

**Los Cerritos Wetlands Authority****Date: November 5, 2020****To: Governing Board Members****From: Sally Gee, Project Manager****Through: Mark Stanley, Executive Officer****Subject: Item 10: Consideration of a resolution certifying the Final Program Environmental Impact Report prepared for the Los Cerritos Wetlands Restoration Plan and adopting Findings and Facts and a Mitigation Monitoring and Reporting Program pursuant to the California Environmental Quality Act (State Clearinghouse No. 2019039050)**

**RECOMMENDATION:** That the Los Cerritos Wetlands Authority (LCWA) certify the Final Program Environmental Impact Report prepared for the Los Cerritos Wetlands Restoration Plan, adopt Findings and Facts, and adopt a Mitigation Monitoring and Reporting Program.

**PROJECT DESCRIPTION:** The Los Cerritos Wetlands Authority (LCWA), as the Lead Agency pursuant to CEQA, is proposing to implement a restoration program for the Los Cerritos Wetlands Complex. The Los Cerritos Wetlands Restoration Plan (proposed program) identifies conceptual restoration designs for approximately 503 acres of land and water located on the border of Orange County and Los Angeles County in the cities of Seal Beach and Long Beach (Exhibit A). The program area contains large expanses of open space, including wetland habitat, as well as other uses described in more detail in the Program Environmental Impact Report (PEIR). Due to its size, the Final PEIR is not attached to this report, but may be downloaded on the LCWA website at: <http://intoloscerritoswetlands.org/the-lcws-eir/>. This PEIR serves as a first-tier environmental document that focuses on the overall effects of implementing the activities that make up the proposed program. The final proposed program is described in Appendix A, Chapter 2 Project Description of the Final PEIR. As a first-tier environmental document, this PEIR will serve as the foundation for subsequent CEQA analysis (e.g., project-level EIRs, addendums) which may be conducted for project-specific restoration designs. To provide LCWA with the broadest of foundations as a first-tier environmental document, where appropriate, assumptions have been made in describing the program features that would potentially result in the worst-case impacts. This ensures that the analysis in the PEIR documents the potential for environmental impacts from all of the projects under this program – (Exhibit B, Table 5-1 Summary of Program and Alternative Impacts). Once LCWA begins the process of designing specific restoration projects, it will seek to minimize impactful aspects of the project, wherever feasible.

This PEIR has been prepared to address the potential environmental impacts associated with implementing the proposed program. Since the Los Cerritos Wetlands Restoration Plan consists of numerous conceptual restoration designs that involve implementation of projects over a long time period, a PEIR has been prepared (see Appendix A, Chapter 1, Section 1.2, Purpose of the Environmental Impact Report). CEQA Guidelines Section 15168 states that a PEIR may be used to evaluate a plan or program that has multiple components (projects and actions) or addresses a series of related actions. The proposed program would restore wetland, transition, and upland habitats throughout the program area. This would involve remediation of contaminated soil and

groundwater, grading, revegetation, construction of new public access opportunities (including trails, visitor center, parking lots, and viewpoints), construction of flood management facilities (including earthen levees and berms, and walls), and modification of existing infrastructure and utilities.

The goals and objectives of the proposed program are presented below and are similar to the goals and objectives identified in the Los Cerritos Wetlands Final Conceptual Restoration Plan (CRP) (Moffatt & Nichol, 2015):

1. Restore tidal wetland processes and functions to the maximum extent possible.
  - a. Increase estuarine habitat with a mix of tidal channels, mudflat, salt marsh, and brackish/ freshwater marsh and ponds.
  - b. Provide adequate area for wetland-upland ecotone and upland habitat to support wetlands.
  - c. Restore and maintain habitat that supports important life history phases for species of special concern (e.g., federal and state listed species), essential fish habitat, and migratory birds as appropriate.
  - d. Solicit and address feedback on restoration design from members of the community, Native American tribes, and other interested parties.
2. Maximize contiguous habitat areas and maximize the buffer between habitat and sources of human disturbance.
  - a. Maximize wildlife corridors within the LCW Complex and between the LCW Complex and adjacent natural areas within the region.
  - b. Incorporate native upland vegetation buffers between habitat areas and human development to mitigate urban impacts (e.g., noise, light, unauthorized human encroachment, domestic animals, wastewater runoff) and reduce invasion by non-native organisms.
  - c. Design the edges of the LCW Complex to be respectful and compatible with current neighboring land uses.
3. Create a public access and interpretive program that is practical, protective of sensitive habitat and ongoing oil operations, economically feasible, and will ensure a memorable visitor experience.
  - a. Build upon existing beneficial uses.
  - b. Minimize public impacts on habitat/wildlife use of the LCW Complex.
  - c. Design interpretive concepts that promote environmental stewardship and the connection between the wetlands and the community.
  - d. Solicit and address feedback from members of the community, Native American tribes, and other interested parties.
  - e. Encourage equitable access of the LCW as a regional resource.
4. Incorporate phasing of implementation to accommodate existing and future potential changes in land ownership and usage, and as funding becomes available.
  - a. Include projects that can be implemented as industrial operations are phased out and other properties are acquired over the near, mid, and long terms (next 10 years, 10–20 years, and 20+ years).
  - b. Investigate opportunities to restore levels of tidal influence that are compatible with current oil leases and neighboring private land holdings.
  - c. Remove/realign/consolidate existing infrastructure (roads, pipelines, etc.) and accommodate future potential changes in infrastructure, to the maximum extent feasible.
5. Strive for long-term restoration success.
  - a. Implement an adaptive management framework that is sustainable.

- b. Restore habitats in appropriate areas to minimize the need for long-term maintenance activities that are extensive and disruptive to wildlife.
  - c. Design habitats that will accommodate climate changes (e.g., incorporate topographic and habitat diversity and natural buffers and transition zones to accommodate migration of wetlands with rising sea levels).
  - d. Provide economic benefit to the region.
6. Integrate experimental actions and research into the project, where appropriate, to inform restoration and management actions for this project.
- a. Include opportunities for potential experiments and pilot projects to address gaps in information (e.g., effect of warm river water on salt marsh ecosystem) that are protective of sensitive habitat and wildlife and that can be used to adaptively manage the restoration project.
  - b. Include areas on the site, where appropriate, that prioritize research opportunities (such as those for adaptive management) over habitat sensitivities

**BACKGROUND:** 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. The CRP is a restoration alternatives analyses report that provides 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 identifies goals and objectives (see above) and three restoration design alternatives (minimum alteration, moderate alteration, and maximum alteration) with varying degrees of alterations to existing site conditions 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 20 resource and permitting agencies, and research groups covering federal, state, regional, and local jurisdictions), and the public (based on input during 6 community workshops). The plan is supported by 8 technical reports that provide baseline information for numerous topics including hydrology and hydraulics, soils, watersheds, and habitat. The CRP identified the next step in the restoration design process:

*“Further concept development of a hybrid alternative may occur at some point in the future to maximize benefits and minimize impacts of restoration. This work may include “mixing” and “matching” certain footprints of particular alternatives with those of different alternatives to create more alternatives that may provide more overall benefit than any of these individual concepts” (pg 7).*

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 PEIR, and to prepare a Los Cerritos Wetlands Optimized Restoration Plan (expected to be completed in late 2020). The proposed program along with alternatives to the proposed program (described in Appendix A, Chapter 5) 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 the public (based on input during 2 community workshops). The PEIR has been prepared to evaluate the environmental impacts associated with the proposed program.

Following certification of the PEIR by the LCWA Governing Board, the Los Cerritos Wetlands Optimized Restoration Plan will be finalized with input from public agencies, tribal representatives, stakeholders, landowners, and the community, and adopted by the LCWA Governing Board. The

restoration design presented in the Los Cerritos Wetlands Optimized Restoration Plan will be informed by this PEIR and public input while maintaining consistency with the framework provided by the CRP. The purpose of the Los Cerritos Wetlands Optimized Restoration Plan is to provide a conceptual basis of design for the restoration of the Los Cerritos Wetlands Complex, and to provide guidance for future phases of the restoration process.

Future phases of the restoration would involve identifying individual projects, performing required analyses and field surveys (i.e., wetland delineation reports, habitat surveys, archaeological and cultural surveys, soil samplings, etc.), engaging stakeholders, and developing more detailed, project-level designs (i.e., engineering designs, grading plans). As each individual restoration project is proposed, it will be evaluated for consistency with the Los Cerritos Wetlands Optimized Restoration Plan and the goals and objectives identified in this PEIR. Individual restoration projects will be developed with input from public agencies, tribal representatives, stakeholders, landowners, and the community, and adopted by the LCWA Board. As required by CEQA Guidelines Section 15168(c), subsequent activities in furtherance of a program (or plan) must be examined in the light of the Program EIR to determine whether additional environmental documentation must be prepared.

**DISCUSSION:** In conformance with CEQA and the CEQA Guidelines, the LCWA conducted an extensive environmental review of the proposed program. The environmental review process has included:

- ❖ Completion of an Initial Study (IS)/Notice of Preparation (NOP) on March 8, 2019. The 30-day public review period extended from March 8, 2019, to April 8, 2019. The NOP was posted at the Los Angeles County Clerk's office on March 8, 2019. Copies of the IS were made available for public review at the Bay Shore Neighborhood Library, located at 195 Bay Shore Avenue, Long Beach, CA 90803, at the Mary Wilson Library, located at 707 Electric Avenue, Seal Beach, CA 90740, and on LCWA's website (<http://intoloscerritoswetlands.org/the-lcws-eir/>).
- ❖ Completion of the scoping process where LCWA invited the public to participate in a scoping meeting held on March 21, 2019, at the Community Center in Recreation Park, 4900 East 7th Street, Long Beach, CA. The notice of a public scoping meeting was included in the NOP.
- ❖ Preparation of a Draft PEIR, which was made available for a 45-day public review period beginning May 8, 2020, and ending June 22, 2020. The public review period was extended by 15 days to July 6, 2020 for a total of 60-days. The scope of the Draft PEIR was determined based on the Initial Study, comments received in response to the NOP, and comments received at the scoping meeting conducted by LCWA. Draft PEIR Section 1.3.5, Known Areas of Controversy and Issues of Concern, describes the issues identified for analysis in the Draft PEIR. The Notice of Availability (NOA) for the Draft PEIR was sent to interested persons and organizations, sent to the State Clearinghouse in Sacramento for distribution to public agencies and posted on LCWA's website (<http://intoloscerritoswetlands.org/the-lcws-eir/>). The NOA was posted at the Los Angeles County Clerk's office and on the Project Site on May 11, 2020. The NOA was also posted at the Orange County Clerk's office on May 12, 2020. In addition, the Notice of Completion was sent to the Office of Planning and Research pursuant to CEQA Guidelines Section 15085, for distribution to the responsible regional agencies on May 8, 2020, with a review period ending on July 6, 2020. Two virtual public meeting webinars on the Draft PEIR were held on May 21, 2020 and on June 4, 2020.

