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STAFF REPORT: REGULAR CALENDAR

Application No.: **5-23-0233**

Applicant: **Los Cerritos Wetlands Authority**

Agent: Moffat & Nichol and Tidal Influence

Project Location: Southern Area Los Cerritos Wetlands, Pacific Coast Highway and 1St Street, Seal Beach.

Project Description: Two-phase habitat restoration of a 103.54-acre site of prior oil operation lands to subtidal, salt marsh, transitional, and upland habitats at the Southern Los Cerritos Wetlands Site including remediation or containment of contaminated soil, grading, habitat restoration, replacement of existing culvert along Hellman Channel with a larger culvert, creation of new secondary tidal channels through the wetlands, construction of new tribal and public access opportunities including parking and trails, construction of flood management elements, raising of the existing utility and maintenance road (1st Street) through the wetlands, and undergrounding of power transmission lines along the road.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The Southern Los Cerritos Wetlands Restoration Project—covering a 103.54-acre area—is part of the larger restoration program for the overall Los Cerritos Wetlands

Complex which is approximately 503 acres of open space owned by the applicant, Los Cerritos Wetlands Authority (LCWA). The applicant, LCWA, is a governmental entity developed in 2006 by a joint powers agreement between the State Coastal Conservancy, the Rivers and Mountains Conservancy, and the cities of Seal Beach and Long Beach. The mission of the LCWA is to provide for a comprehensive program of acquisition, protection, conservation, restoration, maintenance and operation, and environmental enhancement of the Los Cerritos Wetlands area consistent with the goals of flood protection, habitat protection and restoration, and improved water supply, water quality, groundwater recharge, and water conservation. In an effort to accomplish their mission, in 2021, the LCWA acquired funding to pursue project-level planning for a portion of the Program's South Area and in 2023, the LCWA received approximately $32.5 million in grant funding to implement Phase 1 of the proposed Southern Los Cerritos Wetlands Restoration.

The Southern California Wetlands Recovery Project, a partnership of 17 state and federal agencies, has identified the acquisition and restoration of the Los Cerritos Wetlands as a high regional priority. The Southern Los Cerritos Wetlands Restoration Project Site is composed of two parcels, a 100-acre Los Cerritos Wetlands Authority site and a 3.5-acre parcel owned by the California State Lands Commission that is leased to LCWA. The 100-acre South LCWA Site (also known as "Hellman Ranch Lowlands") is comprised of some southern coastal salt marsh habitat, while a majority of the remaining area is occupied by non-native plant species alliances. Mixed in with this vegetation are features such as a tidal creek, salt flats, tidal flats, utilities, a developed asphalt roadway, dirt maintenance roadways, dumped fill, and remnants various human-made structures that have accumulated over time. The State Lands Parcel Site is comprised of a tidal wetland in the northern portion of the property where the culvert connects to the San Gabriel River, a concrete pad that is approximately 0.83 acres in size, and is otherwise covered by degrading asphalt that is being invaded by various ruderal plant species.

The proposed restoration project includes remediation or containment of contaminated soil, grading, habitat restoration, replacement of the existing culvert along Hellman Channel with a larger culvert, creation of new secondary tidal channels through the wetlands, construction of flood management elements, raising of the existing road (1st Street) through the wetlands, and undergrounding of power transmission lines along the road. Ecosystem restoration at the site would occur in two phases. The Phase 1 area restoration activities would enhance existing habitat areas in closer proximity to the existing muted tidal channel (Hellman Channel). Phase 2 area restoration activities would expand tidal wetlands to the eastern end of the site by creating a full tidal connection with the Haynes Cooling Channel. Phase 1 area work is designed to provide an initial functional lift to existing habitat areas that will be become further enhanced by the improved hydrological conditions provided by Phase 2. The project would also expand new public access opportunities including parking and public trails. The project would increase local Native American Tribes' access to their ancestral lands by constructing a Story Porch, harvest garden, gathering spaces, traditional tulle boat launch area, and a monument all developed with local tribal representation during the

project planning process. The applicant has worked closely and collaborated with five local tribal leaders on these aspects of the restoration project.

While the construction activities associated with the ecological restoration would impact a portion of the existing wetlands, may impact unknown archaeological and/or tribal cultural resource deposits, and would likely temporarily impact marine biological resources and water quality, these activities are allowed under Coastal Act Section 30233 for restoration projects with the temporary and potential impacts avoided or minimized and mitigated for pursuant to the recommended special conditions described below. Plus, the restoration project would significantly expand and enhance the wetlands and, in so doing, improve habitat, water quality, and local marine ecosystem health, as well as provide for improved tribal access and new public access opportunities consistent with the Chapter 3 policies of the Coastal Act.

The Commission staff recommends the Commission find that with implementation of the mitigation measures described in the project's Initial Study and Mitigated Negative Declaration (IS/MND) and recommended **Special Conditions 1 through 12**, the project would be carried out consistent with the coastal access, cultural resource, hazards, dredging, marine resource and water quality protection policies of the Coastal Act. **Special Condition 1** would require implementation of adverse impact avoidance, minimization and mitigation measures described in the Final Southern LCW Restoration Project IS/MND. **Special Conditions 2** requires submittal of final revised plans that conform to the 65% plans submitted but revised to include additional project details related to proposed public trails, tribal amenities, stewardship site amenities, lighting plan, irrigation plan, and fence/gate detail plan. In addition, **Special Conditions 3** requires final as-built plans ensuring consistency with all special conditions. **Special Condition 4** requires an archeological and tribal cultural resource monitoring treatment plan to ensure tribals consultation during project grading activities. **Special Condition 5, 6, 7** would further reduce potential wetland, biological resource and habitat impacts by requiring the applicant to adhere to revisions to the Habitat Restoration and Monitoring Plans, an Integrated Pest Management Plan, and Construction Phase BMPs. **Special Conditions 8 and 9** would ensure proposed public access amenities remain accessible to the general public and Native American tribes. **Special Condition 10** requires submittal of a Final Contamination Materials Contingency Plan revised to include provisions for submittal of a final report documenting all actual excavation surface areas, total volumes, and soil testing results and indicating compliance with RWQCB requirements other appropriate governmental agencies. **Special Condition 11** requires submittal conformance with other agency approvals, and **Special Condition 12** requires the applicant adhere to an assumption of risk, waiver of liability and indemnity.

Therefore, Commission staff recommends that the Commission **APPROVE** coastal development permit application 5-23-0233, as conditioned. The motion is on page 6. The standard of review is Chapter 3 of the Coastal Act.

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I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. 5-23-0233 pursuant to the staff recommendation.

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve the Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the applicant to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Mitigated Negative Declaration.** By acceptance of this permit, the permittee acknowledges and agrees that the permittee shall implement and adhere to all mitigation measures included in the Final Initial Study/Mitigated Negative Declaration, prepared by Moffatt & Nichol dated June 2023, State Clearinghouse No. 2023040250. A full list of these mitigation measures is provided in **Appendix C**. In the event of conflicts between the mitigation measures of the Final Initial Study/Mitigated Negative Declaration and those expressed in or developed in accordance with this coastal development permit, such terms and conditions of this coastal development permit shall prevail.

2. **Final Phase 1 and Phase 2 Plans**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit, for Executive Director review and written approval, two full-sized sets of Final Plans that substantially conform to the 65% Project Plans (dated January 31, 2023). The Final Plans shall at a minimum include details on the timing of development, grading, drainage, box culvert/bridge, flood management, utility relocation, roadway design, construction staging and stockpiling, trails, signage, lighting, fencing, gates, habitat planting, and temporary irrigation and shall be consistent with the following criteria:

   a. **Trails Plan** (Trail Use, Alignment, Width, and Extents) - The Trails Plan shall include a detailed description that includes but is not limited to the intended use (e.g., pedestrian, bicycle, multi-use, etc.), alignment of trail segments (e.g., along flood control berm, 1st Street right-of-way, 1st Street to Gum Grove Park Trail, along flood control berm connecting to Hellman Ranch Trail, etc.), trail surface material, trail widths, and trail extents. The Trails Plan shall also identify connections to trails or accessways on adjacent properties.

      No development, as defined in Section 30106 of the Coastal Act, shall occur within the trail corridor(s) identified on the final plans except for the following development: grading and construction necessary to construct and maintain the trail(s) and other development approved by this permit; maintenance of public

access facilities and appurtenances (e.g., signs, interpretive facilities, benches, picnic tables, safety fencing), planting and removal of vegetation consistent with the special conditions of this permit, any permitted underground utilities, drainage devices, and erosion control and repair provided that the development that diminishes public access through any trail corridor shall be prohibited), or other such development subject to review and written approval by the Executive Director.

The Final Trails Plan shall provide for archaeological and tribal cultural resource protection in conformance with that required by **Special Condition 4** and access requirements of **Special Condition 9.**

At the end of Phase I grading and habitat restoration activities, the permittee shall submit for review and written approval of the Executive Director, evidence that the trail(s) and required public access improvements approved by this coastal development permit have been constructed and implemented in conformance with the approved Final Trail Plan, and that they are complete and ready for public use.

b. **Tribal Cultural Resources Plan** – Project Plans shall include a Tribal Cultural Resources Site Plan depicting locations of the resources proposed to be used by local native tribes including, but not limited to a) tribal gathering space, b) tribal harvest areas and/or harvest garden, c) tribal monument, d) tidal channel access points specific for tribal use. The Plan shall also clearly indicate that these improvements will be constructed as part of Phase 1 of the project and will become available for Tribes' use at the end of Phase 1.
c. **Stewardship Site Plan** – Project Plans shall include a site plan clearly depicting all proposed development on the State Lands Parcel including, but not limited to a) automobile parking spaces including ADA-compliant and electric vehicle spaces, b) bike racks, c) trailhead and trails; d) interpretative/educational signage, e) gathering/learning/play spaces, and f) tribal amenities. The Plan shall also clearly indicate that these improvements will be constructed as part of Phase 1 of the project and will become available for public use at the end of Phase 1.
d. **Lighting Plan** – The Lighting Plan shall depict all proposed lighting, including temporary lighting installed during project construction on or near the project site. All lighting shall be downward directed, shielded away from wetlands, intertidal habitat, and upland habitat areas and shall use best available dark-skies technology to minimize glare and spillover effects to the greatest extent feasible.
The average light intensity within the project area shall be no greater than 0.01 foot candles at the property line that is adjacent to the west side of Studebaker Road. The applicant shall submit an exhibit or report documenting that the final

lighting plan is consistent with this requirement.

e. **Construction Staging Plan** – The Construction Staging Plan shall identify the limits of the work areas and staging areas, all such areas shall be delineated in cooperation with a qualified biologist, limiting the potential habitat areas affected by project activities and in cooperation with known tribal resource areas. All vehicles and equipment shall be restricted to pre-established work areas and haul routes and to established or designated staging areas. Construction vehicle access shall be limited to 1st Street and Adolfo Lopez Drive only. Construction vehicles shall be restricted to designated routes. Construction equipment and materials shall be stored only in designated staging and stockpiling areas, and equipment shall not be in contact with any receiving waters or environmentally sensitive habitat areas only as needed for targeted construction.
f. **Irrigation Plan** – The Irrigation Plan shall clearly indicate that the proposed irrigation system is temporary and shall be fully removed from the restoration areas within 60 days from issuance of the final monitoring report declaring the project has met the restoration criteria.

g. **Fence and Gate Detail Plan** – Project Plans shall include a Fence and Gate Plan clearly depict proposed location(s) of any access gates and property fencing and/or habitat protection fencing. The Plan shall indicate which access points are for public use and which may only be accessible to LCWA staff or for access to the adjacent oil operation site. The plan shall depict fencing height and materials. If chain link is proposed, chain-link and shall not include razor wire or razor wire loops, fabric covers, or color/coating materials and shall be a minimum of 2.25” mesh chain-link.

The permittee shall undertake development in conformance with the approved final plans unless this permit is amended and approved by the Commission or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

3. As-built Report. WITHIN 60 DAYS FOLLOWING COMPLETION OF EACH PHASE OF CONSTRUCTION AND REVEGETATION ACTIVITIES, the permittee shall submit as-built reports summarizing restoration activities to-date, a description of consistency with approved final plans in **Special Condition 2**, documentation of acreage treated, maps and descriptions of any temporary infrastructure installed, photos taken from fixed points, assessment of the as-built success criteria in the HRMP for the respective project phase, in and a description of consistency with all terms and conditions, to be submitted to the Executive Director. Separate as-built

reports are required for Phase 1 and Phase 2 within 60 days of the respective completed phase.

4. **Archaeological and Tribal Cultural Resource Monitoring and Treatment Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit, for the review and approval of the Executive Director, an Archaeological and Tribal Cultural Resources Monitoring and Treatment Plan (Plan) prepared by a qualified resource specialist in consultation with Gabrieleño-affiliated Native American representatives, which shall incorporate the following measures and procedures:

    a. All representatives of Gabrieleño-affiliated Native American Tribes listed on an updated Native American Heritage Commission (NAHC) contact list for the area shall be invited to consult on the preparation of the Plan and all who accept the invitation shall be allowed to consult and shall be meaningfully considered in the Plan's development. Evidence of written notification shall be made available to the Executive Director.

    b. The Plan shall ensure that any archaeological or tribal cultural resources that are present on the site and could be impacted by the approved development will be identified so that a plan for their protection can be developed. The methods of protection of Tribal Cultural Resources shall be developed in consultation with the Native American tribal government(s). If there is disagreement regarding the method(s) of protection of resources, the methods that are most protective of coastal resources shall be selected. To this end, the Plan shall require that the Gabrieleño-affiliated representatives of Native American Tribes listed on an updated Native American Heritage Commission (NAHC) contact list for the area be invited to be present and monitor all ground-disturbing activities and arrange for any invited Tribal representative that requests to monitor and a qualified archaeological monitor to be present to observe project activities with the potential to impact archaeological and/or tribal cultural resources. The monitor(s) shall have experience monitoring for archaeological resources of the local area during excavation projects, be competent to identify significant resource types, and be aware of recommended Tribal procedures for the inadvertent discovery of archaeological resources and human remains.

    c. There shall be at least one pre-grading conference with the project manager and grading contractor at the project site to discuss the potential for the discovery of archaeological or tribal cultural resources. Prior to grading operations, a copy of all archaeological documents and reports shall be provided to the Native American monitors.

d. The permittee shall provide sufficient archaeological and Gabrieleño-affiliated Native American monitors to assure that all project grading and subsurface construction activities that have any potential to uncover or otherwise disturb cultural deposits are monitored at all times.

e. If any archaeological or cultural deposits, are discovered, including but not limited to skeletal remains and grave-related artifacts, artifacts of traditional cultural, religious or spiritual sites, or any other artifacts relating to the use or habitation sites, all construction shall cease. Should human remains be discovered on-site during the course of the project, immediately after such discovery, the on-site archaeologist and Native American monitor(s) shall notify the County Coroner within 24 hours of such discovery, and all construction activities shall be temporarily halted until the remains can be identified. The Native American group/person deemed acceptable by the NAHC shall participate in the identification process, pursuant to Public Resources Code Section 5097.98. Should the human remains be determined to be that of a Native American, the permittee shall comply with the requirements of Section 5097.98. Within five (5) calendar days of such notification, the permittee shall notify the Executive Director of the discovery of human remains. Treatment of any archaeological or cultural resource discovery shall be determined by the appropriate monitor(s) or the Most Likely Descendant (MLD) when state law mandates the identification of an MLD. If there is disagreement amongst monitors regarding the treatment of any resource discovery, the treatment that is the most protective of coastal resources shall prevail. Significance testing may be carried out only if acceptable to the affected Native American Tribe(s), in accordance with the attached "Cultural Resources Significance Testing Plan Procedures" (Appendix B). The permittee shall report all discovered resources as soon as possible, by phone and/or by email to the Executive Director. The permittee shall provide the significance testing results and analysis to the Executive Director, if applicable. A permittee seeking to recommence construction activities shall follow the procedures set forth in Appendix B.

f. If the Executive Director determines that the discovery is significant or that the treatment method preferred by the affected Native American tribe(s) is in conflict with the approved development plan, the permittee shall seek an amendment from the Commission to determine how to respond to the discovery and to protect both those and any further cultural deposits that are encountered. Development shall not recommence until an amendment is approved, and then only in compliance with the provisions of such amendment.

g. The Permittees shall implement the approved Archaeological and Tribal Cultural Resources Treatment and Monitoring Plan in accordance with this condition. Any proposed changes to the final approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Coastal Commission approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.

5. Habitat Restoration and Monitoring Plans.

a. **Phase 1 HRMP**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two copies of a final Habitat Restoration and Monitoring Plan (HRMP) for Phase 1 prepared by a qualified restoration ecologist to the Executive Director for review and written approval. The final Phase 1 HRMP shall be in substantial conformance with the Draft Phase 1 HRMP dated December 2024. Additional components shall include, at a minimum:

i. A comprehensive implementation and monitoring schedule in graphical form.

ii. **Success criteria**.

1. Final and interim criteria for vegetation cover and invasive cover in years 1, 3, and 5 shall be provided. These criteria shall be quantitative and supported with a clear empirical basis (i.e., relative to reference sites and/or fixed according to published technical literature appropriate for the local area).

2. Interim and final success criteria for hydrology in the as-built report and years 1, 3, and 5 shall be provided. The hydrology success criteria shall, at a minimum, confirm the presence of tidal water activity in primary and secondary wetland channels and assess erosion that would significantly impact inlets/outlets and habitat areas.

3. As-built and year 5 success criteria for habitat and elevation mapping shall be provided. The criteria description shall include a table of elevation ranges in feet for subtidal, low, mid, and high marsh, transitional wetland, and uplands using NAVD88 or NGVD29 datums as comparable in the final plans. The description and table of elevation ranges may include target post-construction and target 5-year ranges, as appropriate. The criteria shall also require a quantitative assessment of the acreage of each restored habitat type and comparison to the proposed restored habitat acreages as described in the HRMP.

4. Designation of success metrics and criteria requested as a part of Commission permit approval and those monitored by the Project for other efforts in narrative and applicable tables.

iii. A list of potential nurseries to source container plants.

iv. **Consistency with the Final Initial Study/Mitigated Negative Declaration**. The Phase 1 HRMP shall demonstrate consistency with the avoidance, minimization, and mitigation measures in the Final IS/MND. Specifically, all biological measures that must be incorporated into the restoration design shall be detailed and finalized as a part of this HRMP. Success criteria for rare plants shall adhere to the proposed mitigation criteria for rare plants listed in the Final IS/MND. Any measures modified via consultation with regulatory agencies shall be incorporated into the text of the HRMP and submitted to the Executive Director within 20 working days of approved modification.

v. **Reporting Requirements**. Monitoring of and reporting on the restoration site shall occur during Years 1, 3, and 5 starting the year after the restoration project has been installed. All reports shall be prepared by a qualified restoration ecologist and be submitted to the Executive Director for review and approval, no later than December 31st of each year.

1. **Monitoring Years 1 and 3.** Beginning the year after the restoration project has been installed, monitoring reports shall be due 1 year and 3 years post-construction, including photos taken from fixed points; assessment relative to interim success criteria; a work plan for the subsequent year; and specific recommendations to adaptively manage the effort and facilitate mitigation success if interim success criteria are not being met.

2. **Final Monitoring Report.** A final monitoring report shall be submitted at the conclusion of all restoration and monitoring efforts and include all Year 5 monitoring activities in addition to a summary of all prior reports; provide a detailed timeline of the overall progress and success; and include sufficient detail to evaluate comprehensive restoration success with the specified goals, objectives, and success criteria set forth in the approved HRMP.

b. **Phase 2 HRMP. AT LEAST 180 DAYS PRIOR TO PHASE 2 CONSTRUCTION,** the Permittee shall submit two copies of a final Habitat Restoration and Monitoring Plan (HRMP) for Phase 2 prepared by a qualified restoration ecologist to the Executive Director for review and written approval. The final Phase 2 HRMP shall include, at a minimum, each of the following components:

i. **Timing of Phase 2 Implementation.** Phase 2 of the project shall not start construction until all as-built and monitoring reports required within the 5 year monitoring period post construction of Phase 1 are submitted and approved by the Executive Director. That is, if Phase 1 is in year 4 in the year that Phase 2 will start construction, the permittee must have submitted and approved the Phase 1 as-built report, Year 1 monitoring report, and Year 3 monitoring report prior to construction of Phase 2.

ii. The Phase 2 HRMP shall be consistent with the avoidance, minimization, and mitigation requirements provided in the Final IS/MND. Specifically, all biological measures that must be incorporated into the restoration design shall be detailed and finalized as a part of this HRMP. Any measures modified via consultation with regulatory agencies shall be incorporated into the text of the HRMP and submitted to the Executive Director within 20 working days of approved modification.

iii. **Introduction.** Description of the HRMP purpose including an overview of the proposed project associated with the HRMP; identification of the general restoration strategies to be used; and the proposed restoration locations.

iv. **Restoration Goals and Objectives.** Statement of restoration goals, including the desired habitat type(s), major vegetation components, and sensitive species and wildlife support functions; description of the desired habitat with rationale, to be based on a high functioning reference site where feasible and alternatively, derived from literature describing either the site's historic conditions or "typical" regional habitat conditions; specific, actionable objectives to support stated goals; and a detailed narrative and graphical timeline laying out all major activities including any outstanding preliminary work such as surveys, site preparation, restoration implementation including revegetation activities, interim and final monitoring periods, etc. For any restoration wetlands, hydrological considerations shall also be included.

v. **Description of Existing Habitat(s).** Separate sections describing each of the impacted native habitat types; final figures, maps, and related information depicting existing ecological resources; and description and justification of any restoration or construction-related impacts to special status plants or wildlife.

vi. **Design Plans and Construction Methods.** Specification of final restoration site design and construction methods consistent with identified goals and objectives, including but not limited to:

1. **Restoration Design**. Detailed plans showing final topography (grading), vegetation communities, and any other significant features characteristic of the intended habitat, and how these connect to the surrounding environment. Future conditions shall be taken into consideration, including the surrounding natures and intensities of land use, ongoing development,

climate disruption, and other potential stressors, and restoration design aim to promote ecological resilience.

2. **Site Preparation.** Methods and plans for salvage of any plant and/or seed material (including collection from impact areas, storage, relocation, and/or reestablishment); salvage of any topsoils to be stock-piled and reused in the restoration area; any demolition, debris removal, grading or other landform alteration; decompaction, soil amendment, or other substrate-affecting activities; erosion control measures; and treatment of invasive species.

3. **Best Management Practices.** Detailed list of all BMPs that will be implemented as part of project implementation, including triggers for further or remedial action.

4. **Revegetation Plans.** Details on plant palettes; stocks and seed mixes; material sourcing including verification of local and genetically appropriate nature; any proposed irrigation including rationale, method, and schedule; and provisions for removal of any temporary infrastructure following plant establishment.

vii. **Invasive Species Control.** Provision for continued control of all California Invasive Plant Council Inventory species listed as high or moderately invasive and description of monitoring and control methods. If any herbicide is proposed for potential use, rationale for why it would constitute the least environmentally damaging alternative and detail on the specific product(s), including adjuvants, that would be used, including its certification by the California Department of Pesticide Regulation and allowance for the intended application. This section shall not conflict with the approved IPM for Phase 2.

viii. **Monitoring Plan.** Detailed plan for quantitatively monitoring the condition and progress of the restoration site during both the 5-year restoration phase; restoration success relative to set criteria, as informed by qualitative or quantitative sampling; triggers for adaptive management action; and reporting. Specifically:

1. **Monitoring Frequency.** During the initial phase of no less than five (5) years, quantitative monitoring should be conducted at least during Years 1, 3, and 5 during a specified window.

2. **Monitoring Areas.** The monitored areas for the Phase 2 HRMP shall be limited to areas within the construction footprint of Phase 2 and any vegetation areas in Phase 1 potentially altered by the implementation of Phase 2. Vegetation areas in Phase 1 that may be altered by the implementation of Phase 2 shall be mapped and described along with monitoring frequency, timing, and adaptive management actions in the

Phase 2 monitoring plan and remain subject to the final success criteria in Phase 1 in the final monitoring report for Phase 2. Where the vegetation areas in Phase 1 are planned to shift in type due to the implementation of Phase 2, those areas shall be fully incorporated into the Phase 2 HRMP subject to all conditions of that plan.

3. **Success Criteria.** Final success criteria will be supported by interim criteria. Interim criteria are intended to serve as benchmarks and guide adaptive management, the final critera will enable evaluation of restoration success. Criteria shall have a clear empirical basis (i.e., reference sites and/or published technical literature appropriate for the local area) and generally include metrics of target vegetation communities (e.g., species composition, cover, structure, diversity, and/or presence of major structure-producing and habitat-defining species); physical parameters such as topography, bare substrate, and hydrology; and target wildlife support functions or usage. Criteria may be fixed values where there is a strong empirical basis, but, where feasible, should be relative to high-functioning reference sites to account for environmental variability. If used, reference site selection shall use the framework of the Wetlands Recovery Project Regional Monitoring Program, and reference sites shall be identified, sampled, and quantitatively described as a component of the monitoring plan. Invasive species ranked by the Cal-IPC as “high” shall not exceed a total of 5% absolute cover in any habitat with a maximum threshold of 2% cover in the low marsh, and all ranked invasives (high, moderate, and limited) shall not exceed a total of 10% relative cover in any habitat.

4. **Performance Assessment.** Methods for judging restoration success shall include supporting rationale for their selection and be specified in terms of the type(s) of comparison, including whether relative to fixed criteria or reference sites; identification of any proposed reference sites; test(s) of similarity; specification of the maximum allowable difference or effect size between the restoration results and the targeted results for each success criterion, based on a clear rationale and ecological principles.

