed. These design features are all consistent with the MSCP directives.

MSCP Management Goals and Objectives

Most of the Project area is on MSCP-preserved land. The Project serves the overarching goal of the MSCP by restoring degraded salt marsh habitat to higher-functioning wetlands. The result of the Project will maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats, preventing local extirpation and ultimate extinction. The Project would improve existing conditions for a wide variety of flora and fauna and restore special-status plant species impacted by project construction/restoration activities. After all construction is complete, operations and maintenance activities will ensure that maximized biological values are maintained well into the future. In addition, low-intensity public usage by virtue of hiker access along the marsh trail precludes intense or disturbing activities from within or adjacent to the MHPA; no other public access is proposed. Since the project serves to restore, enhance, and protect the resources in the MHPA, the project falls under the Priority 1 category.

The Priority 1 operations and maintenance activities for the Project will include exotic plant species control, litter removal and control, existing marsh trail maintenance, signage installation and maintenance, erosion control, off-road vehicle prohibition, channel maintenance, and sediment removal as specified in the City of San Diego MSCP Subarea Plan (1997). Baseline vegetation mapping

completed for the MSCP indicates that the majority of the BSA supports southern riparian scrub, southern coastal salt marsh, and coastal and valley freshwater marsh, with areas of valley and foothill grassland and Diegan coastal sage scrub along the western margins. A summary figure included as Figure 5 of the MSCP Subarea Plan combines the riparian and wetland habitats as “riparian/wetlands.” Although the project would result in a loss of riparian scrub in favor of salt marsh and other habitats that are more consistent with historical conditions, this change does not represent a substantial adverse effect on baseline habitat conditions relied on for the conservation analysis in the MSCP.

The project is subject to the specific management policies and directives for the Northern Area of the MSCP Subarea Plan, which includes Los Peñasquitos Lagoon. Although some impacts to special-status plant and wildlife species are possible or anticipated, the Project is centered on habitat enhancement and restoration, and impacts to special-status species would be largely mitigated through overall improved habitat value and function. Plant species covered under the MSCP that could be impacted include the San Diego barrel cactus, Torrey pine, Del Mar Mesa sand aster, and coast wallflower (*Erysimum ammophilum*) (although San Diego populations of coast wallflower are now treated as the common species). MSCP-covered wildlife species found present on the Project site include coastal California gnatcatcher, Cooper’s hawk, Belding’s savannah sparrow, elegant tern (*Thalasseus elegans*), least Bell’s vireo, light-footed Ridgway’s rail, mule deer, northern harrier, orange-throated whiptail, saltmarsh skipper, California brown pelican (*Pelecanus occidentalis californicus*), and white-faced ibis. The Project would enhance and restore habitats conducive to the long-term survival of these MSCP-covered species, as well as hundreds of other native plant and wildlife species. Management directives for these species under the MSCP SAP require specific management directives for the protected population that must include specific measures to protect against detrimental edge effects to these species and prevent unauthorized collection. Area-specific management directives must include appropriate fire management/control practices to protect against a fire cycle that may become too frequent. To adequately protect these species per the MSCP, the Project includes avoidance and minimization measures that will effectively limit edge effects, direct take, and implement fire management/control practices. Additionally, the Project would restore and enhance habitats for all impacted plant and wildlife species and seeks to restore the Lagoon to its historic vegetative composition, creating a region of higher ecological value for all native flora and fauna that inhabit the Lagoon. Species-specific management actions for all present MSCP-covered species within the Project site are included below.

Overall, the Project is consistent with conservation levels required for coverage of species under the MSCP except for light-footed Ridgway’s rail. The loss of habitat for this species is not included in the state definition of take, as contrasted with the federal definition, which includes harassment which can be interpreted as including the loss of habitat. The Project is not expected to result in state-defined take. USFWS will determine federally-defined take under Section 7 consultation.

Del Mar Mesa Sand Aster

MSCP conservation levels required for coverage of this species stipulate protection from edge effects, unauthorized collection, and increased fire frequency. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities with associated/ancillary facilities in proximity to natural land installed to minimize impacts, any edge effects to adjacent vegetation

communities would likely be temporal in nature. Under such circumstances, it would not be expected for the proposed construction to contribute to habitat fragmentation or increase the potential for adverse edge effects. Further, the Project does not propose modifications to potential access points that may allow for unauthorized collection. Invasive plant species control would also aid in the reduction of wildfire potential and detriment edge effects specified by the MSCP Subarea Plan. Therefore, the Project would not adversely affect the goals and objectives of the MSCP.

Coast Wallflower

MSCP conservation levels required for this species are limited to preserve-level management of southern foredunes and southern maritime chaparral habitats. The Project does not propose impacts to these habitat types. Further, per Appendix A of the MSCP SAP, populations of this species within San Diego County may now be considered a more common species of wallflower, although scientific consensus still has not been met.

Torrey Pine

This species is covered by the MSCP because the single naturally occurring population at Torrey Pines State Reserve will be conserved and appropriately managed. The MSCP assumed a 100% conservation of the native populations and that no major populations would be impacted. There are no Area Specific Management Directives (ASMDs; per MSCP SAP, Appendix A) for this species. The Project would result in the removal of one individual Torrey pine. Removal would not jeopardize the continued survival of the species considering larger revegetation efforts by State Parks and is therefore consistent with the MSCP conditions of coverage. This species will be covered by the MSCP because the single naturally occurring population at Torrey Pines State Reserve will be conserved and appropriately managed. Torrey Pines State Park and Los Peñasquitos Lagoon are both managed by state park rangers and ecologists according to their general plans and management plans.

San Diego Barrel Cactus

This species is covered by the MSCP through the conservation of most populations. Torrey Pines State Reserve is not listed amongst the population areas with specific conservation levels. ASMDs for the species include management of edge effects, unauthorized collection, and appropriate fire management/control practices. The Project would not result in direct impacts to any San Diego barrel cactus and is not expected to increase indirect effects such as edge effects, unauthorized collection, or fire frequency/severity. Therefore, the Project meets the MSCP conditions of coverage for this species.

Belding's Savannah Sparrow

MSCP conservation levels required for this species are limited to preserve-level management. A primary goal of the Project is to restore and enhance healthy wetland and tidal function of the Lagoon through active management that is anticipated to result in the net increase of the value and function of habitat for this species. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities, with associated/ancillary facilities in proximity to natural land installed

to minimize impacts, any edge effects to adjacent vegetation communities would likely be temporal in nature. Therefore, the Project is consistent with MSCP coverage requirements for this species.

Coastal California Gnatcatcher

The basis for MSCP coverage of this species is based on landscape-level preserve design. Loss of coastal sage scrub habitats within the MHPA is not consistent with MSCP coverage for this species and would, therefore, be significant. Requirements for species coverage under the MSCP require no clearing of occupied gnatcatcher habitat within the MHPA between March 1 and August 15. Although large expanses of available coastal sage scrub habitat would remain intact for this species upon Project completion, any loss of habitat for coastal California gnatcatcher would be considered significant and would require mitigation.

Cooper's Hawk

MSCP conservation levels required for this species are limited to preserve-level management of foraging and nesting habitats, including coastal sage scrub (considered foraging habitat). Loss of coastal sage scrub foraging habitats and/or nesting habitats within the MHPA may not be consistent with MSCP coverage for this species and may be potentially significant. During restoration activities, some available riparian nesting habitat would be converted to salt marsh wetland habitat types, but foraging habitats would be diverse and readily available throughout the BSA upon Project completion. It is important to note that some of the existing riparian habitat, particularly toward the downstream end of Carroll Canyon Creek that is proposed for salt marsh restoration, was not historically present and would not have been available as nesting habitat for Cooper's hawk had it not been for the confluence of factors that led to the degraded salt marsh conditions downstream of the recruited riparian habitats that are present today. However, even though there would be a slight reduction in the amount of available nesting habitat for this species at the localized level within the BSA, at the preserve level there would still be plentiful nesting and foraging habitats available for this species upon Project completion. Therefore, the Project is consistent with the MSCP objectives for this species.

Least Bell's Vireo

MSCP conservation levels required for this species include preserve-level management and site-specific considerations. A primary goal of the Project is to restore and enhance healthy wetland and tidal function of the Lagoon through active management that is anticipated to result in a net increase of value and function of habitat. The Project proposes altering 29 acres of riparian forest/scrub habitats, including southern arroyo willow riparian forest, mule fat scrub, and southern willow scrub in the form of no-net loss salt marsh restoration. Approximately 5% of the available suitable nesting habitat within the BSA would undergo type conversion from riparian to salt marsh habitat. The conversion of riparian forest to salt marsh habitat would represent a loss of function to this species at the localized level due to the conversion of suitable nesting habitat to non-suitable habitat. Conversion of riparian forest/scrub habitats to salt marsh may not be consistent with MSCP requirements for species coverage and may be considered significant. However, least Bell's vireo has not been documented nesting within the BSA, so the riparian forest and scrub habitats that are present within the BSA do not appear to support nesting least Bell's vireos, but rather dispersing and migrating individuals only. The 2022 vireo locations are in an area that is not subject to conversion to

salt marsh. As such, loss or conversion of riparian and scrub habitat types because of the Project would not be anticipated to adversely affect this species on the preserve level, nor at the regional level. In addition, as was the case for Cooper's hawk, much of the riparian forest/scrub habitat that is available now for this species would not have been present had it not been for the confluence of factors that led to the degraded salt marsh conditions downstream of the largely recruited riparian habitats present today. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities, with associated/ancillary facilities in proximity to natural land installed to minimize impacts, any edge effects to adjacent vegetation communities would likely be temporal in nature. In addition, requirements for species coverage under the MSCP require no clearing of occupied vireo habitat within the MHPA between March 15 and September 15, outside the nesting season. If vegetation clearing occurs within that timeframe, pre-construction surveys would determine least Bell's vireo occupancy status at that time. Since preserve-level protections and available habitat in and around the BSA would remain in place upon Project completion for this species, the Project is compliant with MSCP coverage requirements for least Bell's vireo.

Light-Footed Ridgway's Rail

MSCP conservation levels required for this species are limited to preserve-level management. A primary goal of the Project is to restore and enhance healthy wetland and tidal function of the Lagoon through active management that is included as a primary requirement of species coverage under the MSCP. In addition, the Project will enhance linkages of the MSCP areas to the east and provide increased dispersal opportunities for this species to constrained upstream habitat. The Project would also result in increased salt marsh habitat with additional foraging and nesting opportunities for this species. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities, with associated/ancillary facilities in proximity to natural land installed so as to minimize impacts, any edge effects to adjacent vegetation communities would likely be temporal in nature. Therefore, the Project is consistent with MSCP coverage requirements for this species.

Light-footed Ridgway's rail is also a fully protected species under the California Fish and Game Code. Fully protected species may not be taken or possessed at any time, and no licenses or permits can be issued for their take except for collecting these species for necessary scientific research, relocation of the bird species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a natural community conservation plan. The MSCP does not include take for wetland-dependent covered species like light-footed Ridgway's rail. Take is defined under Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The loss of habitat is not included in the state definition of take, as contrasted with the federal definition, which includes harassment, which can be interpreted as including the loss of habitat. The Project is not expected to result in state-defined take, but the level of federally defined take will be determined by USFWS under Section 7 consultation.

Mule Deer

MSCP conservation levels required for this species are limited to preserve-level management through habitat-based and corridor site management plans. All habitats within the Project are suitable for mule deer, and habitat type conversions proposed by the Project would not reduce the amount of

suitable habitat. In addition, the Project would likely enhance linkages of the MSCP areas to the east. Therefore, the Project is consistent with MSCP coverage requirements for this species.

Northern Harrier

MSCP conservation levels required for this species are limited to preserve-level management. Although the Project includes modifications of suitable nesting and foraging habitat for this species, the Project will result in an overall increase in habitat suitability for this species by enhancing wetland functions within the MHPA. MSCP coverage requirements for this species include impact avoidance of 900 feet or the maximum possible distance within the MHPA area. Biological monitoring and/or pre-construction surveys would determine northern harrier occupancy status to ensure that impacts are 900 feet or more from any known nesting location(s). By adhering to 900-foot impact avoidance areas, direct and indirect impacts to this species are considered less than significant. Therefore, the Project is consistent with the conservation levels required for coverage of this species under the MSCP.