The Draft PEIR contains the following sections:

- **Executive Summary.** This chapter summarizes the contents of the Draft PEIR.
  - **Chapter 1, Introduction.** This chapter discusses the CEQA process and the purpose of the PEIR.
  - **Chapter 2, Project Description.** This chapter provides an overview of the proposed program, describes the need for and objectives of the proposed program, and provides detail on the characteristics of the proposed program.
  - **Chapter 3, Environmental Setting, Impacts and Mitigation Measures.** This chapter describes the environmental setting and identifies impacts of the proposed program for each of the following environmental resource areas; *Aesthetics; Air Quality; Biological Resources; Cultural Resources; Geology, Soils, and Paleontological Resources; Greenhouse Gas Emissions and Energy; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Public Services; Recreation; Transportation; Tribal Cultural Resources; and Utilities and Service Systems.* Measures to mitigate the impacts of the proposed program are presented for each resource area.
  - **Chapter 4, Other CEQA Considerations.** This chapter describes the effects that were found not to be significant and those that were found to be significant and unavoidable. In addition, this section discusses the significant irreversible environmental changes and growth-inducing impacts associated with the proposed program.
  - **Chapter 5, Alternatives.** This chapter presents an overview of the alternatives development process and describes the alternatives to the proposed program that were considered.
  - **Chapter 6, Report Preparation.** This chapter identifies the key staff at LCWA and the authors involved in preparing this Draft PEIR.
  - **Appendices.** This PEIR includes appendices that provide either background information or additional technical support for the analysis. The following technical reports have been prepared and incorporated into the PEIR:
    - Appendix A – NOP/IS, Scoping Meeting Materials, and NOP and Scoping Meeting Comments
    - Appendix B – Air Quality Technical Report
    - Appendix C – Biological Resources
    - Appendix D – Cultural Resources Assessment Report
    - Appendix E – Paleontological Resources Assessment
    - Appendix F – Greenhouse Gas Emissions Technical Report
    - Appendix G – Energy Calculations
    - Appendix H – Hydrodynamic Modeling Technical Report
    - Appendix I – Sediment Dynamics and Sediment Budget Analysis
    - Appendix J – Sediment and Water Quality Investigation Technical Report
    - Appendix K – Noise Analysis Report
    - Appendix L – Summary of Environmental Effects and Mitigation Measures for the Los Cerritos Wetlands Oil Consolidation and Restoration Project
- ❖ Preparation of a Final PEIR, including comments, the responses to comments on the Draft PEIR, revisions to the Draft PEIR, and a Mitigation Monitoring and Reporting Program. The Final PEIR was released on October 22, 2020, for a two-week agency review period prior to certification of the Final PEIR and was posted to the LCWA's website and distributed to the public and commenting individuals, agencies, and organizations through

email. Due to the length of the Final PEIR, it has not been attached as an exhibit to this staff report, but can be publicly viewed on the LCWA website at <http://intoloscerritoswetlands.org/the-lcws-eir/>. A notice of public hearing for certification of the Final PEIR was circulated at the same time as the release of the Final PEIR.

The Final PEIR contains the following sections:

- **Chapter 1, Introduction to the Final PEIR.** This chapter describes CEQA requirements and the content of the Final PEIR.
- **Chapter 2, Responses to Comments.** This chapter provides a list of agencies, organizations, and interested individuals who commented on the Draft PEIR; copies of their comment letters received during the public review period; and responses to their individual comments.
- **Chapter 3, Draft PEIR Revisions.** This chapter contains a table identifying the sections of the Draft PEIR that have been revised as a result of the comments received by tribes, agencies, organizations and individuals as described in Chapter 2, and/or errors and omissions discovered subsequent to release of the Draft PEIR for public review. LCWA has determined that none of this material constitutes significant new information that requires recirculation of the Draft PEIR for further public comment under CEQA Guidelines Section 15088.5. The additional material clarifies existing information prepared in the Draft PEIR and does not present any new substantive information. None of this new material indicates that the project would result in a significant new environmental impact not previously disclosed in the Draft PEIR. Additionally, none of this material indicates that there would be a substantial increase in the severity of a previously identified environmental impact that would not be mitigated, nor that there would be any of the other circumstances requiring recirculation described in Section 15088.5.
- **Chapter 4, Mitigation Monitoring and Reporting Program.** This chapter includes the Mitigation Monitoring and Reporting Program (MMRP). The MMRP was prepared based on the mitigation measures included in this Final PEIR.
- **Appendix A, Revised Draft PEIR.** This appendix includes the chapters and sections from the Draft PEIR that have been revised in response to comments received by tribes, agencies, organizations and individuals.

The Final PEIR Added and/or changed the following:

- Executive Summary (Revised)
- Chapter 1 – Introduction (Revised)
- Chapter 2 – Project Description (Revised)
- Chapter 3 – Individual Sections (Revised)
  - Section 3.2 – Air Quality (Revised)
  - Section 3.3 – Biological Resources (Revised)
  - Section 3.4 – Cultural Resources (Revised)
  - Section 3.5 – Geology and Soils (Revised)
  - Section 3.6 – Greenhouse Gas Emissions and Energy (Revised)
  - Section 3.7 – Hazards and Hazardous Materials (Revised)
  - Section 3.8 – Hydrology and Water Quality (Revised)
  - Section 3.9 – Land Use and Planning (Revised)
  - Section 3.13 – Recreation (Revised)
  - Section 3.15 – Tribal Cultural Resources (Revised)

Section 3.16 – Utilities and Service Systems (Revised)  
 Chapter 4 – Other CEQA Considerations (Revised)  
 Chapter 5 – Alternatives (Revised)

- **Appendix B, Monitoring and Adaptive Management Plan.** This appendix provides a framework for the Los Cerritos Wetlands Restoration Program for monitoring, assessing, and managing potential hydrodynamic and water and sediment quality impacts to biological resources and human health from and to the program after construction.

**FURTHER DISCUSSION/ IDENTIFICATION AND DISCLOSURE OF ENVIRONMENTAL IMPACTS:**

The LCWA, as lead agency, is required under CEQA to make written findings concerning each alternative and each significant environmental impact identified in the Draft PEIR and Final PEIR. The Findings and Facts, and Statement of Overriding Considerations is included as Exhibit C.

*Significant Unavoidable Adverse Environmental Impacts:*

Although many of the proposed program impacts have been substantially avoided or mitigated, as described in the Findings and Facts, there remain some potential impacts concerning air quality, cultural resources, and tribal cultural resources for which complete mitigation is not feasible. For these impacts, mitigation measures were identified and adopted by the Lead Agency, however, even with implementation of the measures, the LCWA finds that the impacts described below cannot be reduced to a level of less than significant. The impacts and alternatives are described below and were also addressed in the Findings. As identified in the Final PEIR, implementation of the proposed program would result in the following significant impacts even after imposition of all feasible mitigation measures:

- ❖ Impact AQ-1a (construction), Impact AQ-3a (construction), Cumulative: If all subphases of construction associated with the near-term phase were to occur concurrently (which was conservatively analyzed in the earliest possible year), maximum daily emissions from construction activities would exceed the SCAQMD regional threshold for NOX. With implementation of mitigation measures, regional impacts would be mitigated to a less than significant level. However, localized impacts to sensitive receptors at the program-level would be considered potentially significant even after incorporation of mitigation. Therefore, localized impacts from program construction pertaining to NOX emissions would be significant and unavoidable (Impact AQ-3), if all subphases of construction associated with the near-term phase were to occur concurrently (which was conservatively analyzed in the earliest possible year). In addition, as the proposed program would have a localized impact from NOX emissions, the proposed program would also conflict with Criterion 1 for determining the proposed program's consistency with the AQMP (Impact AQ-1a and Impact AQ-3a).
- ❖ Impact CUL-1, Impact CUL-2, and Cumulative: There are 23 potential historical resources within or immediately adjacent to the program area, including 15 archaeological resources and 8 historical architectural resources. In addition, the Los Cerritos Wetlands is part of a tribal cultural landscape identified by some tribal representatives during consultation with the CCC. Furthermore, given that the entire program area was not systematically surveyed as part of this assessment, there could be additional as-yet unidentified archaeological and historical architectural resources within the program area. As such, the proposed

program would implement Mitigation Measure CUL-1 through CUL-17 to reduce impacts to historical resources by requiring qualified cultural resources personnel to conduct future project-specific studies; development of appropriate treatment for significant resources; and archaeological and Native American monitoring of ground disturbance. The proposed program also includes Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. However, even with implementation of these mitigation measures, impacts to historical resources and archaeological resources would be significant and unavoidable at the program level during construction of the proposed program. Once specific projects are designed, additional cultural resources studies would be completed as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to historical and archaeological resources may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

- ❖ Impact TRI-1 and Impact TRI-2: Since the publication of the Draft PEIR, although the tribal cultural landscape has not been formally documented, geographically defined, nor evaluated for listing in the California Register or in a local register of historical resources, using its discretion and supported by substantial evidence, the LCWA has determined it to be a tribal cultural resource. Implementation of Mitigation Measures CUL-1 and CUL-4 through CUL-17 would lessen the impact to archaeological resources that contribute to the significance of the tribal cultural landscape. The proposed program also includes Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. Even with implementation of these measures, the destruction or material alteration of an archaeological resource that contributes to the landscape's significance would constitute a substantial adverse change since it would no longer be present on the landscape. Since avoidance and preservation in place of such resources cannot be guaranteed, impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape are considered significant and unavoidable at the program level. Once specific projects are designed, additional tribal consultation would be conducted as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

Further discussions regarding impact findings of less than significant impacts, mitigated to less than significant, and program alternatives can be found in the Findings and Facts (Exhibit C).

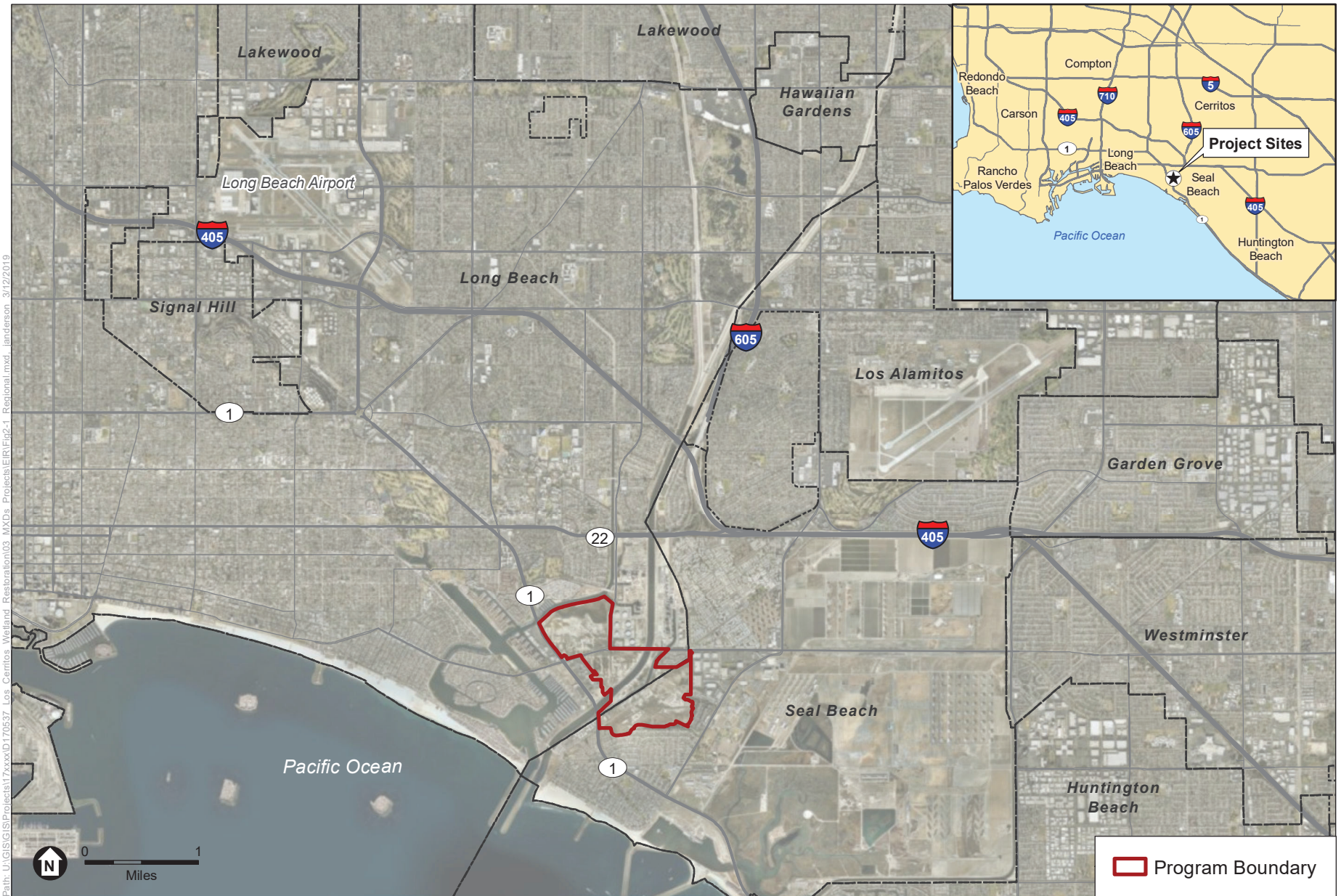
In conclusion, the LCWA has identified and analyzed all potentially significant impacts of the proposed program and has concluded that construction-related air quality impacts, cultural resource impacts and tribal cultural resource impacts will remain unavoidable and adverse after all mitigation measures have been examined. In addition, these impacts would also result from implementation of Alternative 2 (Exhibit B). The LCWA has identified economic and social benefits and important public policy objectives that will result from implementation of the proposed program (see Exhibit C, Section 3.3 Statement of Overriding Considerations, for a list of considerations). The proposed program will provide benefits to members of the public from surrounding cities and the region. Pursuant to Public Resources Code Section 21081(b) and *CEQA Guidelines* Section 15093, the LCWA has balanced the benefits of the proposed program against the unavoidable adverse impacts associated with the proposed program and has adopted

all feasible mitigation measures with respect to these impacts. Given the substantial social and public benefits that will accrue to the region from the implementation of the proposed program, the LCWA finds that the proposed program's identified benefits override the program's identified significant environmental impacts.