5. **Sampling Design.** The field sampling program shall be designed in conjunction with the success criteria and selected methods of assessment and relate logically to these. Where feasible, the project should use the wetland monitoring protocols from the Wetlands Recovery Project Regional Monitoring Program. The sampling design and methods shall provide sufficient detail to enable an independent scientist to duplicate them, including a description of the project-specific elements from each protocol selected by the permittee. Sampling protocols may be appended at the end of the Phase 2 HRMP.

ix. **Reporting.** Monitoring of and reporting on the restoration site shall occur during Years 1, 3, and 5 starting the year following the installation of the restoration project. All reports shall be prepared by a qualified restoration ecologist and be submitted to the Executive Director for review and approval, no later than December 31st of each year.

1. **Monitoring Years 1 and 3.** Beginning the year after the restoration project has been installed, monitoring reports shall be due 1 year and 3 years post-construction, including photos taken from fixed points; assessment relative to interim success criteria; a work plan for the subsequent year; and specific recommendations to adaptively manage the effort and facilitate mitigation success if interim success criteria are not being met.

2. **Final Monitoring Report.** A final monitoring report shall be submitted at the conclusion of all restoration efforts and include all Year 5 monitoring activities in addition to a summary of all prior reports; provide a detailed timeline of the overall progress and success; and include sufficient detail to evaluate comprehensive restoration success with the specified goals, objectives, and success criteria set forth in the approved HRMP.

x. **Adaptive Management.** If long-term management/maintenance activities indicate that there has been substantial decline in the condition of the restoration site, adaptive management shall be implemented to resolve this issue(s) to the extent feasible.

xi. **Partnering Agencies and/or Subcontractors.** The Permittee remains responsible for meeting all CDP terms and conditions, including funding of the full cost and implementing all measures to minimize and fully mitigate project impacts to plants and wildlife. If the Permittee elects to enter into a binding agreement with a third-party agency or land management entity to carry out all or a portion of these HRMP requirements, the Permittee shall submit draft agreement to the Executive Director for review and approval prior to finalizing any such agreements.

xii. **Consistency.** The Permittee or the approved third-party entity shall undertake development in accordance with the approved HRMP. The Executive Director may approve minor adjustments to these terms if the Executive Director determines that the adjustments (1) are de minimis in nature and scope, (2) are reasonable and necessary, (3) do not adversely impact coastal resources, and (4) do not legally require an amendment.

6. Integrated Pest Management Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit an integrated pest management plan (IPM) for the review and approval by the Executive Director. The IPM shall be in substantial conformance with pesticide use described in the Phase 1

Habitat Restoration and Monitoring Plan. The IPM shall incorporate integrated pest management principles including the long-term prevention and management of pests using the most effective strategies that provide the least risk to human health and the environment.
The permittee shall comply with the following requirements:

a. The plan shall outline, at a minimum, the IPM goals, strategies, documentation and notification, responsible parties, applicable project phases, steps and details to the removal of vegetation, timing and frequency, and approved chemical herbicides and adjuvants.

b. A California licensed Pest Control Advisor (PCA) must provide written recommendations regarding the appropriate herbicides and adjuvants for the respective circumstances and species. The State product registration number(s) should be provided along with a complete description of how they will be used, including criteria and limits for if/why/how (including frequency and total number of applications), considerations for pollinators, and triggers for adaptive management or remedial actions.

c. Herbicide use shall be restricted to the use of aquatic-safe herbicides registered in California by the California Department of Pesticide Regulation appropriate for the respective task and shall explicitly comply with label instructions. Adjuvants shall be limited to crop oil concentrates or modified seed oils. Adjuvants and herbicides shall be applied in complete conformance to the label instructions for intended use and shall be monitored on site by Qualified Licensed Applicators or PCAs. All applicable best management practices shall have been applied to avoid wildlife exposure to herbicides in the impact area.

d. All personnel administering herbicides must have current, documented herbicide application training (Qualified Applicator Licenses). Personnel must wear all personal protective equipment required by law and follow all label directions and precautions. Any exposure to herbicides by personnel will be immediately reported to the Executive Director.

e. The project Restoration Ecologist(s), Biological Monitor(s), or other qualified biologist with the Los Cerritos Wetland Authority shall conduct a survey of the project site each day prior to the use of herbicide to confirm the impact area for herbicide application that day and determine whether any rare vegetation with a California Rare Plant Rank of 2B.1 or more rare is present. Rare vegetation shall be clearly delineated and protected on the project site with fencing or survey flags. In the event that herbicide application occurs within 1 foot of rare vegetation, the applicant shall either: (a) remove invasive, non-native vegetation by hand (woody plants not removable by hand shall be cut to a height of 6 inches or less, and the stumps painted with the appropriate herbicide), or (b) utilize a

plastic sheet/barrier to shield rare vegetation or surface water from any potential overspray that may occur during the use of herbicide.

f. In no instance shall spray herbicide application occur if wind speeds on site are greater than 5 mph or 48 hours prior to predicted rain. In the event that rain does occur, herbicide application shall not resume again until 72 hours after rain. Herbicide applications shall be timed to avoid rainfall events.

g. Use, application, storage, safety, and disposal of all herbicides and adjuvants shall comply with the requirements of the California Department of Pesticide Regulation, California State Water Resources Control Board, state and federal OSHA regulations, and manufacturer instructions on product labels, Material Safety Data Sheets, and current practices.

h. Herbicide mixing and preparation shall occur at least 100 ft. from all water bodies. Areas where herbicide use is employed will also be marked with a non-toxic material (e.g., Blazon, Turfmark).

Any proposed changes to the approved IPM shall be reported to the Executive Director. No changes to the approved IPM shall occur without a Commission amendment to this Coastal Development Permit unless the Executive Director determines that (1) are de minimis in nature and scope, (2) are reasonable and necessary, (3) do not adversely impact coastal resources, and (4) do not legally require an amendment. If the approved IPM applies only to one of the two project phases, an IPM for the other phase consistent with the above conditions shall require separate authorization as an amendment to this permit as determined appropriate by the Executive Director.

7. Construction Best Management Practices. BY ACCEPTANCE OF THIS PERMIT, the applicant agrees to comply with the following construction phase related requirements**:**

a. **Pre-Construction Surveys for Special Status Species**. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF EACH PHASE, pre-construction surveys shall be conducted by a qualified biologist approved by the Executive Director for special-status plant and wildlife species and nesting birds protected under the Migratory Bird Treaty Act and California Fish and Wildlife Code Section 3503 and to document the boundaries of existing wetlands and other sensitive habitat areas identified by the biologist. Surveys shall incorporate the following:

i. Appropriate survey methods and timeframes, including protocol-level surveys for special-status plants and wildlife, shall be established by the consulting qualified biologist and referenced in submitted survey results.

1. All surveys for special-status plants shall be performed during the typical peak blooming period of each species in the blooming season immediately prior to construction.
2. All surveys for special-status wildlife shall occur within the project site and an appropriate buffer outside the project site for each species (300 feet for birds and 500 feet for raptors and monarchs). Further, surveys for special-status wildlife shall occur no more than 14 days prior to construction, except in cases where the protocol-level survey overrides this requirement and shall be repeated after work on a project site ceases for a period of 10 calendar days or more.

ii. Pre-construction surveys for Southern tarplant (*Centromadia parryi* ssp. *australis*) shall include high-resolution GPS data with the locations and counts of individual plants. This data shall be mapped, tallied, and reported to the Executive Director for use in meeting the project's mitigation requirements for this subspecies.

iii. Pre-construction, protocol-level surveys for special-status species shall include, but are not limited to, estuary seablite, salt marsh bird's-beak, Coulter's goldfields, Ventura marsh milk-vetch, monarchs (pop. 1), Belding's savannah sparrows, light-footed Ridgway's rails, California least terns, western snowy plovers, burrowing owls, and white-tailed kites. If these or any other listed species are encountered during a pre-construction survey, the Permittee shall consult with the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW) and the Executive Director before continuing with work.

b. **Nesting Birds**. All construction shall be limited to the non-breeding season (September 1 through December 31) to the extent possible. If construction must occur during this time, **NO MORE THAN 7 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES,** a qualified biologist, approved by the Executive Director, shall conduct a pre-construction survey for the presence of nesting birds.

i. If an active nest of any bird including a Federal or State-listed threatened or endangered bird species, bird species of special concern, or any species of raptor is identified during such pre-construction surveys, or is otherwise identified during construction, the Permittee shall notify all appropriate State and Federal agencies within 24 hours and shall develop an appropriate action plan specific to each incident that shall be consistent with any recommendations of those agencies. The Permittee shall notify the Executive Director in writing within 24 hours of identifying such a nest and consult with the Executive Director regarding the determinations of the State and Federal agencies.

ii. If any active nest is located within 300 feet of construction activities (or within 500 feet for raptors), the Permittee must ensure that noise levels do not exceed 65 dB at the nest and that nesting birds are not disturbed by construction-related activities. The Permittee shall submit a plan to the Executive Director, for review and written approval, demonstrating how construction activities will be modified to avoid, minimize and mitigate impacts to nesting birds. Such measures may include, but are not limited to, buffer zones around nests, sound blocking BMPs, limits on duration of construction activities, and limits on the location of construction-related machinery and activity. If construction activity noise levels exceed a peak of 65 dB at the nest site(s), sound mitigation measures such as sound shields, blankets around smaller equipment, use of mufflers, and minimizing the use of back-up alarms shall be employed. If these sound mitigation measures do not reduce noise levels, construction within 300 ft. (500 ft. for raptors) of the nesting areas shall cease and shall not commence again until either new sound mitigation can be employed or until the nest(s) is vacated, juveniles have fledged and there is no second attempt at nesting.

iii. If work on a project site ceases for a period of 7 calendar days or more, a new pre-construction survey(s) for nesting birds, including protocol-level surveys for special status species and raptors, shall be conducted prior to continuing with construction or decommissioning activities.

c. Prior to the commencement of any project activities, the limits of the work areas and staging areas shall be delineated in cooperation with a qualified biologist, limiting the potential area affected by project activities and in cooperation with known tribal resource areas. All vehicles and equipment shall be restricted to pre-established work areas and haul routes and to established or designated staging areas. Construction vehicles shall be restricted to designated routes. Construction equipment and materials shall be stored only in designated staging and stockpiling areas, and equipment shall not be in contact with any receiving waters or environmentally sensitive habitat areas at any time.

d. During project activities, all trash and debris shall be properly contained, removed from the worksite, and disposed of on a daily basis, and no tools or other materials shall be stored at the work site overnight. No materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, wetlands, receiving waters or a storm drain, or be subject to wind, rain, or erosion and dispersion. Any debris inadvertently discharged into coastal waters shall be recovered immediately and disposed of consistent with the requirements of this coastal development permit.

e. Best Management Practices (BMPs) shall be implemented to control erosion from any disturbed areas and to prevent sediment and potential pollutants from entering coastal waters and/or sensitive habitat during approved project grading activities. All temporary erosion control materials shall be comprised of bio-degradable materials (natural fiber, not photo-degradable plastics) and must be removed when no longer needed and plants are established.

f. All BMPs shall be maintained in a functional condition throughout the duration of restoration activities.

8. Public Access Management Plan. WITHIN ONE YEAR OF ISSUANCE, the Permittee shall submit for Executive Director review and approval a Public Access Management Plan (Access Plan). The Access Plan shall clearly describe the manner in which general public access associated with the approved project is to be provided and managed, with the objective of maximizing public use and enjoyment of the public access areas of the site area including the Stewardship Site Plan improvements (i.e., car and bike parking areas, trails, wildlife viewing areas, interpretive signage, gates and fencing) and Tribal Cultural Resource Plan improvements (i.e., gathering space, story porch, harvest garden and or harvest areas). The Access Plan shall be implemented, and all associated development completed no later than 6-months after Phase 1 final grading, revegetation, and construction activities. The Access Plan shall be substantially in conformance with the plans submitted to the Coastal Commission as shown and described in Exhibit 2, and shall at a minimum include the following:

a. Clear Depiction of Public Access Areas and Amenities. All public access areas and amenities, including all of the areas and amenities described above, shall be clearly identified on an exhibit within the Access Plan (including with hatching and closed polygons so that it is clear what areas are available for public access use and which are available for tribal cultural uses).

b. Public Access Signs/Materials. A description of all signs, handouts, brochures, and any other project elements that will be used to educate, facilitate, manage, and provide public access to the approved project, including identification of all public education/interpretation features that will be provided on the site (e.g., educational displays, interpretive signage, etc.), shall be provided. Public education/interpretive materials shall be provided in English and Spanish. Sign details showing the location, materials, design, and text of all public access signs (including the public access use hours described in **Special Condition 9(d)**) shall be included in the Access Plan. At a minimum, public access signs shall be placed in the parking area and adjacent to Pacific Coast Hwy for conspicuous viewing to alert the traveling public of the site's public access offerings. The signs shall be designed to provide clear information without impacting public views and site character.

c. Public Access Use Hours. Public access areas and amenities, including all parking areas, trails, and viewing platforms, shall be open to the general public free of charge at least between sunrise and sunset every day, except when storms or other hazards present imminent risk of flooding or other significant risks to health and safety.

d. Access Restrictions. The Access Plan shall identify the type and location of any signs, gates, fencing, bollards, or other such measures necessary to prevent unauthorized access areas. All such measures shall be minimally visually intrusive and shall not impede access to the areas open for public use and enjoyment as identified in subsection (a).

e. Public Access Areas and Amenities Maintained. The public access components of the project shall be maintained in their required and approved state. In the event that the approved public access amenities (including but not limited to the trails, parking lot, wildlife viewing areas, etc.) are threatened with damage or destruction from coastal hazards, or become a hazard, or are damaged or destroyed by coastal hazards, such amenities shall be reconstructed with due diligence and speed, and with minimum disruption to continued public use (and/or relocated inland as necessary to provide long term stability). Prior to such relocation/reconstruction, the Permittee shall submit two copies of a Reconstruction/Relocation Plan to the Executive Director for review and approval. If the Executive Director determines that an amendment to this CDP or a separate CDP is legally required, the Permittee shall immediately complete and submit the required application. The Reconstruction/Relocation Plan shall clearly describe the manner in which such amenities are to be reconstructed (and relocated as applicable), and shall be implemented immediately upon Executive Director approval or approval of the CDP or CDP amendment application, unless such CDP or CDP amendment identifies a different timeframe for implementation.

f. Programming and Outreach. The Access Plan shall identify the goals, methods, and programs to increase equitable public access and environmental education for under-resourced communities and youth in the Los Angeles and Orange Counties area. This may include expanding existing programming and outreach associated with the Los Cerritos Wetlands Authority's stewardship, community engagement, and education programs, and may also include new programming and outreach that takes advantage of the unique characteristics of the site.

All requirements above and all requirements of the approved Public Access Management Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved Public Access Management Plan.

9. Tribal Access Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit a Tribal Access Plan for the South LCW project

area written in collaboration with the Los Cerritos Wetlands Authority and the affected tribal governments, for the review and written approval of the Executive Director. The Plan shall include but is not limited to, the names of Tribes that will have access to the area for religious and ceremonial gatherings, resource and material gathering, and other tribal gatherings, a description of the type and frequency of activities permitted on the site and a discussion of how these activities will be carried out in a manner that is protective of the native habitat and species, and a description of whether and how the area will be closed off to the general public while Tribes are accessing the area for certain described activities. Tribal access shall be maintained in perpetuity in conformance with the approved Tribal Access Plan unless the Commission amends this permit or the Executive Director determines that no amendment is legally required.

10. **Final Contaminated Materials Contingency Plan**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit a Final Contaminated Materials Contingency Plan for review and approval by the Executive Director. The Plan shall be in substantial conformance with Draft Contaminated Materials Contingency Plan prepared by Moffatt & Nichol, dated October 27, 2023 but revised to include provisions for submittal of a final report documenting all actual excavation surface areas, total volumes, and a description and results of all final soil sample testing results, identification of appropriate clean-up thresholds that are protective of adjacent coastal waters and habitats and reflect the ultimate use of the site as tidally-influenced wetlands, and avoidance and minimization measure to ensure the protection of salt marsh areas and the surrounding coastal waters. If sump excavation activities result in unanticipated impacts to wetlands, the Permittee shall apply to amend this permit to address additional wetland impacts, unless the Executive Director determines a permit amendment is not legally necessary. The final Plan shall indicate that it is consistent with Regional Water Quality Control Board requirements and developed in consultation with other appropriate agencies, including, but not limited to the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife.

    The Permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director provides a written determination that no amendment is legally required.

11. **Other Agency Approvals.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director a copy of a permit issued by U. S. Army Corps of Engineers, CA Department of Fish and Wildlife, CA State Lands Commission, and Santa Ana Regional Water Quality Control Board, or letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the resource agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director issues a written determination

that no amendment is legally required.

12. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this CDP, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns: (i) that the site is subject to hazards from episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal and riverine flooding, and the interaction of same; (ii) to assume the risks to the Permittee and the property that is the subject of this CDP of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims due to such hazards), expenses, and amounts paid in settlement arising from any injury or damage; (v) that sea level rise could render it difficult or impossible to provide services to the site (e.g., maintenance of roadways, utilities, sewage or water systems), thereby constraining allowed uses of the site; (vi) that the boundary between public land (tidelands) and private land may shift with rising seas, the development approved by this permit may eventually be located on public trust lands, and the development approval does not permit encroachment onto public trust land; (vii) any future encroachment must be removed unless the Coastal Commission determines that the encroachment is legally permissible pursuant to the Coastal Act and authorizes it to remain, and any future encroachment would also be subject to the State Lands Commission's (or other trustee agency's) leasing approval; and (viii) that the development may be required to be removed or relocated and the site restored if it becomes unsafe or if removal is required pursuant to the Coastal Act.

IV. FINDINGS AND DECLARATIONS

A. Project Location, Description and Background

The proposed Southern Los Cerritos Wetlands Restoration Project is located within the City of Seal Beach within the northwestern portion of Orange County. The City of Seal Beach is bounded by the City of Long Beach to the west, the City of Los Alamitos and the neighborhood of Rossmoor to the north, the Pacific Ocean to the south, and the cities of Huntington Beach, Westminster, and Garden Grove to the east. Two major waterways are present in the vicinity: the San Gabriel River and the Haynes Cooling Channel (**Exhibit 1**). The Southern Los Cerritos Wetlands 103.5-acre site is part of the larger 503-acre Los Cerritos Wetlands Complex in the cities of Long Beach and Seal Beach (**Exhibit 2**). The proposed Restoration Project is part of a larger restoration program for the overall Los Cerritos Wetlands Complex.

The proposed project site (**Exhibit 3**) is 103.54 acres of land and water on the border of Los Angeles and Orange Counties entirely within the City of Seal Beach and is bounded by the Haynes Cooling Channel to the northwest, PCH to the west, oil extraction fields to the north, residential and industrial developments to the east, and residential development to the south. The project boundary is composed of two parcels: a 100-acre parcel owned by the applicant, the Southern Los Cerritos Wetlands Authority (LCWA) known as the South LCWA Site (previously known as the Hellman Ranch Lowlands) and an approximately 3.54 parcel owned by the State Lands Commission and leased to the LCWA under a long-term non-exclusive lease agreement for its management. A portion of the South CLWA Site is comprised of southern coastal salt marsh habitat, while a majority of the remaining area is occupied by non-native plant species alliances. Mixed in with this vegetation are features such as a tidal creek, salt flats, tidal flats, utilities, a developed asphalt roadway, dirt maintenance roadways, dumped fill, and remnants various human-made structures that have accumulated over time. The State Lands Parcel Site is comprised of a mix of tidal wetland in the northern portion of the property where the culvert connects to the San Gabriel River, concrete pad that is approximately 0.83 acres in size other developed and covered by degrading asphalt that is being invaded by various ruderal plant species.

Two major channels are present in the vicinity of the project site: the San Gabriel River and the Haynes Cooling Channel (**Exhibit 3**). Only Hellman Channel, a remnant historic tidal channel, is present within the project site area. The channel is a natural, soft bottom 4,161 feet long waterway connected to and gravity fed from the San Gabriel River through a small culvert with a tidal gate; it is between 1-2 feet deep, varying in width from 4-feet at its narrowest point to 15-feet at its widest. Hellman Channel was likely constructed circa 1928 and originally used for irrigation purposes on the historic Hellman Ranch. Hellman Channel provides hydrology to the site and supports the existing remaining salt marsh habitat.

Existing public access is restricted within the project site boundary. A gated and locked access road from 1st Street provides occasional guided access (docent led tours of the wetlands by LCWA staff) to the restricted areas within the site. A small public parking lot located off of Seal Beach Boulevard provides access to the Hellman Ranch Trail (not on the subject site). This trail runs west and north between the Heron Pointe private residential community and the South Area and includes interpretive signage, benches, and a gathering area. The north end of the trail ends at a locked gate at the boundary of the oil operations. The Hellman Ranch trail also connects west to the Gum Grove Trail in municipal Gum Grove Park and is served by a second, small, public parking area accessed from Avalon Drive along the project site's southern boundary. Gum Grove Trail and Hellman Ranch Trail combine to provide approximately a 1-mile-long trail just outside the Project site. The City of Seal Beach owns Gum Grove Park, and a private residential community owns Heron Pointe. There are no trails open to the general public onsite currently.

The site is located entirely within the City of Seal Beach's coastal zone. The Seal Beach General Plan designates the land use as Community Facilities, Industrial – Oil

Extraction, Open Space, and Commercial Service and the Seal Beach Zoning Map designates the site Open Space Natural. The site also falls within the City's Hellman Ranch Specific Plan; however, the Specific Plan has not been certified by the Coastal Commission. Furthermore, the City of Seal Beach does not have a certified Local Coastal Program (LCP) at this time.

The applicant, LCWA, is a governmental entity developed in 2006 by a joint powers agreement between the State Coastal Conservancy, the Rivers and Mountains Conservancy, and the cities of Seal Beach and Long Beach. The mission of the LCWA is to provide for a comprehensive program of acquisition, protection, conservation, restoration, maintenance and operation, and environmental enhancement of the Los Cerritos Wetlands area consistent with the goals of flood protection, habitat protection and restoration, and improved water supply, water quality, groundwater recharge, and water conservation. In 2023, the LCWA received approximately $32.5 million in grant funding to implement Phase 1 of the proposed Southern Los Cerritos Wetlands Restoration.

Background

Until the late 1800s, the wetlands within the project area and across the Los Cerritos Wetlands Complex, spanned approximately 2,400 acres, and consisted of a network of tidal channels, vegetated wetlands, and upland areas. Ancestors of the existing Gabrieleño/Tongva California Native American Tribes inhabited the area since time immemorial and the Tribes continue to access the general area for resource collection and cultural use. The general area is also important to other indigenous communities that visited and visit the culturally significant area. Historically, the Los Cerritos Wetlands Complex was almost entirely tidal wetland, with a few natural streams and intertidal flat channels. Tribal communities were pushed out of the area by settlers and state and federal officials and, in the late 1800s, the Los Cerritos Wetlands Complex began to undergo significant alterations due to cattle and beet farming, the demands of a growing population, and oil extraction. Oil was first discovered at the Seal Beach Oil Field in 1926 and operations continue today. Oil production operations plus the channelization of the San Gabriel River, resulted in substantial dredging, and fill of the Los Cerritos Wetlands Complex. The Hellman Retained Site is an active oil field with substantial oil operation infrastructure (pipelines, pumps, tanks, and roadways) located north of the subject Southern Los Cerritos Wetlands project site but still within the greater Los Cerritos Wetlands Complex. There are 43 active oil wells and 11 idle oil wells on the Hellman Retained Site, which is owned and operated by Hellman Properties, LLC. Historically, it was primarily coastal salt marsh habitat; today the parcel is composed mostly of ruderal uplands with no tidal connection. Past surveys indicate that the Hellman Retained Site may host several special status plant species. Access to the site is available via a gated private road accessed by 1st Street. LCWA aims to restore the Hellman Retained Site sometime in the future when oil operations cease.

Over time, coastal salt marsh habitat was converted primarily to ruderal uplands with no tidal connections when dredge material associated with the excavation and concrete channelization of the San Gabriel River Channel and the Haynes Cooling Channel were spread within the Southern Los Cerritos Wetlands project area. The Haynes Cooling Channel is a waterway adjacent (northwest) of the project site used by the Haynes Generating Station to supply water from the Pacific Ocean via seven culverts in the Alamitos Bay Marina to cool the power plant through a method called once-through cooling. Once the water is used, it is discharged into the San Gabriel River slightly upstream of where the river crosses under 2nd Street. The Haynes Generating Station, owned and operated by the City of Los Angeles Department of Water and Power (LADWP), is a natural gas and steam power plant that was built in the mid-1960s. The Haynes Generating Station is undergoing a modernization project that would eliminate the use of ocean water to cool the power plant by 2029. Once the modernization project is completed, the Haynes Cooling Channel will be decommissioned from use by the Haynes Generating Station. The applicant proposes to enter into an agreement with DWP to use the Haynes Cooling Channel as the main source of seawater for the project site for Phase 2 of this project. Currently, the Hellman Channel, a small, muted remnant historic tidal channel connects directly to the San Gabriel River providing hydrology to the site and supports the existing remaining salt marsh habitat. The Hellman Channel historically served as the drainage ditch across this area of the former Hellman property.

Project Description

The 103.5-acre project site, the Southern Los Cerritos Wetlands, is part of the larger 503-acre Los Cerritos Wetlands Complex and is part of a larger restoration program planned for the overall Los Cerritos Wetlands Complex (**Exhibit 2**). The goals of the larger Los Cerritos Wetlands Complex Restoration Program, including the South LCW site, are:

1. Restore tidal wetland processes and functions to the maximum extent possible.
2. Maximize contiguous habitat areas and maximize the buffer between habitat and sources of human disturbance.
3. Create a public access and interpretive program that is practical, protective of sensitive habitat and ongoing oil operations, and is economically feasible.
4. Incorporate phasing of implementation to accommodate existing and future potential changes in land ownership and usage, and as funding becomes available.
5. Strive for long-term restoration success.
6. Integrate experimental actions and research into the project, where appropriate, to inform restoration and management actions for this project.