Orange-Throated Whiptail

MSCP conservation levels required for this species are limited to preserve-level management of suitable upland chaparral and scrub habitats. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities, with associated/ancillary facilities in proximity to natural land installed so as to minimize impacts, any edge effects to adjacent vegetation communities would likely be temporal in nature. Under such circumstances, it would not be expected for the proposed construction to contribute to habitat fragmentation or increase the potential for adverse edge effects. In addition, since the Project is focused on lowland habitats consisting of wetland and riparian habitat types that do not support this species, and upland habitat impacts are relegated only to small portions along the western access road and peripheral areas proposed for salt marsh restoration, the vast majority of surrounding upland habitats will remain as is upon Project completion, leaving preserve-level management for this species intact. Therefore, the Project is consistent with MSCP coverage for this species.

Salt Marsh Skipper

MSCP conservation levels required for this species include preserve-level management of suitable salt marsh habitats. The Project will increase and enhance existing wetland functions for this species within the MHPA through increased salt marsh habitat availability and function. Potential impacts to the salt marsh skipper would be offset through on-site salt marsh restoration activities that would include the planting and/or seeding of saltgrass (*Distichlis spicata*), the larval host plant for this species, as a component. Any individuals lost due to grading and restoration activities during the construction phase are expected to recolonize quickly from adjacent salt marsh habitats, resulting in no permanent loss of populations nor the function or value of habitats. Exotic species control and lack of public access are expected to further protect this species. As such, the Project is consistent with MSCP coverage requirements for this species.

White-Faced Ibis

MSCP conservation levels required for this species are limited to preserve-level management. Although the Project includes potential impacts to suitable habitat for this species, the Project will increase and enhance existing wetland functions within the MHPA. Since the Project footprint is largely confined to natural lands and mostly involves restoration activities, with associated/ancillary facilities in proximity to natural land installed so as to minimize impacts, any edge effects to adjacent vegetation communities would likely be temporal in nature. Coverage requirements for this species require impact avoidance of 900 feet or the maximum possible distance within the MHPA area. Biological monitoring and/or pre-construction surveys would determine white-faced ibis occupancy status to ensure that impacts are 900 feet or more from any known nesting location(s). By adhering to 900-foot impact avoidance areas, direct and indirect impacts to this species are considered less than significant. Therefore, the Project is consistent with the conservation levels required for coverage of this species under the MSCP.

Southern California Rufous-Crowned Sparrow

MSCP conservation levels required for the Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) are limited to preserve-level management, including maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components. The Project would have a limited impact on upland habitats and is expected to reduce non-native grassland and increase the diversity of native upland and wetland transitional communities, which would benefit this species. Therefore, the Project is consistent with MSCP coverage requirements for this species.

American Peregrine Falcon

MSCP conservation levels required for this species are limited to preservation of foraging habitat including no-net-loss of wetlands; nest sites occur outside the MHPA. The Project will result in enhancement of foraging habitat and no net loss of wetlands and is therefore consistent with MSCP coverage requirements for this species.

Long-Billed Curlew

MSCP conservation levels required for the long-billed curlew (*Numenius americanus*) are limited to preservation of foraging habitat, including conservation of grassland habitats and no-net-loss of wetlands. The Project will result in the loss of non-native grassland in favor of restoration of wetland habitats that are expected to be more productive as foraging habitat for the species. The Project would result in no net loss of wetlands and is consistent with MSCP coverage requirements for this species.

Western Bluebird

MSCP conservation for the western bluebird (*Sialia mexicana*) is based on conservation of roosting and foraging habitat and limited loss of beach habitat. The Project provides for the enhancement of native habitats within the MHPA, including no net loss of wetlands, and is therefore consistent with MSCP coverage requirements for this species.

California Brown Pelican

MSCP conservation levels required for this species are limited to conservation of habitat with existing large population primarily occurring on public lands east of the MSCP plan area. The Project provides for the enhancement of native habitats within the MHPA and is therefore consistent with MSCP coverage requirements for this species.

Elegant Tern

MSCP conservation levels required for this species are limited to conservation of potential habitat including saltpan and beaches. ASMDs for the species including protection of nesting sites and control of edge effects. The Project provides for the enhancement of native habitats within the MHPA, an increase in tidal influence to support saline habitats, and measures to ensure active nest sites are protected. Therefore, the Project is consistent with MSCP coverage requirements for this species.

Mountain Lion

MSCP conservation levels required for the mountain lion (*Puma concolor*) are limited to conservation of habitats, including maintaining ecosystem function and processes such as large animal movement. Specific design criteria for linkages and road crossings/under-crossings are required under the City's MSCP SAP. The Project will result in the enhancement of conserved habitats and retention of existing movement corridors, particularly in the constrained area adjacent to the proposed floodplain enhancement 2. These design features will ensure that the Project is consistent with MSCP coverage requirements for this species.

Conclusion

The Project would not conflict with state or local policies protecting biological resources, or an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region. The Project would also not introduce development in areas adjacent to the MHPA that would result in adverse edge effects and impacts would be **less than significant (Thresholds E, F, and G)**.

Invasive Species

The Project includes numerous key components that focus on the removal of invasive species from the riparian areas of the Lagoon. During implementation, construction vehicles visiting the Project site have the potential to introduce invasive species of plants. However, PDF #22 (Table 2) would be implemented for construction, which would ensure that equipment is free of non-native plant species and other foreign matter before entering the Project site. Therefore, a **less-than-significant** impact related to introduction of invasive species to the Lagoon would result (**Threshold H**).

Summary of Significant Impacts and Mitigation

Significant impacts to vegetation communities, jurisdictional resources, and special-status wildlife species would occur from the implementation of the Project due to permanent impacts to wetlands and Tier II and Tier IIIB uplands outside the pre-mitigated area. Permanent impacts include the

footprint of permanent access roads, storm drain improvements, floodplain enhancements, and Carroll Canyon Creek (which will be regraded, lined with cobble, and subject to permanent as-needed maintenance). In addition, the reestablishment of wetlands within areas currently supporting Tier II uplands is considered significant, as the proposed restoration in those areas will result in a loss of these upland vegetation communities. These significant impacts require mitigation based on the City's Biology Guidelines. Mitigation for wetlands impacts would be offset by reestablishment of wetlands in existing upland vegetation communities and wetlands enhancement in non-graded portions of the Project as planned in the Restoration Plan/HMMP (Table 8).

Table 8: Mitigation Required for Permanent Impacts to Sensitive Vegetation Communities

Vegetation Community	Significant Permanent Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Wetlands Reestablishment Proposed ^a	Wetlands Enhancement Proposed ^a	Total Wetland Mitigation Acreage ^a
Wetlands						
Riparian forest	5.59	3:1	16.76			
Riparian scrub	0.22	3:1	0.66		1.92	1.92
Disturbed wetland	0.82	2:1	1.64			
Natural flood channel	0.04	2:1	0.08	0.03		0.03
Freshwater marsh	0.07	4:1	0.28			
Salt marsh	0.04	4:1	0.15	3.36	15.42	18.78
<i>Wetlands Total</i>	<i>6.77</i>	<i>—</i>	<i>19.57</i>	<i>3.39</i>	<i>17.35</i>	<i>20.74</i>
Uplands						
Coastal sage scrub	3.52 ^b	1:1	3.52			See Table 9
Non-native grassland	0.24	1:1	0.24			
<i>Uplands Total</i>	<i>3.76</i>	<i>—</i>	<i>3.76</i>			
Total	10.54	—	23.34	3.39	17.35	20.74

Notes:

^a All mitigation acreages proposed occur in the Multi-Habitat Planning Area, on publicly owned lands, excluding any utility easements.

^b This acreage of significant coastal sage scrub permanent impacts includes a portion of area counted as wetlands reestablishment proposed.

Significant impacts would occur from the implementation of the Project due to temporary impacts to wetlands and Tier II and Tier IIIB uplands outside the pre-mitigated area (Table 9). Temporary impacts include the majority of the Project, including all graded or dredged restoration areas, including those areas that may be subject to additional temporal loss (e.g., temporary construction and adaptive management roads), reduced function (e.g., cobble-lined channels and channels subject to maintenance during the adaptive management period), and non-vegetative restoration (e.g., tidal channel dredging). These temporary impacts require a minimum 1:1 mitigation ratio. A minimum 1:1 ratio is appropriate due to the design of the Project, which will result in high-functioning, ecologically appropriate wetlands, and uplands within the Project's temporary impact areas. It is acknowledged that type conversions of habitat will occur, but that the Restoration Plan/HMMP has been optimized

to balance ecological benefits and sustainability. These improvements to long-term habitat function would result in net benefits to covered species and habitats that offset the temporary loss of habitat. Table 9 provides acreages for temporary impacts to existing habitat and the types of habitats that will be restored. All temporary impacts will be restored with a different assemblage of habitats; however, the restored condition is expected to have a higher function and be sustainable in the long term.

Table 9: Mitigation Required for Temporary Impacts to Sensitive Vegetation Communities

Vegetation Community	Temporary Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Restoration in Significant Temporary Impact Area (acres)	Additional Restoration in Pre-Mitigated Area (acres) ^a
Wetlands					
Riparian forest	14.54	1:1	14.54		
Riparian scrub	6.04	1:1	6.04	15.82	1.75
Disturbed wetland	1.22	1:1	1.22		
Natural flood channel	5.04	1:1	5.04	7.80	0.25
Freshwater marsh	4.27	1:1	4.27	5.95	0.46
Salt marsh	31.18	1:1	31.18	33.48	
<i>Subtotal: Wetlands</i>	<i>62.30</i>	<i>—</i>	<i>62.30</i>	<i>63.06</i>	<i>2.47</i>
Uplands					
Coastal sage scrub	4.96	1:1 ^b	4.96	7.09 ^c	
Non-native grassland	1.83	1:1 ^b	1.83		
<i>Subtotal: Uplands</i>	<i>6.78</i>	<i>—</i>	<i>6.78</i>	<i>7.09</i>	
Total	69.08	—	69.08	70.15	2.47

Note:

- ^a Additional restoration acreage occurs in the Multi-Habitat Planning Area, on publicly owned lands, excluding any utility easements.
- ^b Use of the Habitat Acquisition Fund in accordance with the City's 2018 Biology Guidelines would be determined at the time of contribution (prior to notice to proceed) and may request in a 2:1 ratio for coastal sage scrub and 1.5:1 ratio for non-native grassland if planned acquisition in outside the MHPA.
- ^c Coastal sage scrub restoration primarily occurs in temporary impact areas with a small portion (0.45 acre) in permanent impact areas (e.g., slopes adjacent to floodplain enhancement 3 and Flintkote Ave.)

Based on the acreages provided in Tables 8 and 9, all significant impacts to wetlands and associated special-status species from permanent and temporary impacts would be mitigated through Project implementation with a potential for 4.40 acres of excess wetlands mitigation consisting of 1.17 acres of excess enhancement (Table 8; 20.74 acres total wetlands mitigation minus 19.57 acres wetland mitigation requirement) and 3.22 acres excess restoration (Table 9; 63.06 acres wetland restoration minus 62.30 acres wetland mitigation requirement plus 2.47 acres of additional restoration in pre-mitigated area) that may be considered in the analysis of impacts. In addition, much of the riparian area adjacent to the proposed restoration grading and enhancement areas will be subject to inspection by a Qualified Biologist during and following construction. The Qualified Biologist may recommend additional enhancement restoration activities (such as removal and control of riparian understory

species), which would be quantified and included in Project monitoring reports. These areas may provide additional mitigation acreages towards the Phase 2 project and/or act as a contingency if portions of the Phase 1 Project are unable to meet the success criteria identified in the Restoration Plan/HMMP.

The mitigation measures below are consistent with the Mitigation Framework for future projects established in the LPLEP PEIR. Additional details and clarification to Mitigation Measures Biological-2 from the PEIR are provided below.

Biological-1 Confirm presence of suitable habitat within the proposed project limits and an appropriate buffer. If suitable habitat is present for sensitive species,

- a. Conduct pre-construction surveys to confirm presence/absence of sensitive species.
- b. If sensitive species are present, implement the following measures:
 1. For impacts to species identified as candidate, sensitive, or special-status species in the Multiple Species Conservation Program (MSCP), specific management priorities will be undertaken as part of MSCP implementation requirements to ensure that covered species are adequately protected. Priority 1 actions identified in the City of San Diego (City) MSCP Subarea Plan Section 1.5 Framework Management Plan, specifically actions which concerns the Northern Area, will be undertaken to adequately protect covered species (City of San Diego 1997). The actions identified as Priority 2 may be undertaken as applicable.
 2. For impacts to state and/or federally listed species not covered under the MSCP, complete coordination with wildlife agencies as required.