*Mitigation Monitoring and Reporting Program (MMRP)*

CEQA requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA Section 21081.6, CEQA Guidelines Section 15097). A MMRP is included as Chapter 4 of the Final EIR and is incorporated into this report as Exhibit D.

**FISCAL:** The CEQA filing fee for an Environmental Impact Report is \$3,418.25.

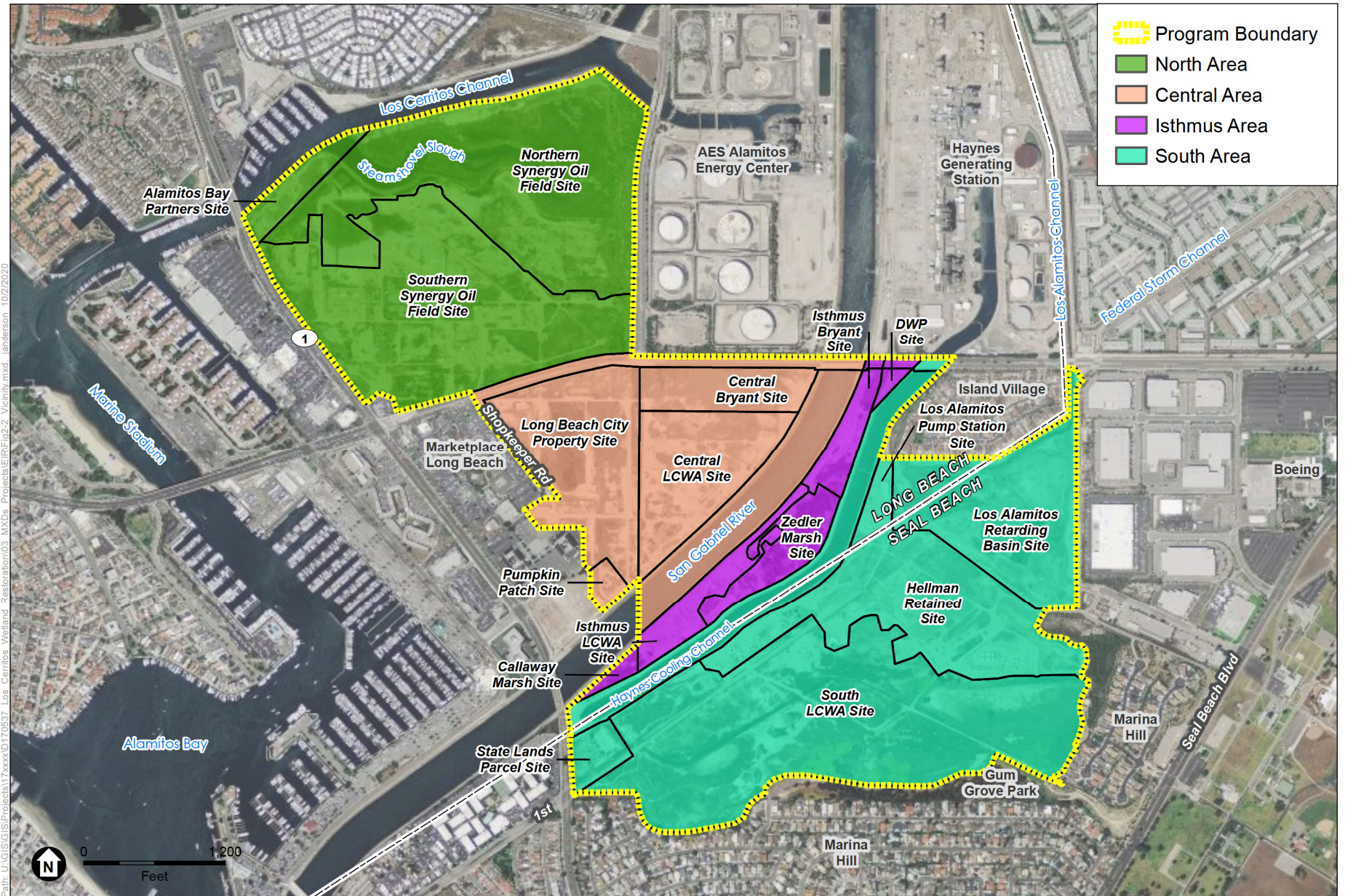


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SOURCE: ESRI

Los Cerritos Wetlands Restoration Plan Draft Program EIR

**Figure 2-1**  
Regional Location



SOURCE: Mapbox, LCWA

Los Cerritos Wetlands Restoration Plan Draft Program EIR

**Figure 2-2**  
Revised Project Site and Local Vicinity

**TABLE 5-1  
SUMMARY OF PROGRAM AND ALTERNATIVE IMPACTS**

<b>Environmental Issue</b>	<b>Program Impact</b>	<b>Alternative 1: No Program (No Build)</b>	<b>Alternative 2: Culvert Connection to San Gabriel River with Perimeter Levee</b>
<b>Aesthetics</b>			
Impact AES-1: Scenic Vistas	LTS	LTS (Greater)	LTS (Similar)
Impact AES-2: Scenic Resources	LTS	NI (Less)	LTS (Similar)
Impact AES-3: Regulations Governing Scenic Quality	LTS	NI (Less)	LTS (Similar)
Impact AES-4: Light and Glare	LTS with MM	NI (Less)	LTS with MM (Similar)
<b>Air Quality</b>			
Impact AQ-1: Air Quality Plan	SU for construction; LTS for operation	NI for construction and operation (Less)	SU for construction (Similar); LTS for operation (Similar)
Impact AQ-2: Cumulative Considerable Net Increase	LTS with MM for construction; LTS for operation	NI for construction and operation (Less)	LTS with MM for construction (Similar); LTS for operation (Similar)
Impact AQ-3: Sensitive Receptors	SU for construction; LTS for operation	NI for construction and operation (Less)	SU for construction (Similar); LTS for operation (Similar)
Impact AQ-4: Odors	LTS	LTS (Similar)	LTS (Similar)
<b>Biological Resources</b>			
Impact BIO-1: Candidate, Sensitive or Special-Status Species	LTS with MM	NI (Less)	LTS with MM (Less)
Impact BIO-2: Riparian Habitat or Sensitive Natural Community	LTS with MM	NI (Less)	LTS with MM (Less)
Impact BIO-3: State or Federally Protected Wetlands	LTS with MM	NI (Less)	LTS with MM (Less)
Impact BIO-4: Native Resident or Migratory Fish or Wildlife Species	LTS with MM	NI (Less)	LTS with MM (Less)
Impact BIO-5: Biological Resources Protection Policies	LTS	NI (Less)	LTS (Similar)
<b>Cultural Resources</b>			
Impact CUL-1: Historical Resources	SU	NI (Less)	SU (Similar)
Impact CUL-2: Archaeological Resources	SU	NI (Less)	SU (Similar)
Impact CUL-3: Human Remains	LTS with MM	NI (Less)	LTS with MM (Similar)

**TABLE 5-1  
SUMMARY OF PROGRAM AND ALTERNATIVE IMPACTS**

<b>Environmental Issue</b>	<b>Program Impact</b>	<b>Alternative 1: No Program (No Build)</b>	<b>Alternative 2: Culvert Connection to San Gabriel River with Perimeter Levee</b>
<b>Geology, Soils, and Paleontological Resources</b>			
Impact GEO-1a: Fault Rupture	LTS	NI (Less)	LTS (Similar)
Impact GEO-1b: Seismic Ground Shaking	LTS	NI (Less)	LTS (Similar)
Impact GEO-1c: Seismic-Related Ground Failure	LTS	NI (Less)	LTS (Similar)
Impact GEO-2: Soil Erosion and Topsoil Loss	LTS	NI (Less)	LTS (Less)
Impact GEO-3: Geologic Instability	LTS	NI (Less)	LTS (Similar)
Impact GEO-4: Expansive Soil	LTS	NI (Less)	LTS (Similar)
Impact GEO-5: Septic Tanks	NI	NI (Less)	NI (Similar)
Impact GEO-6: Paleontological Resources	LTS with MM	NI (Less)	LTS with MM (Similar)
<b>Greenhouse Gas Emissions and Energy</b>			
Impact GHG-1: GHG Emissions	LTS	LTS (Less)	LTS (Less)
Impact GHG-2: GHG Regulations	LTS	LTS (Similar)	LTS (Similar)
Impact EN-1: Wasteful, Inefficient, or Unnecessary	LTS	NI (Less)	LTS (Less)
Impact EN-2: Conflict or Obstruct State or Local Plan	LTS	LTS (Similar)	LTS (Similar)
<b>Hazards and Hazardous Materials</b>			
Impact HAZ-1: Routine Transport, Use, Or Disposal	LTS	NI (Less)	LTS (Similar)
Impact HAZ-2: Hazardous Materials Near Schools	NI	NI (Similar)	NI (Similar)
Impact HAZ-3: List of Hazardous Materials	LTS with MM	NI (Less)	LTS with MM (Similar)
Impact HAZ-4: Public Airport or Public Use Airport	NI	NI (Similar)	NI (Similar)
Impact HAZ-5: Wildland Fires	NI	NI (Similar)	NI (Similar)
<b>Hydrology and Water Quality</b>			
Impact HYD-1: Water Quality Standards	LTS with MM	NI (Less)	LTS with MM (Similar)
Impact HYD-2: Groundwater Supplies	LTS	NI (Less)	LTS (Similar)
Impact HYD-3a: Drainage Patterns – Erosion or Siltation	LTS with MM	NI (Less)	LTS with MM (Less)
Impact HYD-3b: Drainage Patterns - Flooding	LTS	LTS (Greater)	LTS (Similar)

**TABLE 5-1  
SUMMARY OF PROGRAM AND ALTERNATIVE IMPACTS**

<b>Environmental Issue</b>	<b>Program Impact</b>	<b>Alternative 1: No Program (No Build)</b>	<b>Alternative 2: Culvert Connection to San Gabriel River with Perimeter Levee</b>
Impact HYD-3c: Drainage Patterns – Stormwater Drainage Systems	LTS	NI (Less)	LTS (Similar)
Impact HYD-3d: Drainage Patterns – Flood Flows	LTS	NI (Less)	LTS (Similar)
Impact HYD-4: Flood Hazards, Tsunami, Seiche	LTS	LTS (Similar)	LTS (Similar)
Impact HYD-5: Water Quality Control Plan	LTS	LTS (Greater)	LTS (Similar)
<b>Land Use and Planning</b>			
Impact LU-1: Applicable Land Use Plan, Policy, or Regulation	LTS	LTS (Greater)	LTS (Similar)
<b>Mineral Resources</b>			
Impact MIN-1: Mineral Resource Loss or Locally Important Mineral Resource Recovery Site Loss	NI	NI (Similar)	NI (Similar)
<b>Noise</b>			
Impact NOI-1: Noise Standard Exceedance	LTS	NI (Less)	LTS (Greater)
Impact NOI-2: Groundborne Vibration	LTS	NI (Less)	LTS (Greater)
<b>Public Services</b>			
Impact PS-1a: Fire Protection	LTS with MM	NI (Less)	LTS with MM (Similar)
Impact PS-1b: Police Protection	LTS	NI (Less)	LTS (Similar)
Impact PS-1c: Parks	LTS	NI (Less)	LTS (Similar)
<b>Recreation</b>			
Impact REC-1: Neighborhood and Regional Parks	LTS	NI (Less)	LTS (Similar)
Impact REC-2: Expansion of Recreational Facilities	LTS	NI (Less)	LTS (Similar)
<b>Transportation</b>			
Impact TRA-1: Program Plan, Ordinance, or Policy	LTS with MM	NI (Less)	LTS with MM (Similar)
Impact TRA-2: CEQA Guidelines section 15064.3, subdivision (b)	LTS	NI (Less)	LTS (Similar)
Impact TRA-3: Traffic Hazards	LTS with MM	NI (Less)	LTS with MM (Similar)