The first major step in the design process for the restoration of the Los Cerritos Wetlands Complex was the development of the Los Cerritos Wetlands Final Conceptual Restoration Plan (CRP; Moffatt & Nichol, 2014). The CRP is a restoration alternatives analyses report that provided the LCWA with a roadmap for habitat enhancement and improved public access for the Los Cerritos Wetlands Complex. Adopted by the LCWA Governing Board in August 2015, the CRP identified goals and objectives and

restoration design alternatives under a range of sea-level rise scenarios. The report was prepared with input by the LCWA Steering Committee (made up of staff representing agencies of the LCWA joint powers authority), a Technical Advisory Committee (comprised of representatives of twenty (20) resource and permitting agencies, and research groups covering federal, state, regional, and local jurisdictions), and the public (based on input during six (6) community workshops).

In 2017, LCWA received funding to further the design of the alternatives identified in the CRP with the development of a program-level restoration design, to prepare a Programmatic EIR (PEIR), and to prepare a Habitat Restoration Plan. The PEIR was certified by the LCWA Governing Board in January 2021, and the Los Cerritos Wetlands Habitat Restoration Plan was subsequently adopted in July 2021. The overall Los Cerritos Wetlands Complex Restoration Program and alternatives were identified based on input from the LCWA Steering Committee (made up of staff representing agencies of the LCWA joint powers authority), a Technical Advisory Committee (representatives of 20 resource and permitting agencies, and research groups covering federal, state, regional, and local jurisdictions), and public input from two community workshops. The PEIR evaluated the environmental impacts associated with the proposed overall program. The PEIR states that future phases of the restoration, would involve identifying individual projects, such as the subject Southern Los Cerritos Wetlands Restoration Project, performing required analyses and field surveys (e.g., wetland delineation reports, habitat surveys, archaeological and cultural surveys, soil samplings, etc.), engaging stakeholders, and developing more detailed, project-level designs (e.g., engineering designs, grading plans). Each individual restoration project would be evaluated for consistency with the PEIR Goals and Objectives and the Los Cerritos Wetlands Habitat Restoration Project. Individual restoration projects would also need to be developed with input from public agencies, tribal representatives, stakeholders, landowners, and the community, and adopted by the LCWA Governing Board. The Los Cerritos Wetlands Habitat Restoration Plan was similarly vetted by the public and technical advisors. The Restoration Plan was developed to provide refined restoration plans specifically for near-term projects like the subject Southern Los Cerritos Wetlands Restoration Project (Project) that are expected to tier from the PEIR within 10 years of approval. In 2021, the LCWA acquired funding to pursue project-level planning for a portion of the Program's South Area.

The Southern California Wetlands Recovery Project, a partnership of 17 state and federal agencies, has identified the acquisition and restoration of the Los Cerritos Wetlands as a high regional priority. The proposed restoration project would restore wetland, wetland-upland transition zone, and upland habitats throughout the Southern Los Cerritos Wetlands project area. This would involve addressing any contaminated soil and groundwater, grading, revegetation, construction of tribal access and new public access opportunities (including trails, a Stewardship Site, and viewpoints), construction of flood management facilities (including earthen berms), and modification of existing infrastructure and utilities. Ecosystem restoration at the site would occur in two phases. The Phase 1 area restoration activities would enhance existing habitat areas in closer proximity to the existing muted tidal channel (Hellman Channel). Phase 2 area restoration activities would expand tidal wetlands to the eastern end of the site

by creating a full tidal connection with the Haynes Cooling Channel. Phase 1 area work is designed to provide an initial functional lift to existing habitat areas that will be become further enhanced by the improved hydrological conditions provided by Phase 2. Preliminary project plans (65% complete) for Phase 1 and Phase 2 are included as **Exhibit 6** of the staff report.

The Phase 1 restoration activities, as outlined below, would focus on enhancing existing habitat areas in the areas closest to the existing muted tidal channel connection, the culvert connecting the site to the San Gabriel River. Phase I grading and restoration activities are estimated to take place over an 18-month period.

Phase 1 Activities – 53.43 acres (**Exhibit 4**)

- Grading activities, described in more detail in the Grading subsection below, including excavation to create tidal channels and creeks and re-use of clean soils as fill material onsite to support existing upland habitat areas along the northeast and southwest extents of the project area;

- Excavate a tidal channel up to the property boundary of the LADWP Haynes Cooling Channel (connection to occur in Phase 2);

- Protect in place the existing culvert and tide gate connecting the site to the San Gabriel River and clean out the culvert for improved water flow into Hellman Channel;

- Remove the culverts and headwalls under the existing dirt access roads and replace the small culvert and headwalls under 1st Street (paved) with a twice as large concrete culvert system using the existing connection to Hellman Channel in order to increase tidal flows into the Phase 1 area;

- Create new areas of intertidal salt marsh with newly graded tidal channel networks in the western and southern half of the site (Phase I area);

- Protect in place existing tidal marsh;

- Soil remediation (e.g., excavation, testing and removal, or cap in place) in previous oil operation areas;

- Construct an earthen berm along the Hellman Retained Site boundary on the South LCWA side to protect the Hellman Retained site from flooding utilizing soil excavated from the tidal channels or marsh plain grading;

- Construct an earthen berm along the eastern and southeastern boundary of the State Lands Commission parcel to protect the parcel from flooding utilizing soil excavated from the tidal channels or marsh plain grading;

- Construct educational/interpretive improvements on State Lands parcel, (i.e., stewardship site, parking, connector trails, etc.);

- Construct public trails;

- Build Tribal Cultural Resource features such as a gathering place, an artifact reburial area, harvest gardens, and tidal channel access points for tribal use;

- Raise 1st Street on the South LCWA site out of the floodplain by filling/regrading and raising the road on average 3-feet above its existing elevation in the same alignment and within the 100-foot-wide access easement utilizing approximately 7,000 cu. yds. soil excavated from the proposed onsite tidal channels or marsh plain grading in order to maintain existing access easement for the Hellman Retained site;

- Reconfigure the associated utilities (e.g., Southern California Edison power poles and overhead power transmission lines and City of Seal Beach 18-inch water line) along 1st Street on the site. Existing power poles within the project boundary and along the south side of the road are proposed to be removed, and the overhead transmission lines are proposed to be undergrounded. The undergrounding of the transmission lines will take place either within or along the existing road and will remain within the same easement. Prior to 1st Street being elevated, a trench will be graded either along or within the existing road. The trench will be used to place a conduit for power transmission lines and pull boxes then backfilled. The existing municipal water line will remain in place except where it crosses the channel. At the channel, the water line takes a vertical jog upward to reach the bridge-type structure and extend over the channel attached to the bridge-type structure and then drops down to its existing location along the opposite bank. The length of the re-routed water line is approximately 80 feet; this will be the new portion of the water line that crosses over the channel and ties back into the existing water line. The remaining water line will be protected in place.

In Phase 1, new secondary tidal (feeder) channels that branch from the larger proposed new channel will be excavated to create a sinuous network of tidal channels throughout the wetlands. The existing smaller Hellman Channel will remain connected to the existing San Gabriel River culvert and will continue its current hydrological subtidal connection to the South LCW. The smaller channels through the rest of the marsh will be intertidal and will drain out at low tide. No physical improvements to the existing Hellman Channel culvert and tide gate, aside from maintenance cleaning/clearing-out, are proposed. The existing culvert under 1st Street is proposed to be demolished and a new (twice as large) culvert constructed; additionally, two culverts under a smaller dirt access road farther upstream of Hellman Channel are proposed to be removed and those connections daylighted to enhance this existing tidal connection to the southern and easternmost portions of the South LCWA site.

Based on the hydraulic modeling for the proposed project, Phase 1 area grading is designed to have a 2.8-foot tidal range, which is a 0.8-foot increase from existing conditions (a 40% increase). As a result of the increased tidal influence, Phase 1 muted salt marsh and subtidal habitats will be enhanced, and additional salt marsh habitat will form. Further, additional subtidal habitat will also be created with the excavation of tidal channels/creeks. Much of the existing upland habitat in the Phase 1 area is either bare ground or filled ground with nonnative vegetation that would be converted into new tidal wetlands or established with native plant communities of coastal salt marsh, coastal sage scrub, southern bluff scrub, and mulefat scrub. The restoration project goal is to maintain and restore six habitat types that include tidal channels, unvegetated intertidal (i.e., mudflats), tidal salt marsh, transitional wetlands, salt panne, and restored uplands (i.e., coastal sage scrub, southern bluff scrub, mulefat scrub, etc.). Some developed areas will remain developed in the Phase I area (i.e., paved road, utilities, and a remnant concrete slab area); new developed areas consisting of new parking areas, trails, and public educational/access features are proposed.

Phase 2 restoration activities would expand tidal wetlands throughout the project site by creating a full tidal connection with the Haynes Cooling Channel. The Phase 2 area would be graded/lowered to create new salt marsh habitat and the newly excavated subtidal channel constructed in the Phase 1 area would be extended into the Phase 2 area. The Haynes Channel would be breached after all channel excavation activities conclude to connect the portion of the subtidal channel constructed in Phase 1 with the Haynes Cooling Channel. The new salt marsh habitat created in the Phase 1 and Phase 2 areas will then become fully tidal wetlands.

As previously stated, the Haynes Cooling Channel is currently used by the Haynes Generating Station to supply water from the Pacific Ocean via seven culverts in the Alamitos Bay Marina to cool the power plant through a method called once-through cooling. Water from the San Gabriel River is not used for this purpose. The Haynes Generating Station, owned and operated by the City of Los Angeles Department of Water and Power (LADWP), is a natural gas and steam power plant that was built in the mid-1960s. The Haynes Generating Station is undergoing a modernization project that would eliminate the use of ocean water to cool the power plant by 2029. Once the modernization project is completed, the Haynes Cooling Channel will be decommissioned as it will no longer be required for use by the Haynes Generating Station. The applicant proposes to enter into an agreement with DWP to use the Haynes Cooling Channel as the main source of seawater for the project site for Phase 2 of this project. This existing tidal connection through Hellman Channel will also remain. The construction duration for Phase 2 is approximately 9-12 months. Phase 2 would commence when the Haynes Cooling Channel becomes available (sometime after 2029).

Phase 2 Activities – 50.11 acres **(Exhibit 5)**

- Grading activities including excavation to create tidal channels, re-use of clean soils as fill material on site to support existing upland habitat areas along the

northeast and southwest extents of the project area (continued from Phase I);

- Excavate a channel connecting the Hellman Channel directly to the Haynes Cooling Channel;

- Remove a portion of the existing maintenance road to connect the new tidal channel to the Haynes Cooling Channel to increase/expand tidal range;

- Expand the salt marsh habitat area south from the existing marsh and create salt panne, revegetation of transitional habitat areas, and upland scrub habitats in the south and eastern portions of the site;

- Soil remediation (e.g., on-site treatment, excavation, testing and removal, or cap in place) of previous oil operation areas (continued from Phase I);

- Build new public access elements in Phase 2 areas, such as connector trails, along the southern portion of the site over the former landfill to connect to Gum Grove Park, and extend east and south from the site;

- Build experimental restoration plots for future wetland research activities; and

- Restore native habitat supporting raptor foraging.

Based on the hydraulic modeling for the proposed project, the Phase 1 and Phase 2 areas together will have a 7.97-foot tidal range, which is a 5.17-foot increase from Phase 1 conditions. Because of the new subtidal channel connection, the salt marsh habitat in Phase 1 and Phase 2 areas will become fully tidal wetlands and also include restored salt panne habitat. Phase 2 would also add transitional wetland habitat and include invasive plant removal and the restoration of 38.73 acres of native upland habitat communities. The overall habitat types restored in Phase 2 areas include southern coastal salt marsh, coastal sage scrub and mulefat scrub which will expand and enhance existing Belding's savannah sparrow habitat and potentially support other special status wildlife including light-footed Ridgway's Rail, least Bell's vireo, coastal California gnatcatcher, and burrowing owl.

Project Grading

The proposed project design intends to minimize grading (specifically cut) to avoid and minimize impacts to remnant salt marsh habitat and tribal cultural resources. The project design intends to balance cut and fill as much as possible on-site, however some of the excavated material around the previous oil operation sumps is considered unsuitable for placement within the South LCW site and thus will need to be disposed of/hauled offsite (see Soils Remediation subsection below). Grading/excavation of soil would be removed in focused areas in the marsh plain to restore tidal wetlands near the Hellman Channel with transitional habitats between the wetlands and Gum Grove Park. Grading will be avoided or minimized in areas with existing high-functioning wetland and

transitional wetland habitats. Biological and tribal monitoring are proposed to occur during all grading activities.

The table below summarizes the estimated earthwork soil volume for Phases 1 and 2. The final volume of fill placement for berm construction will depend on the final plan design and the actual conditions during restoration (e.g., the compatibility of excavated soils).

Feature/Action	Cut Quantity (cy)	Fill Quantity (cy)
South LCWA Perimeter Berm	0	Ph 1 = 6,000
South LCWA Marsh Grading	Ph 1 = 120,000 Ph 2 = 260,000	Ph 1 = 17,000 Ph 2 = 2,000
South LCWA Sumps (Suitable Material)	Ph 1 = 26,000 Ph 2 = 6,000	0
South LCWA Sumps (Potentially Contaminated Material)	Ph 1 = 23,000	0
Total cut/fill balance	***Phase 1: a) 123,000 cy net cut (excess) of suitable material, to be placed at the onsite upland Area 18 and former south landfill and b) 23,000 cy of potentially contaminated sump material, to be hauled off-site to an appropriate disposal site.*** ***Phase 2: 264,000 cy net cut (excess) of suitable material, to be placed at onsite "landfill" and upland Area 18.***	

The majority of suitable excess excavated soil is proposed to be placed at the South LCW landfill area (former municipal landfill area) and in Area 18 (See **Exhibit 3, page 2**). These areas will be revegetated with upland habitat communities such as coastal sage scrub. Soil stockpiled at Area 18 may possibly be considered for future use when the South LCW site may need material to elevate habitat due to possible future sea level rise impacts or for use in other future project sites in other areas of the LCW Complex. Regulatory approval(s) for future potential removal and placement of stockpiled material would be subject to separate future permits. Any possible future reuse of the stockpiled material is not included in this application. Approximately 23,000 cy of potentially contaminated sump material will have to be hauled offsite to an appropriate landfill disposal site. Excavated soils are also proposed to be used onsite to construct the proposed new perimeter berm along the Hellman Retained site boundary and along the State Lands parcel to provide those sites with flood protection, raise 1st Street on average 3-feet above existing elevation in order to maintain existing access easement for the Hellman Retained site, and be used as fill in the designated higher elevation upland habitat areas. During both phases, all existing dirt roads crisscrossing the site and previous historically filled areas with higher elevations ranging from 8 to 14 feet mean lower low water (MLLW) on the site will be graded down to intertidal marsh plain and transitional wetland elevations.

Project Soil Remediation

As outlined in the section above, the subject Southern Los Cerritos Wetlands contains sumps from former oil operations. Previous investigations during the preparation of the PEIR characterized contamination based on the magnitude of concentrations and sources. Identified sources of contamination included oil wells, oil pipelines, petroleum sumps, Area 18 (an areas where asphalt-like material was previously stockpiled and buried), and a construction and demolition landfill area along the southwest portion of the site. There are no active oil operations in the proposed project area. The applicant provided a Soil Sampling and Analysis Report by Anchor QEA, October 2022, which determined that of the twelve sumps on-site, five need to be removed and seven can remain on-site. Contaminants present on the site included total petroleum hydrocarbons (TPH), metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCBs), pesticides, volatile organic compounds (VOCs), and semi volatile organic compounds (SVOCs). The project investigated potential contamination in near-surface soils (down to 6 feet below ground surface) at each sump site and made determinations about their handling. **Exhibit 11** shows the sumps on-site and indicates which are to be removed and those to remain. The five sumps that require removal are numbered 1, 2, 3, 7 and 11. All sumps except number 7 are located within the phase 1 project area. Sump number 7 is within the Phase 2 project area.

Seven other sumps on-site numbered 4, 5, 6, 8, 9,10 and 12 do not require removal due to the relatively low level of contamination in each. These sumps were assumed acceptable to remain on-site because any constituents were either below the federal government standards (e.g., NOAA's Effects Range Medium (ERM) and Effects Range Low (ERL) criterion) or were similar to levels as natural background concentrations and could be buried by one foot of clean soils as determined by the team's contamination expert Anchor QEA. These sumps will not be disturbed during restoration activities.

The sumps proposed for removal would be excavated 6 feet below grade with 2:1 side slopes within their entire outlines. As proposed, if potentially contaminated soil is identified during earthwork excavation, excavation activities would stop and a sample would be taken for testing. The soil sample would be tested for sump constituents such as DDT, metal and pesticide levels that were identified in the initial IS/MND investigation. The final surface will also be sampled and tested to confirm no contamination remains after sump removal. If contamination is found on the surface, relative to ERL/ERMs, then it would be excavated and the material would be stockpiled on a liner, contained with a straw waddle containment berm, covered so that it will not run off or contaminate other nearby soils, and removed from the site until testing confirms no further exposure of contaminated sediments. Clean surplus sediment from grading will be used to backfill the excavation footprints of these sumps. Any excavated material that returns a contamination level below ERLs and satisfies other soil criteria will be used on site to build elevated areas such as the perimeter berm, 1st Street, and in the proposed upland fill areas.

Project Habitat Restoration

The proposed habitat restoration is a voluntary restoration project and not part of mitigation for a development project. It is part of the Los Cerritos Wetlands Authority's

larger restoration program for the Los Cerritos Wetlands Complex. The applicant prepared a Draft Habitat Restoration and Monitoring Plan (HRMP) (**Exhibit 6**) for Phase I of the restoration. The Plan summarizes the project goals, existing site conditions, project design, restoration actions, and describes proposed monitoring, adaptive management, and maintenance programs for Phase I restoration activities only.

Initially, tidal channels and creeks will be excavated in the Phase 1 area (53.43 acres) and the connection to the San Gabriel River will be improved through cleaning of the existing culvert. Grading activities will remove many of the non-native plants, though the Phase 1 HRMP outlines the removal of non-native plants not in graded areas concurrent with revegetation. Revegetation of targeted habitat communities would include additional maintenance activities such as temporary irrigation, soil conditioning/preparation, and weed control.

Existing habitat on the 103.5 acre site includes 59 acres of nonnative vegetation communities and approximately 27.2 acres of CCC wetlands. The end result of the project will replace the nonnative vegetation communities on site with native communities in both wetland and upland habitats, totaling approximately 64 and 36 acres, respectively. The remaining approximately 3.5 acres on site is devoted to already developed land. The project will maintain and restore six habitat types that include tidal channels, unvegetated intertidal (mudflats), tidal salt marsh, transitional wetlands, salt panne, and upland, and some developed areas (trails, roads, and public access features) will remain. The post-restoration plant communities include low marsh, mid marsh, high marsh, transitional wetland, mulefat scrub, coastal sage scrub, and southern bluff scrub. Sensitive vegetation alliances that currently exist at the Los Cerritos Wetlands will be represented in these habitat types and plant communities as required by the final IS/MND and reflected in the respective HRMPs for this CDP.

As proposed, progress towards the restoration project goals and objectives will be tracked using physical and biological monitoring over at least 5 years for each project phase. Additional project goals seeking to reduce public impacts on habitat and wildlife will be monitored by performing site visits, maintenance surveys, and making necessary repairs. The Phase 1 HRMP includes the parameters that will be monitored and the methods for each, as well as anticipated survey timeline, success criteria, and adaptive management plan elements. It also includes mitigation measures outlined in the Project's Mitigated Negative Declaration (Moffatt and Nichol, 2023). The Phase 1 HRMP will inform and be a component of a yet to be developed comprehensive Monitoring and Adaptive Management Plan (MAMP).

<u>New Access Amenities</u>

Phase 1 project activities include construction of onsite public trails connecting to other nearby offsite trails, public areas and public parks, a stewardship site, viewpoints, on-site parking, and educational/interpretive kiosks/signs. In addition to these general public amenities, the applicant proposes construction of amenities for exclusive use by Native American tribes such as a harvest garden, ceremonial site, story porch, and channel access.

B. Standard of Review

The project is located in the City of Seal Beach, an uncertified jurisdiction. The standard of review for development is Chapter 3 of the Coastal Act. At this time, there is no certified LUP policies that may be used for guidance.

C. Consultations and Other Agency Approvals

Tribal Governments

The California coastal zone has been home to native populations since time immemorial. The larger project area is located in a region historically occupied within the ancestral settlements of Gabrieleño-affiliated Tribes. Other indigenous people, including the Juaneño (Acjachemen) Tribes also have cultural ties to the area. Currently, there are five Gabrieleño groups that are recognized by the State as California Native American Tribes (as indicated by the Native American Heritage Commission, NAHC): the Gabrieleño Band of Mission Indians – Kizh Nation, the Gabrielino Tongva Indians of California Tribal Council, the Gabrieleno-Tongva San Gabriel Band of Mission Indians, the Gabrielino-Tongva Tribe, and the Gabrielino/Tongva Nation. These Tribes are living communities who are the actively participate in the preservation of their culture and protection of tribal cultural resources, for which they are experts.

The LCWA initially notified the designated contact of, or tribal representative of a total of 26 California Native Tribes inviting them to engage in government-to-government consultation during preparation of the PEIR for the greater Wetlands Restoration Program for the greater 500-acre LCWA property which includes the subject 103.5-acre Southern Los Cerritos Wetlands Site. The following six Tribes requested consultation:

- Gabrieleño Band of Mission Indians – Kizh Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrieleño-Tongva San Gabriel Band of Mission Indians
- Gabrielino-Tongva Tribe
- Juañeno Band of Mission Indians, Acjachemen Nation – Romero (several attempts to schedule a consultation were made via e-mail and phone call in July and August 2019, but no response was received)
- Juañeno Band of Mission Indians, Acjachemen Nation – Belardes

This engagement resulted in the formation of a Tribal Advisory Group. As a result of that process, a Tribal Advisory Group (TAG) was created specifically for the Southern Los Cerritos Restoration Project to collaborate first, with all tribes that consulted with LCWA through the AB 52 process for the PEIR, and potentially second, other interested Tribes, to engage tribal perspectives early on and throughout planning development, and to incorporate traditional ecological knowledge into restoration designs. Nine Tribes were invited to participate in the TAG meetings. To date, there have been 10 TAG meetings, and the group continues to meet quarterly. While several of the Tribes with ancestral ties to the area are represented in the TAG, not all are. This engagement also resulted

in development of a Tribal Cultural Landscape Study documenting the landscape, determining what features contribute to its significance, and recommending how those features can be protected, enhanced, and restored.

Furthermore, during the preparation of the IS/MND for this subject Southern Los Cerritos Wetlands Restoration Project, LCWA again initiated formal AB52 consultation requests on October 18, 2022 and a second round on November 23, 2022 through November 28, 2022 based on an updated Native American Heritage Commission (NAHC) list. Of a total of 17 tribes contacted, the following four requested formal consultation:

- Gabrielino-Tongva Tribe
- Gabrielino Tongva Indians of California Tribal Council,
- Gabrielino/Tongva Nation
- Juañeno Band of Mission Indians, Acjachemen Nation – Belardes

The Commission's Tribal Consultation Policy (adopted on August 8, 2018) recognizes the importance of State efforts to protect Tribal Cultural Resources and improve communication and coordination with Tribes, and it sets out a tribal consultation process that is fully consistent with, and complementary to the nature of, the Commission's goals, policies (including Section 30244), and mission statement. Commission staff attended two site visits with LCWA and one meeting with the TAG. TAG has had ten project meetings and continues to meet quaterly. In addition, Commission staff has consulted with tribal representatives regarding this and other projects at this site including with representatives of the Gabrieleño Band of Mission Indians - Kizh Nation, Gabrieleno Tongva San Gabriel Band of Mission Indians, and Gabrielino Tongva Indians of CA Tribal Council in November 2021, December 2021, January 2022, and March 2024. Upon settling on a hearing date, Commission staff followed-up with the representatives of Tribes with ancestral ties to the area on February 12, 2025 and February 25, 2025 and have plans to continue consultation ahead of the Commission hearing on this item, as well as during the review of any final site plans, tribal access plans, and tribal cultural resource monitoring and treatment plan.

Other Agency Approvals

The RWQCB regulates pollutant discharges into receiving waters in the project area, it is currently reviewing the LCWA's application for water quality certification pursuant to Clean Water Act Section 401. A Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) is also required Nationwide Permit or equivalent permit issued from USACE. USFWS will consult with USACE as part of the USACE permit process. Additionally, a new lease or lease amendment is required for approval of proposed development on the California State Lands Commission (CSLC) parcel.

D. Dredging and Fill in Wetlands

The Coastal Act regulates the type of development allowed within wetlands, sloughs, rivers, and other coastal waterways, including for restoration and flood control purposes. Sections 30233 states (in relevant part):

> **Section 30233**
>
> **(a)** The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
>
> ... (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
>
> (6) Restoration purposes.
>
> (7) Nature study, aquaculture, or similar resource-dependent activities.
>
> **(b)** Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.
>
> **(c)** In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Wildlife, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

The proposed restoration project includes both dredging/grading and fill of remnant tidal marsh areas that meet the Commission's definition of a wetland (see **Exhibit 8**). The project is therefore subject to the policies of Coastal Act Section 30233. Grading activities associated with the proposed restoration project's excavation of tidal channels and creeks and from the excavation/removal of sumps and contaminated soils associated with defunct oil infrastructure would result in temporary impacts to existing wetlands.