Biological-2 An evaluation for no net loss of each sensitive habitat type would occur. The net changes of habitat in acreage of habitat within each tiered habitat as defined by the MSCP or other sensitive natural habitats would be quantified. If a net loss of tiered or other sensitive habitat is confirmed, then the following would be implemented with priority given to lands within or adjacent to the Lagoon:

- A. Contribution to an appropriate funding mechanism for habitat acquisition; and/or
- B. Restoration/enhancement within the Torrey Pines State Natural Reserve.

Addendum-specific mitigation as provided in MM-BIO-2.1 ensures implementation of the Project in accordance with the Restoration Plan/HMMP and MM-BIO-2.2 addresses the potential net loss of coastal sage scrub. In addition, the small area of eelgrass impact associated with the tidal channel dredging requires mitigation in accordance with the National Marine Fisheries Service California Eelgrass Mitigation Policy.

MM-BIO-2.1 Mitigation for Permanent Impacts to Wetlands and Sensitive Vegetation Communities. The City of San Diego shall implement the 2022 Restoration Plan/Habitat Mitigation and Monitoring Plan (Restoration Plan/HMMP) or subsequent

update as approved by the resource agencies. As documented in the Restoration Plan/HMMP, monitoring and reporting shall be conducted to document the successful restoration of wetland habitats (based on Year 5 performance standards) that result in no net loss.

As identified in Tables 8 and 9, the project includes 7.09 acres of coastal sage scrub restoration but requires 8.48 acres of coastal sage scrub (Table 8, 3.52 acres, and Table 9, 4.96 acres) and 2.07 acres of non-native grassland (Table 8, 0.24 acres; Table 9, 1.83 acres) mitigation. This results in a coastal sage scrub mitigation deficit of 1.39 acres and a non-native grassland mitigation deficit of 2.07 acres.

MM-BIO-2.2 Mitigation for Type Conversion of Sensitive Upland Vegetation. The City of San Diego shall mitigate for direct impacts to coastal sage scrub habitat by providing 1.39 acres of coastal sage scrub and 2.07 acres of non-native grassland mitigation through one of three equally viable options:

1. Revision to habitat restoration design to add at least 3.46 acres of coastal sage scrub restoration and/or enhancement in existing disturbed upland areas on site. Any proposed additional coastal sage scrub habitat restoration shall be consistent with the current coastal sage scrub habitat restoration details in the Restoration Plan/HMMP, including rationale for success, contribution to the MHPA, and annual performance standards.
2. If revisions to the habitat restoration design cannot feasibly be made to add at least 3.46 acres of coastal sage scrub restoration and/or enhancement, all or the remainder of the mitigation may be provided through:
 - a) Deduction of habitat mitigation credits at an approved upland mitigation bank (e.g., Cornerstone Lands Bank or Marron Valley Mitigation Bank);

If habitat mitigation credits are not available, all or the remainder of the mitigation may be provided through:
 - b) Contribution into the City's Habitat Acquisition in accordance with the City of San Diego Environmentally Sensitive Lands regulations and the mitigation ratios established by the Biology Guidelines (2018).

MM-BIO-2.3 Eelgrass Mitigation and Monitoring Plan. Prior to project implementation, the City of San Diego, in coordination with California State Parks (State Parks), shall prepare an Eelgrass Mitigation and Monitoring Plan (Mitigation Plan) and consult with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) to describe the approach for compensatory mitigation for the loss of approximately 0.087 acres of eelgrass habitat in the tidal channel. Mitigation for impacts shall be implemented as mutually agreed upon by the City of San Diego ECP, NMFS, CDFW, and State Parks. Preference in the Mitigation Plan shall be given to in-kind replacement of the eelgrass habitat. Such mitigation shall be implemented in accordance with the NMFS California Eelgrass Mitigation Policy, including site selection; initial and long-term habitat area replacement ratios; methods for and timing of transplantation activities; and monitoring, performance, and reporting requirements. Should in-kind mitigation

within the lagoon not be feasible, consideration shall be given to in-kind mitigation first in areas in close proximity to the channel, then in locations within the Southern California region. If in-kind mitigation is not feasible, mitigation banks or in-lieu fee conservation programs shall be given preference over out-of-kind mitigation.

The potential net loss of sensitive habitat is considered a potentially significant impact requiring implementation mitigation consistent with LPLEP PEIR mitigation measure Biological-2. With the implementation of MM-BIO-2.1 through MM-BIO-2.3, direct impacts to sensitive habitat would be reduced to **less than significant**.

5.7. TRANSPORTATION

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities;
- B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); or
- D. Result in inadequate emergency access?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would result in no conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities. Minor construction traffic is anticipated, and a traffic control plan would be required if project activities would disrupt the transportation system.

The LPLEP PEIR also determined that restoration and enhancement activities would result in a less than significant impact related to increased vehicle miles traveled (VMT) because the nature of the project would not generate traffic or otherwise cause vehicle miles to increase.

Additionally, the LPLEP PEIR concluded that no impact related to a substantial increase in hazards due to a geometric design feature or incompatible use would result because restoration and enhancement activities would not include roadway reconfiguration or other modifications or result in new land uses or features causing incompatible uses on local roadways.

Finally, the LPLEP Final EIR concluded that restoration and enhancement activities would result in a less than significant impact related to emergency access. A Traffic Control Plan would be required if the transportation system were disrupted, which would outline safety and emergency procedures to ensure that adequate emergency access would be maintained throughout the construction period.

Project

Typical equipment required for the construction of the Project would include a loader, backhoe, dozer, compactor, chipper (mulch), haul trucks, and a water truck. Construction-generated traffic on local roadways associated with the Project would generally include transporting of equipment and materials, haul trips, and worker trips to the construction area. These vehicle trips would be nominal relative to existing traffic on local roadways. Additionally, parking for construction vehicles would be adequately supported by staging areas on the Project site, minimizing construction interference with traffic operations on local roadways. Upon Project completion, occasional maintenance operations would be required but would not necessitate substantial traffic trips. Finally, the Project would be required to comply with the SCPs of the LPLEP PEIR, including SCP #14, requiring preparation of work zone traffic control plans prior to construction for projects that would disrupt traffic flow on local roadways if the transportation system would be disrupted. The work zone traffic control plans would be required to be prepared by the Project contractor in accordance with the California Manual of Uniform Traffic Control Devices, California Department of Transportation Standard Plans (Caltrans 2010), and current standards and best practices of the reviewing and approving agencies. The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be **less than significant (Threshold A)**.

As described in the TSM Project Information Form, construction traffic would result in approximately 1,767 trips per day, and Project operation would consist of occasional maintenance operations generating approximately 166 trips per day. Therefore, the Project is screened out from requiring a VMT analysis, and potential impacts would be **less than significant (Threshold B)**.

The Project would consist of restoration and enhancement activities within the Lagoon. The Project would not alter local public roadways. Access roads would either be retained for operational maintenance activities or restored as trails or habitat. Therefore, the Project would not substantially increase geometric design hazards or incompatible uses, and impacts would be **less than significant (Threshold C)**.

As previously described, the Project would include the preparation of a traffic control plan if the transportation system would be disrupted. The traffic control plan would outline safety and emergency procedures to ensure that adequate emergency access is available through the impacted areas and may include informing and coordinating with emergency services provided in the area, use of flagmen to control traffic flow, and allowing passage for emergency vehicles, as detailed in the SCPs included in the LPLEP PEIR. Otherwise, the Project would include adequate emergency access throughout the Project site, and impacts would be **less than significant (Threshold D)**.

5.8. AIR QUALITY

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Conflict with or obstruct implementation of the applicable air quality plan;
- 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;
- C. Expose sensitive receptors to substantial pollutant concentrations; or
- D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The LPLEP PEIR concluded that implementation of the proposed restoration and enhancement activities would not conflict with or obstruct the implementation of the applicable air quality plan. Although Lagoon restoration and enhancement construction activities would generate temporary emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter less than or equal to 10 microns in diameter (PM₁₀; coarse particulate matter), and particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}; fine particulate matter), these activities would not increase population, employment, or vehicle trips over the current assumptions used to develop the Regional Air Quality Strategy (RAQS) and State Implementation Plan. Additionally, the LPLEP PEIR included PDFs #1, #2, #3, and #4 (Table 3) to minimize soil erosion and thereby fugitive dust, PDF #13 to maintain construction equipment in proper working order, and SCP #12 (Table 4) to limit vehicle idling time. Once constructed, the Lagoon would not generate air quality emissions, aside from periodic and short-term maintenance activities, and may have the potential to sequester carbon.

The LPLEP PEIR concluded that restoration and enhancement activities would result in a potentially significant impact related to a cumulatively considerable contribution to the region's air quality. The LPLEP Final EIR included Mitigation Measure Air Quality-1 to minimize the potential pollutant emissions associated with future projects under the PEIR that have the potential to exceed applicable air quality standards. The PEIR concluded these measures would not be able to fully reduce potential emissions to below a level of significance, and impacts were concluded to remain significant and unavoidable at the program level.

The LPLEP PEIR concluded that restoration and enhancement would not expose sensitive receptors to substantial construction pollutant concentrations, and impacts related to other pollutants, including odors, would be less than significant. Compliance with San Diego Air Pollution Control District (SDAPCD) rules and permit regulations would reduce particulate matter emissions generated by construction equipment. Additionally, it was anticipated that emissions would be dispersed around the project site and would not expose sensitive receptors to substantial construction pollutant concentrations. Similarly, odors from construction activities were determined to be localized and generally confined to the immediate area surrounding the project site.

Odors were also determined to result from the creation of new tidal mudflat habitat, which could result in intermittent odor emission from anaerobic respiration of mudflat bacteria. However, this odor would only be generated when tidal mudflats are exposed to the air during low tide. While most proposed mudflat habitat would not be located near any sensitive receptors, the LPLEP PEIR determined that the closest proposed mudflat habitat activities would be sited approximately 200 feet

from the nearest receptors, which would provide adequate distance for dispersion of odorous molecules. Ultimately, impacts associated with odors and the exposure of sensitive receptors to substantial pollutant concentration were determined to be less than significant.

Project

Burns & McDonnell Engineering, Inc prepared, “Technical Memorandum Subject: Los Penasquitos Lagoon Restoration – Phase 1 Air Quality & Greenhouse Gas Technical Analysis” for the project August 2023. The Project would result in construction emissions from equipment and vehicle use and fugitive dust. The calculated maximum hourly construction emissions are presented in Table 10. None of the Project construction emissions exceed the significance thresholds and thus would not obstruct an air quality plan.

Table 10. Hourly Criteria Pollutant Construction Emissions Summary

Pollutant	Hourly Emissions (lbs.)	SDAPCD Threshold (lbs.)	Threshold Exceeded?
PM ₁₀	4.31	100	N/A
PM _{2.5}	0.89	55	N/A
NO _x	4.29	250	No
SO _x	0.01	250	No
CO	3.77	550	No
VOCs	0.46	137	N/A

Notes: SDAPCD = San Diego Air Pollution Control District; lbs = pounds; PM₁₀ = particulate matter equal to or less than 10 microns in diameter; N/A = not applicable; PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter; NO_x = oxides of nitrogen; SO_x = sulfur oxides; CO = carbon monoxide; VOCs = volatile organic compounds.

Maximum hourly, daily, and annual operational emissions calculated from CalEEMod are presented in Table 11. None of the Project operational emissions exceed the SDAPCD hourly, daily, or annual significance thresholds, and impacts would be less than significant during Project operation.

Table 11. Criteria Pollutant Operational Emissions Summary

Pollutant	Hourly		Daily		Annual		Threshold Exceeded?
	Project Emissions (lbs.)	SDAPCD Threshold (lbs.)	Project Emissions (lbs.)	SDAPCD Threshold (lbs.)	Project Emissions (lbs.)	SDAPCD Threshold (lbs.)	
PM ₁₀	0.18	—	1.47	100	0.013	15	None
PM _{2.5}	0.17	—	1.36	55	0.012	10	None
NO _x	5.08	25	40.64	250	0.362	40	None
SO _x	0.02	25	0.18	250	1.61 × 10 ⁻³	40	None
CO	5.63	100	45.08	550	0.396	100	None
VOCs	0.79	—	6.35	75	0.066	13.7	None

Notes: SDAPCD = San Diego Air Pollution Control District; lbs = pounds; PM₁₀ = particulate matter equal to or less than 10 microns in diameter; N/A = not applicable; PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter; NO_x = oxides of nitrogen; SO_x = sulfur oxides; CO = carbon monoxide; VOCs = volatile organic compounds.