**TABLE 5-1  
SUMMARY OF PROGRAM AND ALTERNATIVE IMPACTS**

Environmental Issue	Program Impact	Alternative 1: No Program (No Build)	Alternative 2: Culvert Connection to San Gabriel River with Perimeter Levee
<b>Tribal Cultural Resources</b>			
Impact TRI-1: Listed or Eligible Tribal Cultural Resource	SU	NI (Less)	SU (Similar)
Impact TRI-2: Tribal Cultural Resource Determined by the Lead Agency	SU	NI (Less)	SU (Similar)
<b>Utilities and Service Systems</b>			
Impact UTL-1: Expanded Facilities	LTS with MM	NI (Less)	LTS with MM (Similar)
Impact UTL-2: Sufficient Water Supplies	LTS	NI (Less)	LTS (Similar)
Impact UTL-3: Adequate Wastewater Treatment Capacity	LTS	NI (Less)	LTS (Similar)
Impact UTL-4: Solid Waste Capacity	LTS	NI (Less)	LTS (Similar)
Impact UTL-5: Solid Waste Regulations	LTS	NI (Less)	LTS (Similar)
NI = No Impact LTS = Less than Significant LTS with MM = Less than Significant with mitigation measures SU = Significant and unavoidable impacts			

# CHAPTER 1

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## Background

The California Environmental Quality Act (CEQA) requires that written findings be made by the lead agency in connection with certification of an environmental impact report (EIR) prior to approval of the project pursuant to *CEQA Guidelines* Sections 15091 and 15093 and Public Resources Code Section 21081. This document provides the findings required by CEQA and the specific reasons for considering the proposed program acceptable even though the proposed program has significant impacts that are infeasible to mitigate.

The lead agency is responsible for ensuring the adequacy and objectivity of the EIR. The Los Cerritos Wetlands Authority (LCWA), as lead agency, has subjected the Draft Programmatic EIR (PEIR) and Final PEIR to the agency's own review and analysis process.

### 1.1 Program Summary

The LCWA, as the Lead Agency pursuant to CEQA, is proposing a restoration program for the Los Cerritos Wetlands Complex. The proposed program identifies conceptual restoration designs for approximately 503 acres of land located on the border of Orange County and Los Angeles County in the cities of Seal Beach and Long Beach. The program area consists of the South, Isthmus, Central and North areas. The proposed program would restore wetland, transition, and upland habitats throughout the program area. This would involve remediation of contaminated soil and groundwater, grading, revegetation, construction of new public access opportunities (including trails, visitor center, parking lots, and viewpoints), construction of flood management facilities (including earthen levees and berms, and walls), and modification of existing infrastructure and utilities.

### 1.2 Los Cerritos Wetlands Restoration Plan Goals and Objectives

The goals and objectives of the proposed program are presented below and are similar to the goals and objectives identified in the Los Cerritos Wetlands Final Conceptual Restoration Plan (CRP) (Moffatt & Nichol, 2015):

1. Restore tidal wetland processes and functions to the maximum extent possible.
  - a. Increase estuarine habitat with a mix of tidal channels, mudflat, salt marsh, and brackish/freshwater marsh and ponds.
  - b. Provide adequate area for wetland-upland ecotone and upland habitat to support wetlands.

- c. Restore and maintain habitat that supports important life history phases for species of special concern (e.g., federal and state listed species), essential fish habitat, and migratory birds as appropriate.
    - d. Solicit and address feedback on restoration design from members of the community, Native American tribes, and other interested parties.
  2. Maximize contiguous habitat areas and maximize the buffer between habitat and sources of human disturbance.
    - a. Maximize wildlife corridors within the LCW Complex and between the LCW Complex and adjacent natural areas within the region.
    - b. Incorporate native upland vegetation buffers between habitat areas and human development to mitigate urban impacts (e.g., noise, light, unauthorized human encroachment, domestic animals, wastewater runoff) and reduce invasion by non-native organisms.
    - c. Design the edges of the LCW Complex to be respectful and compatible with current neighboring land uses.
  3. Create a public access and interpretive program that is practical, protective of sensitive habitat and ongoing oil operations, economically feasible, and will ensure a memorable visitor experience.
    - a. Build upon existing beneficial uses.
    - b. Minimize public impacts on habitat/wildlife use of the LCW Complex.
    - c. Design interpretive concepts that promote environmental stewardship and the connection between the wetlands and the community.
    - d. Solicit and address feedback from members of the community, Native American tribes, and other interested parties.
    - e. Encourage equitable access of the LCW as a regional resource.
  4. Incorporate phasing of implementation to accommodate existing and future potential changes in land ownership and usage, and as funding becomes available.
    - a. Include projects that can be implemented as industrial operations are phased out and other properties are acquired over the near, mid, and long terms (next 10 years, 10–20 years, and 20+ years).
    - b. Investigate opportunities to restore levels of tidal influence that are compatible with current oil leases and neighboring private land holdings.
    - c. Remove/realign/consolidate existing infrastructure (roads, pipelines, etc.) and accommodate future potential changes in infrastructure, to the maximum extent feasible.
  5. Strive for long-term restoration success.
    - a. Implement an adaptive management framework that is sustainable.
    - b. Restore habitats in appropriate areas to minimize the need for long-term maintenance activities that are extensive and disruptive to wildlife.
    - c. Design habitats that will accommodate climate changes (e.g., incorporate topographic and habitat diversity and natural buffers and transition zones to accommodate migration of wetlands with rising sea levels).
    - d. Provide economic benefit to the region.

6. Integrate experimental actions and research into the project, where appropriate, to inform restoration and management actions for this project.
  - a. Include opportunities for potential experiments and pilot projects to address gaps in information (e.g., effect of warm river water on salt marsh ecosystem) that are protective of sensitive habitat and wildlife and that can be used to adaptively manage the restoration project.
  - b. Include areas on the site, where appropriate, that prioritize research opportunities (such as those for adaptive management) over habitat sensitivities.

### 1.3 Environmental Review Process

In conformance with CEQA and the *CEQA Guidelines*, the LCWA conducted an extensive environmental review of the proposed program. The environmental review process has included:

- Completion of an Initial Study (IS)/Notice of Preparation (NOP) on March 8, 2019. The 30-day public review period extended from March 8, 2019, to April 8, 2019. The NOP was posted at the Los Angeles County Clerk's office on March 8, 2019. Copies of the IS were made available for public review at the Bay Shore Neighborhood Library, located at 195 Bay Shore Avenue, Long Beach, CA 90803, at the Mary Wilson Library, located at 707 Electric Avenue, Seal Beach, CA 90740, and on LCWA's website (<http://intoloscerritoswetlands.org/the-lcws-eir/>).
- Completion of the scoping process where LCWA invited the public to participate in a scoping meeting held on March 21, 2019, at the Community Center in Recreation Park, 4900 East 7th Street, Long Beach, CA. The notice of a public scoping meeting was included in the NOP.
- Preparation of a Draft PEIR, which was made available for a 45-day public review period beginning May 8, 2020, and ending June 22, 2020. The public review period was extended by 15 days to July 6, 2020 for a total of 60-days. The scope of the Draft PEIR was determined based on the Initial Study, comments received in response to the NOP, and comments received at the scoping meeting conducted by LCWA. Draft PEIR Section 1.3.5, Known Areas of Controversy and Issues of Concern, describes the issues identified for analysis in the Draft PEIR. The Notice of Availability (NOA) for the Draft PEIR was sent to interested persons and organizations, sent to the State Clearinghouse in Sacramento for distribution to public agencies and posted on LCWA's website (<http://intoloscerritoswetlands.org/the-lcws-eir/>). The NOA was posted at the Los Angeles County Clerk's office and on the Project Site on May 11, 2020. The NOA was also posted at the Orange County Clerk's office on May 12, 2020. In addition, the Notice of Completion was sent to the Office of Planning and Research pursuant to *CEQA Guidelines* Section 15085, for distribution to the responsible regional agencies on May 8, 2020, with a review period ending on July 6, 2020. Two virtual public meeting webinars on the Draft PEIR were held on May 21, 2020 and on June 4th 2020.
- Preparation of a Final PEIR, including comments, the responses to comments on the Draft PEIR, and revisions to the Draft PEIR. The Final PEIR was released for a two-week agency review period prior to certification of the Final PEIR.
- The LCWA Board held a public hearing on the proposed program on November 5, 2020.

## 1.4 Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings for the proposed program includes, but is not limited to, the following documents and other evidence:

- The NOP, the NOA, and all other public notices issued by LCWA in conjunction with the proposed program.
- The Draft PEIR and Final PEIR for the proposed program.
- All written comments submitted by agencies or members of the public during the public review comment period on the Draft PEIR.
- All responses to written comments submitted by agencies or members of the public during the public review comment period on the Draft PEIR.
- All written and verbal public testimony presented during a noticed public hearing for the proposed program.
- The Mitigation Monitoring and Reporting Program.
- The reports and technical memoranda included or referenced in the Draft PEIR and Final PEIR.
- All documents, studies, EIRs, or other materials incorporated by reference in the Draft PEIR and Final PEIR.
- The Resolution adopted by the LCWA in connection with the proposed program, and all documents incorporated by reference therein, including comments received after the close of the comment period and responses thereto.
- Matters of common knowledge to the LCWA, including but not limited to federal, state, and local laws and regulations.
- Any documents expressly cited in these Findings.

## 1.5 Custodian and Location of Records

Due to the COVID-19 pandemic and closure of public libraries and gathering spaces, the documents and other materials that constitute the administrative record for LCWA's actions related to the proposed program will be made available only on an appointment basis for those that cannot view the document online. Please contact Sally Gee from the Los Cerritos Wetlands Authority at 626-815-1019 x 104 or [sgee@rmc.ca.gov](mailto:sgee@rmc.ca.gov) to make arrangements to view the document. LCWA is committed to making this document accessible to the public during these unique times. Copies of these documents, which constitute the record of proceedings, are available upon request. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and Guidelines Section 15091(e).

## CHAPTER 2

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# Findings and Facts

The LCWA, as lead agency, is required under CEQA to make written findings concerning each alternative and each significant environmental impact identified in the Draft PEIR and Final PEIR.

Specifically, regarding findings, *CEQA Guidelines* Section 15091 provides:

- (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
  1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
  3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.
- (b) The findings required by subsection (a) shall be supported by substantial evidence in the record.
- (c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subsection (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.
- (d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.
- (e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.
- (f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

The “changes or alterations” referred to in Section 15091(a)(1) may include a wide variety of measures or actions as set forth in Guidelines Section 15370, including:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

## 2.1 Organization

Chapter 2 is divided into the following subsections:

- **Section 2.2, Findings Regarding No Impact and Less than Significant Impacts Identified in the PEIR**, presents the impacts of the proposed program that were determined in the Draft PEIR to be less than significant without the addition of mitigation measures.
- **Section 2.3, Findings Regarding Impacts Which Can Be Mitigated to Less Than Significant**, presents significant impacts of the proposed program that were identified in the Final PEIR, the mitigation measures identified in the Mitigation Monitoring and Reporting Program, and the rationales for the findings.
- **Section 2.4, Findings Regarding Impacts Not Fully Mitigated to Less Than Significant**, presents significant impacts of the proposed program that were identified in the Final PEIR, the mitigation measures identified in the Mitigation Monitoring and Reporting Program, the findings for significant impacts, and the rationales for the findings.
- **Section 2.5, Findings Regarding Program Alternatives**, presents alternatives to the proposed program and evaluates them in relation to the findings set forth in *CEQA Guidelines* Section 15091(a)(3), which allows a public agency to approve a project that would result in one or more significant environmental effects if the project alternatives are found to be infeasible because of specific economic, social, or other considerations.
- **Section 2.5, Findings Regarding the Final PEIR**, provides a determination regarding the Final EIR.