Project Impacts to Jurisdictional Wetlands

Soil is proposed to be removed in focused areas to restore tidal wetlands in the vicinity of the Hellman Channel and restore transitional habitats between the wetlands and

Gum Grove Park. Existing dirt roads and previously filled areas with elevations ranging from 8 to 14-feet MLLW on the site will be graded down to intertidal marsh plain and transitional upland elevations. Grading is proposed to be avoided or minimized in areas with existing wetland and transitional upland habitat. However, approximately 7.8 acres out of the 27.2 acres of existing CCC jurisdictional wetlands onsite will be temporarily impacted by the overall site grading plan in Phase 1 and Phase 2 project areas. In general, the impacted jurisdictional areas are proposed to be re-established, expanded, and enhanced as part of proposed restoration project. **Exhibit 8, page 1** provides a figure depicting the location of the 7.8 acres of wetland areas where grading is proposed to occur, and **Exhibit 8, page 2** depicts those same areas restored to tidal salt marsh or transitional wetland habitat. Upon completion of both project phases, a total of 63.38 acres comprised of subtidal, salt marsh, salt flat, and transitional habitat areas will be created. These 63.38 acres are assumed to become jurisdictional wetlands. Compared to the 27.2 acres of existing CCC jurisdictional area, the proposed project aims to result in an increase of 36.2 acres of jurisdictional wetland, more than offsetting the 7.8 acres of impacted jurisdictional areas.

Section 30233 of the Coastal Act limits diking, filling, or dredging of wetlands and only permits such development for few uses, one of which is for restoration purposes. However, diking, filling, or dredging of wetlands is only permitted when it is in accordance with other applicable provisions of the Coastal Act, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

Projects that include dredging or fill of wetlands must meet the three tests of Coastal Act Section 30233(a). The first test requires that the proposed activity must fit into one of seven categories of uses enumerated in Coastal Act Section 30233(a). The second test requires that there be no feasible less environmentally damaging alternative. The third and last test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

Allowable Use Test

The first test set forth above is that any proposed filling, diking, or dredging in wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act.

The temporary wetland impacts that would result from proposed excavation of new tidal channel and creeks, grading of the marsh plain to lower elevations and fill for the creation of new berms/raising of 1st Street access road are necessary to facilitate greater tidal flows into the site and thus the restoration and expansion of subtidal, tidal salt marsh, and transitional wetlands into these areas. Thus, these activities meet the allowable use test as restoration under Coastal Act Section 30233(a)(6).

Alternatives

The second test set forth in Coastal Section 30233 is that the proposed development must have no feasible less environmentally damaging alternative. The Los Cerritos Wetlands Final Conceptual Restoration Plan (CRP) (Moffatt & Nichol, 2015) analyzed three restoration design alternatives for habitat enhancement and improved public

access for the larger Los Cerritos Wetlands Complex. The alternatives (minimum alteration, moderate alteration, and maximum alteration) included varying degrees of alterations to existing site conditions under a range of sea-level rise scenarios. Additionally, the PEIR and MND examined several alternatives. Some of these alternatives are described in detail below.

- Full Tidal Connection from the Haynes Cooling Channel to the South Area - This alternative would remove the flap gate on the existing culvert that connects the San Gabriel River to the South LCW Area to increase the tidal influence in the near-term. Focused marsh and transitional wetland grading would occur to lower the site to wetland elevations transitioning up to upland elevations along the southern and eastern borders of the South Area. Existing tidal salt marsh habitat would be avoided as much as possible. A new earthen berm or flood wall (with a height approximately 4 feet above the marsh plain) would be constructed along the Hellman Retained site boundary on the South LCWA site to protect the Hellman Retained site from flooding. In the mid-term, the South LCWA site would be connected to the Haynes Cooling Channel, in addition to the existing culvert to the San Gabriel River, to increase the tide range at the site. This was the chosen alternative because it would reduce the most significant impacts associated with the project.

- Full Tidal Connection from the San Gabriel River to the South Area through an Open Channel - This alternative would excavate an open channel around the west end of the Haynes Cooling Channel to connect the San Gabriel River with the South Area. The existing San Gabriel River levee would be breached to allow for full tidal influence in the South Area. New flood management features would be constructed in the South Area to maintain or reduce the current level of flood risk. Major levees (with a height at least 13 feet above the marsh plain) would be constructed around the entire perimeter of the South Area and along the channel from the San Gabriel River to the South Area. This potential alternative meets most of the program objectives because it would restore tidal wetland processes and functions and maximize contiguous habitat areas and buffers; however, this alternative would not reduce or eliminate significant impacts associated with the proposed program and, instead, would cause additional impacts. Creating a full tidal connection from the South Area to the San Gabriel River would require a flood risk management levee, a modified Los Angeles County Drainage Area project feature that would be operated and maintained by LACFCD, around the entire perimeter of the South Area and the channel connecting it to the San Gabriel River. The levee would require more extensive maintenance than would be required for the berm in the chosen alternative. This levee footprint would impact existing biological and tribal cultural resources beyond the impacts in the chosen alternative, and it would reduce the restored habitat area.

- Full Tidal Connection from the San Gabriel River through the Haynes Cooling Channel to the South Area - This alternative would excavate an open channel through the Isthmus Area to the Haynes Cooling Channel to connect the San

Gabriel River with the South Area. The existing San Gabriel River levee would be breached to allow for full tidal influence in the Haynes Cooling Channel and in the South Area. New flood management features (e.g., major levees with a height at least 13 feet above the marsh plain) would be constructed along the full distance of the Haynes Cooling Channel and the entire perimeter of the South Area to maintain or reduce the current level of flood risk. This potential alternative meets most of the project objectives because it would restore tidal wetland processes and functions and maximize contiguous habitat areas and buffers but would have all the same impacts as the previous alternative. This alternative would not be feasible for purposes of CEQA because it would not be feasible to acquire all the land that would be needed to maintain the current level of flood protection (CEQA Guidelines Section 15364). The flood risk management levee that would be needed around the Haynes Cooling Channel to maintain the existing level of flood protection would conflict with existing land uses outside the project area. For example, the Island Village neighborhood north of the Los Alamitos Retarding Basin and the Haynes Generating Station would limit the space available for a flood management levee and the LCWA would not be able to reasonably acquire, control, or otherwise have access to these areas, making this alternative infeasible.

- Expanded Culvert Connection from the San Gabriel River to the South Area - This alternative would install an expanded culvert system (additional and/or larger culverts) along the existing culvert to increase the tidal connection from the San Gabriel River to the Southern Area. Focused marsh and transitional wetland grading would occur to lower the site to wetland elevations transitioning up to upland elevations along the southern and eastern borders of the South Area. Existing tidal salt marsh habitat would be avoided as much as possible. A new earthen berm or flood wall (with a height approximately 4 feet above the marshplain) would be constructed along the Hellman Retained site property boundary on the South LCWA site to protect the Hellman Retained site from flooding. This potential alternative meets most of the program objectives because it would restore tidal wetland processes and functions and maximize contiguous habitat areas and buffers however, this alternative would not reduce and/or eliminate significant impacts associated with the proposed project and, instead, would cause additional impacts. Installing a new expanded culvert connection from the South LCW Area to the San Gabriel River would involve additional construction impacts west of the Haynes Cooling Channel, compared to the project. The additional culverts, which would be larger compared to the culverts proposed under the proposed project, would require more extensive long-term maintenance than would be required in the proposed project.

Mitigation

The final requirement of Coastal Act Section 30233(a) is that filling and dredging of wetlands may be permitted if feasible mitigation measures have been provided to minimize any adverse environmental effects. As described above, as proposed, approximately 7.8 acres out of the 27.2 acres of existing CCC jurisdictional wetlands will be temporarily impacted by the overall site grading plan in Phase 1 and Phase 2 project

areas, those impacted areas would be restored to tidal salt marsh and transitional wetland habitats. Upon completion of both project phases, a total of 63.38 acres comprised of subtidal, salt marsh, salt flat, and transitional habitat areas will be created. These 63.38 acres will become jurisdictional wetlands. Compared to the 27.2 acres of existing CCC jurisdictional area, the proposed project plans to add 36.2 acres of jurisdictional wetland, more than offsetting the 7.8 acres of impacted jurisdictional areas. Additionally, dredging and spoils disposal are proposed to be carried out to avoid significant disruption to marine and wildlife habitats and water circulation. In any case, Special Condition 3 requires submittal of As-Built Reports following each phase of construction to ensure consistency with the approved final plans and assessment of success criteria in the HRMP; thus, ensuring that the temporary wetland impacts are fully mitigated as proposed. Additionally, Special Condition 5 requires revisions to the HRMP restoration success criteria and project monitoring plus submittal of an HRMP for Phase 2 of the restoration project.

In summary, due to insensitive land uses such as the dredging and fill of the complex for farming and oil extraction in the late 1800s, the existing wetlands are degraded with only a small portion adjacent to the Hellman Channel that is minimally tidally influenced. Until the change in land use, the site was almost entirely tidal wetland with a few natural streams and intertidal channels. The applicant's proposed restoration restores tidal influence in the complex by maintaining the existing culvert that is the current source of seawater to the wetlands, grading tidal channels to allow water from the culvert to enter the complex in Phase 1 and to increase the extent of tidal influence in Phase 2, and connecting to the Haynes Cooling Channel as an additional source of seawater. These activities and the replanting plan included in the Phase 1 HRMP are expected to increase wetland habitat and complexity. The final project would result in substantial restoration and improvement of existing non-tidal, disturbed wetlands to higher functioning tidally influenced and creation of new tidal wetlands from degraded uplands. In addition, tidal channels were designed to avoid existing wetlands to the maximum extent possible. As proposed, any diking, filling, or dredging in wetlands components of the project aim to maintain or enhance the functional capacity of the wetland and are limited to very minor incidental public facilities, restorative measures, nature study. For the reasons described above, the Commission finds the project, as proposed and conditioned, is consistent with Coastal Act Section 30233.

E. Biological Resources and Water Quality

The Coastal Act also includes a suite of protections for sensitive habitats including aquatic habitats and the water quality needed to support their health. Coastal Act Sections 30230 and 30231 protect marine and inland watercourse biological resources stating:

> **Section 30230.** Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms

adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

As previously stated, the subject 103.5-acre Southern Los Cerritos Wetlands Site is part of a larger restoration program for the 500-acre Los Cerritos Wetlands (LCW) Complex in the Cities of Long Beach and Seal Beach. The 103.54-acre project area is located in the southernmost portion of the LCW Complex (**Exhibit 2**). The proposed restoration is broken up into two-phases, Phase 1 aims to enhance existing salt marsh habitat, grade new sinuous tidal channels, create intertidal habitat, and increase tidal flux by cleaning the inlet culvert and replacing a secondary culvert with a box bridge; Phase 2 of the restoration will expand the tidal wetlands to the east which will be made possible by a connection to the Haynes Cooling Channel. The total acreage of wetlands to be restored, including transitional wetlands, is approximately 64 acres across both phases. Both phases will include the restoration of approximately 36 acres of uplands, including coastal sage scrub, coastal bluff scrub, and mulefat scrub vegetation communities. This is a voluntary habitat restoration project and not part of a mitigation project.

Description of Existing Habitat

Exhibit 7, page 1 provides a map of existing habitat communities on the site. The Applicant provided a Biological Resources Report prepared by Tidal Influence dated September 2021 providing a complete assessment of the existing biological resources, including jurisdictional wetlands. Focused surveys for all special status species determined by the PEIR to be moderate-high potential for occurrence or to be present in Los Cerritos Wetlands were conducted as part of the report. Of the 41 special status plant species listed and analyzed in the potential to occur table of the PEIR, only 11 of

those species had a moderate, high, or present potential to occur status. Of these 11 species, only three were documented on site: California boxthorn (*Lycium californicum*), Lewis' evening primrose (*Camissoniopsis lewisii*), and southern tarplant (*Centromadia parryi ssp. australis*). The IS/MND mitigation measures requires pre-construction mapping and appropriate mitigation for impacts to these and any other sensitive plant species found on site. If special-status plants cannot be avoided, they are required to be incorporated into the proposed program's restoration design at a minimum ratio of 1:1 (one plant planted for every one plant removed, or 1 square foot of absolute cover planted for every 1 square foot of absolute cover removed), a mitigation ratio of a minimum 2:1 for natural communities with a rarity ranking of S3 or higher, and higher mitigation ratios of up to 3:1 to be incorporated where suitable habitat area can support populations of large individual numbers. Special-status plants that cannot be avoided shall be salvaged prior to impacts using species- specific propagation methods, such as transplanting, seed and cuttings.

The Report also references 5 years of surveys for breeding Belding's savannah sparrow (BSS) on the site and has identified and mapped 4.73 acres of core BSS breeding habitat and an additional 16.37 acres of habitat area that has potential to be utilized by BSS. No bird nesting activity aside from BSS was observed within the project boundary throughout the survey period. However, red-tailed hawks (*Buteo jamaicensis*) were observed performing breeding behaviors in the eucalyptus trees located in the adjacent Gum Grove Park. No burrowing owls or indicators of burrowing owl use were found within the project area; additionally, no bat or roosting activity was documented during focused bat surveys.

The subject site is composed of 15 unique vegetation alliances and land cover types. Approximately 59 acres of the 103.54 acre site is currently dominated by non-native vegetation communities. However, other native wetland and upland communities exist on site, such as approximately 20 acres of pickleweed mats necessary to support Belding's savannah sparrow. The proposed restoration increases the potential BSS habitat area to approximately 55 acres. Sensitive plant communities are present in patches across the site and include *Cressa truxillensis – Distichlis spicata* herbaceous alliance (G2S2 community; 1.43ac), *Frankenia salina* herbaceous alliance (G4S3 community; 2.77ac), *Arthrocnemum subterminale* herbaceous alliance (G4S2 community; 0.31ac), and *Isocoma menziesii* shrubland alliance (G3S3 community; 1.52ac). The site also hosts 27.2 acres of CCC wetlands and 3.7 acres of developed, paved asphalt, concrete, or dirt areas created prior to the site's acquisition by the LCWA. Despite expected impacts to sensitive plant and avian species and communities, the proposed restoration will restore approximately 36 acres of upland habitats with native plant communities and create additional and enhance existing wetland habitat totaling approximately 64 acres, greatly increasing the function and quality of wetlands throughout the complex. Further, the Phase 1 HRMP includes the installation of a wide diversity of plant species, including sensitive plants like southern tarplant and Lewis's evening primrose, and the multiple plants that comprise current sensitive vegetation communities described above. The Phase 2 HRMP will similarly

provide for sensitive plants and communities, as required by the final IS/MND and conditioned in the staff report. The increased and connected native acreage for both wetlands and uplands are expected to exceed the current value of the sensitive communities on site, better support BSS, and may attract other sensitive avifauna such as least Bell's vireo, light-footed Ridgway's rail, and Coastal California gnatcatcher.

The PEIR and IS/MND include mitigation measures to ensure avoidance or minimization of biological impacts such as the example described above aimed to avoid or minimize impacts to special-status plants (i.e., California boxthorn (*Lycium californicum*), Lewis' evening primrose (*Camissoniopsis lewisii*), and southern tarplant (*Centromadia parryi ssp. australis*). Additionally, it includes a mitigation measure addressing suitable Belding's savannah sparrow breeding habitat that will be impacted by the proposed program requiring a minimum ratio of 1:1 (area created: area impacted) within the project area, with restored breeding habitat consisting of a minimum 60 percent absolute cover of salt marsh vegetation, and with a hydrologic regime similar to that currently present in the project area and other unique conditions within coastal salt marsh communities, such as, similar slope, aspect, elevation, soil, and salinity.

Furthermore, the PEIR and IS/MND includes detailed mitigation measures addressing minimization of light spillage, pre-construction burrowing owl and bat surveys, nesting bird and raptor avoidance, and monitoring and adaptive management. **Special Condition 1** requires the applicant comply with the implementation and adherence to all mitigation measures of the IS/MND.

In order to ensure protection of existing biological resources at the site, **Special Condition 7** requires the applicant adhere to Construction Best Management Practices (BMPs) requring construction to be limited to the bird non-breeding season (September 1 – December 31) to the extent possilbe, pre-construction surveys of sensitive habitat areas, special-status species and nesting bird and raptor to avoid or mitigate impacts and provide for biological monitoring during grading and sump removal activities by documenting wetland resources before and after grading and sumps are removed to verify the extent of grading and that any impacts to these resources are temporary.

Proposed Ecosystem Restoration

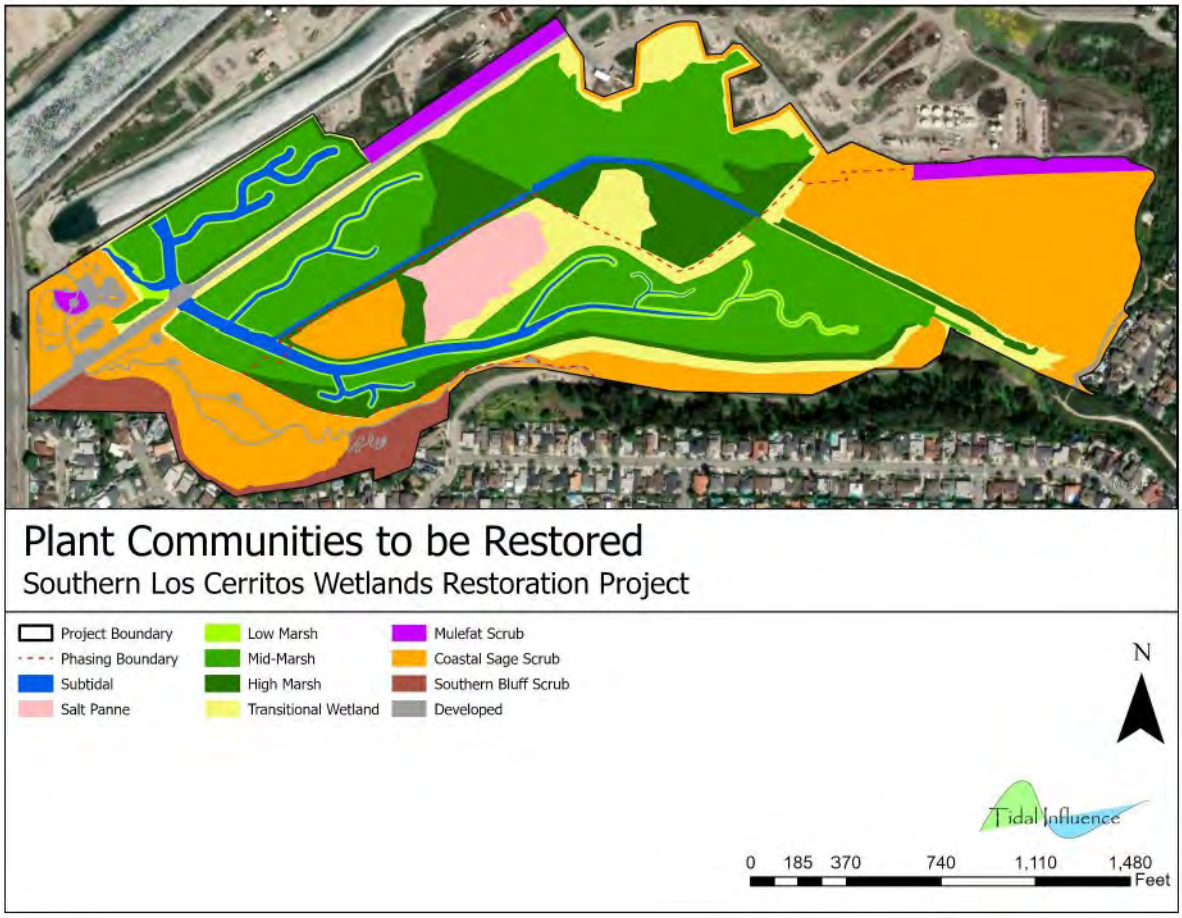
Exhibit 7, page 2 provides a map of the proposed habitat communities to be enhanced and created as part of the restoration project. The applicant submitted a Habitat Restoration and Monitoring Plan (HRMP) summarizing the project's goals, existing site conditions, design, restoration actions, and describes the monitoring, adaptive management, and maintenance programs for Phase I of the Project. According to the HRMP, Phase 1 area restoration work includes the restoration of transitional wetland habitat and native upland habitat. Much of the existing upland habitat in the Phase 1 area is either bare ground or filled ground with nonnative vegetation that will be converted into tidal wetlands or enhanced so that native upland plant communities are established. The project will maintain and restore six habitat types that include tidal

channels, unvegetated intertidal (mudflats), tidal salt marsh, transitional wetlands, salt panne, and upland, and include improvements to existing developed areas (trails, roads, and public access features). These habitat types include targeted post-restoration plant communities that include low marsh, mid marsh, high marsh, transitional wetland, mulefat scrub, coastal sage scrub, and southern bluff scrub. Native vegetation alliances that exist at the Los Cerritos Wetlands will be represented in these habitat types and plant communities. Phase 2 area restoration work includes excavation of new intertidal tidal salt marsh habitat in the Phase 2 area. This Phase 2 salt marsh habitat will be connected to the new subtidal channel connected to the Haynes Cooling Channel and because of this new tidal connection, the salt marsh habitat in the Phase 1 and Phase 2 areas will become fully tidal wetlands.

Plant Communities to be Restored	Phase 1 (acres)	Phase 2 (acres)	Total
Subtidal	3.65	1.93	5.58
Salt Panne	0.00	3.24	3.24
Low Marsh	0.71	0.99	1.70
Mid-Marsh	19.65	11.48	31.13
High Marsh	6.91	4.09	11.00
Transitional Wetlands	3.99	6.86	10.86
Mulefat Scrub	1.49	1.19	2.69
Coastal Sage Scrub	10.48	20.22	30.70
Southern Bluff Scrub	3.28	0.00	3.28
Developed	3.26	0.11	3.37
Total:	**53.43**	**50.11**	**103.54**

Phase 2 will also add transitional wetland habitat and native uplands to the restored habitat established in Phase 1. The plant communities anticipated to be established within the Phase 2 area include southern coastal salt marsh, coastal sage scrub, and mulefat scrub. These plant communities have the potential to support a wide variety of special status wildlife including Belding's savannah sparrow, California least tern, light-footed Ridgway's rail, least Bell's vireo, and burrowing owl.

Vegetation Alliances	Habitat Type to Be Restored	Targeted Post-Restoration Plant Community
Spartina foliosa Herbaceous Alliance	Tidal Salt Marsh	Low Marsh
Cressa truxillensis - Distichlis spicata Herbaceous Alliance	Tidal Salt Marsh	High Marsh - Transitional Wetland
Distichlis spicata Herbaceous Alliance	Tidal Salt Marsh	Mid - High Marsh - Transitional Wetland
Salicornia pacifica Herbaceous Alliance	Tidal Salt Marsh	Mid - High Marsh
Frankenia salina Herbaceous Alliance	Tidal Salt Marsh	Mid - High Marsh
Ulva lactuca Algal Mat	Subtidal	Tidal Channel
Arthrocnemum subterminale Herbaceous Alliance	Transitional Wetlands	High Marsh - Transitional Wetland
Heterotheca grandiflora Herbaceous Stand	Restored Upland	Coastal Sage Scrub
Isomeris arborea (Peritoma arborea) Shrub Stand	Restored Upland	Coastal Sage & Southern Bluff Scrub
Isocoma menziesii Shrubland Alliance	Restored Upland	Transitional Wetlands - Coastal Sage Scrub
Baccharis salicifolia Shrubland Alliance	Transitional Wetlands	Mulefat Scrub
Disturbed – mowed/disked fire break	Developed	Developed
Unvegetated Salt Flat	Salt Panne	High Marsh
Unvegetated Tidal Flat	Unvegetated Intertidal	Tidal Channel
Developed	Developed	Developed



Exotic nonnative vegetation will be removed from the upland areas and replaced with native plantings. **Exhibit 9** depicts areas proposed to be cleared and grubbed prior to

grading. The applicant proposes to have a biological monitor present during vegetation clearing. Non-native plants will be removed prior to and concurrent with revegetation to ensure native habitat enhancement. Specifically, invasive non-native species populations designated as “High” by California Invasive Plant Council will be targeted for removal. If other invasive non-native plant species listed as having a “Moderate” or “Limited’ impact by the California Invasive Plant Council are present, they will be removed if, based on the CDFW’s review, they are negatively affecting habitat and/or restoration efforts at the site. For some species, particularly woody species or large biomass species (e.g., pampas grass), mowers, chainsaws, or other handheld equipment may be used if the eradication method will not adversely affect sensitive wildlife species. If mechanical or hand removal methods are tried and found to be ineffective after two years of repeated treatment, or the problem is too widespread for hand removal to be practical, then the applicant proposes chemical controls. Herbicides would be used in accordance with manufacturers’ application guidelines for specific species when manual and mechanical removal methods are proved not effective or used in conjunction with physical removal methods for species that are known to be difficult to control. All herbicides and adjuvants used on the site shall be aquatic-safe to protect the new and existing wetland areas. As pesticides may be needed to control persistent, widespread, or woody nonnatives in the proposed project, **Special Condition 6** requires the applicant to submit an Integrated Pest Management Plan (IPM) including long-term prevention and management using the most effective strategies that provide the least risk to human health and the environment for review and approval of the Executive Director prior to issuance of the CDP.

Approximately 78 non-native trees will be removed: 65 Mexican Fan Palms, 3 Shamal Ash, 3 Blue Gum, 3 Brazilian Pepper, 1 Italian Stone Pine, 1 Chinese Elm, 1 Red River Gum, and 1 Italian Cypress. These trees were not found to support raptor nesting or bat roosting per multiple surveys of the project site that are detailed in the project’s Biological Resources Report from September 2021. Additionally, these trees are non-native and do not contribute to the native upland or riparian vegetation communities planned for the site. **Special Condition 7** requires construction, including tree removal to occur outside of nesting season to the maximum extent feasible and, when in season, requires pre-construction surveys for nesting birds be conducted with any discovered nests buffered from construction activities and not disturbed until any chicks have fledged. Raptors may breed in eucalyptus trees in adjacent Gum Grove Park, **Exhibit 7** depicts proposed habitat communities of restored upland coastal sage scrub, transitional wetlands, and tidal marsh adjacent to Gum Grove Park that may serve as raptor foraging habitat. Furthermore, the project proposes, and **Special Condition 7** requires, best management practices during construction to prevent noise impacts to breeding raptors. Pre-construction bat surveys are required as a part of the Final IS/MND and memorialized by **Special Condition 1**.