Emissions from construction would not exceed any SDAPCD thresholds of significance for construction or operation. Additionally, the Project would not increase population, employment, or vehicle trips over the current assumptions used to develop the RAQS and State Implementation Plan. The generally moist soil conditions throughout the Lagoon basins where most construction activities would occur would also naturally limit the amount of fugitive dust generated by soil exposure. Additionally, the Project would not include new development or new land uses that would generate air quality emissions during operation or have the potential to sequester carbon. Therefore, the Project would not conflict with or obstruct the implementation of the applicable air quality plan, and impacts would be **less than significant (Threshold A)**.

The restoration and enhancement activities would not violate any air quality standards or significantly contribute to existing or Project air quality violations. Air quality emissions would not exceed SDAPCD thresholds and thus meet the requirements set forth by the City of San Diego. Impacts would be **less than significant (Threshold B)**.

Compliance with SDAPCD would reduce emissions generated by construction equipment, and it is anticipated that emissions would decrease substantially before affecting the nearest sensitive receptor. Compliance with the City of San Diego Whitebook measures would also ensure dust abatement (3-12.2.1, 5-15.2.4.7), protection of stockpiles (3-12.4.3, 5-15.2.4.8, 5-15.2.4.9, 5-15.2.4.10), wind erosion control and other sediment controls (1001-2.2&1001-2.2) and prohibition of smoking (802-2.4). Therefore, the Project would not expose sensitive receptors to substantial construction or operational pollutant concentrations, and impacts would be **less than significant (Threshold C)**. No cumulatively considerable net increases would be expected in emissions from the construction or operation of the Project.

Exhaust from construction equipment may generate odors during Project construction activities. Any odors from construction will be periodic and temporary in nature since construction equipment will not be in any one area for longer than 5 to 6 months. The potential for odors affecting the public is low due to the low population density immediately surrounding the Project. Therefore, impacts related to odors during construction would be less than significant. Odors could result from the creation of new tidal mudflat habitat, which could result in intermittent odor emissions from anaerobic respiration of mudflat bacteria. Proposed mudflat habitat activities would be sited far enough from the nearest receptors to provide adequate distance for the dispersion of odorous molecules. Therefore, the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be **less than significant (Threshold D)**.

Regarding exposure of sensitive receptors to substantial pollutant concentrations, the nearest sensitive receptor is Torrey Pines State Beach on the opposite side of North Torrey Pines Road from the Lagoon. The nearest residential receptors are north of the Project across Carmel Valley Road. Because construction emissions from the Project would be short term and would not exceed SDAPCD construction thresholds, these sensitive receptors would not be exposed to substantial pollutant concentrations. Operational emissions would be significantly smaller than construction emissions since ongoing operating and maintenance activities would be intermittent and considerably less intensive than construction activities at the Project. Impacts would be **less than significant**.

Furthermore, there would not be any stationary sources of air emissions associated with the construction or operation of the Project. Therefore, there would be **no impacts** related to air contaminants beyond the boundaries of the premises from stationary sources.

5.9. CULTURAL RESOURCES

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Cause an alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site;
- B. Have any impact to existing religious or sacred uses within the potential impact area;
- C. Cause the disturbance of any human remains, including those interred outside of formal cemeteries; or
- D. 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:
 - i. Listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
 - ii. 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 I 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?

The LPLEP PEIR concluded that restoration and enhancement activities would have the potential for physical impact to, or destruction of, archaeological resources and the unanticipated presence of human remains. These impacts were determined to be potentially significant. Accordingly, the LPLEP PEIR included Mitigation Measure Cultural-1 to reduce impacts identified at the program level analysis to archaeological resources to less than significant levels. The applicable sections of Mitigation Measure Cultural-1 would also be implemented to reduce impacts to less than significant if human remains or tribal cultural resources are discovered within the Lagoon during ground-disturbing activities.

The LPLEP PEIR also concluded that no impacts would result to existing built environment resources or existing religious or sacred uses because no built environment resources or existing religious or sacred uses were identified within or adjacent to the Lagoon.

Finally, the LPLEP Final EIR concluded that while the area of potential effects (APE) presents an area of potential tribal cultural significance, as of certification of the PEIR, no tribal cultural resources were listed, determined eligible for listing, or were under consideration as significant resource as outlined in California Public Resources Code Section 5024.1(c). Impacts to tribal cultural resources were determined to be less than significant. However, as previously described, Mitigation Measure Cultural-1 would also be implemented if unanticipated tribal cultural resources are discovered during ground-disturbing activities.

Project

Burns & McDonnell and PanGIS prepared, "Cultural Resources Technical Report Los Penasquitos Lagoon Restoration Phase 1" April 2022 (Cultural Resources Report). The Cultural Resources Report determined that the archaeological/architectural area of potential effects (APE) consists of 240 acres. A records search for the APE was conducted on April 8, 2020 to capture any cultural resource studies or resources that had been added to the South Coastal Information Center's (SCIC's) database since the original records search for the Project on June 1, 2016. The original SCIC records search from 2016 revealed 131 cultural resources studies conducted within a 0.5-mile radius of the Project area, at least 19 of which include portions of the Project area. Additionally, 72 cultural resources have been previously recorded within a 0.5-mile radius of the Project area. Eight resources were recorded in 2016 within 150 meters of the Project area, near enough that they should be considered during Project design. The supplemental records search from April 2020 returned an additional eight cultural resources studies within 0.25 miles of the Project area. The combined record searches indicated a total of 10 previously recorded sites within or adjacent to the Project area, and each of these were surveyed in the Cultural Resources Technical Report (P-37-024762, P-37-000196, P-37-017178, P-37-024739, P-37-034707, P-37-035638, P-37-035837, P-37-036068, P-37-036278, and P-37-038784).

For these resources, it was recommended that the Project avoid all the resources within the APE. In some cases, work near these resources may be unavoidable. As such, resources P-37-000196, P-37-035837, P-37-017178, P-37-036068, and P-37-034707 should be treated as eligible for inclusion in the National Register of Historic Places and the California Register of Historic Resources for purposes of construction and avoided during Project implementation. Due to a change in project design in 2023, it was determined that resource P-37-035638 would, in fact, be impacted, and an additional Evaluation Report was prepared for this resource, "P-37-035638 (CA-SDI-21,812) Evaluation Report" (PanGIS, Inc, January 2024). Based on the background research, field visit, and evaluation, P-37-035638 does not meet the criteria for listing on the CRHR or local register; is not a Historical Resource per CEQA; and is not a sensitive or unique cultural resources per HRG guidelines. Based on the results of the evaluation, no further cultural resource work is recommended for this resource.

Based on archaeological testing conducted at P-37-000196 (CA-SDI-196) (Mengers et al. 2022), there were no sensitive/unique resources within the testing area that correspond to the limits of the planned Project temporary access roads and grading. However, the determination of the overall sensitive/unique status of the resource could not be reached without testing at the main site, which was not performed because it is outside the Project boundary and located in an area with sensitive biological resources. Based on the results of the testing, Mitigation Measure Cultural-1, presented in the LPLEP PEIR shall be implemented. Mitigation Measure Cultural-1 includes environmentally

sensitive area (ESA) fencing along construction limits, archaeological and Native American monitoring during all ground disturbance within the site boundary, archaeological/Native American monitor spot checks for the duration of the Project, and collection of potentially cultural materials. Further design refinements have been made to avoid the testing area that include relocating temporary access roads to the extent feasible.

PanGIS requested a Sacred Lands File search from the California Native American Heritage Commission (NAHC). The NAHC responded to the request in a letter dated April 27, 2020, with negative results. The letter also included a list of Native American contacts. On May 13, 2020, contact letters soliciting information about Native American cultural resources were sent via certified mail or email to all individuals and groups indicated by the NAHC. Of the 19 tribes listed by the NAHC, two of them responded, requesting formal consultation with State Parks during the Project. These tribes are the Iipay Nation of Santa Ysabel and Viejas Band of Kumeyaay Indians.

Section 2.2.11 of the LPLEP PEIR states, "The consultation process will continue beyond that date and will be reinitiated for subsequent project level planning." In accordance with the LPLEP PEIR and the requirements of California Public Resources Code 21080.3.1 the City of San Diego provided formal notifications to the Iipay Nation of Santa Ysabel, the Jamul Indian Village, the San Pasqual Band of Mission Indians, Mesa Grande Band of Diegueno Mission Indians and Viejas Band of Kumeyaay Indians which are traditionally and culturally affiliated with the Project area; requesting consultation on November 21, 2022. A response was received by the San Pasqual Band of Mission Indians requesting consultation on December 12, 2022. A consultation meeting was held on July 12, 2023, where information was requested and was provided on July 13, 2023. The City sent follow-up emails and received no follow-up comments from the San Pasqual Band of Mission Indians and concluded consultation on October 2, 2023.

The potential exists for the Project to encounter previously unidentified, potentially significant archaeological resources. The LPLEP PEIR included Mitigation Measure Cultural-1, which would reduce potentially significant impacts to archaeological resources to below a level of significance. Mitigation Measure Cultural-1 sets forth requirements for an archaeological monitoring program with procedures for various Project stages, including prior to permit issuance, prior to construction, during construction, and post construction. The Project would be required to comply with all previously adopted mitigation measures of the LPLEP PEIR, as they are applicable to restoration and enhancement activities, including Mitigation Measure Cultural-1. Therefore, impacts to archaeological resources would be **less than significant with previous mitigation incorporated (Threshold A)**.

Several historic-period built resources were found; however, Project activities associated with Phase 1 will not directly impact these resources. Thus, **no impact** to existing built environment resources would occur **(Threshold A)**.

As identified in the LPLEP PEIR, no existing religious or sacred uses were identified within the Lagoon. Therefore, the Project would have **no impact** to existing religious or sacred uses within the Lagoon because none exist **(Threshold B)**.

With regard to human remains, there is no current evidence for the presence of human remains in the Lagoon. However, recent restoration activities within the San Dieguito Lagoon included the

discovery of unrecorded human remains approximately 2.5 miles north of the Lagoon (refer to the LPLEP PEIR for additional information). Thus, the potential exists to encounter human remains during ground-disturbing activities associated with Project construction. The LPLEP PEIR included mitigation for the discovery of human remains in Mitigation Measure Cultural-1 to reduce potentially significant impacts to human remains to below a level of significance. If human remains were discovered during Project construction, applicable sections of Mitigation Measure Cultural-1 would be implemented. As previously described, the Project would be required to comply with the previously adopted Mitigation Measure Cultural-1 of the LPLEP PEIR, as it is applicable to restoration and enhancement activities. Therefore, impacts to human remains would be **less than significant with previous mitigation incorporated (Threshold C)**.

The Project area is of potential tribal cultural significance and impacts to previously unidentified tribal cultural resources could occur during ground-disturbing activities associated with construction. As a follow-up to the Assembly Bill 52 tribal consultation process, notification letters were sent to tribes on December 21, 2022. Daniel Tsosie with the Campo Band of Mission Indians requested consultation; however, he has since been contacted on three separate occasions with no response. Accordingly, Mitigation Measure Cultural-1 was included in the LPLEP PEIR, which would also mitigate for tribal cultural resources and Native American human remains, in addition to other archaeological resources as previously described. Therefore, impacts to tribal cultural resources would be **less than significant with previous mitigation incorporated (Threshold D)**.

5.10. PALEONTOLOGICAL RESOURCES

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit; or
- B. Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

In addition, the City's Significance Determination Thresholds (2016), were referenced in the LPLEP PEIR and included the following at the time the PEIR was published, "Monitoring is always required when grading on a fossil recovery site or near a fossil recovery site in the same geologic deposit/formation/rock unit as the project site." The LPLEP PEIR concluded that restoration and enhancement activities would result in a potentially significant impact to paleontological resources if such activities were to disturb more than 1,000 cubic yards within the Delmar Formation and/or more than 2,000 cubic yards within the Torrey sandstone or Lindavista Formations. Accordingly, the LPLEP PEIR included Mitigation Measure Paleo-1 to reduce impacts to paleontological resources to below a level of significance. Mitigation Measure Paleo-1 would require paleontological monitoring during initial cuttings of previously undisturbed deposits of moderate to high paleontological significance to inspect exposures

for contained fossils. Subsequent requirements were included if significant paleontological resources are encountered, which can be found in the LPLEP PEIR.

Project

As identified in the LPLEP PEIR, the perimeter of the Lagoon is underlain by the Delmar Formation, which is identified as having high resource potential, and the Torrey sandstone and Lindavista Formations, which are identified as having medium resource potential. The Lagoon basin is underlain by marine or river sand, which are not considered paleontologically sensitive deposits. The Project would involve ground-disturbing activities during construction, including approximately 363,800 cubic yards of excavation volume over all three sub-phases. Excavation depth would range from 3 to 8 feet in portions of the salt marsh restoration, with shallower excavation depths for other restoration and enhancement activities.