## 2.2 Findings Regarding No Impact and Less than Significant Impacts Identified in the EIR

The PEIR found that the proposed program would have *no impacts or less than significant impacts without the imposition of mitigation* on a number of environmental topic areas. The no impact or less than significant environmental impact determination was made for each of the following topic areas listed in Table 1, *No Impact or Less Than Significant Impacts*, below, based on the more expansive discussions contained in the PEIR.

**TABLE 1  
NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<b>Aesthetics</b>		
<p><b>AES-1:</b> The proposed program would not have a substantial adverse effect on a scenic vista.</p>	<p>EIR Section 3.1, p. 3.1-23 to 3.1-30</p>	<p>Construction activities would restore and enhance the wetlands and would be temporary in nature. Since views from public roads surrounding the site are from the same elevation as the program area, restoration and construction work viewed from these roads would be seen in the foreground views and would not block or obscure broader views of background scenic vistas, such as those of the San Gabriel Mountains. All restoration and construction activities would be temporary in nature.</p> <p>While development of the proposed program would change views of the scenic vistas, a majority of the viewpoints would be enhanced and new ones created by the proposed program due to the restoration of native vegetation and wetland habitat and consolidation of oil production facilities as shown in Figures 3.1 7 through Figure 3.1 12.</p>
<p><b>AES-2:</b> The proposed program would not substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.</p>	<p>EIR Section 3.1, p. 3.1-37</p>	<p>Views of scenic resources on the program area are for the most part not visible from Pacific Coast Highway (PCH). While views of wetlands located on the North Area are somewhat visible from PCH, the construction and operation of the proposed program would remove non-native vegetation and phase out oil production facilities, which would enhance the scenic value of the proposed program.</p>
<p><b>AES-3:</b> The proposed program would not conflict with applicable zoning and other regulations governing scenic quality in an urbanized area.</p>	<p>EIR Section 3.1, p. 3.1-37</p>	<p>Zoning and other regulations governing scenic quality applicable to the proposed program include the City of Seal Beach General Plan, Hellman Ranch Specific Plan, City of Long Beach General Plan, adopted Southeast Area Development and Improvement Plan (SEADIP), the proposed Southeast Area Specific Plan (SEASP) 2060 (for informational purposes), and City of Long Beach's Local Coastal Program (LCP). Generally, these regulations emphasize preserving views, preserving open space, and creating and enhancing public access. The development of the proposed program would be consistent with these regulations.</p>

**TABLE 1**  
**NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<b>Air Quality</b>		
<b>AQ-1b:</b> The proposed program would not conflict with or obstruct implementation of the applicable air quality plan during operation of the proposed program.	EIR Section 3.2, p. 3.2-23	Under the two consistency criterion for the Air Quality Management Plan (AQMP), as it relates to 1) an increase in the frequency or severity of existing air quality violations, and 2) exceeding the assumptions in the AQMP, under operation of the proposed program, the proposed program would restore wetlands and habitat areas which would reduce emissions in the long term from the existing environmental setting as oil operations cease. The proposed program would not increase population growth as it includes no housing and would generate a minimal number of jobs for maintenance of the facilities. The improvements to pedestrian access would help decrease vehicle miles traveled region-wide as it provides a recreational area near existing residential communities in the cities of Seal Beach and Long Beach thereby reducing the need to travel long distances for recreation.
<b>AQ-2b (operation):</b> The proposed program would not result in a cumulatively considerable net increase of criteria pollutants during operation of the proposed program.	EIR Section 3.2, p. 3.2-25	As shown in Table 3.2-5, Maximum Unmitigated Regional Operational Emissions (Pounds per Day), all operational criteria air pollutants emissions would be well below the South Coast Air Quality Management District (SCAQMD) regional thresholds during operation. In addition, Table 3.2-6, Comparison of Program-Level Operational Emissions and South Coast Air Basin Emissions (Tons per Year), compares program-level operational emissions with South Coast Air Basin emissions. The net increase in emissions from the proposed program would be minuscule in comparison to basin-wide emissions.
<b>AQ-3b (operation):</b> The proposed program would not expose sensitive receptors to substantial pollutant concentrations during operation of the proposed program.	EIR Section 3.2, p. 3.2-30	As shown in Table 3.2-9, Operational Screening LSTs (Pounds per Day), the unmitigated on-site operational emissions would not exceed any of the operational screening localized significance thresholds since most of the operational emissions are from mobile sources (off site).
<b>AQ-4:</b> The proposed program would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	EIR Section 3.2, p. 3.2-32	The proposed program would decommission oil wells and pipelines, thus, odors would be expected to be reduced compared to the existing setting. Through mandatory compliance with SCAQMD Rules, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people. Therefore, the proposed program would not create adverse odors affecting a substantial number of people.

**TABLE 1  
NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<b>Biological Resources</b>		
<p><b>BIO-5:</b> The proposed program would not have a substantial adverse effect and conflict with biological resources protected by local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	<p>EIR Section 3.3, p. 3.3-116</p>	<p>As it relates to protected trees, the proposed program would comply with the City of Seal Beach's Protective Tree Ordinance and the City of Long Beach's Tree Maintenance Policy, or the California Coastal Commission Special Condition 1. Tree Trimming and Tree Removal Policy, as appropriate, during any construction or operational activities. As it relates to Environmentally Sensitive Habitat Areas (ESHA), ground disturbing activities during construction of the proposed program would temporarily impact ESHA; however, overall ESHA would be expanded due to the conversion of non-ESHA to ESHA. Any negligible impacts that occur by foot traffic from maintenance personnel during operation of the proposed program, are permitted in accordance with Section 30240 and Section 30233(a)(b) of the California Coastal Act.</p>
<p><b>BIO-6:</b> The proposed program would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.</p>	<p>EIR Section 3.3, p. 3.3-118</p>	<p>Based on a review of the California Department of Fish and Wildlife California Regional Conservation Plans, there are no Habitat Conservation Plans or other approved habitat conservation plans prepared for the program area.</p>
<b>Geology and Soils</b>		
<p><b>GEO-1a:</b> The proposed program would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.</p>	<p>EIR Section 3.5, p. 3.5-40</p>	<p>Based on compliance with existing regulations, the proposed uses, limited hours of use, and anticipated number of people visiting the site, exposure of people to fault rupture impacts on the program area during operation would be unlikely. The proposed program would also not exacerbate the potential for earthquakes because the proposed program does not include changes to the existing injection and extraction of oil and produced water.</p>
<p><b>GEO-1b:</b> The proposed program would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.</p>	<p>EIR Section 3.5, p. 3.5-41</p>	<p>Based on the proposed uses, limited hours of use and anticipated number of people visiting the site, exposure of people to seismic shaking impacts on the program area during operation would be unlikely. The proposed visitor's center structure would be required to comply with the California Building Code (CBC) and would be required to undergo appropriate project level design-level geotechnical evaluations prior to the final design and construction. In addition, the removal of wells and associated infrastructure would reduce the exposure of wells and infrastructure to seismic shaking.</p>

**TABLE 1**  
**NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

<b>Impact Statement</b>	<b>Page Number</b>	<b>Description/Finding</b>
<b>GEO-1c:</b> The proposed program would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction, lateral spreading, and landslides.	EIR Section 3.5, p. 3.5-43	Based on the proposed uses, limited hours of use, and anticipated number of people visiting the site, exposure of people to liquefaction and lateral spreading impacts on the program area during operation would be unlikely. The proposed visitor's center structure would be required to comply with the requirements of the CBC and local ordinances and would be required to undergo appropriate project level design-level geotechnical evaluations, which would include recommendations to address geotechnical issues, including liquefaction and lateral spreading. In addition, the removal of wells and associated infrastructure would reduce the exposure of wells and infrastructure to liquefaction and lateral spreading.
<b>GEO-2:</b> The proposed program would not result in substantial soil erosion or the loss of topsoil.	EIR Section 3.5, p. 3.5-45	Because the overall footprint of construction activities would exceed 1 acre, the proposed program would be required to comply with regulatory requirements including the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and applicable erosion control ordinances. In addition, during operation of the proposed program, after some initial channel adjustment, erosion during typical tides is expected to be minimal.
<b>GEO-3:</b> The proposed program would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed program, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	EIR Section 3.5, p. 3.5-47	The program area is relatively flat and the wetlands habitat restoration efforts would not result in slope susceptible to landslide. The proposed program also does not include the extraction of shallow groundwater and collapse would not occur.
<b>GEO-4:</b> The proposed program would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	EIR Section 3.5, p. 3.5-47	Based on the proposed uses, limited hours of use, and anticipated number of people visiting the site, exposure of people to expansive soil impacts on the program area during operation would be unlikely. The proposed visitor's center structure would be required to comply with the requirements of the CBC and local ordinances and would be required to undergo appropriate project level design-level geotechnical evaluations.
<b>GEO-5:</b> The proposed program would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	EIR Section 3.5, p. 3.5-49	The proposed program does not include the construction or operation of septic tanks or alternative waste water disposal systems.
<b>Greenhouse Gas Emissions and Energy</b>		
<b>GHG-1:</b> The proposed program would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	EIR Section 3.6, p. 3.6-21	The proposed program's annual emissions, including construction and operational emissions, would be below the 10,000 metric tons of carbon dioxide per year (MTCO <sub>2</sub> e/year) threshold.

**TABLE 1  
NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<p><b>GHG-2:</b> The proposed program would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p>EIR Section 3.6, p. 3.6-22</p>	<p>During construction, construction contractors would comply with regulations including the United States Environmental Protection Agency (USEPA) Heavy Duty Vehicle Greenhouse Gas Regulation and the California Air Resources Board (CARB) Airborne Toxic Control Measures that limits heavy-duty diesel motor vehicle idling. Implementation of these measures would ensure that greenhouse gas (GHG)-efficient equipment and practices in accordance with applicable plans, policies, and regulations would be used. As it relates to operation, the proposed program is expected to align with the strategies of the Long Beach Climate Action and Adaptation Plan (CAAP). In addition, the proposed program would not conflict with the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals of improving air quality, increasing accessibility to natural areas, preserving open space, and encouraging active transportation (e.g., bicycling and walking).</p>
<p><b>EN-1:</b> The proposed program would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during program construction or operation.</p>	<p>EIR Section 3.6, p. 3.6-23</p>	<p>The conservatively estimated construction energy demand for the proposed program would represent a very small fraction of the County's total fuel consumption. Program construction trucks would also be required to comply with fuel saving regulations. During operation, the amount of energy used would not represent a substantial fraction of the available energy supply in terms of building energy or transportation fuels and would not increase the need for new energy infrastructure. The proposed program would incorporate green building measures consistent with energy efficiency standards in city policy and CALGreen.</p>
<p><b>EN-2:</b> The proposed program would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.</p>	<p>EIR Section 3.6, p. 3.6-27</p>	<p>The proposed program would be consistent with energy efficiency standards in the City of Seal Beach municipal code, City of Long Beach municipal code, and CALGreen Code. The proposed program would also not conflict with the SCAG 2016 RTP/SCS general goals and strategies of increasing accessibility to natural areas, preserving open space, and encouraging active transportation (e.g., bicycling and walking) thereby minimizing transportation fuel demand.</p>