Restoration of target habitats will require active revegetation, including irrigation, soil conditioning and amendments, and weed control. Topsoil management during grading will be important to monitor for the suitability of target vegetation. For instance, upland habitats (e.g. coastal sage scrub, levee plantings) will require soils with a low salt content. Soils could be amended by adding gypsum or leached of salts through

irrigation. High-clay soils that are not compacted will be used for salt marsh and other wetland habitats. Soils will be prepared before plant establishment. Soil preparation will include proper drainage, nutrient and mycorrhizae content, and erosion control. Topsoil in all areas to be planted is proposed to be tested prior to planting to assess whether they will support the target plant community. Soils that are not appropriate for vegetation establishment could then be placed elsewhere, buried, or amended as feasible. Typical soil amendments may include compost, mycorrhizae, and fertilizer. If found to be necessary, amendments will be tilled into the upper 8 to 12 inches of soil. All seed and plant material is proposed to be collected from local sources, preferably from the Southern LCW or other LCW areas when possible. Seeds will be collected from only natural populations. Seeds will be collected by hand during the appropriate season for each species and will be propagated at a local native plant nursery and/or the on-site nursery adjacent to the Zedler Marsh site. A temporary irrigation system connected to the City's main waterline traversing the site is proposed to provide water to the plantings during the establishment period following plant or seed installation**. Special Condition 2**, requiring submittal of final plans, also requires submittal of an Irrigation Plan clearly indicating that the irrigation system is temporary and will be removed from all restored areas at the end of the restoration monitoring period.

The HRMP indicates that the selection of wetland indicators for Phase 1 was informed by the development of the Wetland Recovery Project Regional Monitoring Program (WRP RMP) and plans to use similar indicators for the wetland restoration in Phase 2. The WRP RMP provides a monitoring framework that is flexible enough to meet different wetland restoration goals across multiple wetland types in Southern California but unified in the monitoring protocols required to evaluate restoration goals, thus making assessments of wetland function and quality more comparable across wetlands in the region. The monitoring framework in the WRP RMP was developed by a suite of Southern California wetland science experts from academia, state and federal agencies, and non-governmental organizations and supported by a US EPA grant. Of the indicators identified by the WRP RMP, Commission staff are requiring reporting of topography and habitat mapping, hydrology, vegetation cover and diversity, and special status avifauna in semi-annual reports for both wetland and upland habitats. However, the applicants plan to include progress towards additional indicators in the WRP RMP as a part of their monitoring. Further, the project will use standardized protocols to measure progress towards restoration success criteria that were developed as a part of the Estuary Marine Protected Area (EMPA) Monitoring Program. The project's frequency and intensity of monitoring and the assessment design and analysis of progress towards final monitoring goals are representative of the Commission's approach towards evaluating the success of a voluntary restoration project.

The current draft of the Phase 1 HRMP includes the majority of necessary elements for a restoration plan but needs additional details regarding the restoration project's success criteria, consistency with mitigation ratios for rare plants listed in the Final IS/MND, and overall reporting requirements. Furthermore, the HRMP only covers Phase 1 activities. Therefore, **Special Condition 5** requires submittal of a revised final HRMP addressing these success criteria and monitoring requirements for Phase 1 prior to issuance of the CDP and submittal of an HRMP for Phase 2 at least 180 days prior to

commencement of Phase 2 construction and lists all the minimum necessary components required for the Phase 2 HRMP. The purpose of the Plan is to document biological resources on each site, including wetlands, sensitive habitat areas and special-status species, provide for biological monitoring during construction and sump removal and document wetland resources before and after grading and sumps are removed to verify that any impacts to these resources are temporary.

Additionally, the proposed public access and recreation improvements on to the South LCW Site could also result in disturbance to sensitive species and habitats. Currently, public access to the site is limited to only supervised docent led tours. Part of the reason the existing remnant tidal wetlands have been able to persist and thrive is because it was previously on private oil production facility inaccessible to the public and public access is limited and controlled under LCWA ownership. The proposed project adds onsite parking, a Stewardship Site with educational/interpretive opportunities and picnic facilities, and new trails and new trail connections to nearby off-site trails and public areas. The public access element that could have the most potential to result in disturbance to wetlands, sensitive species and habitats is the proposed new trails through the site. However, as proposed, the northern trail is proposed along the newly constructed flood control berm sited at a much higher elevation than the wetlands and the surrounding habitat areas and will provide an opportunity for the public to view the entire Southern LCW Site from a higher vantage point. Furthermore, public trails in sensitive habitat areas are permitted under Coastal Act Section 30240(b) when designed to prevent impacts which would significantly degrade those areas. To ensure protection of sensitive habitat areas, the applicant proposes signage and fencing to prevent the public from entering the wetlands and surrounding transition and upland habitat areas. Even though all new trail segments are sited to minimize impacts, there is still a potential for impacts associated with noise, trash, development of volunteer trails and other potential disturbances to sensitive species and habitats. To address these concerns, **Special Condition 9** requires LCWA to develop a Public Access Management and Maintenance Plan. Among other requirements, this Plan would need to define appropriate restrictions on use of Steward Ship facilities by large groups and for public functions to minimize the potential for impacts to sensitive species and habitats. The Plan would ensure the site is open from dawn to dusk with no entry or parking fees, and identify measures such as signage, wildlife-friendly fencing or barriers and/or public education to ensure successful implementation of these measures to minimize disturbance to sensitive species and habitats.

With the proposed measures and those required by these Special Conditions, sensitive biological resources will be protected against any significant disruption of habitat values. In instances where impacts are necessary to restore the surrounding habitat, impacts will be minimized and the restoration project will be fully self-mitigated. Furthermore, proposed activities include sufficient measures to ensure that impacts to ESHA are avoided. Therefore, as conditioned, the Commission finds that the development conforms to the requirements of Section 30240(a) and 30240(b) of the Coastal Act regarding the protection of environmentally sensitive habitat areas and the siting of new development in areas adjacent to environmentally sensitive habitat areas and parks and

recreation areas preventing impacts which would significantly degrade those areas and is compatible with the continuance of those habitat and recreation areas.

Marine Resources and Water Quality

Construction phase grading and demolition activities such as removal of an existing culvert/replacement with larger new box culvert activities, and use of heavy equipment in tidally influenced channels have the potential to adversely affect marine resources, water quality and the biological productivity of coastal waters. The most significant water-quality related impacts associated with the proposed project are likely to stem from increased sedimentation associated with construction activities and exposure to contaminated sediments. **Special Condition 7** requires the applicant comply with construction phase best management practices (BMPs) such as restricting vehicles to pre-established staging areas and haul routes, ensuring equipment does not come into contact with any receiving waters or environmentally sensitive habitat areas, proper containment and disposal of trash and debris, ensuring waste is not placed or stored where it may enter sensitive habitat, wetlands, receiving waters, or be subject to wind, rain, or erosion and dispersion; implementation of erosion control measures to prevent sediment and potential pollutants from entering coastal waters and/or sensitive habitat during approved project grading activities, and maintenance of BMP in a functional condition throughout the duration of restoration activities to ensure protection of water quality and the biological productivity of coastal waters.

Project equipment staging and vehicle storage is proposed to occur at three sites across the 103-acre project site (**Exhibit #6**). Staging is proposed at the existing State Lands Parcel, along the southern shoulder of 1st Street outside of the fence line and at the site of the existing shipping container off of 1st Street currently used for stewardship programs. Staging at the State Lands parcel is proposed to occur outside of the existing concrete pads and to only occur on existing vacant ground avoiding wetlands. Staging along 1st Street is only to be located along the southern shoulder of the road and outside of the fence line to provide continued passage of vehicles into and out of the site, as needed. Staging at the location of the existing shipping container is on a small site and may only be suitable for the construction trailer or other small-scale storage needs. Southern tarplant has been observed at or near all of these areas and is especially widespread at the State Lands Commission site. Potential impacts to this special status plant species must be considered in choosing a preferred footprint for project staging areas. An additional construction staging area is proposed at the midpoint of the northern project boundary. Construction access points are at 1st Street off Pacific Coast Highway, and at Adolfo Lopez Street. To minimize adverse impacts, the Commission is requiring, in **Special Condition 2** that final plans include staging and construction areas clearly demarcated and used in a manner that avoids existing sensitive habitat and maintains existing levels of public access to the site. As part of this requirement, all parking and storage of vehicles for on-site workers would be along paved areas on the State Lands Parcel and 1st Street.

<u>Contaminated Soils</u>
The proposed project could potentially lead to the release of hazardous materials that

could potentially migrate into sensitive habitat areas and marine waters. The proposed project includes excavation necessary for the removal of buried sumps, some of which are located within wetland areas. The Southern LCW Site contains 12 sumps. **Exhibit 11** shows the sumps on-site and indicates which are to be removed and those to remain. As reported in the PEIR, the consultant documented that historically, it was common practice to excavate a sump adjacent to an oil well for temporary storage of produced oil, water and drilling muds. Thus, on this site, the drilling mud was likely left in the sump and backfilled.

The applicant provided a Soil Sampling and Analysis Report by Anchor QEA, October 2022 which determined that of the twelve sumps on-site, five need to be removed and seven can remain on-site. Contaminants present on the site included total petroleum hydrocarbons (TPH), metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCBs), pesticides, volatile organic compounds (VOCs), and semi volatile organic compounds (SVOCs). The project investigated potential contamination in near-surface soils (down to 6 feet below ground surface) at each sump site and made determinations about their handling. The five sumps that require removal are numbered 1, 2, 3, 7 and 11. All sumps except number 7 are located within the phase 1 project area. Sump number 7 is within the phase 2 project area. Seven other sumps on-site numbered 4, 5, 6, 8, 9,10 and 12 do not require removal due to the relatively low level of contamination in each. These sumps were assumed acceptable to remain on-site because any constituents were either below the federal government standards (e.g., NOAA's Effects Range Medium (ERM) and Effects Range Low (ERL) criterion) or were similar to levels as natural background concentrations and could be buried by one foot of clean soils as determined by the team's contamination expert Anchor QEA. See the proposed sediment management actions table below:

Sump	Proposed Sediment Management Action	Summary of Results	Rationale for Fate Decision
1	Remove for landfill disposal (at least top 6" and confirmatory testing)	4,4'-DDT, chlordane, and dieldrin exceeds the ERM at the surface	Contaminated and surface is proposed to be lowered
2	Remove for landfill disposal (at least top 6" and confirmatory testing)	As, Cu, Pb, and Ni exceed the ERL at the surface and at depth	Contaminated and surface is proposed to be lowered
3	Remove for landfill disposal (at least top 6" and confirmatory testing)	As, Cu, Ni, PAHs exceed the ERL at the surface	Contaminated and surface is proposed to be lowered
4	Remains on Site	All levels are below the ERL	Site is to be buried by proposed slopes and berms
5	Remains on Site	Cu, Ni, PAHs exceed the ERL but are consistent with natural background levels; Pb exceeds the ERM below any surface proposed modification	Site is within a sensitive habitat area to be retained
6	Remains on Site	Ni exceeds the ERL but the not the ERM	Clean material at the surface
7	Remove for landfill disposal (at least top 6" and confirmatory testing)	As, Cu, Ni exceeds the ERL	Contaminated and surface is proposed to be lowered
8	Remains on Site with 12" cover of clean soil placed over it	As, Cu, Pb, Ni, 4,4'-DDE exceeds the ERL but not the ERM; 4,4'-DDT exceeds the ERM at the surface and should be covered	Site is within a sensitive habitat area to be retained
9	Remains on Site with 12" cover of clean soil placed over it	As, Pb, Ni, 4,4'-DDT exceeds the ERL at the surface and should be covered	Site is within a sensitive habitat area to be retained
10	Remains on Site	As, Cu, Pb, Ni, PAHs exceed the ERL but not the ERM	Site is within a sensitive habitat area to be retained
11	Remove for landfill disposal (at least top 6" and confirmatory testing)	As, Cu, Pb, Hg, Ni, Zn exceeds the ERL (both, except Cu only at the surface); Hg exceeds the ERM at the surface	Contaminated sufficiently to cause a concern
12	Remains on Site	Cu and Ni exceeds the ERL at the subsurface well below any proposed modifications	Site is to be buried by a berm

To address known and potential areas of contamination, the applicant proposes to excavate and remove contaminated soil. The sumps are proposed to be entirely removed to 6 feet below grade with 2:1 side slopes within their entire outlines. Because some of these areas will be restored to tidal wetlands, it is important to ensure that contamination is cleaned up to a level that is protective of sensitive species and habitats. During earthwork excavation, if potentially sump or contaminated soil is identified, excavation activity is proposed to stop and a sample taken for testing. The soil sample would be tested for sump constituents such as DDT, metal and pesticide levels that were identified in the initial investigation. The final surface will also be sampled and tested to confirm no remaining contamination after sump removal. If contamination is found on the surface, relative to ERL/ERMs, then it would be excavated and the material would be stockpiled on a liner and contained with a straw waddle containment berm and covered so that it will not runoff and contaminate other nearby soils and removed off-site until testing confirms no further exposure contaminated sediments. Any excavated material that returns a contamination level below ERLs and satisfies other soil criteria will be used on site to build elevated areas such as the perimeter berm, 1st Street, and in the proposed upland fill areas. Contaminated soils would be disposed of at an appropriate facility.

The applicant submitted a Contaminated Materials Contingency Plan, however, to be consistent with Coastal Act Sections 30230 and 30231, these activities must be conducted in a manner that ensures protection of marine resources and water quality. Therefore, **Special Condition 11** requires the applicant to submit a revised Final Contaminated Soil Investigation and Removal Plan to the Executive for review and approval prior to CDP issuance. The Plan will need to be revised to ensure it is developed in consultation with appropriate resource agencies and include provisions for submittal of a final report documenting all actual excavation surface areas, total volumes, and final soil testing results, a description and results of all final sampling activities, identification of appropriate clean-up thresholds that are protective of existing coastal waters and habitats and reflect the ultimate use of the site as tidally-influenced wetlands, proposed excavation and other remedial actions, avoidance and minimization measure to ensure the protection of salt marsh areas and the surrounding coastal water.

As conditioned, clean-up of contaminated areas on the South LCW site will be conducted in a manner that maintains, enhances and restores marine resources and maintains the biological productivity of coastal waters in compliance with Coastal Act Sections 30230 and 30231.

Final Project Water Quality Monitoring

Estuarine wetlands are dynamic habitats with constantly changing abiotic conditions due to interactions between freshwater inflows, tidal cycles, and meteorological events. Variations in water quality affect the biota and physical properties of wetlands, including vegetation, ichthyofauna, benthic and pelagic invertebrates, salinity profiles, and anoxic conditions. Therefore, the project includes ongoing water quality monitoring after Phase 1 of the Project is installed using handheld devices collecting point data during fish seining monitoring events and semi-monthly (twice monthly). Point water quality

measurements will be collected at three stations following the upstream-downstream gradient and include both bottom, middle, and surface measures. Data will be collected on parameters such as pH, temperature, salinity, conductivity, dissolved oxygen, depth, and turbidity at user-defined intervals.

There are no success criteria associated with water quality monitoring as the hydrology success criteria are expected to be sufficiently rigorous to inform any observed shifts in vegetation and wildlife. However, the applicants plan to track physical parameters of water quality so that site managers and the LCWA can monitor the condition of the site and make maintenance decisions based on the results.

Thus, as proposed and conditioned, the restoration project would conform to the biological resource and water quality protection policies of the Coastal Act.

F. Public Coastal Access and Recreation

Coastal Act Sections 30210 through 30213, 30221, and 30223 protect public access and recreation. Those sections relevant here are as follows:

> **Section 30210**. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.
>
> **Section 30213**. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred…
>
> **Section 30223**. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

These overlapping Coastal Act policies protect public recreational access to the coast, including along the beach/shoreline and to offshore waters, for public recreational access purposes, particularly free and low-cost access. Importantly, Coastal Act Section 30210's requirement to maximize access and recreational opportunities represents a different threshold than to simply provide or protect such access, and it is fundamentally different from other like provisions in this respect. Namely, it is not enough to simply provide access to and along the coast, and not enough to simply protect access; rather such access must also be maximized. This terminology distinguishes the Coastal Act in certain respects, and it provides fundamental direction with respect to projects along the California coast that raise public access issues, like this one.

The project as proposed will substantially improve and expand existing public access facilities at this site, which contains remnants of historic coastal wetlands, which are now rare in southern California, and maintains a connection to the ocean. Phase I of the project includes a Stewardship Site (i.e., a location offering interpretive signage, shade

structures, equipment storage, and seating where volunteers can gather before and after stewardship program events) proposed on the existing raised building pad on the State Lands Commission Parcel. Onsite parking and bike racks are proposed at the Stewardship Site and along 1st Street adjacent to the Stewardship Site. Phase 1 also includes creation of a trail connection from the San Gabriel River in the west through the State Lands Parcel and South LCWA site ending just short of Avalon Drive near Gum Grove Park. Public trail connections will continue in Phase 2 to extend and finalize the trail connection to Gum Grove Park, through Gum Grove Park and connect with the Hellman Ranch Trailhead on the east. Hours of operation for public use of the new parking, trails, and the Stewardship Site are proposed to be from sunrise to sunset. Parking areas would be closed after hours. A maintenance road trail atop the proposed new berm along Hellman Retained Site would connect 1st Street on the western side of the site to the Heron Point Cultural Trail in the eastern end of the site. This maintenance road trail is proposed to be restricted to docent led tours only until habitat is established and possible general public access on this maintenance road trail is analyzed as part of an Access Management Plan.

As such, the described proposed project includes significant new public access and recreation amenities which will result in a much more visible, functional, and enjoyable public recreational experience. However, the preliminary 65% complete plans provided (**Exhibit 6**) simply depict the proposed placement of these amenities without the necessary development details. Therefore, **Special Condition 2** requires the applicant submit final plans that in addition to plan details submitted also include plan details on trails, signage, lighting, fencing, gates, habitat planting, temporary irrigation, and proposed Stewardship Site improvements maximizing car and bike parking access. The Applicant verbally expressed that it expects to complete and open the new and improved access features of the project by the end Phase 1 construction. To codify these proposed elements, and to ensure clarity and ease of implementation into the future, **Special Condition 9** requires the preparation of a Public Access Management Plan (Access Plan) for Executive Director review and approval. The Access Plan's purpose is to maximize public access offerings by, among other things, specifying that public access/parking is free of charge, maximizing the number of car and bike parking spaces, the location and type of facilities open to the public, hours of operation (i.e., at least sunrise to sunset), location of signage and interpretive features, and measures to control access to off-limit areas.

And lastly, the Access Plan is to serve as a vehicle for equitable public access by identifying opportunities to increase usage by local and regional under resourced communities, including specifying the programs and protocols related to outreach, engagement, and environmental education. The proposed improvements to public access infrastructure present an opportunity for the LCWA to expand programming to the South LCW site and create new programs or expand existing ones that take advantage of the unique features at the site.

In conclusion, the proposed project will vastly improve public access and construct new recreational facilities at the site, maximizing public access while protecting and enhancing sensitive coastal resources. Outreach and educational programming, ADA

accessibility improvements, interpretive/educational signage, and the expansion of free public access to the improved facilities also come with additional environmental justice benefits. As such, and for the reasons stated above, the Commission finds that the project is consistent with the public access policies of the Coastal Act.

With implementation of **Special Condition 2** and **Special Condition 9** the project would be carried out in a manner that would protect existing, and facilitate expanded, coastal access and recreation opportunities at the project site. The Commission therefore finds that the proposed project, as conditioned, consistent with the coastal access and recreation sections (Sections 30210, 30213, and 30223) of the Coastal Act.

G. Archaeological, Paleontological, and Tribal Cultural Resources

Section 30244 of the Coastal Act states:

> **Section 30244**. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

This site was historically coastal floodplain and tidal wetlands that have since been impacted by agriculture, oil operations, placement of dredge spoils, and other development. In any case, the sediment includes native soil, as well as fill may have been imported from adjacent sites without monitoring that would be excavated or moved around to introduce tidal influence. While the applicant has selected a project alternative that maximizes habitat enhancement with less grading than other analyzed alternatives, LCWA is proposing 387,000 net cy of grading (435,000 cy of cut and 25,000 cy of fill), which has the potential to impact in-ground archaeological, paleontological, and tribal cultural resources.

The Final Initial Study & Mitigated Negative Declaration for the Southern Los Cerritos Wetlands Restoration Project (June 2023) uses a conservative estimate of five feet below ground surface for high potential for paleontological resources. As such, the applicant is proposing several mitigation measures to minimize impacts including but not limited to project-level paleontological resources review and monitoring, paleontological resources sensitivity training, paleontological resources monitoring during ground-disturbing activities occurring in the older alluvium and old shallow marine deposits, and discovery, treatment, and reporting procedures. **Special Condition 1** requires these mitigation measures be implemented during the project thereby minimizing and mitigating impacts to paleontological resources as required by Section 30244.

The PEIR and IS/MND describe potential impacts to archaeological and tribal cultural resources. Such resources also have the potential to be impacted through changes to the landscape and ground disturbing activities including the substantial amount of proposed grading/excavation. In recognition that the entirety of the State's coastal zone was originally indigenous territory that continues to have cultural significance to Native American tribes and that tribes are the experts in locating, protecting, managing, and

determining the significance of tribal cultural resources, both the LCWA and Coastal Commission staff consulted with tribes with ancestral and cultural ties to the area regarding this site and proposed development, as described in more detail in Section C: Consultations and Other Agency Approvals of this staff report. California Native American Tribes who consulted with LCWA pursuant to AB 52 generally indicated that the program area is culturally sensitive and important, and expressed support for the restoration of the wetlands. Tribal members specifically made the following requests to mitigate potential impacts to resources important to the Native American community and LCWA has incorporated this input into the restoration project:

- Input on the proposed program's ecological design and the selection of plants/native plants
- Input on the restoration program's educational/interpretive signage and displays
- Preservation of tribal access
- Remaining informed of the proposed program as it progresses
- Participation in surveys/tribal interviews
- Monitoring during construction phase
- Communicating the history and cultural connection of the program area for generations to come

LCWA also learned of Tribes' desires to reconnect the community with the salt marsh through the harvesting of plants and animals. There is documented historic use of salt as medicine, and gathering/collecting of fishing for crab, mussels, and plants such as watercress, pickleweed, salt grass, evening primrose, yerba mansa for food and medicinal purposes. Gabrielino (aka Gabrieleño) and Acjachemen community members also stated that they would like to use the wetlands to teach the next generation how to paddle and use tule boats to collect resources. Using the wetlands in this way would be creating a place where community members could gather, assemble, and build a tule boat and launch it safety into the water. Having access to collect plant material, conduct ceremony and other cultural activities in the Los Cerritos Wetlands is important. However, the Tribal Advisory Group also discussed the idea of co-management (co-steward) the wetlands. Co-stewardship means using methods that are grounded in the Gabrielino's and Acjachemen's relationship to the land and relatives as instructed by their Creator. Co-stewardship also means having the indigenous communities with ancestral ties to the site involved in all planning and decision making so that natural processes can be sustained and to ensure that the use by the community does not diminish the potential to meet the needs and aspirations of future generations.

LCWA is proposing 18 mitigation measures as part of the PEIR and IS/MND (See **Appendix C**) to assess, minimize, and properly treat archaeological and cultural resources including but not limited to conducting a historical resources assessment and evaluation prior to implementing the project, conducting extended archaeological investigations, coordinating with Native American Tribes, cultural resource sensitivity

trainings for construction workers, monitoring ground-disturbing activities by an archaeologist and Native American monitor(s), avoidance and preservation in place of discovered historical resources or unique archaeological resources or resources that contribute to the significance of the tribal cultural landscape, and protections for discoveries of human remains. These mitigation measures are also required to be met pursuant to **Special Condition 1**, and at least for general historic and non-tribal cultural and archaeological resources conform with Coastal Act Section 30244. However, in alignment with the Commission's Tribal Consultation Policy and in response to past tribal consultations about this specific area involving Commission staff, the Commission conducted consultation separate from LCWA, which informs the following findings.

Tribal cultural resources can be sites, features, cultural landscapes, sacred places, and objects with cultural value and can also qualify as archeological, paleontological, visual, biological, or other resources that the Commission is tasked with protecting pursuant to the Coastal Act. The Los Cerritos Wetlands are located in between and within approximately three miles of the villages of Puvungna and Motuucheyngna and are considered by tribes to be part of a larger cultural landscape. Puvungna, located to the north, was, and continues to be, an important ceremonial center for the Gabrieleño and Juaneño (Acjachemen) Tribes, as it is known through oral tradition to be the location of their peoples. Motuucheyngna village has been identified on a portion of the former Hellman Ranch property, to the east and outside the Southern LCW Project area.

The subject site was identified by the NAHC as being positive for sacred lands and has been described as such by consulting tribal representatives. The site contains known tribal cultural resources including but not limited to a tribal cultural landscape, plants and animals, and water, as well as has the potential for in-ground resource deposits as others have been found in close proximity to the site. While ceremonies are still held in nearby public areas and indigenous people are still connected to land, water, plants and animals at this site, their use and connection to the site is and has been significantly limited by colonization, development, and ownership by others. Further, tribal representatives have shared with Commission staff about the trauma associated with past and proposed impacts to tribal cultural resources from development projects at this site and adjacent sites.

The proposed restoration both impacts tribal cultural resources through construction activities and removal of some existing habitat and offers enhanced and expanded ecological function, as well as an increase in tribal access opportunities as compared to current conditions. As each Tribe has its own culture and perspective, not all Tribes with ancestral ties to this area are in agreement about whether this project should move forward or the exact details of how this should occur. The tribal representative who expressed opposition to the project described the trauma associated with repetitive ground disturbance at this site. However, all tribal representatives that Commission staff have consulted with agree that if the project is approved, any ground disturbance must be carefully monitored by appropriate Native American monitors. Thus, **Special Condition 4** is imposed to require the submittal of a final tribal cultural resource monitoring and treatment plan developed in consultation with the Gabrieleño-affiliated

Tribes with ancestral ties to this site that provides for the invitation of all such Tribes to monitor and the retention of a Native American monitor from any Tribe that accepts the invitation. The plan requires monitoring of all ground-disturbing activities, including those involved in future maintenance of the site. **Special Condition 4** also requires the applicant notify the Executive Director of any discovery of resources and apply for an amendment to this CDP if project changes are required in order to avoid or mitigate for any impacts to archaeological deposits. Significance testing and data recovery are only permitted if done in consultation with the affected Native American Tribes, and in accordance with the "Cultural Resources Significance Testing Plan Procedures" (**Appendix B**).