PanGIS, Inc, and the Department of PaleoServices – San Diego Natural History Museum prepared “Los Penasquitos Lagoon Restoration, Phase 1 Paleontological Resources Technical Report” September 2021. As indicated in the Paleontological Resources Technical Report, there are several specific locations where channel grading, floodplain enhancement work, and access road grading as part of Phase 1 may impact paleontological resources. Channel grading would include a small ridge that protrudes above the floodplain (at the north end of the temporary access road), where deposits of the Delmar Formation (high paleontological potential) could be impacted. Channel grading along Flintkote Avenue located to the east and southeast of the in-park residential property, as well as excavations in the western half of the Floodplain Enhancement 3 area, could impact areas mapped as old paralic deposits, Unit 6 (here assigned a moderate paleontological potential based on uncertainty of age assignment). Finally, grading of temporary and permanent access roads along the existing footpath leading north from Flintkote Avenue will take place primarily in areas mapped as old paralic deposits, Unit 6, and the Torrey sandstone (both moderate paleontological potential).

Because the Project’s grading amounts do exceed the LPLEP PEIR significance thresholds, and because the Project is located near a fossil recovery site, the Project is required to implement paleontological monitoring in accordance with the Land Development Manual General Grading Guidelines for Paleontological Resources and San Diego Municipal Code Section 142.0151, Paleontological Resources Requirements for Grading Activities.

The following is the standard monitoring requirement that shall be placed on grading plans and implemented when required pursuant to LDC section 142.0151:

I. Prior to Start of Construction

A. Construction Document Verification

1. Prior to issuance of any Notice to Proceed, or prior to the first preconstruction meeting, whichever is applicable, the City Engineer (CE) shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

2. The applicant shall submit a letter of verification to Resident Engineer (RE) identifying the qualified Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program. A qualified PI is defined as a person with a Ph.D. or M.S. or equivalent in paleontology or closely related field (e.g., sedimentary or stratigraphic geology, evolutionary biology, etc.) with demonstrated knowledge of southern California paleontology and geology, and documented experience in professional paleontological procedures and techniques.

A. Verification of Records Search

1. The PI shall provide verification to the RE that a site-specific records search has been completed. Verification includes, but is not limited to, a copy of a confirmation letter from the San Diego Natural History Museum, or another relevant institution that maintains paleontological collections recovered from sites within the City of San Diego.

2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Preconstruction Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Preconstruction Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, and RE, as appropriate. The qualified paleontologist (PI) shall attend any grading/excavation-related Preconstruction Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.

a. If the PI is unable to attend the Preconstruction Meeting, the Applicant shall schedule a focused Preconstruction Meeting with the PI, RE, or CM if appropriate, prior to the start of any work that requires monitoring.

2. Identify Areas to be Monitored

Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to the RE identifying the areas to be monitored, including the delineation of grading/excavation limits. The PME shall be based on the results of a site-specific records search as well as information regarding existing known geologic conditions (e.g., geologic deposits as listed in the Paleontological Monitoring Determination Matrix below).

3. When Monitoring Will Occur

a. Prior to the start of any work, the PI shall also submit a construction schedule to the RE and/or BI indicating when and where monitoring will occur.

b. The PI may submit a detailed letter to the RE prior to the start of work or during construction requesting a modification to the monitoring program. This request shall

be based on relevant information such as review of final construction documents and geotechnical reports which indicate conditions such as depth of excavation and/or thickness of artificial fill overlying bedrock, presence or absence of fossils , etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The paleontological monitor shall be present full-time during grading/excavation/trenching activities as identified on the PME that could result in impacts to formations with high and moderate resource sensitivity. The Construction Manager is responsible for notifying the PI and RE of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances, OSHA safety requirements may necessitate modification of the PME.

2. The PI may submit a detailed letter to the RE during construction requesting a modification to the monitoring program when a field condition, such as trenching activities that do not encounter previously undisturbed and paleontologically sensitive geologic deposits as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for paleontological resources to be present.

3. The paleontological monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be emailed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of any discoveries.

B. Discovery Notification Process

1. In the event of a discovery, the paleontological monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and notify the RE. The contractor shall also process a construction change for administrative purposes to formalize the documentation and recovery program, including modification to Mitigation Monitoring and Compliance (MMC).

2. The paleontological monitor shall notify the PI (unless paleontological monitor is the PI) of the discovery.

3. The PI shall notify MMC of the discovery and shall submit documentation to MMC within 24 hours by email with photos of the resource in context.

C. Recovery of Fossils If a paleontological resource is encountered:

1. The paleontological monitor shall salvage unearthed fossil remains, including simple excavation of exposed specimens or, if necessary as determined by the PI, plaster-jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits.

2. The paleontological monitor shall record stratigraphic and geologic data to provide a context for the recovered fossil remains, including a detailed description of all paleontological localities within the project site, as well as the lithology of fossil-bearing strata within the measured stratigraphic section and photographic documentation of the geologic setting.

IV. Post Construction

A. Preparation and Submittal of Draft Paleontological Monitoring Report

1. The PI shall submit two copies of the Draft Paleontological Monitoring Report (even if negative), prepared to the satisfaction of the Development Services Department. The Draft Paleontological Monitoring Report shall describe the methods, results, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring,

a. For significant or potentially significant paleontological resources encountered during monitoring, as identified by the PI, the Paleontological Recovery Program shall be included in the Draft Monitoring Report.

b. The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines (revised November 2017), and submittal of such forms to the San Diego Natural History Museum and MMC with the Draft Paleontological Monitoring Report.

2. MMC shall return the Draft Paleontological Monitoring Report to the PI for revision or preparation of the Final Report.

3. The PI shall submit the revised Draft Paleontological Monitoring Report to MMC for approval.

4. MMC shall provide written verification to the PI of the approved Draft Paleontological Monitoring Report.

5. MMC shall notify the RE of receipt of all Draft Paleontological Monitoring Report submittals and approvals.

B. Handling of Recovered Fossils

1. The PI shall ensure that all fossils collected are cleaned to the point of curation (e.g., removal of extraneous sediment, repair of broken specimens, and consolidation of fragile/brittle specimens) and catalogued as part of the Paleontological Monitoring Program.

2. The PI shall ensure that all fossils are analyzed to identify stratigraphic provenance, geochronology, and taphonomic context of the source geologic deposit; that faunal material is taxonomically identified; and that curation has been completed, as appropriate.

C. Curation of Fossil Remains: Deed of Gift and Acceptance Verification

1. The PI shall be responsible for ensuring that all fossils associated with the paleontological monitoring program for this project are permanently curated with an accredited institution that maintains paleontological collections (such as the San Diego Natural History Museum).
2. The PI shall include an acceptance verification from the curation institution in the Final Paleontological Monitoring Report submitted to the RE and MMC.

D. Final Paleontological Monitoring Report(s)

1. The PI shall submit two copies of the Final Paleontological Monitoring Report to MMC (even if negative) within 90 days after notification from MMC that the Final Paleontological Monitoring Report has been approved.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Paleontological Monitoring Report from MMC, which includes the Acceptance Verification from the curation institution.

Based on the City's thresholds of significance, paleontological monitoring is required due to the paleontological sensitivity and due to grading volumes in excess of significance thresholds. As a result, the Project would require a paleontological monitor during grading activities. This measure would ensure potential for impact is below a level of significance.

5.11. PUBLIC SERVICES AND UTILITIES

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Result in impacts to any of the following public services that would require the establishment of additional facilities? Would these facilities result in further potential physical impacts to the environment:
 1. Fire protection;
 2. Police protection;
 3. Lifeguard services;
 4. Parks; or
 5. Other public facilities?
- B. Result in a need for any of the following new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts:
 1. Natural gas;
 2. Water;

3. Sewer;
4. Communication systems; or
5. Solid waste disposal?

The LPLEP PEIR concluded that restoration and enhancement activities would result in less than significant impacts related to the provision of public services and the construction of new or substantially altered utilities. Related to fire safety and protection services, PDFs (Table 3) and SCPs (Table 4) would be implemented to maintain fire safety. Staging and access areas would be located in previously disturbed areas with minimal vegetation or in areas cleared prior to construction to minimize the risk of accidental ignition of surrounding vegetation (PDF #15). Implementation of the PDFs and SCPs by the construction contractors and work crews would minimize fire hazards and the need for additional fire protection services.

Related to police service, construction equipment would be secured away from public access areas to minimize the need for police involvement. Additionally, the LPLEP PEIR included PDF #10 to ensure that access to and from lifeguard towers is not impeded, and mobile lifeguard towers would be relocated as necessary. PDF #11 was also included to ensure placement of materials on the beach would not be of a height that would interfere with sight lines from viewing platforms on the lifeguard towers. As concluded in Section 4.7, Transportation, of the PEIR, adequate emergency access would also be maintained throughout the duration of restoration and enhancement activities.

Regarding parks, the LPLEP PEIR concluded that restoration and enhancement activities would be contained generally in the Lagoon, which is not a public park, nor would such activities impact local parks.

Regarding utilities, the LPLEP PEIR identified multiple utility corridors that traverse through or along the perimeter of the Lagoon, including sewage lines, stormwater conveyance systems, underground natural gas lines, overhead power lines, and an underground water main. However, relocation of existing utilities was not proposed or anticipated. Moreover, the restoration and enhancement activities were not determined to require substantial additional public utilities such as natural gas, electricity, or communications facilities. SCPs (Table 4) were included in the LPLEP PEIR, such as coordination with utility service providers for avoiding and/or relocating utility infrastructure, if necessary (SCP #2). Finally, restoration and enhancement activities were determined to require a nominal amount of water consumption and wastewater disposal. Lagoon restoration and enhancement activities are not likely to generate wastewater as there would be minimal water consumption and no features that require sewer service. Minimal water consumption would be required during initial construction, the plant establishment period, and occasional maintenance activities. However, available water supplies were determined to be sufficient to serve restoration and enhancement activities and reasonably foreseeable future development during normal, dry, and multiple dry years.

Regarding solid waste, the LPLEP PEIR concluded that construction activities associated with restoration and enhancement activities would generate relatively small amounts of construction waste as no large structures or other facilities would be built. Additionally, such activities do not include other components that would generate solid waste. Vegetation and sediments removed from

the lagoon would be targeted for beneficial reuse when possible, and the majority of this material would not be exported as “waste.” Ultimately, all impacts to public services and utilities were determined to be less than significant in the LPLEP PEIR.

Project

Fire Protection Services. Construction activities could increase the potential for accidental on-site fires from sources such as the operation of mechanical equipment and the use of flammable construction materials. Although most Project activities would occur within the Lagoon, which would not be high risk due to the wet, marshy nature of the area, the LPLEP PEIR included PDFs and SCPs to maintain fire safety. In addition to PDF #15 described above, SCPs include requiring heavy equipment operators to be trained in appropriate responses to accidental fires (SCP #9), providing fire suppression equipment on board vehicles and at the worksite (SCP #10), and providing emergency communication equipment for site personnel (SCP #11). Implementation of PDFs and SCPs would minimize fire hazards during restoration and enhancement activities, thereby minimizing the need for additional fire protection services. The Project would be required to comply with all applicable PDFs and SCPs (Table 3 and Table 4). Additionally, the Project would not include new development or new land uses that would require ongoing fire protection services during operation. Therefore, the Project would not result in impacts to fire protection services that would require the establishment of additional facilities, and impacts would be **less than significant (Threshold A)**.

Police Services. The LPLEP PEIR included an SCP to minimize the risk of trespassing and other illegal activities, thereby minimizing the need for police services (SCP #5). In addition, during non-working hours, heavy equipment, vehicles, and fuel storage would be secured away from publicly accessible areas, creating physical barriers (SCP #6). The Project would be required to comply with all previously adopted PDFs and SCPs as related to restoration and enhancement activities. Additionally, the Project would not include new development or new land uses that would require ongoing police services during operation. Therefore, the Project would not result in impacts to police services that would require the establishment of additional facilities, and impacts would be **less than significant (Threshold A)**.

Lifeguard Services. The LPLEP PEIR included PDFs #10 and #11 to ensure lifeguard services are not significantly impacted, as described above. Implementation of these PDFs would minimize the risk associated with reduced lifeguard services at Torrey Pines State Beach, and thereby minimize the need for additional lifeguard services. The Project would be required to comply with all previously adopted PDFs related to restoration and enhancement activities. However, the Project does not propose placement of materials on the beach. Staging and stockpiling areas for the Project would be located within the Lagoon. Therefore, the Project would not result in impacts to lifeguard services that would require the establishment of additional facilities, and impacts would be **less than significant (Threshold A)**.