**TABLE 1**  
**NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<b>Hazards and Hazardous Materials</b>		
<p><b>HAZ-1:</b> The proposed program would not create a significant hazard to the public or the environment through the routine transport, use, or disposal, or reasonable foreseeable upset and accident conditions that release hazardous materials.</p>	<p>EIR Section 3.7, p. 3.7-31</p>	<p>Construction activities are required to comply with numerous hazardous materials and storm water regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, to reduce the potential for a release of construction-related fuels or other hazardous materials to affect storm water and downstream receiving water bodies, and to respond to accidental spills, if any. In addition, as it relates to well plugging and abandonment, the proposed program would comply with existing regulations including Public Resources Code (PRC) Section 3229, Division 3 and California Department of Health Services regulations in Section 30346 of CCR Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 7. Pipelines would also be removed from service, cleaned, and disposed of per Geologic Energy Management Division (CalGEM) and Department of Toxic Substances Control (DTSC) requirements. Newly installed pipelines would be subject to federal regulations (49 CFR Part 192 and 49 CFR Part 195) that mandate hydrostatic testing of new, cathodically protected pipelines prior to placing the pipeline into operation. Such tests are designed to prove that the pipe, fittings, and weld sections would maintain mechanical integrity under pressure without failure or leakage.</p> <p>Upon completion of restoration activities, the operations would not use hazardous materials. No new wells would be drilled and put into production, and thus there would be no changes to operation that would increase the risk of a spill over the existing conditions. The visitor center would occasionally use small quantities of cleaning products and paints, solvents, and thinners for routine maintenance. As previously discussed, the Hazardous Materials Business Plan (HMBP) would require the materials be stored and labeled in appropriate containers.</p>
<p><b>HAZ-2:</b> The proposed program would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</p>	<p>EIR Section 3.7, p. 3.7-36</p>	<p>There are no schools within one-quarter mile of the program area.</p>
<p><b>HAZ-4:</b> The proposed program would not result in a safety hazard or excessive noise for people residing or working in the program area plan.</p>	<p>EIR Section 3.7, p. 3.7-36</p>	<p>The are no airports within two miles of the program area.</p>

**TABLE 1  
NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

Impact Statement	Page Number	Description/Finding
<p><b>HAZ-5:</b> The proposed program would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.</p>	<p>EIR Section 3.7, p. 3.7-39</p>	<p>The proposed program would not stage or store construction materials or construction equipment on public roadways. The proposed program would not propose any public road closures or rerouting of the existing public roadway network. Program-generated traffic trips during construction and operation would be minimal and would not interfere with an adopted emergency response plan.</p>
<p><b>HAZ-6:</b> The proposed program would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.</p>	<p>EIR Section 3.7, p. 3.7-40</p>	<p>The program area is not located within or near a very high or high fire hazard severity zone.</p>
<p><b>Hydrology and Water Quality</b></p>		
<p><b>HYD-2:</b> The proposed program would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed program may impede sustainable groundwater management of the basin.</p>	<p>EIR Section 3.8, p. 3.8-32</p>	<p>Construction water demand could include use of groundwater supplies although demand would be temporary and unlikely to be substantial. During operation the proposed program would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin due to different sources of water supply and limited water demand. The area would largely remain pervious with restoration and would provide large areas of groundwater recharge.</p>
<p><b>HYD-3b:</b> The proposed program would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.</p>	<p>EIR Section 3.8, p. 3.8-35</p>	<p>The proposed program would involve altered drainage patterns compared with the existing sites in order to improve drainage to support tidal wetlands on the Project Site. Modeling performed for the South Area, Isthmus Area, and Central Area indicate water levels would decrease on the South Area, remain the same on the Isthmus Area, and increase within the Central Area. While water levels would increase on the Central Area, the proposed program would increase levee elevations compared to existing conditions, resulting in an increased freeboard, which is a beneficial effect.</p>
<p><b>HYD-3c:</b> The proposed program would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.</p>	<p>EIR Section 3.8, p. 3.8-44</p>	<p>Replacement stormwater storage volume would be provided by creating low areas (e.g., basins or swales) between the roads and the proposed levee in the Central Area. These infiltration basins or bioswales would be sized to accommodate the local area drainage and would function as water quality treatment measures for a portion of the runoff from the existing paved areas. All drainage features throughout the program area would be designed in accordance with National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) permit requirements.</p>

**TABLE 1**  
**NO IMPACT OR LESS THAN SIGNIFICANT IMPACTS**

<b>Impact Statement</b>	<b>Page Number</b>	<b>Description/Finding</b>
<b>HYD-3d:</b> The proposed program would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.	EIR Section 3.8, p. 3.8-44	The levees, berms, or flood walls would be constructed in accordance with 33 U.S. Code Section 408 permit requirements. Above ground structures (i.e., the Visitor Centers) and improvements would be constructed in accordance with flood control requirements and with the expanded floodplain habitat created by the proposed program, they would not impede or redirect flood flows.
<b>HYD-4:</b> The proposed program would not risk release of pollutants due to program inundation.	EIR Section 3.8, p. 3.8-45	The proposed program would include flood protection measures that would be designed to limit flooding to the intended habitat areas consistent with pre-development conditions and provide sufficient protection to off-site areas. The berms or flood walls would be constructed in accordance with 33 U.S. Code Section 408 permit requirements which would minimize the potential for activities associated with the proposed program to cause flooding off site or release pollutants from inundation. In addition, there would not be any storage of substantive quantities of hazardous materials anywhere within the program area such that there would be risk of release from program inundation.
<b>HYD-5:</b> The proposed program would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan rise.	EIR Section 3.8, p. 3.8-46	The Los Cerritos Channel and San Gabriel River are listed as impaired waterbodies for a number of constituents through the 303(d) and Total Maximum Daily Load (TMDL) programs as identified in the Basin Plan. Implementation of the proposed program would allow for tidal flows into the program area, creating favorable water quality conditions by limiting retention time and enhancing tidal exchange. This flushing would also minimize the impacts of sediment accumulation with high levels of constituents deposited on the restored program area during high storm flow events.  During operation, water demand would be primarily for the Visitor Centers and would be low. The proposed program would not interfere with the goals of the Water Replenishment District of Southern California Groundwater Basins Master Plan.
<b>Land Use</b>		
<b>LU-1:</b> The proposed program would not physically divide an established community.	EIR Section 3.9, p. 3.9-15	The proposed program is located in a largely urbanized and generally built out area with a fully developed roadway system, surrounded by the Los Cerritos Channel, the Alamitos Energy Center (AES) and Haynes Generation Station to the north, Pacific Coast Highway and commercial-retail strip mall to the west, residential development to the south, and residential and industrial development to the east, including a Boeing office complex. The proposed program would restore wetlands within the program area and construct new public access opportunities that would increase access through/along the program area.

**TABLE 1**  
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Impact Statement	Page Number	Description/Finding
<p><b>LU-2:</b> The proposed program would not conflict with most applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed program, adopted for the purpose of avoiding or mitigating an environmental effect.</p>	<p>EIR Section 3.9, p. 3.9-16</p>	<p>The proposed program would be consistent with the applicable state, regional and local plans and policies, including the City of Seal Beach General Plan, Seal Beach Municipal Code, Hellman Ranch Specific Plan, City of Long Beach General Plan, Long Beach Municipal Code, adopted SEADIP, proposed SEASP 2060, Airport Environs Land Use Plan (AELUP), and California Coastal Act and Long Beach Local Coastal Program.</p>
<p><b>Mineral Resources</b></p>		
<p><b>MIN-1:</b> The proposed program would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.</p>	<p>EIR Section 3.10, p. 3.10-12</p>	<p>Oil production would continue on the Central, Isthmus, and South Areas until the production decreases to below economic levels after which the oil wells would be plugged and the associated infrastructure would be removed. Thus, the economic mineral resources (petroleum) will have been removed and no economic resources would remain accessible at these locations.</p>
<p><b>Noise</b></p>		
<p><b>NOI-1:</b> The proposed program would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the proposed program in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p>	<p>EIR Section 3.11, p. 3.11-13</p>	<p>The Noise Ordinances of the cities of Seal Beach and Long Beach exempt noise generated by construction activities during daytime hours depending on the day of the week and do not establish construction noise level limits. Therefore, program construction noise would not generate a substantial increase in ambient noise levels in the vicinity of the proposed program in excess of standards established in the local general plan or noise ordinance. However, noise reduction measures would be incorporated to reduce and minimize the construction noise generated on the program area.</p> <p>Program construction and operational traffic would not double existing traffic volumes on area roadways. Therefore, program traffic noise would result in a negligible, non-perceptible increase and impacts would be less than significant.</p>
<p><b>NOI-2:</b> The proposed program would not result in generation of excessive groundborne vibration or groundborne noise levels.</p>	<p>EIR Section 3.11, p. 3.11-17</p>	<p>The proposed program would generate vibration levels at 50 feet that would not exceed the structural damage potential criteria of 0.5 in/sec peak particle velocity (PPV) or the "barely perceptible" criteria of 0.04 in/sec PPV for human annoyance. During construction at 50 feet, the maximum vibration levels would be approximately 0.031 in/sec PPV. During operation, minimal vibration would occur.</p>
<p><b>NOI-3:</b> The proposed program would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan.</p>	<p>EIR Section 3.11, p. 3.11-19</p>	<p>The program area is located within the Airport Influence Area of the airport land use plan of the Los Alamitos Joint Forces Training Base (JFTB). However, the program area is outside of the aircraft noise contours for the JFTB; i.e., the area is not exposed to noise levels greater than 60 dBA CNEL due to operations at JFTB (Orange County ALUC, 2016). Thus, the proposed program would not expose people visiting or working in the program area to excessive aircraft noise levels.</p>

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<b>Impact Statement</b>	<b>Page Number</b>	<b>Description/Finding</b>
<b>Public Services</b>		
<b>PS-1b:</b> The proposed program would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.	EIR Section 3.12, p. 3.12-9	The proposed program would not substantially increase the demand for Seal Beach Police Department's or Long Beach Police Department's, services because construction activities are localized and temporary and security measures would be in place. During operation, the proposed program would include security measures. In addition, the proposed program would pay applicable development fees associated with police services.
<b>PS-1c:</b> The proposed program would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.	EIR Section 3.12, p. 3.12-10	Refer to REC-1 and REC-2, below, for a discussion and evaluation of parks and recreational resources within the program area.
<b>Recreation</b>		
<b>REC-1:</b> The proposed program would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	EIR Section 3.13, p. 3.13-10	Construction workers would come from an existing local and/or regional labor force and would not likely relocate their households. Thus, there would not be a corresponding demand or use of the existing parks and recreation facilities. While construction of new sidewalks would result in temporary inaccessibility to portions of the bikeway, all construction for this bikeway would occur within the existing right-of-way and would be implemented in accordance with the City of Long Beach standards.  During operation, employees would be more likely to use parks and recreation facilities near their places of residences. The proposed program would increase the availability of recreational amenities, thereby providing a direct beneficial effect.
<b>REC-2:</b> The proposed program would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	EIR Section 3.13, p. 3.13-12	Once constructed and operational, the proposed program would provide a beneficial effect with respect to increased recreational opportunities for the cities of Seal Beach and Long Beach.

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Impact Statement	Page Number	Description/Finding
<b>Transportation</b>		
<p><b>TRA-2:</b> The proposed program would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).</p>	<p>EIR Section 3.14, p. 3.14-14</p>	<p>Note that the Draft PEIR was circulated prior to July 1, 2020, the effective date of Section 15064.3. As the cities of Seal Beach and Long Beach as well as the Counties of Los Angeles and Orange have not yet formally adopted their updated transportation significance thresholds or their updated transportation impact analysis procedures, a qualitative traffic analysis was used in this PEIR to determine significance of transportation impacts.</p> <p>Per Section 15064.3 of the <i>CEQA Guidelines</i>, since the proposed program is neither a land use nor a transportation project, it can be assumed to have a less than significant impact with respect to vehicle miles traveled. While the proposed program would generate operational trips, it is anticipated that local residents and visitors staying in the area would travel to the program area, with trips originating from the surrounding communities, resulting in low vehicle miles traveled to get to and from the program area.</p>
<b>Utilities and Service Systems</b>		
<p><b>UTL-4:</b> The proposed program would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.</p>	<p>EIR Section 3.16, p. 3.16-21</p>	<p>Construction activities would generate solid waste primarily from excavated soil that would be hauled off-site. Operation and maintenance of the proposed program would result in minimal trash generation, mainly personal waste generated by employees and visitors. Based on the available capacity of nearby landfills, there is sufficient remaining capacity to accommodate the proposed program.</p>
<p><b>UTL-5:</b> The proposed program would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.</p>	<p>EIR Section 3.16, p. 3.16-22</p>	<p>The proposed program would comply with all applicable City and County requirements regarding solid waste. Recyclable materials would be segregated and sent to appropriate facilities while materials that cannot be recycled would be disposed of properly.</p>

## 2.3 Findings Regarding Impacts Which Can Be Mitigated to Less than Significant

### 2.3.1 Aesthetics

**Impact AES-4:** *The proposed program would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.*

**Cumulative Aesthetic Impacts:** *The proposed program would not result in cumulative impacts to aesthetics.*

Construction activities on the program area would occur during daylight hours, generally between 7 a.m. and 8 p.m., in compliance with both requirements of the cities of Seal Beach and Long Beach. Any construction lighting needed would be aimed toward the activity and would be mostly contained within the area where work would be occurring. A minimal amount of glare could result from reflection of sunlight off windows of trucks used during construction, but this would be negligible and would not affect daytime views in the area given that there are no light-sensitive uses directly adjacent to the program area. Security lighting would be provided after hours on all construction sites, but this lighting would be minimal, restricted to the program area, and would not exceed the level of existing night lighting levels in urban areas.