In order to mitigate for the impacts of the project to existing tribal cultural resources and tribal use of such resources during construction, the tribal access component of LCWA's proposal is crucial. **Special Condition 2.b** requires the final project plans to include all elements of the tribal cultural resource design features (e.g. plants species available for tribal harvesting) and access amenities (e.g. tulle boat launch area) developed in coordination with the Tribal Advisory Group. **Special Condition 9** expands on that by requiring the applicants to work in consultation with Tribes to develop a Tribal Access Plan to be submitted for review and approval by the Executive Director (in consultation with Tribes) that includes details about the names of Tribes that will have access to the area for religious and ceremonial gatherings, resource and material gathering, and other tribal gatherings, a description of the type and frequency of activities permitted on the site and a discussion of how these activities will be carried out in a manner that is protective of the native habitat and species, and a description of whether and how the area will be closed off to the general public while Tribes are accessing the area for certain described activities. As conditioned, tribal access must be maintained in perpetuity as approved in the final Tribal Access Plan. As such, mitigation is provided for impacts to tribal cultural resources consistent with Section 30244. In addition, while no land is being returned to Tribes, the project provides for additional access to the site and for the benefits of coastal access to be more equitably dispersed than under current conditions, which is also in line with the Commission's adopted Environmental Justice Policy.

The proposed project, as thus conditioned, is consistent with Coastal Act section 30244, as the development will include reasonable mitigation measures to minimize potential adverse impacts to paleontological, archaeological, and tribal cultural resources at the site.

H. Coastal Hazards

Coastal Act Section 30253 states, in pertinent part:

> **Section 30253.** New Development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion,

> geologic instability, or destruction of the site or surrounding area or in any way require the construction of protection devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30253 of the Coastal Act requires that new development minimize risks to life and property in areas of high geologic and flood hazard and that new development assure stability and structural integrity and not require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The subject site is located within the southern portion of the Los Cerritos Wetlands Complex. Historically, the complex covered approximately 2,400 acres and stretched approximately 2 miles inland, varying from brackish wetlands in its inland areas to salt marsh closer to the ocean. However, these historic wetlands have been reduced by agriculture, placement of fill and excavation of channels and basins for oil fields and landfill dumps.

Flooding

The existing tide range is constricted to approximately 2.0 feet with a high tide elevation of 3.67 feet NGVD29 and a low of 1.47 feet NGVD29 as measured in 2021. Tidal muting is caused by the effects of a limited culvert cross-section area of 42 inches at the marsh and 48 inches at the San Gabriel River. Also, site topography and bathymetry within the main channel limits the existing low tide elevation because the bed elevation remains above +1.0 feet MSL.

The future tide range is predicted to expand from existing conditions but will still be muted and may range by approximately 2.80 feet, with high tide reaching 2.90 feet NGVD29 and low tide reaching 0.10 feet NGVD29. These tides are still determined to be sufficient to provide the desired habitat range within the site for Phase 1 restoration. The tide range will continue to be limited by the size of the existing culvert (no change is proposed to it). The range of tidal elevations will drop by nearly 1.5 feet from existing conditions because the elevation of the bed of the main channel is proposed to be lowered to -4 feet, which is below the elevation of the culvert invert. The proposed bridge-type crossing at 1st Street will have no effect on these tides because the tides are controlled by the existing 42-inch culvert.

The limited surface area of the Phase 1 restored marsh (40 acres) is similar to the existing condition, so the tidal storage capacity in this area of wetland and the tidal range should be similar. Project modeling predicts the tidal range to be similar to existing conditions with a modest increase of approximately 0.6 feet, but the maximum and minimum tidal elevations are lower for future conditions compared to existing values. This is caused by the effect of the proposed grading (lowering) of the entrance channel down to -4 feet NGVD29, as compared to an existing marsh channel invert elevation of +1 foot NGVD29. Existing measured tides remain above the existing invert by 0.5 feet, so the existing low tide is +1.5 feet. The conveyance capacity of the culvert is sufficient to allow high tides to reach within 1.2 feet of the high tide in the river.

The existing culvert has sufficient conveyance capacity to provide tides to the site in Phase 1 in the near term so that it does not need to be replaced with a larger culvert, nor does the existing corroded flap gate on the river end of the culvert need to be replaced. The culvert is proposed to be cleaned of sediment and debris to continue water conveyance. At the end of Phase 1, the tidal range will expand from approximately 2.0 feet to 2.8 feet (40% increase) but drop in elevation by approximately 1.5 feet due to the proposed channel grading. This effect may help to maintain existing salt marsh habitat on-site by not causing tidal inundation to occur more often than the existing marsh habitat can tolerate. No additional hydraulic changes to these results nor those presented below will occur from installing a bridge type crossing at 1st Street. The bridge-type crossing is less influential on tides than the existing 42-inch culvert.

During Phase 1, excess cut that is of suitable material is mostly proposed to be placed onsite in upland Area 18 and the former south landfill area and used to construct a new berm along the Hellman Retained site boundary and a new berm along the State Lands parcel to ensure that the restoration project would not contribute to destruction of the surrounding area through the introduction of additional tidal influence consistent with Section 30253(b). Similarly, the excess suitable soil will also be used to raise 1st Street on average 3-feet above the existing marsh plain elevation in order to maintain the road's existing access easement for the Hellman Retained site. During Phase 2, excess material will be excavated from the Phase 2 area and also placed onsite in upland Area 18 and the former south landfill area then revegetated with a Coastal Sage Scrub plant community.

A combination of earthen berms and natural high terrain will protect neighboring properties from potentially increased flooding risk due to improved connection to the San Gabriel Rive culvert in Phase 1 and future connection to the Haynes Cooling Channel in Phase 2. A berm will be installed up to an elevation of +7.5 feet NGVD along the northern boundary of the site with the active Hellman oil field (Hellman Retained Site). It will provide a 6-foot width across the crest for pedestrian access. That berm will "tie-into" higher existing elevations at the western end of Area 18. Area 18 and natural high ground currently protect neighboring residential properties to the east and south of the site. A second berm is proposed to be constructed along the State Lands Parcel to protect proposed development at that site. Proposed berms and higher terrain areas will minimize risks to adjacent properties and protect the subject site from seasonally high tide levels, storm events, and from impacts due to future sea level rise and most importantly, maintain the hydrology of the wetlands intact (i.e., maintain its water levels/flows) and are necessary so that for the restored habitat to function.

The tide range in the South Area would increase after both Phase 1 and 2 restoration. This means that the habitats expand to a wider range of values (i.e., low marsh, mid-marsh, high marsh, etc.). After restoration, the South LCW Area will continue to be perched above a fully tidal system due to muting of low tide drainage due to the channel system and the Haynes Cooling Channel culverts.

Sea Level Rise

The proposed final restoration of the South Area after Phase 1 and Phase 2 creates a large enough tidal prism to result in muted tides through the new Haynes Cooling Channel connection. Water levels in the Haynes Cooling Channel were muted by 0.1 feet under current conditions (i.e., no sea-level rise) and up to 0.3 feet with 3.3 feet of sea-level rise.

The applicant provided a Phase I and 2 Hydraulic and Hydrology Modeling Report Memo as part of the project's IS/MND. In the report, models for a 1.6-ft. (0.5m) SLR condition and a 3.3-ft. (1m) SLR condition were considered for both Phase 1 and Phase 2 of the restoration project. Future habitat elevations were estimated for potential 1.6 and 3.3 feet of SLR scenarios. For the future habitat elevations for the South Area, the SLR modeling results were used to determine habitat elevations under muted conditions based on inundation frequency. The full breach modeling scenario was used rather than the South Area, near-term scenario, based on the assumption that the restoration would be completed before 1.7 feet of SLR has occurred. With 1.7 feet of SLR, the habitats in the South Area are still perched, but the existing habitats would be inundated more frequently than under no SLR conditions. With 3.3 feet of SLR, only the lower habitats are perched (low marsh and mid marsh) and high marsh and transition zone habitat are at elevations similar to fully tidal areas.

In order to plan the wetlands restoration and overall habitat design, the applicant analyzed the tidal inundation frequency (i.e., inundation statistics over specific elevation thresholds at a given location) in order to deter determine the elevations at which specific marsh habitats will be established and the area and distribution of wetland habitats. There are three inundation percentage breaks, 4%, 20%, and 40% for high marsh, mid marsh, low marsh, and mudflat.

In the South LCW Area, the 100-year coastal storm event with 3.3 feet of sea-level rise would reach 12.1 feet NAVD. This would overtop the berm along the adjacent Hellman Retained site, but the Hellman Retained site would flood from the Haynes Cooling Channel well before this point. If oil operations are still ongoing at the Hellman Retained Site by the year 2100 when 3.3 feet of SLR is probable to occur, additional flood protection for the Hellman Retained Site would be needed. For example, the berm along the Haynes Cooling Channel would need to be raised to increase flood protection, and the berm along the property line between the South LCWA and Hellman Retained site would need to be raised as well. However, if and when oil operations at the Hellman Retained Site end, the LCWA would take over and restore the site to wetlands so no development would be in possible need of protection.

Additionally, the applicant proposes to create wetland research test plots along the existing eastern relic roadway alignment once the road is removed. The research plots will allow for quantitative evaluation of sea level rise effects and perhaps adaptive management approaches.

The final restoration project results in full tidal range in the marsh post-restoration without SLR, and also with SLR over time. All tidal wetland habitats can be realized on-site with high quality and function for existing sea level. The project is designed to function successfully during sea level rise. Groundwater elevations will track with future tidal elevations during SLR and habitat areas will shift upward and change in surface area accordingly. As sea level rises, tidal elevations rise linearly with SLR, and the tide range remains as occurs with existing conditions. Tidal wetland habitats can exist but will transition from the original distribution to a new mix of more subtidal, mudflat, and low marsh habitats, with less mid-marsh, high marsh, and transitional habitats over time. The proposed project promotes resilience by providing higher ground for salt marsh habitat to transgress on to over time. Adaptation during future SLR could consist of thin layer adaptation of adding sediment selectively to certain areas to maintain mid- and high marsh habitats over time. If deemed necessary in the far future due to SLR impacts, utilizing (i.e., digging up) the stockpiled soil in Area 18 and landfill area would require a CDP or an amendment to this CDP.

Monitoring

After construction, the applicant proposes an “as built” topographic survey to compare to the baseline survey and the Project designs to ensure that the Project specifications were followed during construction. The as-built topographic survey should reflect that the actual mix of tidal habitat acreage is within +/-10% of the designed grading plans. Another survey is proposed at the end of the initial Year 5 monitoring period to ensure that the actual mix of tidal habitat acreage is within +/-10% of the as-built condition. Sediment accretion and erosion is a natural part of wetland function. However, in order to ensure that no major changes to channel depths or marsh elevations occur to the detriment of the restored wetlands, **Special Condition 3** requires submittal of an As-Built Report within 60 days of completion of each construction phase summarizing restoration activities to-date, a description of consistency with approved final plans in Special Condition 2, documentation of acreage treated, maps and descriptions of any temporary infrastructure installed, photos taken from fixed points, assessment of the as-built success criteria in Special Condition 3, in and a description of consistency with all terms and conditions, to be submitted to the Executive Director.

Should an unusual deposition of sediment or erosion occur during a storm event, maintenance checks will ensure that proper tidal inundation and drainage continues to occur. Repeat site visits during maintenance and monitoring activities will note and track erosion or accretion events and locations using maps and GPS. The applicant has identified a success criteria of the Year 5 topographic survey reflecting that the actual mix of tidal habitat acreage is within +/-10% of the as-built condition. No substantial erosion or deposition events.

In Phase 1, two of the existing culvert systems along the Hellman Channel will be improved to enhance tidal connection to the southern and eastern portions of the South LCWA site. The existing culvert under 1st Street will be replaced with a short bridge once the road is raised. Additionally, two culverts farther upstream currently running under the existing dirt access road will be removed and the connections will be daylighted. The existing culvert connecting the main channel to the San Gabriel River

will be cleaned out and the flap gate on the culvert retained as is. Though the hydrology of the site is not expected to change dramatically due to these actions, a minor change to tidal range may occur. As part of the monitoring program, water levels will be tracked and maintaining a clear path for water to enter and drain from the site will be a component of maintenance actions. To track water levels in the primary tidal channel, an ONSET HOBO Water Level Data Logger will be deployed during strategic months each year, such as peak wet season and peak dry season. This monitoring technique will allow ecologists to document the maximum high and low tides and inundation areas, average tide depth, and peak water level during the wet season and dry seasons. Water level monitoring is a recommended indicator of the RMP.

As proposed and conditioned, the proposed project will conform with the coastal hazard policies of the Coastal Act.

I. California Environmental Quality Act

Section 13096(a) of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act ("CEQA"). The findings above are incorporated herein by reference.

LCWA is the lead for CEQA compliance. On January 7, 2021, the LCWA certified the "Los Cerritos Wetlands Restoration Plan Final Programmatic Environmental Impact Report" (PEIR) and adopted a Mitigation Monitoring and Reporting Program (MMPR). The PEIR serves as a first-tier environmental review document analyzing the overall impacts of all restoration program activities for the entire 500-acre Los Cerritos Wetlands Complex. The subject Southern Los Cerritos Wetlands Restoration Project is the first project from the PEIR to be pursued. An Initial Study/Mitigated Negative Declaration (IS/MD) was prepared for a more detailed analysis of the subject project, it was certified and adopted on August 24, 2023. The LCWA incorporated feasible mitigation measures and alternatives developed in the PEIR. Following the requirements of the PEIR for implementation of future phases of restoration, the LCWA performed required analyses and field surveys (e.g., wetland delineation, habitat surveys, archaeological and cultural resource surveys, and soil analysis report) engaged stakeholders and engaged in early and often tribal consultation.

This IS/MND determined that the proposed Project would not result in any additional potentially significant environmental impacts that were not identified in the PEIR. While no new mitigation measures are proposed in the IS/MND as compared to the PEIR, those that are provided in the PEIR Mitigation Monitoring and Reporting Program (MMRP) will be adhered to and will reduce any potentially significant impact to less than significant levels. As such, an IS/MND is deemed as the appropriate document to provide the necessary environmental evaluations and clearance. The LCWA determined that a MND is sufficient under the process outlined by the PEIR and Sections 15070(a) and 15168(c) of the CEQA Guidelines.

Under Section 15251(c) of Title 14 of the California Code of Regulations, the Commission's CDP regulatory process has been certified as the functional equivalent to the CEQA process. As a certified regulatory program, Section 21080.5(d)(2)(A) of CEQA still applies to the Commission's CDP regulatory process and prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect which the activity may have on the environment, either individually or cumulatively with other past, current, or probable future projects. The proposed project has been conditioned to be consistent with the Chapter 3 policies of the Coastal Act. As conditioned, there are no feasible alternatives or additional feasible mitigation measures available that would substantially lessen any significant adverse effect that the development may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative, has no remaining significant environmental effects, either individual or cumulative, and complies with the applicable requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

Coastal Development Permit Application No. 5-23-0233 and associated file documents.

Los Cerritos Wetlands Authority Final Initial Study and Mitigated Negative Declaration and Appendices, State Clearinghouse No. 2023040250, prepared by Moffatt & Nichol June 2023.

Los Cerritos Wetlands Restoration Plan Final Program Environmental Impact Report (PEIR) and Appendices; State Clearinghouse No. 2019039050, prepared by ESA October 2020.

Staff Report and Adopted Findings for Coastal Development Permit 9-18-0395 (Beach Oil Minerals and Los Cerritos Wetlands Authority) California Coastal Commission [CCC], 2018)

APPENDIX B – CULTURAL RESOURCES SIGNIFICANCE TESTING PLAN PROCEDURES

A. An applicant seeking to recommence construction following discovery of the cultural deposits shall submit a Significance Testing Plan for the review and approval of the Executive Director. The Significance Testing Plan shall identify the testing measures that will be undertaken to determine whether the cultural deposits are significant. The Significance Testing Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), and the Most Likely Descendent (MLD) when State Law mandates identification of a MLD. The Executive Director shall make a determination regarding the adequacy of the Significance Testing Plan within 10 working days of receipt. If the Executive Director does not make such a determination within the prescribed time, the plan shall be deemed approved and implementation may proceed.

1. If the Executive Director approves the Significance Testing Plan and determines that the Significance Testing Plan's recommended testing measures are de minimis in nature and scope, the significance testing may commence after the Executive Director informs the permittees of that determination.

2. If the Executive Director approves the Significance Testing Plan but determines that the changes therein are not de minimis, significance testing may not recommence until after an amendment to this permit is approved by the Commission.

3. Once the measures identified in the significance testing plan are undertaken, the permittees shall submit the results of the testing to the Executive Director for review and approval. The results shall be accompanied by the project archeologist's recommendation as to whether the findings are significant. The project archeologist's recommendation shall be made in consultation with the Native American monitors and the MLD when State Law mandates identification of a MLD. The Executive Director shall make the determination as to whether the deposits are significant based on the information available to the Executive Director. If the deposits are found to be significant, the permittees shall prepare and submit to the Executive Director a supplementary Archeological Plan in accordance with subsection B of this appendix and all other relevant subsections. If the deposits are found to be not significant, then the permittees may recommence grading in accordance with any measures outlined in the significance testing program.

B. An applicant seeking to recommence construction following a determination by the Executive Director that the cultural deposits discovered are significant shall submit a supplementary Archaeological Plan for the review and approval of the Executive Director. The supplementary Archeological Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), the Most Likely Descendent (MLD) when State Law mandates identification of a MLD, as well as others identified in the special condition. The supplementary Archeological Plan shall identify proposed investigation and mitigation measures. 5-24-0136 (Ismail) 24 The range of

investigation and mitigation measures considered shall not be constrained by the approved development plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. A good faith effort shall be made to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, capping, and placing cultural resource areas in open space. In order to protect cultural resources, any further development may only be undertaken consistent with the provisions of the Supplementary Archaeological Plan.

1. If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after the Executive Director informs the permittees of that determination.

2. If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.

C. Prior to submittal to the Executive Director, all plans required to be submitted pursuant to this special condition, except the Significance Testing Plan, shall have received review and written comment by a peer review committee convened in accordance with current professional practice that shall include qualified archeologists and representatives of Native American groups with documented ancestral ties to the area. Names and qualifications of selected peer reviewers shall be submitted for review and approval by the Executive Director. The plans submitted to the Executive Director shall incorporate the recommendations of the peer review committee. Furthermore, upon completion of the peer review process, all plans shall be submitted to the California Office of Historic Preservation (OHP) and the NAHC for their review and an opportunity to comment. The plans submitted to the Executive Director shall incorporate the recommendations of the OHP and NAHC. If the OHP and/or NAHC do not respond within 30 days of their receipt of the plan, the requirement under this permit for that entities' review and comment shall expire, unless the Executive Director extends said deadline for good cause. All plans shall be submitted for the review and approval of the Executive Director.