Parks. The LPLEP PEIR concluded that restoration and enhancement activities would be contained generally in the Lagoon, which is not a public park, nor would such activities impact local parks. As discussed in Section V.2, Public Access and Recreation, various trails along the perimeter of the Lagoon would be temporarily closed for public safety and/or to be utilized as access roads during Project

construction. However, short-term trail or pathway closures would be a minor disruption, and public trails used for access roads would be restored upon Project completion, resulting in no permanent loss of recreational trails. Therefore, the Project would not result in impacts to parks or recreational facilities that would require the establishment of additional facilities, and impacts would be **less than significant (Threshold A)**.

Utilities. There are multiple utility corridors that traverse through or along the perimeter of the Lagoon, as described above and in the PEIR. The Project does not include relocation of any of these existing utilities, including water or sewer lines, underground gas lines, or overhead power lines. However, the LPLEP PEIR included an SCP to coordinate with utility service providers for relocating and/or avoiding utility infrastructure, should it be determined necessary for the completion of restoration and enhancement activities (SCP #2). In such case, utility relocation would be temporary and is anticipated to occur within the boundaries of the Project site. The Project would be required to comply with this SCP if utility relocation and/or avoidance is determined to be necessary. Coordination with utility providers would ensure that utility relocation would not result in a need for any new systems or require substantial alterations to existing utilities. Finally, the Project is not of the nature to require substantial additional public utilities such as natural gas, electricity, or communication facilities; thus, the development of expanded or new facilities is not proposed and would not be required.

The Project would include the construction of new stormwater conveyance facilities during the implementation of floodplain enhancement activities, as described in Section II.3, Project Components. However, new stormwater conveyance facilities and the overall floodplain enhancement portion of the Project would be included to promote sediment capture, reduced velocities, increased channel conveyance, habitat function, and operation and maintenance access. Additionally, as components of the Project, potential environmental impacts of such new stormwater facilities have been analyzed throughout this Addendum. Therefore, impacts related to the construction or relocation of new or existing utility systems would be **less than significant (Threshold B)**.

Water Use. The Project would require minimal water use. Consistent with the determination of the LPLEP PEIR, water consumption would be limited and primarily required during initial construction, the plant establishment period, and occasional maintenance activities. Water would also be used for dust suppression in accordance with PDF #23, if required due to dry conditions. Additionally, the Project would not introduce new development or land uses that would require ongoing water supply during operation. Overall, water use would be minimal, and available water supplies would be sufficient to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, impacts related to water use would be **less than significant (Threshold B)**.

Wastewater Disposal. The Project is not likely to generate substantial wastewater because there would be minimal water consumption and no features that require sewer service. Construction activities would require a nominal need for wastewater disposal, and these activities are limited and temporary in nature. The Project would not generate wastewater in quantities that would affect the determination by the wastewater treatment provider that 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. Therefore, impacts related to wastewater disposal would be **less than significant (Threshold B)**.

Solid Waste Disposal. Consistent with the determination of the LPLEP PEIR construction debris would be recycled in accordance with City policies, where feasible. The Project does not include other components that would generate solid waste. The Project would be subject to the City's Whitebook section 5-14, Construction and Demolition Waste Management, and to Municipal Code §§66.0601–66.0610 (the City's Construction and Demolition Debris Diversion Deposit Program). Therefore, the Project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, and impacts related to solid waste disposal would be **less than significant (Threshold B)**.

5.12. PUBLIC HEALTH AND SAFETY

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or 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;
- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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;
- 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, result in a safety hazard or excessive noise for people residing or working in the project area;
- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- G. Substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances; or
- H. Substantially increase hazards for people recreating at beach and/or nearshore placement locations?

The LPLEP PEIR concluded that restoration and enhancement activities would result in a less than significant impact related to public exposure and risk from the transport, use, disposal, or accidental

release of hazardous materials. Use of hazardous materials would be limited to typical construction materials including petroleum products for equipment. Additionally, preparation of a spill prevention control and containment plan would be required for hazardous spill containment to ensure that spills would be cleaned up in accordance with permit conditions and that employees would understand the proper procedures associated with cleanup.

Soil testing was also determined necessary per permitting and regulatory requirements prior to the excavation of Lagoon materials because of the potential of contamination in Lagoon soils due to past sewage spills. Testing would ensure that if any contaminant concentrations exceed regulatory health risk-based soil screening levels and ecological risk-based screening levels, such soils are properly handled in accordance with applicable regulatory requirements as detailed in the PEIR.

The LPLEP PEIR also concluded that restoration and enhancement activities would result in a less than significant impact related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school because hazardous materials utilized, such as those necessary for operation of construction equipment, would be handled in compliance with safety regulations and potential for accidental release would be minimized through adherence to regulatory requirements, BMPs, and SCPs.

Additionally, the LPLEP PEIR concluded that restoration and enhancement activities would result in a less than significant impact related to the creation of a public hazard from a hazardous material site because the Lagoon is not listed as a hazardous materials site in California Department of Toxic Substances Control databases. Further, soil testing would occur prior to the excavation of materials, and appropriate regulatory requirements would be implemented as necessary to also address any potential contamination from listed off-site hazardous materials sites that may have encroached into the Lagoon.

The LPLEP PEIR also concluded that no impact related to airport safety would occur because the Lagoon is not located within 2 miles of a public-use airport. The Lagoon is within the Airport Influence Area for Marine Corps Air Station (MCAS) Miramar. However, no elements of restoration and enhancement activities were determined to be of the size, magnitude, or nature to interfere with aircraft operations.

The LPLEP PEIR also concluded that restoration and enhancement activities would result in a less than significant impact related to impairment or interference with emergency response or evacuation plans. A traffic control plan would be prepared if the transportation system were to be disrupted, which would outline safety and emergency procedures to ensure that adequate emergency access is available throughout restoration and enhancement activities, including emergency evacuation routes.

The LPLEP PEIR also concluded that restoration and enhancement activities would result in less than significant impacts related to increased human exposure to vectors, such as mosquitoes, that are capable of transmitting public health diseases or creating nuisances. Implementation of restoration and enhancement activities would result in a less conducive vector breeding condition for freshwater mosquitos in the long term. Additionally, sources of impounded water resulting from construction equipment would be removed to prevent new breeding conditions during construction.

Finally, the LPLEP PEIR concluded that restoration and enhancement activities would result in a less-than-significant impact related to hazards for people recreating at beach and/or nearshore placement locations. The PEIR included a series of PDFs to maintain public safety during material placement on beaches, including PDF #6, which requires temporary beach closures where the beach is directly affected by active material placement activities; PDF #7, which would ensure unaffected stretches of beach remain open to public access and recreational activities; PDF #8, which requires material to be spread and checked for potential hazards prior to the opening of beaches used for placing materials; PDF #9, which requires maintenance of horizontal and vertical access along either side of placement areas with temporary closures occurring as necessary to complete sand placement to the back edge of the beach; PDF #10, which requires lifeguard services to remain during construction and temporary relocation of mobile lifeguard towers if necessary; and PDF #11, which would ensure sand would be placed to avoid blocking line-of-sight at lifeguard towers. PDFs are detailed in Table 3 of this Addendum. Ultimately, all public health and safety impacts were determined to be less than significant in the PEIR.

Project

The use of hazardous materials for the Project would be limited to typical construction materials, including petroleum products for equipment. Additionally, preparation of a spill prevention control and containment plan would be required for hazardous spill containment to ensure that spills would be cleaned up in accordance with permit conditions and that employees would understand the proper procedures associated with cleanup. Additionally, storage, handling, transport, emission, and disposal of hazardous materials associated with construction activities would be in full compliance with local, state, and federal regulations, which provide requirements to ensure proper and appropriate actions specific to minimizing hazardous materials risk.

Additionally, soil testing was conducted by Allied Geotechnical Engineers as part of the Project geotechnical report, "Report of Geotechnical Services for Los Penasquitos Lagoon Restoration Phase 1 Design Project – City of San Diego" (Burns & McDonnell Engineering, Inc. and Allied Geotechnical Engineers, June 2022). Per permitting and regulatory requirements soil testing is required prior to the excavation of Lagoon materials as determined to be necessary in the LPLEP PEIR. Soil testing was conducted to determine if potential contaminant concentrations exceed regulatory health risk-based soil screening levels and ecological risk-based screening levels developed by the State of California, as well as soil screening levels developed by the U.S. Environmental Protection Agency (Regional Screening Levels). Concentration levels would determine what, if any, regulatory requirements would be necessary for the proper handling of the material. If special treatment of Lagoon materials is determined necessary, the Project would conform to regulatory requirements related to the safe transport, handling, and disposal of hazardous material to minimize the potential for public exposure. Therefore, through adherence with the regulatory requirements, BMPs, and SCPs (Table 4), potential risk associated with the transport, use, or disposal of hazardous materials or public exposure due to accidental release of hazardous materials would be minimized, and impacts would be **less than significant (Threshold A and Threshold B)**.

Consistent with the determination of the LPLEP PEIR, the Project would result in a less-than-significant impact related to hazardous emissions or handling of hazardous or acutely hazardous materials,

substances, or waste within 0.25 miles of an existing or proposed school because hazardous materials utilized, such as those necessary for operation of construction equipment, would be handled in compliance with safety regulations and potential for accidental release would be minimized through adherence to regulatory requirements, BMPs, and SCPs. Impacts would be **less than significant (Threshold C)**.

The Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, **No impact** would occur **(Threshold D)**.

As identified in the LPLEP PEIR, the Lagoon is not within 2 miles of a public airport but is within the Airport Influence Area for MCAS Miramar. The Project would include restoration and enhancement activities within the Lagoon and would not introduce new buildings or tall structures that could impair operations at MCAS Miramar. Additionally, the Project does not include components that would bring substantial new amounts of people to the area. Through construction and during operation, the open space setting of the Lagoon would not influence or modify airport operations in a way that could result in a safety hazard or excessive noise for people residing or working in the Project area. **No impact** would occur **(Threshold E)**.

As discussed in Section V.7, Transportation, construction-generated traffic would be nominal relative to existing traffic on local roadways and operational traffic would only be required for occasional maintenance. However, if the transportation system were to be disrupted, a traffic control plan would be prepared as required by the SCPs of the LPLEP PEIR (SCPs #14 through #18). The traffic control plan would outline safety and emergency procedures to ensure that adequate emergency access is available through the impacted areas, including emergency evacuation routes, and may include informing and coordinating with emergency services provided in the area, use of flagmen to control traffic flow, and procedures for emergency evaluation situations. Project construction would occur within the Lagoon and would not obstruct local roadways or impair emergency operations in the surrounding areas. Upon Project completion, the Lagoon would not create conditions that could impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be **less than significant (Threshold F)**.

The Lagoon is a breeding area for mosquitos, including vector species that are capable of transmitting a number of diseases to both humans and equine hosts. The current conditions of the Lagoon have allowed mosquitoes to become further established due to several reasons, including freshwater ponding, rapid sedimentation, and structural impediments (e.g., railway berm, Highway 101), which have greatly diminished tidal circulation throughout the Lagoon. The Project would implement restoration and enhancement activities within the Lagoon to improve the overall hydrologic conditions of the Lagoon to accommodate more tidal exchange and circulation within lagoon channels. The increased tidal action within the Lagoon would interrupt the mosquito reproductive process, leading to substantially increased mortality of eggs, larvae, and pupae. Increased tidal action would also result in other benefits for mosquito abatement, including increased salinity, which reduces the ability of these vectors to reproduce; quick draw-down, which prevents the establishment of stagnant ponds on the Lagoon edges; and habitat conversion resulting in less stands of invasive and non-native vegetation that cannot survive the saline waters, creating better circulation of water and improved effectiveness of vector control measures. The freshwater management channels also

reduce the ponding of freshwater in the upper Lagoon by creating a continuous channel from the pilot channel to the tidal channel that will convey persistent dry weather flows and more frequent storm flows. Currently, these flows pond behind the end of the pilot channel which then sheet flows over the marsh plain and collects in low-lying areas, creating favorable mosquito breeding habitat. In addition, four storm drain outfalls will be upgraded to include erosion protection and filling in scour ponds at the outfalls, where freshwater ponds provide for favorable mosquito breeding habitat. Therefore, the Project would result in a less-conducive vector breeding condition for freshwater mosquitos and reduce the public health and safety risks associated with mosquito-borne diseases. Impacts would be **less than significant (Threshold G)**.