With regard to operation, the proposed program would introduce new sources of light within an urban environment. Thus, lighting is not unusual in the program area. Nevertheless, the proposed program would comply with the requirements set forth by the cities of Seal Beach and Long Beach. More specifically, for the individual sites within the City of Seal Beach, the proposed program would comply with Seal Beach Municipal Code Section 11.4.20.025, which requires that lighting in parking areas be directed away from adjacent streets and properties and shall not blink, flash, change intensity, or cause glare. String lights are prohibited. Development Standard 7.8 of the Hellman Ranch Specific Plan also requires that all lighting be installed and maintained in such a manner to confine direct rays to the premises and prevent direct rays or glare onto neighboring properties. For the individual sites within the City of Long Beach, in compliance with the standards set forth in the SEADIP (PD-1), all lighting would be directed downward and exterior lighting would be designed and located in such a way that it does not project off site or onto adjacent uses. In addition, the proposed program would comply with SEASP 2060, once adopted, which requires that prior to approval of any development within the Coastal Habitat, Wetlands, and Recreation (CHWR) land use, the project applicant shall submit a photometric plan demonstrating that the proposed program will be designed and shielded so that nighttime lighting shall be no greater than 0.10 foot-candles at the edge of the habitat. Furthermore, the individual sites within the City of Long Beach would also comply with Long Beach Municipal Code Section 21.41.259, which requires that all parking area lighting be directed and shielded to prevent light spillover to adjacent properties. With compliance with the applicant standards, impacts from light and glare would be less than significant.

With regard to cumulative impacts, Cumulative Project Nos. 22 and 23 are located in the City of Long Beach within proximity of the program area. Similar to the proposed program, the cumulative projects would adhere applicable lighting requirements. Therefore, the proposed program and cumulative projects would not cumulatively combine to result in lighting impacts during construction activities.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts from new sources of lighting as identified in the Final PEIR. With the implementation of Mitigation Measure AES-1, potential lighting impacts during construction would be reduced to less-than-significant levels. With compliance with applicable lighting requirements, lighting impacts during operation would be less than significant.

**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.

**Basis for Finding:** Mitigation Measure AES-1 requires a construction Lighting Plan to ensure that exterior lighting will be placed and oriented downward to encourage wayfinding and provide security, thereby limiting the spillover of lighting to sensitive uses and habitats. With implementation of Mitigation Measure AES-1, the construction activities would not create a new source of substantial light or glare and impacts would be less than significant. Cumulative projects would be required to comply with applicable lighting standards during construction. With implementation of Mitigation Measure AES-1 and compliance with applicable lighting standards, the proposed program and cumulative projects would not cumulatively combine to result in lighting impacts during construction activities.

### 2.3.2 Air Quality

**Impact AQ-2a (construction):** *The proposed program would not violate the air quality standard and contribute substantially to an existing or projected air quality violation for construction-related NO<sub>x</sub> emissions.*

Construction emissions would vary temporally and spatially as the exact construction schedules, staging areas, and work plans are not known at this time. Despite the long construction duration for near-term, mid-term, and long-term activities, emissions from a singular activity would not be concentrated in one place for an extended duration. However, the program-level analysis concludes that construction of the proposed program could result in exceedances to the SCAQMD daily regional threshold for NO<sub>x</sub> during individual construction subphases. In addition, there is potential for subphases to overlap as well, thereby worsening the exceedances for NO<sub>x</sub>, but likely not causing a new exceedance. The emissions for CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would not be exceeded even if all subphases of construction occurred at the same time. It is anticipated that a project-level analyses would be conducted when more specific construction information is known. At a program level, construction emissions could potentially exceed the SCAQMD daily regional thresholds for the nonattainment ozone precursor emissions (i.e., NO<sub>x</sub>), construction impacts would be potentially significant.

With regard to health risk, the impacts of ozone are typically considered on a basin-wide or regional basis and not on a localized basis. The mass emissions significance thresholds used in CEQA air quality analysis are not intended to be indicative of human health impacts that a project may have (SCAQMD, 2012; SJVAPCD, 2015). Therefore, the proposed program's exceedance of the mass regional emissions threshold prior to mitigation (i.e., proposed program construction NO<sub>x</sub> exceedance) from program-related activities does not necessarily indicate that the proposed program would cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant air quality impacts during construction as identified in the Final PEIR. With the implementation of Mitigation Measure AQ-1, potential air quality impacts during construction would be reduced to less-than-significant levels.

**Mitigation Measure AQ-1: Construction NO<sub>x</sub> Reduction Measures.** The Applicant for the proposed program shall be responsible for the implementation of the following construction-related NO<sub>x</sub> 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.
- 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.

**Basis for Finding:** Mitigation Measure AQ-1 requires the implementation of construction-related NO<sub>x</sub> reduction measures, such as the use of certain equipment that complies with Tier IV emission controls, use of Best Available Control Technology devices, prohibition of equipment idling in excess of five minutes, prohibition of use of portable generators, and routing of construction trucks. With implementation of Mitigation Measure AQ-1, the construction activities would not result in emissions that will violate the air quality standard and contribute substantially to an existing or projected air quality violation and impacts will be less than significant. In addition, implementation of Mitigation Measure AQ-1 would also minimize construction-related air pollution health effects.

### 2.3.3 Biological Resources

**Impact BIO-1:** *The proposed program would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*

**Special-Status Plants.** Suitable habitat is present or individuals have been observed in the proposed program area for 31 special-status plant species, including within the South, Isthmus, Central and North Areas (Final PEIR, Table 3.3-4). Ecosystem restoration activities, development of public access, and infrastructure and utility modifications may impact these species should they be present. The loss of any of these species, should they be present, would be significant.

**Non-Special-Status Invertebrates.** Wetlands are among the world's most valuable and most threatened habitats, and invertebrates are an extremely important component in these ecosystems. These invertebrates are one of the primary trophic links between lower plants and higher vertebrates (i.e., amphibians, birds and fish). Grading within wetland or mudflat areas could result in mortality of non-special-status invertebrates.

**Special-Status Wildlife.** Suitable habitat is present or individuals have been observed in the proposed program area for 9 special-status invertebrates, 2 special-status fish, 7 special-status reptiles, 23 special-status birds, and 5 special-status mammals (Final PEIR, Table 3.3-6). The purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife and as such, implementation of the proposed program would have a net benefit on this species. However, temporary direct impacts to special status species could occur from direct loss of individuals and from grading activities and removal of suitable habitat. Construction noise and dust could result in significant indirect impacts to sensitive status wildlife.

During operation, the proposed program would not have an effect on tidal-influenced or storm-generated water levels based on modeling of sea-level rise scenarios (see Final PEIR Section 3.8, *Hydrology and Water Quality*). Therefore, no impacts to tidal marsh-dependent species would occur following the implementation of the proposed program. However, operational impacts associated with the ecosystem restoration activities could include the introduction and spread of noxious, invasive weeds that could compete with native plants for water and nutrients and alter habitat conditions for some wildlife species and nighttime lighting of the visitor center and parking lot areas include disruption to nocturnal wildlife species that could affect their breeding and foraging habits. These could result in potentially significant impacts to special-status wildlife.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts to biological resources as identified in the Final PEIR. With the implementation of Mitigation Measures BIO-1 through BIO-8, potential impacts to special-status species would be reduced to less-than-significant levels.

**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 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.

**Mitigation Measure BIO3: 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 coastal 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, subs. (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.

**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.

**Mitigation Measure BIO5: 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 and /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.

**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.

**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 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.

**Basis of Finding:** Mitigation Measure BIO-1 requires avoidance and/or re-establishment of special-status plants, restoration of any impacts to these special-status species, and the preparation and implementation of weed management, maintenance, and monitoring procedures. Mitigation Measure BIO-2, BIO-3, and BIO-5 require the implementation of a Worker Education Awareness Program (WEAP), monitoring of initial work efforts by a qualified biological monitoring, and a minimum habitat replacement ratio of 1:1. Mitigation Measure BIO-4 that requires minimization and avoidance measures for preserving active bird nests. Mitigation Measure BIO-6 requires the preparation of a lighting plan and requires that nighttime lighting is shielded downward to minimize spillage onto adjacent areas. Mitigation Measure BIO-7 requires pre-construction bat surveys and appropriate steps if a maternity roost is determined to be present. Mitigation Measure BIO-8 requires focused habitat

assessments and focused surveys for terrestrial or aquatic special-status species to determine presence, absence and/or abundance as well as necessary steps if such species cannot be avoided. With implementation of Mitigation Measures BIO-1 through BIO-8, impacts to special-status species would be reduced to less-than-significant levels.

**Impact BIO-2:** *The proposed program would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*

The following CDFW Sensitive Natural Communities and riparian habitats are present within the program area: *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 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. Implementation of the proposed program consist of grading, berm installation, fill for the overlook terrace, berm/road removal, sidewalk grading, and relocation of infrastructure and utilities, which would result in direct impacts. Given that these areas would be restored to coastal salt marsh, transitional wetland, or other native habitat as part of the proposed program, impacts would be temporary and there would be no net loss of habitat following implementation of the proposed program. While no impacts to CDFW Sensitive Natural Communities or riparian habitats are expected to occur, in the event that inadvertent and temporary impacts result impacts would be significant.

Operational impacts associated with the ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities, and infrastructure and utility modifications could result in adverse direct impacts to Sensitive Natural Communities or riparian habitats, such as the introduction and spread of noxious, invasive weeds that could compete with native plants for water and nutrient and alter the composition of communities.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts to riparian habitat or other sensitive natural community as identified in the Final PEIR. With the implementation of Mitigation Measure BIO-1 and BIO-9, potential impacts to riparian habitat or other sensitive natural community would be reduced to less-than-significant levels. See Impact BIO-1 for Mitigation Measure BIO-1.

**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 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.

**Basis of Finding:** Mitigation Measure BIO-9 requires reestablishment of Sensitive Natural Communities that will be impacted by restoration activities. In addition, Mitigation Measure BIO-1, which requires the preparation and implementation of weed management, maintenance and monitoring procedures, will address direct impacts caused by the invasion of weed species. With the implementation of Mitigation Measure BIO-1 and BIO-9, impacts to sensitive natural communities during construction and operation will be reduced to less-than-significant levels.

**Impact BIO-3:** *The proposed program would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means.*

The primary goal of the proposed program is the restoration and expansion of coastal salt marsh throughout much of the program area, much of which includes jurisdictional waters, resulting in a net increase in jurisdictional wetlands and waters. There will be upland areas transformed into jurisdictional wetlands following implementation of the proposed program.

Direct impacts to jurisdictional waters and wetlands would occur on all four areas. Potential inadvertent impacts would be considered significant. As such, the proposed program has the potential to result in significant impacts to state or federally protected wetlands.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts to state and federally protected wetlands as identified in the Final PEIR. With the implementation of Mitigation Measure BIO-9 through BIO-11, potential impacts to state and federally protected wetlands would be reduced to less-than-significant levels. See Impact BIO-2 for Mitigation Measure BIO-9.