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
Aesthetics			
Mitigation Measure AES-1: Lighting Plan. Prior to issuance of a grading permit for each individual site that requires construction, a Lighting Plan for the individual site shall be developed and implemented that requires all exterior lighting to be directed downward and focused away from adjacent sensitive uses and habitats to encourage wayfinding and provide security and safety for individuals walking to and from parking areas.	Written verification; visual inspection.	By LCWA prior to issuance of grading permit and continuously during construction.	City of Long Beach City of Seal Beach
Air Quality			
Mitigation Measure AQ-1: Construction NO_X Reduction Measures. The Applicant for the proposed program shall be responsible for the implementation of the following construction-related NO_X reduction measures: • Require all off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) to comply with EPA-Certified Tier IV emission controls where commercially available. Documentation of all off-road diesel equipment used for this proposed program including Tier IV certification, or lack of commercial availability if applicable, shall be maintained and made available by the contractor to the local permitting agency (City of Seal Beach and City of Long Beach) for inspection upon request. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB such as certified Level 3 Diesel Particulate Filter or equivalent. A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. If Tier IV construction equipment is not available, LCWA shall require the contractor to implement other feasible alternative measures, such as reducing the number and/or hp rating of construction equipment, and/or limiting the number of individual construction subphases occurring simultaneously. The determination of commercial availability of Tier IV construction equipment shall be made by the City prior to issuance of grading or building permits based on applicant-provided evidence of the availability or unavailability of Tier IV equipment and/or evidence obtained by the City from expert sources such as construction contractors in the region. • Require all main engines for tugboats to comply with EPA- Certified Tier IV emission controls. • Eliminate the use of all portable generators. Require the use of electricity from power poles rather than temporary diesel or gasoline power generators. • Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow, including during the transportation of oversized equipment and vehicles. • Provide dedicated turn lanes for movement of construction trucks and equipment on site and off site. The location of these dedicated lanes shall be addressed in the Construction Trip Management Plan.	Included in contractor's scope of work; written verification	By LCWA continuously during construction.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
• Reroute construction trucks away from congested streets or sensitive receptor areas. • Prohibit the idling of on-road trucks and off-road equipment in excess of 5 continuous minutes, except for trucks and equipment where idling is a necessary function of the activity, such as concrete pour trucks. The Applicant or construction contractor(s) shall post signs at the entry/exit gate(s), storage/lay down areas, and at highly visible areas throughout the active portions of the construction site of the idling limit. • On-road heavy-duty diesel haul trucks with a gross vehicle weight rating of 19,500 pounds or greater used to transport construction materials and soil to and from the program area shall be engine model year 2010 or later or shall comply with the USEPA 2007 on-road emissions standards.			
Biological Resources			
Mitigation Measure BIO-1: Avoidance of Special-Status Plants. Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, a qualified botanist/biologist shall conduct a habitat assessment to determine the presence or absence of suitable habitat for special-status plant species. If suitable habitat is determined to be present, focused plant surveys should be conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW, March 20, 2018). Consistent with the CDFW protocol, such focused special- status plant surveys will be conducted during the appropriate blooming period for these species, with May and June likely having the highest number of species in flower. The results of focused special-status plant species will be incorporated into restoration design plans. The locations of any special-status plants within 25 feet of proposed disturbance areas shall be identified and mapped. Individual plants shall be flagged for avoidance and an avoidance buffer of at least 10 feet shall be established around the plant(s). If special-status plants cannot be avoided, they shall be incorporated into the proposed program's restoration design at a minimum ratio of 1:1 (one plant planted for every one plant removed, or 1 square foot of absolute cover planted for every 1 square foot of absolute cover removed). For special- status plant species with small population numbers (less than 50 individuals), higher mitigation ratios up to 7:1 will be incorporated, where on-site seed sources are available. Higher mitigation ratios of up to 3:1 will be incorporated where suitable habitat area can support populations of large individual numbers. Special-status plants that cannot be avoided shall be salvaged prior to impacts using species- specific propagation methods, such as transplanting, seed and cuttings. Seed collection shall occur during the appropriate time of year for each species. Seeds shall be propagated by a qualified horticulturalist or in a local nursery, and shall be incorporated into habitat-specific seed mixes that will be used for revegetation of the restoration areas. Plant transplantation of perennial species is a potential mitigation technique but must be used sparingly and only when receiving site parameters are a suitable match from the donor location. Performance standard for the success of propagated or transplanted species will be achieved with the survival of the appropriate number of individuals meeting the mitigation ratio (1:1 for most species) after five years of growth and the establishment of a self-propagating population for annual	Written verification.	Prior to LCWA's approval of project plans or publication of subsequent CEQA documents	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
species for a minimum of three years after revegetation completion for a specific area.			
Mitigation Measure BIO-2: Environmental Awareness Training and Biological Monitoring. Prior to commencement of activities within the program area, a qualified biologist shall prepare a Worker Environmental Awareness Program (WEAP) that provides a description of potentially occurring special-status species and methods for avoiding inadvertent impacts. The WEAP training shall be provided to all construction personnel. Attendees shall be documented on a WEAP training sign-in sheet. Initial grading and vegetation removal activities shall be supervised by a qualified monitoring biologist, who will be present during all construction activities. The biologist shall ensure that impacts to special-status plants and wildlife, including wetland vegetation, are minimized to the greatest extent feasible during implementation of program activities on the South, Isthmus, Central and North Areas. If any special- status wildlife species are encountered during construction and cannot be avoided, the monitoring biologist shall have the authority to temporarily halt construction activities until a plan for avoidance has been prepared and approved by CDFW, and implemented by the monitoring biologist. Relocation of a federal- or state-listed species shall not be allowed without first obtaining take authorization from USFWS and/or CDFW.	Included in construction contractor's scope of work and agreements; written verification	Prior to commencement of construction activities	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife
Mitigation Measure BIO-3: Belding's Savannah Sparrow Breeding Habitat. Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, a qualified biologist shall map suitable Belding's savannah sparrow habitat as the location and amount of suitable habitat is anticipated to change over time. The results of habitat mapping will be incorporated into restoration design plans Project activities shall be limited to July 16 through February 14 within suitable costal marsh habitat to avoid impacts to breeding Belding's savannah sparrow. Suitable Belding's savannah sparrow breeding habitat that will be impacted by the proposed program shall be created within the program area at a minimum ratio of 1:1 (area created:area impacted). Restored breeding habitat shall consist of a minimum 60 percent absolute cover of salt marsh vegetation, and shall consist of a hydrologic regime similar to that currently present in the North Area or South Area, respectively. Other unique conditions within coastal salt marsh communities shall exist as well, such as, similar slope, aspect, elevation, soil, and salinity. A Mitigation, Maintenance and Monitoring Program shall be prepared and approved by CDFW prior to implementation. The proposed program shall be implemented by a qualified restoration ecologist, and at a minimum, shall include success criteria and performance standards for measuring the establishment of Belding's savannah sparrow breeding habitat, responsible parties, maintenance techniques and schedule, 5-year monitoring and reporting schedule, adaptive management strategies, and contingencies. Moreover, in accordance the CESA, an Incidental Take Permit (or other mitigation options identified in accordance with Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)) shall be obtained from CDFW if any Belding's savannah sparrow may be impacted during construction or operations of the program. The amount of potential take shall be determined prior to design approval of each restoration area based on consultation with CDFW. Lastly, take authorization shall be obtained prior to commencement of any ground disturbing activities.	Written verification	Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
Mitigation Measure BIO-4: Nesting Bird and Raptor Avoidance. A qualified biologist shall identify areas where nesting habitat for birds and raptors is present prior to LCWA's approval of project plans or publication of subsequent CEQA documents. To ensure the avoidance of impacts to nesting avian species, the following measures shall be implemented: • Construction and maintenance activities shall be limited to the non-breeding season (September 1 through December 31) to the extent feasible. If construction or maintenance activities will occur during the avian nesting season (January 1 through August 31), a qualified biologist shall conduct pre-construction nesting avian surveys within no more than 5 days prior to the initiation of construction activities to identify any active nests. If a lapse in work of 5 days or longer occurs, another survey shall be conducted to verify if any new nests have been constructed prior to work being reinitiated. • If active nests are observed, an avoidance buffer shall be demarcated by a qualified biologist with exclusion fencing and shall be maintained until the biologist determines that the young have fledged and the nest is no longer active.	Written verification	Prior to LCWA's approval of project plans or subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure BIO-5: Habitat Assessment and Pre- Construction Surveys for Burrowing Owl. A qualified biologist shall conduct a pre-construction burrowing owl survey of each restoration area (including required survey buffer areas) prior to LCWA's approval of project plans or publication of subsequent CEQA documents. If burrowing owls are detected, the habitat will be avoided ad /or enhanced by the restoration design. In addition, a Burrowing Owl Management Plan shall be prepared and approved by CDFW, and implemented, prior to commencement of construction. The Burrowing Owl Management Plan shall be prepared in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation and shall address specific minimization and avoidance measures for burrowing owls, such as avoidance of occupied habitat, translocation of individuals, and on site revegetation.	Written verification; submittal of Burrowing Owl Management Plan	Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife
Mitigation Measure BIO-6: Minimization of Light Spillage. A Program Lighting Plan shall be designed to minimize light trespass and glare into adjacent habitat areas prior to the commencement of activities within the program area. Nighttime lighting associated with the visitor center, parking lot, and trails shall be shielded downward and/or directed away from habitat areas to minimize impacts to nocturnal species, including breeding birds.	Submittal of Program Lighting Plan	Prior to commencement of construction activities	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure BIO-7: Pre-Construction Bat Surveys. A qualified biologist shall conduct a pre-construction bat survey of each restoration area prior to final approval of the area's restoration plan. If suitable bat roosting habitat is determined to be present, a presence/absence survey shall be conducted prior to commencement of construction activities. A qualified biologist shall conduct the preconstruction clearance survey of suitable bat roosting habitat, such as mature palm trees. If bats are determined to be roosting, the biologist will determine whether it is a day roost (non-breeding) or maternity roost (lactating females and dependent young). If a day roost is determined, the biologist shall ensure that direct mortality to roosting individuals will not occur by requiring that trees	Written verification; submittal of Bat Exclusion Plan (if needed)	Prior to final approval of the area's restoration plan.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
with roosts are not directly impacted (e.g., removed) until after the roosting period. If a maternity roost is determined to be present, the biologist shall determine a suitable buffer distance between construction activities and the roosting site. If direct disturbance to the maternity roost could occur, a Bat Exclusion Plan shall be prepared and approved by CDFW, and implemented, prior to impacting the roost. At a minimum, the Plan shall include avoidance and minimization measures to reduce potential impacts to breeding bats during construction activities and prescribed methods to safely and humanely evict bats from the roost to avoid mortality.			
Mitigation Measure BIO-8: Focused Surveys for Special- Status Wildlife Species. Should suitable habitat occur for terrestrial or aquatic special-status species, a qualified biologist shall conduct focused habitat assessments and focused surveys to determine presence, absence and/or abundance for special-status wildlife species listed in Table 3.3-5. Both habitat assessments and focused surveys shall occur prior to LCWA's approval of the project plans or the publication of subsequent CEQA documents for any project site that potentially contains special-status species. Agency-approved protocols shall be used for specific species where appropriate during the required or recommended time of year. For all other target (special-status) species, prior to initiating surveys, survey methods shall be verified and approved in writing by CDFW and USFWS or NMFS for all state- and/or federally-protected species, respectively. If special-status species are detected, the project-specific restoration plan should be designed to minimize impacts to special-status wildlife to the greatest extent feasible and a Wildlife Avoidance Plan shall be prepared and approved by CDFW and USFWS or NMFS prior to commencement of construction. The Wildlife Avoidance Plan shall include specific species minimization and avoidance measures, measures to minimize impacts to occupied habitat, such as avoidance and revegetation, as well as relocation/translocation protocols. The plan shall require that a qualified biological monitor approved by CDFW be onsite prior to and during ground and habitat disturbing activities to move special status species or other wildlife of low mobility out of harm's way that could be injured or killed by ground disturbing activities. If special-status species cannot be avoided, Incidental Take Permits from the National Marine Fisheries Service or United States Fish and Wildlife Service and California Department of Fish and Wildlife will be required. The amount of potential take shall be determined prior to design approval of each restoration area based on consultation with NMFS or USFWS and CDFW and take authorization shall be obtained prior to commencement of any ground disturbing activities. If an incidental take permit is being obtained, compensatory mitigation for the loss of occupied habitat shall be provided through purchase of credit from an existing mitigation bank, private purchase of mitigation lands, or on-site preservation, as approved by the resource agencies. Compensatory mitigation shall be provided at a minimum 1:1 ratio to reduce potential effects to less-than-significant levels.	Written verification; submittal of Wildlife Avoidance Plan (if needed)	Prior to LCWA's approval of the project plans or publication of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife United States Fish and Wildlife Service National Marine Fisheries Service
Mitigation Measure BIO-9: Revegetation of Sensitive Natural Communities. Sensitive natural communities located on the program area include: *Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance, *Arthrocnemum subterminale* Herbaceous Alliance, *Baccharis salicina* Provisional Shrubland Alliance, *Cressa truxillensis – Distichlis spicata* Herbaceous Alliance, *Frankenia salina* Herbaceous Alliance, *Isocoma*	Written verification; submittal of a Mitigation, Maintenance and Monitoring Program	Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
menziesii Shrubland Alliance, *Leymus cinereus – Leymus triticoides* Herbaceous Alliance, *Salicornia pacifica* Herbaceous Alliance, *Salix gooddingii* Woodland Alliance, *Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance and *Spartina foliosa* Herbaceous Alliance. Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, the area(s) that will be impacted shall be delineated and quantified using current Global Information System (ArcGIS) mapping software. Sensitive Natural Communities that will be impacted by the proposed program shall be created within the program area at a minimum ratio of 1:1 (area created:area impacted). A mitigation ratio of a minimum 2:1 for natural communities with a rarity ranking of S3 or higher will be incorporated into the restoration designs. Restored Sensitive Natural Communities shall consist of a minimum 60 percent absolute vegetation cover and shall include community-specific growing conditions, such as, similar slope, aspect, elevation, soil, and salinity. Moreover, soils within mudflat areas shall be salvaged (where feasible) for areas that are proposed for activities such as grading, and reintroduced in new mudflat and/or wetland areas that will be created. A Mitigation, Maintenance and Monitoring Program shall be prepared and approved by CDFW prior to implementation. The Program shall be implemented by a qualified restoration ecologist, and at a minimum, shall include success criteria and performance standards for measuring the establishment of Sensitive Natural Communities, responsible parties, maintenance techniques and schedule, 5-year monitoring and reporting schedule, adaptive management strategies, and contingencies.			and Wildlife
Mitigation Measure BIO-10: Jurisdictional Resources Permitting. Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, a jurisdictional delineation report shall be prepared that describes these jurisdictional resources and the extent of jurisdiction under the USACE, RWQCB, CDFW, and CCC. If it is determined during final siting that jurisdictional resources cannot be avoided, the project applicant shall be subject to provisions as identified below: 1. If avoidance is not feasible, prior to ground disturbance activities that could impact these aquatic features, the project applicant shall file the required documentation and receive the following. a. Nationwide Permit or equivalent permit issued from USACE; b. Water Quality Certification issued from the Los Angeles RWQCB; c. Streambed Alteration Agreement issued from CDFW; and d. Coastal Development Permit issued from CCC. 2. Compensatory mitigation for impacts to jurisdictional resources is not anticipated as the proposed program's goal is the restoration and expansion of coastal salt marsh within the proposed program. 3. The project proponent shall comply with the mitigation measures detailed in permits issued from the USACE, RWQCB, CDFW, and CCC.	Written verification	Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife United States Army Corps of Engineers Regional Water Quality Control Board
Mitigation Measure BIO-11: Monitoring and Adaptive Management Plan. In conjunction with Section 3.8, *Hydrology and Water Quality*, a Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction	Written verification; submittal of Monitoring and Adaptive	Prior to commencement of construction activities	City of Long Beach City of Seal Beach

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
or restoration activities. The MAMP shall provide a framework for monitoring site conditions in response to the proposed program implementation. The MAMP shall include provisions for conducting a pre-construction survey to collect baseline data for existing wetland function. The MAMP shall require that monitoring focus on the functional wetland values as well as sediment quality in areas subject to the greatest deposition from storm events and that are also not subject to regular tidal flushing, (e.g., the southwestern corner of the Long Beach Property site). The MAMP shall identify habitat functions, such as biotic structure and hydrology, that shall be monitored as part of the proposed program's monitoring and reporting requirements. The MAMP shall identify sediment quality monitoring requirements that shall be performed at a frequency that would capture the potential build-up of contaminants in the deposited sediment before concentration are reached that would impact benthic macro-invertebrates and other sensitive species. The MAMP shall require that the findings of the monitoring efforts be used to identify any source of functional loss of wetlands and water quality impairment, and if discovered, provide measures to improve wetland function and for remediation of the sediment source area(s). Upon completion of restoration activities, the proposed program shall demonstrate a no net loss of aquatic resource functions and demonstrate an increase in wetland functions and values throughout the entire site. The MAMP shall be submitted for review and approval to responsible permitting agencies prior to commencement of construction or restoration activities.	Management Plan		California Coastal Commission
Cultural Resources			
Mitigation Measure CUL-1: Cultural Resources Personnel Professional Qualifications Standards. Cultural resources consulting staff shall meet, or be under the direct supervision of an individual meeting, the minimum professional qualifications standards (PQS) set forth by the Secretary of the Interior (SOI) (codified in 36 Code of Federal Regulations [CFR] Part 61; 48 FR 44738-44739).	Included in construction contractor's scope of work and agreements; written verification	By LCWA prior to the commencement of construction.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-2: Historic Resources Assessment. For each near-term, mid-term, and long-term project, LCWA shall retain an SOI-qualified architectural historian (Qualified Architectural Historian) to conduct a historic resources assessment including: a records search at the South Central Coastal Information Center; a review of pertinent archives and sources; a pedestrian field survey; recordation of all identified historic resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the assessment. The report(s) shall be submitted to LCWA for review and approval prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Architectural Historian shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its completion. A Historic Resources Assessment shall not be required for any project site that has already undergone the same or similar assessment as part of the program as long as the assessment is deemed adequate by the Qualified Architectural Historian for the purposes of the project currently under consideration.	Written verification, submittal of assessment	By LCWA prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-3: Historic Resources Evaluation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project site containing unevaluated historic resources, a Qualified Architectural Historian shall	Written verification, submittal of evaluation	By the LCWA prior to approval of project plans or preparation	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
determine if the project has the potential to result in adverse impacts to identified historic resources. For any historic resource that may be adversely impacted, the Qualified Architectural Historian shall evaluate the resource for listing in the California Register under Criteria 1-4 in order to determine if the resource qualifies as a historical resource. If a historic resource is found eligible, the Qualified Architectural Historian shall determine if the project would cause a substantial adverse change in the significance of the resource. If a substantial adverse change would occur (i.e., the project would demolish the resource or materially alter it in an adverse manner), the Qualified Architectural Historian shall develop appropriate mitigation measures to be incorporated into subsequent CEQA documents. These measures may include, but would not be limited to, relocation, HABS/HAER/HALS documentation, development and implementation of an interpretative and commemorative program, or development and implementation of a salvage plan. All evaluations and resulting technical reports shall be completed and approved by LWCA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Architectural Historian shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA.		of subsequent CEQA documents.	
Mitigation Measure CUL-4: Archaeological Resources Assessment. For each near-term, mid-term, and long-term project that involves ground disturbance, LCWA shall retain an SOI-qualified archaeologist (Qualified Archaeologist) to conduct an archaeological resources assessment including: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the Native American Heritage Commission; updated geoarchaeological review incorporating previously unavailable data (such as geotechnical studies); a pedestrian field survey; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report. The technical report shall: document the methods and results of the study; provide an assessment of the project's potential to encounter subsurface archaeological resources and human remains based on a review of the project plans, depth of proposed ground disturbance, and available project-specific geotechnical reports; and provide recommendations as to whether additional studies are warranted (i.e., Extended Phase I presence/absence testing or resource boundary delineation, Phase II testing and evaluation). The report(s) shall be submitted to LCWA for review and approval prior to approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its completion. An Archaeological Resources Assessment shall not be required for any project site that has already undergone the same or similar assessment as part of the program as long as the assessment is deemed adequate by the Qualified Archaeologist for the purposes of the project currently under consideration.	Written verification, submittal of report	By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-5: Extended Phase I Archaeological Investigation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project with a high potential to encounter subsurface archaeological resources as determined by the project-specific archaeological resources assessment conducted under Mitigation Measure CUL-4: Archaeological Resources Assessment, a Qualified Archaeologist shall conduct an Extended Phase I investigation to identify the presence/absence of subsurface archaeological resources. Prior to the initiation of field	Written verification, submittal of report	By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
work for any Extended Phase I investigation, the Qualified Archaeologist shall prepare a work plan outlining the investigation's objectives, goals, and methodology (e.g., field and lab procedures, collection protocols, curation and reporting requirements, Native American input/monitoring, schedule, security measures). For investigations related to Native American archaeological resources, monitoring shall be required in accordance with Mitigation Measures CUL-13: Native American Monitoring. All work plans shall outline the protocols and procedures to be followed in the event that human remains and associated funerary objects or grave goods (i.e., artifacts associated with human remains) are encountered in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Disposition of archaeological materials recovered during Extended Phase I investigations shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Projects occurring within the same timeframe may be covered by one overarching work plan. All investigations and resulting technical reports shall be completed and approved by LCWA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA. An Extended Phase I investigation shall not be required for any project site or resource that has already undergone the same or similar investigation as part of the program as long as the investigation is deemed adequate by the Qualified Archaeologist for the purposes of the project currently under consideration.			
Mitigation Measure CUL-6: Phase II Archaeological Investigation. Prior to LCWA's approval of project plans or the publication of subsequent CEQA documents for any project site containing known unevaluated archaeological resources as identified by the project-specific archaeological resources assessment conducted under Mitigation Measure CUL-4: Archaeological Resources Assessment, a Qualified Archaeologist shall determine if the project has the potential to result in adverse impacts to identified archaeological resources (this may include initial Extended Phase I testing to identify the boundaries of resources, if necessary to properly assess potential impacts, following the procedures outlined under Mitigation Measure CUL-5: Extended Phase I Archaeological Investigation). For any archaeological resource that may be adversely impacted, the Qualified Archaeologist shall conduct Phase II testing and shall evaluate the resource for listing in the California Register under Criteria 1-4 in order to determine if the resource qualifies as a historical resource. LCWA shall consider the significance of the resource to Native American groups prior to requiring any Phase II subsurface testing. If the resource does not qualify as a historical resource, it shall then be considered for qualification as a unique archaeological resource. Native American or prehistoric archaeological resources shall also be considered as contributors to the tribal landscape to determine if they contribute to the significance of the landscape. Prior to the initiation of field work for any Phase II investigation, the Qualified Archaeologist shall prepare a work plan outlining the investigation's objectives, goals, and methodology (e.g., research design, field and lab procedures, collection protocols, data requirements/thresholds, evaluation criteria, curation and reporting requirements, Native American input/monitoring, schedule, security measures). The Qualified Archaeologist and LCWA shall coordinate with participating Native American Tribes during preparation of Phase II work plans related to Native American archaeological resources to ensure cultural	Written verification, submittal of report	By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
values ascribed to the resources, beyond those that are scientifically important, are considered in the evaluation, including those related to the tribal cultural landscape. For investigations related to Native American archaeological resources, Native American Tribal coordination and monitoring shall be required in accordance with Mitigation Measures CUL-12: Native American Coordination and CUL-13: Native American Monitoring. All work plans shall outline the protocols and procedures to be followed in the event that human remains and associated funerary objects or grave goods (i.e., artifacts associated with human remains) are encountered in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Disposition of archaeological materials recovered during Extended Phase I or Phase II investigations shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. Projects occurring within the same timeframe may be covered by one overarching work plan. All investigations and resulting technical reports shall be completed and approved by LWCA prior to LCWA's approval of project plans or publication of subsequent CEQA documents. The Qualified Archaeologist shall file a copy of the final report(s) with the South Central Coastal Information Center within 30 days of its acceptance by LCWA.			
Mitigation Measure CUL-7: Avoidance and Preservation in Place of Archaeological Resources. In the event historical resources or unique archaeological resources or resources that contribute to the significance of the tribal cultural landscape are identified, avoidance and preservation in place shall be the preferred manner of mitigating impacts to such resources. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. If avoidance is determined by the LCWA to be infeasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations, then that resource shall be subject to Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** If avoidance and preservation in place of a resource is determined by LCWA to be feasible, then that resource shall be subject to Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan.	Field verification, written report	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan. A Qualified Archaeologist shall prepare a Phase III Archaeological Resources Data Recovery and Treatment Plan for significant archaeological resources (i.e., resources that qualify as historical resources or unique archaeological resources or that contribute to the significance of the tribal cultural landscape) that will be adversely impacted by a project. Consistent with *CEQA Guidelines* Section 15126.4, data recovery shall not be required for a historical resource if LCWA determines that testing or studies already completed have adequately recovered the scientifically consequential information for resources eligible under California Register Criterion 4. The Qualified Archaeologist and LCWA shall consult	Written verification, submittal of plan	By LCWA, prior to the start of field work for data recovery efforts for resources that are eligible under California Register Criterion 4 (data potential).	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
with interested Native American Tribes for recovery/treatment of Native American archaeological resources during preparation of the plan(s) to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered in assessing treatment, including those related to the tribal cultural landscape. Projects occurring within the same timeframe may be covered by one overarching plan. The plan(s) shall be submitted to LCWA for review and approval prior to the start of field work for data recovery efforts for resources that are eligible under California Register Criterion 4 (data potential). Data recovery field work shall be completed prior to the start of any project-related ground disturbance. Treatment for archaeological resources that are eligible under California Register Criterion 1 (events), Criterion 2 (persons), or Criterion 3 (design/workmanship) shall be completed within 3 years of completion of the project. Each plan shall include: a. *Research Design.* The plan shall outline the applicable cultural context(s) for the region, identify research goals and questions that are applicable to each resource or class of resources, and list the data needs (types, quantities, quality) required to answer each research question. The research design shall address all four California Register Criteria (1–4) and identify the methods that will be required to inform treatment, such as subsurface investigation, documentary/archival research, and/or oral history, depending on the nature of the resource. The research design shall also include consideration of Native American or prehistoric archaeological resources as contributors to the tribal cultural landscape. b. *Data Recovery for Resources Eligible under Criterion 4.* The plan shall outline the field and laboratory methods to be employed, and any specialized studies that will be conducted, as part of the data recovery effort for resources that are eligible under California Register Criterion 4 (data potential). If a resource is eligible under additional criteria, treatment beyond data recovery shall be implemented (see CUL-6c). c. *Treatment for Resources Eligible under Criteria 1, 2, or 3.* In the event a resource is eligible under California Register Criterion 1 (events), Criterion 2 (persons), or Criterion 3 (design/workmanship), then resource-specific treatment shall be developed to mitigate project-related impacts to the degree feasible. This could include forms of documentation, interpretation, public outreach, ethnographic and language studies, publications, and educational programs, depending on the nature of the resource, and may require the retention of additional technical specialists. Treatment measures shall be generally outlined in the plan based on existing information on the resource. Once data recovery is completed and the results are available to better inform resource-specific treatment, the treatment measures shall be formalized and implemented. Treatment shall be developed by the Qualified Archaeologist in consultation with LCWA and Native American Tribal representatives for resources that are Native American in origin, including those related to the tribal cultural landscape. d. *Security Measures.* The plan shall include recommended security measures to protect archaeological resources from vandalism, looting, and non-intentionally damaging activities during field work. e. *Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.* The plan shall outline the protocols and procedures to be followed in the event *that* human remains and associated funerary objects or grave goods are			

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
uncovered. Protocols and procedures shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. f. *Reporting Requirements.* Upon completion of data recovery for resources eligible under Criterion 4, the Qualified Archaeologist shall document the findings in an Archaeological Data Recovery Report. The draft Archaeological Data Recovery Report shall be submitted to the LCWA within 360 days after completion of data recovery, and the final Archaeological Data Recovery Report shall be submitted to LCWA within 60 days after the receipt of LCWA comments. The Qualified Archaeologist shall submit the final Archaeological Data Recovery Report to the South Central Coastal Information Center within 30 days of its acceptance by LCWA. Upon completion of all other treatment for resources eligible under Criteria 1, 2, or 3, the Qualified Archaeologist shall document the resource-specific treatment that was implemented for each resource and verification that treatment has been completed in a technical document (report or memorandum). The document shall be provided to LCWA within 30 days after completion of treatment. g. *Curation or Disposition of Cultural Materials.* The plan shall outline the requirements for final *disposition* of all cultural materials collected during data recovery. Disposition of all archaeological materials shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials**.** Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries**.**			
h. *Protocols for Native American Coordination and Monitoring.* The plan shall outline the role and responsibilities of Native American Tribal representatives in *accordance* with Mitigation Measure CUL-12: Native American Coordination**.** It shall outline communication protocols, timelines for review of archaeological resources documents, and provisions for Native American monitoring. The plan shall include provisions for full-time Native American monitoring of all data recovery field work for resources that are Native American in origin, including those related to the tribal cultural landscape, in accordance with Mitigation Measure CUL-13: Native American Monitoring**.**			
Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan. For each near-term, mid- term, and long-term project that involves ground disturbance, a Qualified Archaeologist shall prepare an Archaeological Resources Mitigation and Monitoring Plan taking into account the final LCWA-approved project design plans, depths/locations of ground disturbance, proximity to known archaeological resources, and potential to encounter subsurface archaeological resources. Projects occurring within the same timeframe may be covered by one overarching plan. The Qualified Archaeologist and LCWA shall coordinate with participating Native American Tribes during preparation of the plan(s). Each plan shall include: a. *Establishment of Environmentally Sensitive Areas.* The plan shall outline areas that will be designated Environmentally Sensitive Areas (including maps), if needed. Significant or unevaluated *archaeological* resources that are being avoided and are within 50 feet of the construction zone shall be designated as Environmentally Sensitive Areas. The resources shall be *delineated* with exclusion markers to ensure avoidance. These	Written verification, submittal of plan	By the LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
areas shall not be marked as archaeological resources, but shall be designated as "exclusion zones" on project plans and protective fencing in order to discourage unauthorized disturbance or collection of artifacts. b. *Provisions for Archaeological Monitoring.* The plan shall outline requirements for archaeological monitoring and the archaeological monitor(s) role and responsibilities in accordance with Mitigation Measure CUL-11: Archaeological Resources Monitoring. Ground disturbance in locations/depths that have been previously monitored as part of the program shall not be subject to additional monitoring. c. *Procedures for Discovery of Archaeological Resources.* Procedures to be implemented in the event of an archaeological discovery shall be fully defined in the plan and shall be in accordance with Mitigation Measure CUL- 14: Archaeological Resources Discoveries. Procedures outlined shall include stop-work and protective measures, notification protocols, procedures for significance assessments, and appropriate treatment measures. The plan shall state avoidance or preservation in place is the preferred manner of mitigating impacts to historical resources, unique archaeological resources, and contributors to the significance of the tribal cultural landscape, but shall provide procedures to follow should avoidance be infeasible in light of factors such as the nature of the find, project design, costs, and other considerations. If, based on the recommendation of a Qualified Archaeologist, it is determined that a discovered archaeological resource constitutes a historical resource or unique archaeological resource or is a contributor to the significance of the tribal cultural *landscape*, then *avoidance* and preservation in place shall be the preferred manner of mitigating impacts to such a resource in accordance with Mitigation Measure CUL-7: Avoidance and Preservation in Place of Archaeological Resources. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Data Recovery and Treatment Plan shall be prepared and implemented following the procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan. LCWA shall consult with appropriate Native American representatives in determining treatment of resources that are Native American in origin to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered, including those related to the tribal cultural landscape.			
d. *Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.* The plan shall outline the protocols *and* procedures to be followed in the event that *human* remains and associated funerary objects or grave goods are uncovered. Protocols and procedures shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. e. *Reporting Requirements.* The plan shall outline provisions for weekly and final reporting. The Qualified Archaeologist shall prepare weekly status reports detailing activities and locations observed (including maps) and summarizing any discoveries for the duration of monitoring to be submitted to LCWA via email for each week in which monitoring activities occur. The Qualified Archaeologist shall prepare a draft Archaeological Resources Monitoring Report and submit it to LCWA within 180 days after completion of the monitoring program or treatment for significant discoveries should treatment extend			