Finally, the LPLEP PEIR determined that placement of material on local beach or nearshore locations could create a potentially dangerous situation with construction equipment operating in areas of typical public beach recreation. Accordingly, the PEIR included a series of PDFs to maintain public safety during material placement on beaches (Table 3). The Project would be required to comply with all previously adopted PDFs related to restoration and enhancement activities. Staging and stockpiling areas for the project would be located within the Lagoon. Therefore, the project would not substantially increase hazards for people recreating at the beach and/or nearshore placement locations. Impacts would be **less than significant (Threshold H)**.

5.13. CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- B. Conflict with the City's Climate Action Plan (CAP) or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The LPLEP PEIR concluded that restoration and enhancement activities would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, nor would such activities result in a substantial adverse effect related to a conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The PEIR was unable to calculate specific emissions estimates of restoration and enhancement activities as the specifics of such activities had yet to be determined. The LPLEP PEIR determined that emissions associated with individual restoration and enhancement activities would be required to be analyzed during future CEQA review, where applicable. However, the LPLEP PEIR evaluated recent lagoon restoration projects in San Diego County as a comparative framework for potential emissions generated by future restoration and enhancement activities under the LPLEP. The example projects evaluated, which were of a larger magnitude than the LPLEP, did not approach the significance guidance threshold of 900 metric tons of carbon dioxide equivalent (MT CO₂e). Specifically, the example projects were estimated to generate 177 MT CO₂e per year and 193 MT CO₂e per year, significantly under the 900 MT CO₂e

threshold. Thus, restoration and enhancement activities under the LPLEP were anticipated to be below this threshold as well. Finally, the LPLEP PEIR demonstrated that restoration and enhancement activities would be consistent with the CAP through the City's Checklist and would not conflict with existing California legislation adopted to reduce statewide GHG emissions. All GHG emissions impacts were determined to be less than significant.

Project

Step 1 of the City's CAP Consistency Checklist requires a project to assess its consistency with existing General Plan and Community Plan land use and zoning designations. The Project would not modify the current land use or designations of Los Peñasquitos Lagoon. The preserved open space of the Lagoon would remain and continue to be consistent with applicable land use planning documents, such as the City's General Plan and Torrey Pines Community Plan. No new land use conflicts would result. Step 2 of the Checklist applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects composed of one- and two-family dwellings or townhouses. The Project does not require a certificate of occupancy. Additionally, Footnote 5 of the City CAP Checklist states that it also does not apply to non-building infrastructure projects. The Project would be consistent with relevant CAP strategies, specifically Strategy 5: Climate Resiliency. Climate Resiliency is described as the ability of a system to absorb disturbance while undergoing change and still retain essentially the same function and identity as before. The intent of the strategy is to develop flexible programs, policies, and processes to accommodate unexpected events and shocks and continue to function effectively (City of San Diego 2015). The Project implements Strategy 5, Climate Resiliency, by restoring and enhancing the Lagoon in a manner that would include appropriate contours, gradients, and elevations that would facilitate upslope migration of salt marsh and other native habitats in response to sea level rise. The improved hydrology of the Lagoon would support native species establishment and improve long-term resiliency. The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be **less than significant (Threshold A)**. The Project would not result in a substantial adverse effect related to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and a **less-than-significant** impact would result (**Threshold B**).

5.14. ENERGY

Los Peñasquitos Lagoon Enhancement Plan PEIR

The following thresholds were used for the PEIR analysis:

Would the proposed project:

- A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The LPLEP PEIR concluded that energy use would not be wasteful, inefficient, or unnecessary. Energy would be used to operate machinery during construction. The LPLEP PEIR includes PDF #13 (Table 3), which requires equipment and vehicle engines to be maintained in good condition and to minimize idling time. Once completed, the restoration and enhancement activities would not generate additional daily vehicle trips, necessitate an increased need for ongoing energy use, or require other energy-consuming activities aside from temporary and minimal maintenance activities when necessary.

Additionally, the LPLEP PEIR concluded that restoration and enhancement activities would not conflict with or obstruct state or local plans for renewable energy or energy efficiency. Specific PDFs and SCPs were incorporated into the LPLEP PEIR to promote energy efficiency and decrease overall energy consumption. All energy-related impacts were determined to be less than significant.

Project

The Project would use energy primarily for the operation of equipment and machinery during construction. Approximately 16 employees would be present on the project site at any given time during construction, including but not limited to a construction superintendent, up to 2 laborers, up to 3 equipment operators, and up to 2 haul truck drivers. Typical equipment required for the construction of the project would include a loader, backhoe, dozer, compactor, chipper (mulch), haul trucks, and a water truck. Although construction activities would use energy, the LPLEP PEIR included PDFs (Table 3) and SCPs (Table 4) that promote energy efficiency either directly, such as PDF #13 described above, or indirectly, such as stockpiling of material where the material areas that would otherwise be hauled to a landfill or other disposal site could instead be placed on top of designated fill. The project would be required to comply with all previously adopted PDFs and SCPs related to restoration and enhancement activities. The Project would not include new development or new land uses that would require ongoing energy use during project operation. Post-construction, energy use would be minimal as related to occasional maintenance activities. The Project has demonstrated consistency with the CAP through the CAP Checklist and would not conflict with existing California legislation that has been adopted to reduce statewide GHG emissions. Therefore, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, and impacts would be **less than significant (Threshold A)**.

The Project would consist of restoration and enhancement activities within the Lagoon that would require some energy use during construction to operate machinery and minimal energy use during operation for occasional maintenance activities. Applicable PDFs (Table 3) and SCPs (Table 4) were incorporated into the Project to promote energy efficiency and decrease overall energy consumption. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be **less than significant (Threshold B)**.

VI. MITIGATION, MONITORING, AND REPORTING PROGRAM (MMRP) INCORPORATED INTO THE PROJECT

The findings of this report are consistent with the findings of the LPLEP PEIR. Due to the program-level review, the LPLEP PEIR determined that additional environmental review will be required as

development and refinement of the project design occurs. Additional mitigation, with a greater degree of specificity, will be developed and incorporated into project construction plans and specifications as necessary.

6.1 Biological Resources Mitigation

Biological-2. An evaluation for no net loss of sensitive habitat would occur, and net changes of habitat as defined by MSCP or other sensitive natural habitats would be quantified.

If a net loss of sensitive habitat is confirmed, the following would be implemented with priority given to lands within or adjacent to the Lagoon:

- A. Contribution to an appropriate funding mechanism for habitat acquisition; and/or
- B. Restoration/enhancement of habitat within the Torrey Pines State Natural Reserve.

The following processes would ensure implementation of the Biological-2 Mitigation Measure within the framework of the LPLEP PEIR.

Biological-2.1 Mitigation for Permanent Impacts to Wetlands and Sensitive Vegetation Communities. The City of San Diego shall implement the 2022 Restoration Plan/Habitat Mitigation and Monitoring Plan (Restoration Plan/HMMP), or subsequent update as approved by the resource agencies. As documented in the Restoration Plan/HMMP, monitoring and reporting shall be conducted to document the successful restoration of wetland habitats (based on Year 5 performance standards) that result in no net loss.

Biological 2.2 Mitigation for Type Conversion of Sensitive Upland Vegetation. The City of San Diego shall mitigate for direct impacts to coastal sage scrub habitat by providing 3.63 acres and 0.59 acres of non-native grassland mitigation through one of three equally viable options:

1. Utilization of habitat mitigation credits at an approved upland mitigation bank (e.g., Cornerstone Lands Bank or Marron Valley Mitigation Bank).
2. Contribution towards the City's Habitat Acquisition Fund (given that impacts are less than 5 acres, and the Habitat Acquisition Fund would provide like-quality habitat within the Multi-Habitat Planning Area [MHPA]).
3. Revision to habitat restoration design to add at least 4.22 acres of coastal sage scrub restoration and/or enhancement in existing disturbed upland areas onsite. Any proposed additional coastal sage scrub habitat restoration shall be consistent with the current coastal sage scrub habitat restoration details in the Restoration Plan/HMMP, which include rationale for success, contribution to the MHPA, and annual performance standards.

Biological 2.3 Eelgrass Mitigation and Monitoring Plan. Prior to project implementation, the City of San Diego, in coordination with California State Parks (State Parks), shall prepare an Eelgrass Mitigation and Monitoring Plan (Mitigation Plan) and consult with the National

Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) to describe the approach for compensatory mitigation for the loss of approximately 0.087 acres of eelgrass habitat in the tidal channel. Mitigation for impacts shall be implemented as mutually agreed upon by the City of San Diego ECP, NMFS, CDFW, and State Parks. Preference in the Mitigation Plan shall be given to in-kind replacement of the eelgrass habitat. Such mitigation shall be implemented in accordance with the NMFS California Eelgrass Mitigation Policy, including site selection; initial and long-term habitat area replacement ratios; methods for and timing of transplantation activities; and monitoring, performance, and reporting requirements. Should in-kind mitigation within the lagoon not be feasible, consideration shall be given to in-kind mitigation first in areas in close proximity to the channel, then in locations within the Southern California region. If in-kind mitigation is not feasible, mitigation banks or in-lieu fee conservation programs shall be given preference over out-of-kind mitigation.

6.2 Cultural Resources Mitigation

Cultural-1

I. Prior to the Start of Construction

A. Construction Document Verification

1. Prior to Notice to Proceed or prior to the first pre-construction (pre-con) meeting, whichever is applicable, the Project Archaeologist shall verify that the requirements for archaeological monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process. For activities occurring on property owned by State Parks, the Project Archeologist will verify with the State Parks Archeologist that the appropriate State Parks requirements have been met.

B. Letters of Qualification Have Been Submitted to Project Archaeologist

1. The project's cultural resources consultant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and confirming the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (City of San Diego 1999). Prior to the potential project start, the State Parks-approved cultural resource consultant must acquire an Archaeological Investigations/Collections (DPR412A) permit from State Parks. If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour Hazardous Waste Operations and Emergency Response training with certification documentation.
2. MMC would provide a letter to the project's cultural resources consultant confirming the qualifications of the PI and all persons involved in the archaeological monitoring

of the project meet the qualifications established in the Historical Resources Guidelines.

3. Prior to the start of work, the project's cultural resources consultant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

C. Verification of Records Search

1. The PI shall provide verification to MMC that a site-specific records search (quarter-mile radius) has been completed, and previously unidentified and/or unevaluated sites would be assessed under the CRHR and/or applicable state codes. Verification includes, but is not limited to, a copy of a confirmation letter from South Coast Information Center (SCIC) and State Parks for projects or portion of project work on State Parks land stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC and State Parks requesting a reduction to the quarter-mile radius.

D. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the landowners and managers shall arrange a pre-con meeting with the project proponent that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Resident Engineer (RE), Construction Manager (CM), and/or Grading Contractor, if appropriate, State Parks archaeologist or cultural representative and MMC. The qualified archaeologist and Native American monitor shall attend any grading/excavation-related pre-con meetings to make comments and/or suggestions concerning the archaeological monitoring program with the CM and/or Grading Contractor.
 - a. If the PI is unable to attend the pre-con meeting, the implementing agencies shall schedule a focused pre-con meeting with MMC, the PI, RE, or CM, if appropriate, prior to the start of any work that requires monitoring.
2. Identify Areas to Be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11 inches x 17 inches) to MMC identifying the areas to be monitored, including the delineation of grading/excavation occurring within stable undisturbed sediments. This should also be submitted to State Parks tribal liaison and cultural representative.