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
beyond the cessation of monitoring. The final Archaeological Resources Monitoring Report shall be submitted to LCWA within 60 days after receipt of LCWA comments. The Qualified Archaeologist shall also submit the final Archaeological Resources Monitoring Report to the South Central Coastal Information Center. f. *Curation or Disposition of Cultural Materials.* The plan shall outline the requirements for final disposition of all cultural materials collected during data recovery. Disposition of all archaeological materials shall be in accordance with Mitigation Measure CUL-15: Curation and Disposition of Cultural Materials. Disposition of human remains and any associated funerary objects or grave goods shall be in accordance with Mitigation Measure CUL-18: Human Remains Discoveries. g. *Protocols for Native American Coordination and Monitoring.* The plan shall outline requirements for Native American coordination and monitoring, and the Native American monitor(s) role and responsibilities in accordance with Mitigation Measures CUL-12: Native American Coordination and CUL-13: Native American Monitoring**.**			
Mitigation Measure CUL-10: Construction Worker Cultural Resources Sensitivity Training. For each near- term, mid-term, and long-term project that involves ground disturbance, LCWA shall retain a Qualified Archaeologist to implement a cultural resources sensitivity training program. The Qualified Archaeologist, or their designee, and a Native American representative shall instruct all construction personnel of the importance and significance of the area as a tribal cultural landscape, the types of archaeological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains, confidentiality of discoveries, and safety precautions to be taken when working with cultural resources monitors. In the event that construction crews are phased, additional trainings shall be conducted for new construction personnel. LCWA or their contractors shall ensure construction personnel are made available for and attend the training. LCWA shall retain documentation demonstrating attendance.	Included in construction contractor's scope of work; written verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-11: Archaeological Resources Monitoring. For each near-term, mid-term, and long-term project, full-time archaeological monitoring of ground disturbance (i.e., demolition, pavement removal, pot-holing or auguring, boring, drilling, grubbing, vegetation removal, brush clearance, weed abatement, grading, excavation, trenching, or any other activity that has potential to disturb soil) shall be conducted in areas and at depths where there is a potential to encounter archaeological materials or human remains, including excavations into existing artificial fill and native soils, based on the project-specific archaeological resources assessment prepared under Mitigation Measure CUL-4: Archaeological Resources Assessment. Ground disturbance in locations/depths that have been previously monitored as part of the program shall not be subject to additional monitoring. The archaeological monitor(s) shall be familiar with the types of resources that could be encountered and shall work under the direct supervision of a Qualified Archaeologist. The number of archaeological monitors required to be on site during ground-disturbing activities is dependent on the construction scenario, specifically the number of pieces of equipment operating at the same time, the distance between these pieces of equipment, and the pace at which equipment is working, with the goal of monitors being able to effectively observe soils as they are exposed.	Field verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
Generally, work areas more than 500 feet from one another will require additional monitors. The archaeological monitor(s) shall keep daily logs detailing the types of activities and soils observed, and any discoveries. Archaeological monitor(s) shall have the authority to halt and re-direct ground disturbing activities in the event of a discovery until it has been assessed for significance and treatment implemented, if necessary, based on the recommendations of the Qualified Archaeologist in coordination with LCWA, and the Native American representatives in the event the resource is Native American in origin, and in accordance with the protocols and procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** Reporting of archaeological monitoring shall be conducted in accordance with the provisions outlined in Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan.			
Mitigation Measure CUL-12: Native American Coordination. LCWA shall seek input from participating Native American Tribes during the preparation of documents required under Mitigation Measures CUL-5: Extended Phase I Archaeological Investigation**,** CUL-6: Phase II Archaeological Investigation**,** CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**,** Mitigation Measure CUL 9: Archaeological Resources Monitoring and Mitigation Plan, and CUL-14: Archaeological Resources Discoveries**,** including but not limited to work plans, research designs, treatment plans, and associated technical reports. LCWA shall provide participating Native American Tribes with electronic copies of draft documents and afford them 30 days from receipt of a document to review and comment on the document. Native American comments will be provided in writing for consideration by LCWA. LCWA shall document comments and how the comments were/were not addressed in a tracking log.	Written verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-13: Native American Monitoring. For each near-term, mid-term, and long-term project, full-time Native American monitoring of ground disturbance (i.e., demolition, pavement removal, pot-holing or auguring, boring, drilling, grubbing, vegetation removal, brush clearance, weed abatement, grading, excavation, trenching, or any other activity that has potential to disturb soil) shall be conducted in areas and at depths where there is a potential to encounter archaeological materials or human remains, including excavations into existing artificial fill and native soils, based on the project-specific study prepared under Mitigation Measure CUL-4: Archaeological Resources Assessment. LCWA shall retain a Native American monitor(s) from a California Native American Tribe that is culturally and geographically affiliated with the program area (according to the California Native American Heritage Commission) to conduct the monitoring. If more than one Tribe is interested in monitoring, LCWA shall contract with each Tribe that expresses interest and prepare a monitoring rotation schedule. LCWA shall rotate monitors on an equal and regular basis to ensure that each Tribal group has the same opportunity to participate in the monitoring program. If a Tribe cannot participate when their rotation comes up, they shall forfeit that rotation unless LCWA can make other arrangements to accommodate their schedule. The number of Native American monitors required to be on site during ground disturbing activities is dependent on the construction scenario, specifically the number of pieces of equipment operating at the same time, the distance between these pieces of equipment, and the pace at which equipment is working, with the goal of monitors being able to effectively observe soils as they are exposed. Generally, work areas more than 500 feet from one another require additional monitors. Native	Written verification, field verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
American monitors shall have the authority to halt and re-direct ground disturbing activities in the event of a discovery until it has been assessed for significance. The Native American monitor(s) shall also monitor all ground disturbance related to subsurface investigations and data recovery efforts conducted under Mitigation Measures CUL-5: Extended Phase I Archaeological Investigation**,** CUL-6: Phase II Archaeological Investigation**,** and CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan for any resources that are Native American in origin, according to the rotation schedule, including those related to the tribal cultural landscape.			
Mitigation Measure CUL-14: Archaeological Resources Discoveries. In the event archaeological resources are encountered during construction of the proposed program, all activity in the vicinity of the find shall cease (within 100 feet), and the protocols and procedures for discoveries outlined in Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan shall be implemented. The discovery shall be evaluated for potential significance by the Qualified Archaeologist. If the Qualified Archaeologist determines that the resource may be significant (i.e., meets the definition for historical resource in *CEQA Guidelines* subdivision 15064.5(a) or for unique archaeological resource in PRC subdivision 21083.2(g) or is a contributor to the tribal cultural landscape), the Qualified Archaeologist shall develop an Archaeological Resources Data Recovery and Treatment Plan for the resource following the procedures outlined in Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan**.** When assessing significance and developing treatment for resources that are Native American in origin, including those related to the tribal cultural landscape, the Qualified Archaeologist and LCWA shall consult with the appropriate Native American representatives. The Qualified Archaeologist shall also determine if work may proceed in other parts of the project site while data recovery and treatment is being carried out. LCWA shall consult with the State Lands Commission Staff Attorney regarding any cultural resources discoveries on state lands. The final disposition of archaeological, historical, and paleontological resources recovered on State land under the jurisdiction of the California State Lands Commission must be approved by the Commission.	Field verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL 15: Curation and Disposition of Cultural Materials. LCWA shall curate all Native American archaeological materials, with the exception of funerary objects or grave goods (i.e., artifacts associated with Native American human remains). LCWA shall consult with Native American representatives regarding the final disposition of Native American archaeological materials and on the selection of the curation facility, with preference given to tribal museums. LCWA shall first consider repositories that are accredited by the American Association of Museums and that meet the standards outlined in 36 CFR 79.9. If a suitable accredited repository is not identified, then LCWA shall consider non-accredited repositories as long as they meet the minimum standards set forth by 36 CFR 79.9. If a suitable non-accredited repository is not identified, then LCWA shall donate the collection to a local California Native American Tribe(s) (Gabrielino or Juañeno) for educational purposes. Disposition of Native American human remains and associated funerary objects or grave goods shall be determined by the landowner in consultation with LCWA and the Most Likely Descendant in accordance with Mitigation Measure CUL 18: Human Remains Discoveries.	Written verification, submittal of curation agreement	By LCWA prior to the start of each project	City of Long Beach City of Seal Beach California Coastal Commission California State Lands Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
LCWA shall curate all historic-period archaeological materials that are not Native American in origin at a repository accredited by the American Association of Museums that meets the standards outlined in 36 CFR 79.9. If no accredited repository accepts the collection, then LCWA may curate it at a non-accredited repository as long as it meets the minimum standards set forth by 36 CFR 79.9. If neither an accredited nor a non-accredited repository accepts the collection, then LCWA shall offer the collection to a public, non-profit institution with a research interest in the materials, or to a local school or historical society in the area for educational purposes. If no institution, school, or historical society accepts the collection, LCWA may retain it for on-site display as part of its interpretation and educational elements. The final disposition of cultural resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. Prior to start of each project, LCWA shall obtain a curation agreement and shall be responsible for payment of fees associated with curation for the duration of the program.			
Mitigation Measure CUL16: Future Native American Input. LCWA shall consult with participating California Native American Tribes, to the extent that they wish to participate, during future design of project-level components, plant and native plant selections or palettes, and development of content for educational and interpretative elements, such as signage and Visitors Center displays.	Written verification	By LCWA prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL17: Tribal Access Plan. Prior to the start of construction, LCWA shall develop a written access plan to preserve and enhance tribal members' access to, and use of, the restoration project area for religious, spiritual, or other cultural purposes. This plan will allow access to the extent LCWA has the authority to facilitate such access, and be consistent with existing laws, regulations, and agreements governing property within the program area. The access plan may place restrictions on access into certain areas, such as oil operations and other exclusive easements the LCWA does not have access rights to. This access plan shall be developed in coordination with participating California Native American Tribes, to the extent that they wish to participate.	Written verification, submittal of access plan	By LCWA prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure CUL-18: Human Remains Discoveries: If human remains are encountered, then LCWA or its contractor shall halt work in the vicinity (within 100 feet) of the discovery and contact the appropriate County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the County Coroner determines the remains are Native American, then the Coroner will notify the California Native American Heritage Commission (NAHC) within 24 hours in accordance with Health and Safety Code subdivision 7050.5(c), and Public Resources Code Section 5097.98. The California Native American Heritage Commission shall then identify the person(s) thought to be the Most Likely Descendant (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted	Field verification; written verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. LCWA and the landowner shall discuss and confer with the MLD on all reasonable options regarding the MLD's preferences for treatment. Until LCWA and the landowner have conferred with the MLD, the contractor shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials. If the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.			
Geology and Soils			
Mitigation Measure GEO-1: Retention of a Qualified Professional Paleontologist. Prior to the start of construction of any near-term, mid-term, or long-term project, LCWA shall retain a Qualified Professional Paleontologist as defined by the Society of Vertebrate Paleontology to carry out all mitigation related to paleontological resources including: project-level review (Mitigation Measure GEO-2); paleontological resources sensitivity training (GEO-3); oversight of paleontological resources monitoring (Mitigation Measure GEO-4); and recovery, treatment, analysis, curation, and reporting (Mitigation Measures GEO-5**,** GEO-6**,** and GEO-7).	Included in construction contractor's scope of work; written verification	By LCWA prior to the commencement of construction.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure GEO-2: Project-Level Paleontological Resources Review and Monitoring Recommendations. Prior to LCWA approval of any near-term, mid-term, and long- term project, the Qualified Professional Paleontologist shall review the *Los Cerritos Wetlands Program Paleontological Resources Assessment* (ESA, 2019), grading plans, and any available geotechnical reports/data to determine the potential for ground disturbance to occur within older alluvium and old shallow marine deposits. If available data is sufficient to accurately determine the depth of older alluvium and old shallow marine deposits within a project site, monitoring shall be required beginning at or just above that depth. If available data is insufficient to determine the depth of older alluvium and old shallow marine deposits, monitoring shall be required beginning at 5 feet below surface (consistent with the accepted depth at which high sensitivity sediments could occur based on regional evidence). The results of the reviews shall be documented in technical memoranda to be submitted to LCWA prior to the start of ground disturbance, along with recommendations specifying the locations, depths, duration, and timing of any required monitoring. The technical memoranda shall include map figures that outline where monitoring is required and at what depths, and shall stipulate whether screen washing is necessary to recover small specimens. Any required screen washing shall follow SVP Guidelines.	Written verification, submittal of technical memoranda	By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
Mitigation Measure GEO-3: Paleontological Resources Sensitivity Training. Prior to the start of ground disturbance for any near-term, mid-term, or long-term project, the Qualified Professional Paleontologist shall conduct paleontological resources sensitivity training. The training shall focus on the recognition of the types of paleontological resources that could be encountered within the program area, the procedures to be followed if they are found, confidentiality of discoveries, and safety precautions to be taken when working with paleontological monitors. LCWA shall ensure that construction personnel are made available for and attend the training, and retain documentation demonstrating attendance. The training should be repeated as necessary for incoming construction personnel.	Written verification	By LCWA prior to commencement of ground disturbance and continuously during construction.	City of Long Beach City of Seal Beach and/or California Coastal Commission
Mitigation Measure GEO-4: Paleontological Resources Monitoring. A qualified paleontological monitor, as defined by the Society of Vertebrate Paleontology, shall monitor all ground-disturbing activities occurring in the older alluvium and old shallow marine deposits for each near term, mid-term, or long-term project. Monitoring shall be implemented consistent with the locations, depths, duration, and timing recommendations specified in the technical memorandum for the project. Monitors shall work under the direction of the Qualified Professional Paleontologist. The number of monitors required to be on site during ground-disturbing activities shall be determined by the Qualified Professional Paleontologist and shall be based on the construction scenario – specifically the number of pieces of equipment operating at the same time, the distance between these pieces of equipment, and the pace at which equipment is working – with the goal of monitors being able to effectively observe sediments as they are exposed. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils in order to recover the fossil specimens, and to request assistance from construction equipment operators to recover samples for screen washing as necessary. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. The Qualified Professional Paleontologist, in consultation with LCWA, shall have the ability to modify (i.e., increase, reduce, or discontinue) monitoring requirements based on observations of soil types and frequency of discoveries. Requests for modifications shall be submitted in writing to LCWA for approval prior to implementation.	Written verification	By LCWA, prior to the commencement of ground disturbing activities and continuously during construction.	City of Long Beach City of Seal Beach California Coastal Commission
Mitigation Measure GEO-5: Paleontological Discoveries. If any potential fossils are discovered by paleontological resources monitors or construction personnel, all work shall cease at that location (within 100 feet) until the Qualified Professional Paleontologist has assessed the discovery and made recommendations as to the appropriate treatment. The paleontological resources monitor (if one is present) or construction personnel (if a monitor is not present) shall flag the fossiliferous area for avoidance until the Qualified Professional Paleontologist can evaluate the discovery and develop plans for avoidance or removal/salvage of the specimen(s), if deemed significant. Significant discoveries shall be salvaged following SVP Guidelines. LCWA shall consult with the State Lands Commission Staff Attorney regarding any paleontological resources discoveries on state lands.	Field verification; written verification	By LCWA continuously throughout construction	City of Long Beach City of Seal Beach California Coastal Commission California State Lands Commission
Mitigation Measure GEO-6: Preparation, Identification, Cataloging, and Curation Requirements. All significant fossil discoveries shall be prepared to the point of	Field verification; written verification, signed	By LCWA continuously	City of Long Beach City of Seal Beach

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
identification to the lowest taxonomic level possible, cataloged, and curated into a certified repository with retrievable storage (such as a museum or university). All GPS data, field notes, photographs, locality forms, stratigraphic sections, and other data associated with the recovery of the specimens shall be deposited with the institution receiving the specimens. The Qualified Professional Paleontologist shall be responsible for obtaining a signed curation agreement from a certified repository in southern California prior to the start of the program. Given the length of the program, multiple agreements may be necessary due to changing capacities of repositories. The final disposition of paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.	curation agreement	throughout construction	California Coastal Commission California State Lands Commission
Mitigation Measure GEO-7: Reporting Requirements. The Qualified Professional Paleontologist shall prepare weekly status reports detailing activities and locations observed (with maps) and summarizing any discoveries to be submitted to LCWA via email for each week in which monitoring activities occur. Monthly progress reports summarizing monitoring efforts shall be prepared and submitted to LCWA for the duration of monitored ground disturbance. Reports detailing the results of monitoring for any near-term, mid-term, or long- term project and treatment of significant discoveries shall be submitted to LCWA within 120 days of completion of treatment, or within 30 days of completion of monitoring if no significant discoveries occurred. If significant fossils are recovered, the Qualified Professional Paleontologist shall file the final report with the Natural History Museum of Los Angeles County and the certified repository.	Written verification, submittal of weekly reports	By LCWA throughout the construction period in which monitoring is required.	City of Long Beach City of Seal Beach California Coastal Commission
Hazards and Hazardous Materials			
Mitigation Measure HAZ-1: Health and Safety Plan. The contractor(s) shall prepare and implement site-specific Health and Safety Plans as required by and in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation and grading activities. This Plan shall be submitted to LCWA, the Orange County Environmental Health Division (the CUPA for the City of Seal Beach area), or Long Beach/Signal Hill Joint Powers Authority (the CUPA for the Long Beach area), for review prior to commencement of construction. The Health and Safety Plans shall include, but are not limited to, the following elements:	Written verification, submittal of plans.	Prior to the issuance of a grading permit	City of Long Beach City of Seal Beach Orange County Environmental Health Division Long Beach/Signal Hill Joint Powers Authority
• Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site Health and Safety Plan;			
• A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals;			
• Specified personal protective equipment and decontamination procedures, if needed;			
• Emergency procedures, including route to the nearest hospital; and			
Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations			

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, notifying the LCWA, and the Orange County Environmental Health Division (the CUPA for the City of Seal Beach area), or the Long Beach/Signal Hill Joint Powers Authority (the CUPA for the Long Beach area), the LARWQCB, or CalGEM, as appropriate, and retaining a qualified environmental firm to perform sampling and remediation.			
Mitigation Measure HAZ-2: Soil, Landfill Materials, and Groundwater Management Plan. In support of the Health and Safety Plan described in Mitigation Measure HAZ-1, the contractor(s) shall develop and implement a Soil, Landfilled Materials, and Groundwater Management Plan that includes a materials disposal plan specifying how the contractor will remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner. The Plan shall identify protocols for soil and landfilled materials testing and disposal, identify the approved disposal site, and include written documentation that the disposal site can accept the waste. Contract specifications shall mandate full compliance with all applicable federal, state, and local regulations related to the identification, transportation, and disposal of hazardous materials, including those encountered in excavated soil, landfilled materials, or dewatering effluent. As part of the Soil, Landfill Materials, and Groundwater Management Plan, the contractor shall develop a groundwater dewatering control and disposal plan specifying how groundwater (dewatering effluent), if encountered, will be handled and disposed of in a safe, appropriate and lawful manner. The Plan shall identify the locations at which groundwater dewatering is likely to be required, the test methods to analyze groundwater for hazardous materials, the appropriate treatment and/or disposal methods, and approved disposal site(s), including written documentation that the disposal site can accept the waste. The contractor may also discharge the effluent under an approved permit to a publicly owned treatment works, in accordance with any requirements the treatment works may have. The Plan will include information to address the following: In the event that any debris are encountered during excavation that could be associated with the FUDS, including but not limited to munitions and explosives of concern (MEC), material potentially presenting an explosive hazard (MPPEH), and munitions constituents (MC), follow the 3Rs of Explosives Safety; Recognize, Retreat and Report: Recognize, when you have encountered munitions; Retreat, note your location as you are backing away. Do not approach, touch, or disturb a suspect munitions, safely leave the area; and Report, immediately what was found to state and or local law enforcement – call 911. Please then notify DTSC. This Plan shall be submitted to the LCWA, and the Orange County Environmental Health Division (the CUPA for the City of Seal Beach area), or the Long Beach/Signal Hill Joint Powers Authority (the CUPA for the Long Beach area), or the Orange County Environmental Health Division (the CUPA for the City of Seal Beach area) for review and approval prior to commencement of construction.	Written verification, submittal of report	By the LCWA prior to the issuance of a grading permit	City of Long Beach City of Seal Beach Orange County Environmental Health Division Long Beach/Signal Hill Joint Powers Authority
Hydrology and Water Quality			
Mitigation Measure HYD-1: A Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction or restoration	Written verification, submittal of report	By the LCWA prior to the commencement	City of Long Beach City of Seal Beach

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
activities. The MAMP shall provide a framework for monitoring site conditions in response to the program implementation. The monitoring shall focus on sediment quality in areas subject to the greatest deposition from storm events and that are also not subject to regular tidal flushing, (e.g., the southwestern corner of the Long Beach Property site). The sediment quality monitoring shall be performed at a frequency that would capture the potential build-up of contaminants in the deposited sediment before concentration are reached that would impact benthic macro-invertebrates and other sensitive species. The findings of the monitoring efforts shall be used to identify any source of impairment, and if discovered, provide measures for remediation of the sediment source area(s). The MAMP shall be submitted for review and approval to permitting agencies prior to commencement of construction or restoration activities.		of construction	California Coastal Commission
Noise			
Noise Reduction Measure NOISE-1: Staging Areas and Mufflers. Staging areas for construction shall be located away from existing off-site residences. All construction equipment shall use properly operating mufflers. These requirements shall be included in construction contracts.	Included in construction contractor's agreements	By the LCWA prior to the commencement of construction	City of Long Beach City of Seal Beach California Coastal Commission
Noise Reduction Measure NOISE-2: Limit Grading. All grading activities shall be conducted outside of the nesting season for sensitive bird species. The nesting season has been identified as extending from March 1 to August 15. (Refer to Section 3.3 Biological Resources for more information on potential impacts to bird species and the corresponding mitigation).	Included in construction contractor's agreements	By the LCWA prior to the commencement of construction	City of Long Beach City of Seal Beach California Coastal Commission
Noise Reduction Measure NOISE-3: Noise Barriers. Where feasible, grading plans and specifications shall include temporary noise barriers for all grading, hauling, and other heavy equipment operations that would occur within 300 feet of sensitive off-site receptors and occur for more than 20 working days. The noise barriers shall be 12-feet high, but may be shorter if the top of the barrier is at least one foot above the line of sight between the equipment and the receptors. The barriers shall be solid from the ground to the top of the barrier, and have a weight of at least 2.5 pounds per square foot, which is equivalent to ¾ inch thick plywood. The barrier design shall optimize the following requirements: (1) the barrier shall be located to maximize the interruption of line-of-sight between the equipment and the receptor, which is normally at the top-of- slope when the grading area and receptor are at different elevations. However, a top-of-slope location may not be feasible if the top-of-slope is not on the project site; (2) the length and height of the barrier shall be selected to block the line-of-sight between the grading area and the receptors; (3) the barrier shall be located as close as feasible to the receptor or as close as feasible to the grading area; a barrier is least effective when it is at the midpoint between noise source and receptor.	Written verification, submittal of plans	By the LCWA prior to the issuance of a grading permit.	City of Long Beach City of Seal Beach California Coastal Commission
Public Services			
Mitigation Measure PS-1: Fire Prevention and Protection Training. Prior to the start of construction activities, the Applicant shall prepare and conduct a fire prevention and protection training for all construction personnel associated with the proposed program. Topics shall include general fire prevention practices such as avoiding smoking on the program area as well as specific preventative measures pertaining to high-fire-risk activities	Written verification	By the LCWA prior to the commencement of construction activities.	City of Long Beach City of Seal Beach California Coastal Commission

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
including handling of oil and welding and cutting. Personal protection measures including the locations of fire extinguishers on the program area and site exit routes should also be disclosed to ensure construction worker safety in the event of a fire. The material for the training shall be obtained in consultation with the Orange County Fire Authority and the Long Beach Fire Department.			
Transportation			
Mitigation Measure TRA-1: Prior to the start of construction of the program component(s) that require a full or partial roadway closure, LCWA shall require the construction contractor(s) to prepare a traffic control plan. The traffic control plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the cities of Seal Beach and Long Beach and Orange and Los Angeles Counties, as applicable. The traffic control plan shall be prepared in accordance with the applicable jurisdiction's traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, and that emergency access will not be restricted. Additionally, the traffic control plan will ensure that congestion and traffic delays are not substantially increased as a result of the construction activities. Furthermore, the traffic control plan will include detours or alternative routes for bicyclists using on- street bicycle lanes as well as for pedestrians using adjacent sidewalks. LCWA shall provide written notice at least two weeks prior to the start of construction to owners/occupants along streets to be affected during construction. During construction, LCWA will maintain continuous vehicular and pedestrian access to any affected residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. Access will be reestablished at the end of the workday. If a driveway needs to be closed or interfered with as described above, LCWA shall notify the owner or occupant of the closure of the driveway at least five working days prior to the closure. The traffic control plan shall include provisions to ensure that the construction of the proposed program does not interfere unnecessarily with the work of other agencies such as mail delivery, school buses, and municipal waste services. LCWA shall also notify local emergency responders of any planned partial or full lane closures or blocked access to roadways or driveways required for program construction. Emergency responders include fire departments, police departments, and ambulances that have jurisdiction within the program area. Written notification and disclosure of lane closure location must be provided at least 30 days prior to the planned closure to allow emergency response providers adequate time to prepare for lane closures.	Written verification, submittal of plan	By the LCWA construction contractor prior to the commencement of construction.	City of Long Beach City of Seal Beach California Coastal Commission
Utilities and Service Systems			
Mitigation Measure UTL-1: Water Will Serve Letter. Prior to issuance of a certificate of occupancy of the visitor center, a will serve letter will be obtained to verify that the water mains surrounding the program boundary have the capacity to serve the visitor center.	Written verification.	By the LCWA prior to issuance of a certificate of occupancy.	City of Seal Beach

Mitigation Measure	Method of Verification	Responsibility / Timing of Implementation	Enforcement Agency
Mitigation Measure UTL-2: Sewer Capacity Study. Prior to issuance of a certificate of occupancy of the visitor center, a sewer capacity study will be performed to verify that the sewer lines surrounding the program boundary have the capacity to serve the visitor center.	Written verification.	By the LCWA prior to issuance of a certificate of occupancy.	City of Seal Beach