- b. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).
 3. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC and State Parks cultural representative through the RE indicating when and where monitoring would occur.
 - b. The PI may submit a detailed letter to MMC and State Parks cultural representative prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information, such as a review of final construction documents that indicate site conditions and depth of excavation and/or site graded to bedrock, etc., that may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor(s) Shall Be Present during Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during soil-disturbing and grading/excavation/trenching activities into stable undisturbed sediments that could result in impacts to archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, State Parks cultural representative, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances, Occupational Safety and Health Administration safety requirements may necessitate modification of the AME. Due to the wet, soft and highly variable nature of the site sediments and the presence of dry weather flows, high groundwater and excavations subject to flooding and tidal flow, alternative approaches to inspections are anticipated. Excavated materials will be stockpiled in designated areas that may be inspected safely.
2. The Native American consultant/monitor shall determine the extent of their presence during soil-disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. The MMC shall provide this information to State Parks cultural representative if ground disturbance is occurring on land owned by State Parks. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop, and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or native soils are encountered that may reduce or increase the potential for resources to be present. If such modifications occur on land owned by State Parks this letter or email notification should be submitted to State Parks cultural representative.
4. The Archaeological Monitor and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVSR). The CSVSRs shall be faxed by

the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of any discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil-disturbing activities, including, but not limited to, digging, trenching, excavating, or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Archaeological Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC and State Parks cultural representative by phone of the discovery and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported from the site until a determination can be made regarding the significance of the resource, specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/Monitor, where Native American resources are discovered, shall evaluate the significance of the resource. If human remains are involved, follow the protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program that has been reviewed by the Native American consultant/Monitor, and obtain written approval from MMC and State Parks cultural representative. Impacts to significant resources must be mitigated before ground-disturbing activities in the area of discovery would be allowed to resume. Note: If a unique archaeological site is also a historical resource as defined in CEQA, then the limits on the amount(s) that the project may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area, and no soil shall be exported from the site until a determination can be made regarding the provenance of the human remains, and the following procedures as set forth in CEQA Section 15064.5(e), California PRC (Section 5097.98) and State Health and Safety Code (Section 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE, State Parks cultural representative, MMC, and the PI, if the Monitor is not qualified as a PI. MMC would notify the appropriate Planner in the Environmental Permitting Support Section of the Engineering and Capital Projects Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate Discovery Site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
2. The Medical Examiner, in consultation with the PI, would determine the need for a field examination to determine the provenance.
3. If a field examination is not warranted, the Medical Examiner would determine with input from the PI whether the remains are, or are most likely to be, of Native American origin.

C. If Human Remains Are Determined to Be Native American

1. The Medical Examiner would notify the NAHC within 24 hours. By law, only the Medical Examiner can make this call.
2. The NAHC would immediately identify the person or persons determined to be the Most Likely Descendant (MLD) and provide contact information.
3. The MLD would contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination to begin the consultation process in accordance with CEQA Section 15064.5, the California PRC, and California Health and Safety Codes.
4. The MLD would have 48 hours to make recommendations to the implementing agency or representative for the treatment or disposition with proper dignity of the human remains and associated grave goods.
5. Disposition of Native American human remains would be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, or the MLD failed to make a recommendation within 48 hours after being notified by the NAHC; or;
 - b. The implementing agency or authorized representative rejects the recommendation of the MLD and mediation in accordance with California PRC Code 5097.94 (k) by the NAHC fails to provide measures acceptable to State Parks and LPLF, then,
 - c. order to protect these sites, the implementing agency shall do one or more of the following:

1. Record the site with the NAHC;
 2. Record an open space or conservation easement on the site; or
 3. Record a document with the County.
- d. Upon the discovery of multiple Native American human remains during a ground-disturbing land development activity, the implementing agency may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures, the human remains, and cultural materials buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
 - e. If human remains are discovered on State Parks land, the State Parks cultural representative should be informed of decisions prior to disposition.
- D. If Human Remains Are Not Native American
1. The PI shall contact the Medical Examiner with notification of the historic era context of the burial.
 2. The Medical Examiner would determine the appropriate course of action with the PI and implementing agency staff (California PRC 5097.98).
 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for the interment of the human remains shall be made in consultation with MMC, State Parks cultural representative, archeological qualified City staff member, any known descendant group, and the San Diego Museum of Man.

V. Night and/or Weekend Work

- A. If Night and/or Weekend Work Is Included in the Contract
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the pre-con meeting.
 2. The following procedures shall be followed.
 - a. **No Discoveries.** In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit it to MMC via fax by 8 a.m. of the next business day.
 - b. **Discoveries.** All discoveries shall be processed and documented using the existing procedures detailed in Sections III – During Construction, and IV – Discovery of Human Remains. The discovery of human remains shall always be treated as a significant discovery.

- c. **Potentially Significant Discoveries.** If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III – During Construction and IV –Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact MMC and the State Parks cultural representative, or by 8 a.m. of the next business day, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If Night and/or Weekend Work Becomes Necessary during the Course of Construction
- 1. The CM shall notify the RE a minimum of 24 hours before the work is to begin.
 - 2. The RE shall notify MMC immediately.
- C. All Other Procedures Described Above Shall Apply, as Appropriate.

VI. Post-Construction

- A. Preparation and Submittal of Draft Monitoring Report
- 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines that describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. Monitoring reports must also be submitted for review and approval per conditions of the DPR412A permit by the State Parks cultural representative. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results, or other complex issues, a schedule shall be submitted to MMC establishing agreed-upon due dates, and the provision for submittal of monthly status reports until this measure can be met.
 - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.
 - b. **Recording Sites with State of California Department of Parks and Recreation.** The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms [DPR 523 A/B]) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Monitoring Report.
 - 2. MMC and State Parks cultural representative shall return the Draft Monitoring Report to the PI for revision or for preparation of the Final Report.
 - 3. The PI shall submit revised Draft Monitoring Report to MMC and State Parks cultural representative for approval.
 - 4. MMC shall provide written verification to the PI of the approved report.

5. MMC shall notify the RE of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
 3. The cost for curation is the responsibility of the property owner.
- C. Curation of Artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing, and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable. Collections and proper curation preparations shall be completed in consultation with State Parks cultural representative.
 2. The PI shall include the Acceptance Verification from the curation institution and appropriate State Parks Museum Collections documents (DPR 927, 928) in the Final Monitoring Report submitted to the RE and MMC.
 3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE and one copy to MMC and State Parks cultural representative (even if negative) within 90 days after notification from MMC that the draft report has been approved.
 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC that includes the Acceptance Verification from the curation institution.

VII. SIGNIFICANT UNMITIGATED IMPACTS

The LPLEP PEIR identified significant and unavoidable impacts related to air quality as impacts would not be fully mitigated to below a level of significance. The LPLEP PEIR identified significant impacts that would be substantially lessened or avoided with the implementation of the mitigation measures

included in the PEIR to be implemented by subsequent projects: water quality and sediment management, biological resources, cultural resources, and paleontological resources.

Each environmental issue area includes an analysis of the project compared to the impact determinations of the LPLEP PEIR. The following analysis indicates there would be no new significant impacts, nor would there be an increase in the severity of impacts resulting from the project. Furthermore, there is no new information in the record or otherwise available indicating that there are substantial changes in circumstances that would require major changes to the PEIR. An overview of the project's impacts in relation to the previously certified PEIR is provided in Table 12.

Table 12: Impact Assessment Summary

Environmental Issue	LPLEP PEIR Impact Determination	LPLEP Mitigation	Project New Impacts ?	Project Resultant Impact	Project-Level New Mitigation?
Land Use	LTS	No	No	LTS	No
Public Access and Recreation	LTS	No	No	LTS	No
Hydrology	LTS	No	No	LTS	No
Water Quality and Sediment Management	LTSM	Yes	No	LTS	No
Geology/Soils	LTS	No	No	LTS	No
Biological Resources	SU	Yes	No	LTSM	No
Transportation	LTS	No	No	LTS	No
Air Quality	SU	Yes	No	LTS	No
Cultural Resources	LTSM	Yes	No	LTSM	No
Paleontological Resources	LTSM	Yes	No	LTS	No
Public Services and Utilities	LTS	No	No	LTS	No
Public Health and Safety	LTS	No	No	LTS	No
Climate Change and Greenhouse Gas Emissions	LTS	No	No	LTS	No
Energy	LTS	No	No	LTS	No

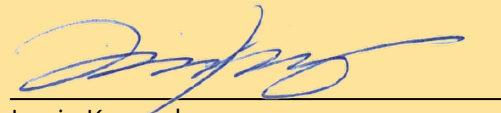
Notes: LPLEP = Los Peñasquitos Lagoon Enhancement Plan; PEIR = Programmatic Environmental Impact Report. LTS = Less than Significant; LTSM = Less than Significant with Mitigation; SU = Significant and Unavoidable

Because there were significant unmitigated impacts associated with the original project approval, the decision maker was required to make specific and substantiated "CEQA Findings" which stated: (a) specific economic, social, or other considerations which make infeasible the mitigation measures or project alternatives identified in the FEIR, and (b) the impacts have been found acceptable because of specific overriding considerations. Given that there are no new or more severe significant impacts that were not already addressed in the previous certified EIR, new CEQA Findings and or Statement of Overriding Considerations are not required.

The Project would not result in any additional significant impacts, nor would it result in an increase in the severity of impacts from that described in the previously certified EIR.

VIII. CERTIFICATION

Copies of the addendum, the certified EIR, the MMRP, and associated project-specific technical appendices, if any, may be accessed on the City's CEQA webpage at <https://www.sandiego.gov/ceqa/final>.



Jamie Kennedy
Senior Planner
Engineering & Capital Projects Department

11/13/24

Date of Final Report

Analyst: JAMIE KENNEDY

Attachments:

- Figure 1: Project Location Map
- Figure 2A: Project Area Features
- Figure 2B: Construction Subphases
- Environmental Impact Report SCH No. 2017121036

Figure 1: Project Location Map



Figure 2A: Phase 1 Project Components

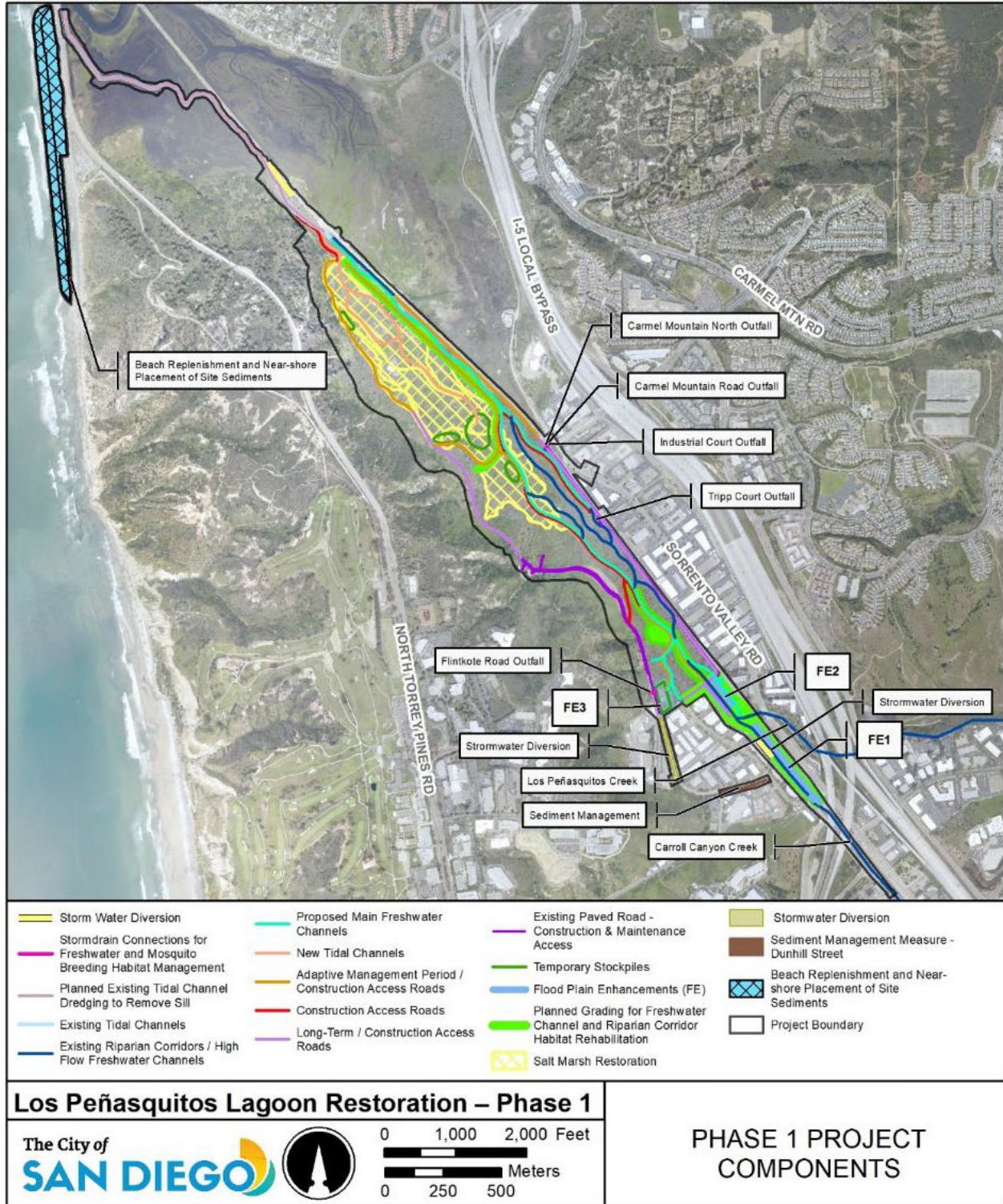


Figure 2B Construction Subphases