**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.

**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 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 concentrations 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.

**Basis of Finding:** Mitigation Measure BIO9 requires re-establishment of permanent and temporary impacts to CDFW Sensitive Natural Communities; Mitigation Measure BIO-10 requires a jurisdictional delineation and issuance of jurisdictional resources permits; and

Mitigation Measure BIO-11 requires a functional assessment of the wetland areas that will be restored in the program area. Implementation of the mitigation measures will result in habitat restoration. The habitat types proposed for restoration will include coastal salt marsh and transitional wetland habitats, as well as establishment of upland scrub buffers. There will be a net increase in jurisdictional wetlands and waters following implementation of the proposed program. With implementation of Mitigation Measure BIO-9 through BIO-11, impacts to jurisdictional waters and wetlands will be reduced to a less-than-significant level.

**Impact BIO-4:** *The proposed program would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*

Terrestrial wildlife movement within the program area is primarily localized due to the surrounding urban landscape that includes Pacific Coast Highway, Studebaker Road, and Westminster Boulevard. The San Gabriel River levees act as a terrestrial wildlife corridor within or adjacent to the program area. Direct impacts to the San Gabriel River levees, which include breaching segments, are not considered significant as project impacts would restore habitats adjacent to the levees providing additional opportunities for terrestrial wildlife movement adjacent to the levees. In addition, indirect impacts from increased noise and dust could occur although they are not considered significant as an existing bike bath, Pacific Coast Highway and Westminster Boulevard provide a high level of disturbance to terrestrial wildlife movement in the program area. Future project impacts will restore habitats adjacent to the levees providing additional opportunities for terrestrial wildlife movement in the program area. The San Gabriel River and Alamitos Bay are the only waterways that have an outlet and have connectivity to other water bodies allowing a corridor for marine animals to move through the program area. Alamitos Bay, Los Cerritos Channel, and Steamshovel Slough would be avoided during construction activities and no in-water work would occur within these waterways. However, potentially significant impacts to corridors for marine animals could occur. During operation, in the event some minor improvements are required to be conducted and will interfere with aquatic wildlife movement, impacts could be significant. However, such potentially significant impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-8 (see Impact BIO-1, above).

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts regarding the movement of any native resident or migratory fish or wildlife species as identified in the Final PEIR. With the implementation of Mitigation Measure BIO-8, potential impacts would be reduced to less-than-significant levels. See Impact BIO-1 for Mitigation Measure BIO-8.

**Basis of Finding:** Mitigation Measure BIO-8 requires focused habitat assessments and focused surveys, a Wildlife Avoidance Plan, biological monitoring, preconstruction surveys and relocation. With implementation of Mitigation Measure BIO-8, impacts related to the movement of terrestrial and marine animals would be reduced to a less-than-significant level.

**Cumulative Impacts to Biological Resources:** *The proposed program would not have a cumulatively considerably impact to biological resources.*

With regard to cumulative impacts, the development of the proposed program could result in significant impacts to biological resources. The construction-related impacts associated with restoration activities within the program area would be short-term, as the majority of area would be temporary impacts and would be largely avoided or enhanced by design and are very limited in extent. Upon completion of the proposed program and any nearby cumulative projects, including the Los Cerritos Wetlands Oil Consolidation and Restoration Project, the Seal Beach Residential Project, and the Haynes Generating Station Intake Channel Infill Project, the proposed program would be required to comply with federal and state regulations, as well as applicable municipal codes, pertaining to the protection of biological resources. Mitigation Measures BIO-1, BIO-6, and BIO-8 through BIO-11 will continue to be implemented during operation to avoid, minimize and mitigate for impacts to sensitive biological resources. Therefore, the cumulative impacts to biological resources during operations would not be cumulatively considerable. Therefore, cumulative impacts to biological resources during construction and operation would not be cumulatively considerable.

### 2.3.4 Cultural Resources

**Impact CUL-3:** *The proposed program would not disturb any human remains, including those interred outside of formal cemeteries.*

The proposed program is located in an area where numerous Native American burials have been previously recovered, including from an archaeological site that appears to overlap the fringes of the program area. Given the prehistoric and ethnohistoric occupation of the area, it is possible that Native American human remains, including those interred outside of formal cemeteries, could be located within the program area. No formal or historic-era cemeteries are known to be located within the program area. Ground-disturbing activities during construction, such as excavation and grading, have the potential to disturb human remains. Therefore, impacts would be potentially significant.

Operation of the proposed program would include ongoing inspection and maintenance of the perimeter levees and berms, flood walls and water-control structures; removal of non-native vegetation in restored habitat and stormwater management features; trash removal within the restored wetlands; and operation of the visitor centers and associated parking lots. Any ground disturbance associated with these activities would occur within soils that have already been subject to ground disturbance, and they are unlikely to disturb human remains. Impacts to human remains from operation of the proposed program would be less than significant.

With regard to cumulative impacts, with implementation of Mitigation Measure CUL-18 the proposed program impacts on human remains would be less than significant. It is assumed that any other projects in the geographic scope of analysis have or would also follow state law. Therefore, cumulative impacts on human remains during construction of the proposed program would not be cumulatively considerable.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant cultural resource impacts during construction as identified in the Final PEIR. With the implementation of Mitigation Measure CUL-18, potential impacts on human remains during construction would be reduced to less-than-significant levels.

**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 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.

**Basis of Finding:** Mitigation Measure CUL-18 requires compliance with California Health and Safety Code Section 7050.5 and California PRC Section 5097.98 in the event that humans are discovered and ensures that human remains and any associated funerary objects or grave goods are treated in a manner consistent with state law. With implementation of Mitigation Measure CUL-18 impacts to human remains will be less than significant.

### 2.3.5 Geology and Soils

**Impact GEO-6:** *The proposed program would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

**Cumulative Geology and Soils Impacts:** *The proposed program would not result in cumulative impacts to geology, soils, and paleontological resources.*

The artificial fill and estuarine deposits on the site have no or low paleontological sensitivity, respectively. However, they overlie young alluvium and old shallow marine deposits at an undetermined depth, which have low-to-high or high paleontological sensitivity, respectively. Therefore, the program area is considered to have low-to-high paleontological potential, increasing with depth. While the exact depth of the artificial fill overlying the majority of the program area is unknown and may vary across the program area, 5 feet below ground surface is used as a conservative estimate of the transition from low to high potential since there have been fossil discoveries in the region from a similar depth. Therefore, ground disturbing activities related to development of the proposed program have the potential to encounter significant paleontological resources. Disturbance of such resources could constitute a significant impact on the environment.

Operation of the proposed program would include ongoing inspection and maintenance of the perimeter levees and berms, flood walls and water-control structures; removal of non-native vegetation in restored habitat and stormwater management features; trash removal within the restored wetlands; and operation of the visitor centers and associated parking lots. Any ground disturbance associated with these activities would occur within soils that have already been subject to ground disturbance, and they are unlikely to disturb paleontological. Impacts to paleontological resources from operation of the proposed program would be less than significant.

Construction-related cumulative impacts to paleontological resources could occur if one or more of the cumulative projects in conjunction with the proposed program, would have impacts on paleontological resources that, when considered together, would be significant.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant program and cumulative paleontological resource impacts during construction as identified in the Final PEIR. With the implementation of Mitigation Measures GEO-1 through GEO-7, potential impacts on paleontological resources during construction would be reduced to less-than-significant levels. Impacts during operation would be less than significant.

**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**).

**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.

**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.

**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.

**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.

**Mitigation Measure GEO-6: Preparation, Identification, Cataloging, and Curation Requirements.** All significant fossil discoveries shall be prepared to the point of 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.

**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.

**Basis of Finding:** Mitigation Measures GEO-1 through GEO-7 require retention of qualified professionals; a project-level review to assess the potential for each project to encounter paleontological resources; training for construction personnel on how to identify paleontological resources and the procedures to follow should they be encountered; paleontological resources monitoring in sensitive sediments; and treatment, curation, and reporting of significant discoveries. With implementation of Mitigation Measures GEO-1 through GEO-7, impacts to paleontological resources will be reduced to a less-than-significant level. Cumulative projects will also be required to implement similar measures to address the potential for paleontological resources, if any. As such, the proposed program's contribution to impacts on paleontological resources is less than cumulatively considerable.

## 2.3.6 Hazards and Hazardous Materials

**Impact HAZ-3:** *The proposed program would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.*

The program area has several individual sites listed on one or more hazardous materials lists for the presence of active, idle, or plugged oil wells; historical releases of contamination; and/or the presence of landfill materials. Restoration and construction activities are anticipated to encounter contamination associated with known landfills on the program area sites in the Central, Isthmus, and South Areas that could include crude oil, its degradation byproducts, tank bottom sludge, and metals. For landfilled areas where the fill materials are inappropriate for a wetlands habitat, it may be necessary to remove some or all of the landfill materials. Thus, the restoration and construction activities could encounter hazardous materials associated with these sites, exposing workers or the environment to hazardous materials. As such, the proposed program could result in potentially significant impacts relative to hazards and hazardous materials during construction.

Issues regarding hazardous materials would be addressed during construction. The proposed program would not use hazardous materials during operations. The ongoing operations of the oil wells and pipelines are regulated outside of the proposed program under CalGEM and other regulations. During operations, there would be no impact.

With regard to cumulative impacts, all of these cumulative projects would be subject to the same regulatory requirements, including the implementation of health and safety plans, and soil and groundwater management plans, as needed. Cumulative projects involving the potential releases of hazardous materials also would be required to remediate their respective sites to the same established regulatory standards. The proposed program would not cause or contribute to a cumulatively significant impact with respect to the use of hazardous materials during construction activities. During operation, the proposed program would not use hazardous materials and, therefore, could not cause or contribute to a cumulatively significant impact.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant hazards and hazardous materials impacts during construction as identified in the Final PEIR. With the implementation of Mitigation Measures HAZ-1 and HAZ-2, potential impacts related to hazards and hazardous materials during construction would be reduced to less-than-significant levels. During operations, no impacts would occur.

**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:

- 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 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.

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.

**Basis of Finding:** Mitigation Measure HAZ-1 requires that construction contractors prepare a health and safety plan in accordance with Cal OSHA regulations. The plan will provide hazard recognition and monitoring information, specify personal protective equipment for

workers, outline construction measures to reduce the potential for workers' exposures to hazardous materials in soil, landfill materials, and groundwater, and describe procedures for handling accidental hazardous materials releases and unanticipated contamination. Mitigation Measure HAZ-2 requires construction contractors to prepare and implement a Soil, Landfilled Materials, and Groundwater Management Plan in compliance with all relevant environmental regulations for the management and disposal of excavated fill, soil, and groundwater. The plan would include describing soil, landfilled materials, and groundwater testing procedures to identify the appropriate reuse and/or disposal options, the containers to be used to transport the materials, and the proposed recycling or disposal facilities along with each facilities acceptance criteria. With compliance with existing regulations, and with implementation of Mitigation Measures HAZ-1 and HAZ-2, the potential for harmful exposure to hazardous materials present in soil, landfilled materials, or groundwater during removal of the landfill will be reduced to less than significant with mitigation.

### 2.3.7 Hydrology and Water Quality

**Impact HYD-1:** *The proposed program would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.*

During construction, exposure and removal of topsoil and the underlying sub-soils could generate sediment that, if mobilized by stormwater runoff or runoff from applied water during construction, could expose sediments to erosion and could potentially mobilize contaminated sediments that adversely affects water quality of receiving waters.

The construction activities for the proposed restoration activities would be required to comply with the Construction General Permit for the state and the County MS4 Permit required as part of the permitting process. For work in the channel, the proposed program also would be required to comply with a Section 401 Water Quality Certification. Compliance with the General Construction Permit, MS4 Permit, and 401 Certification would ensure that the proposed activities would include adequate stormwater protection through BMPs and monitoring, to limit increased turbidity and decreased water quality from sediment and other pollutants leaving the construction site.

Contaminated water and sediment from upstream sources would not be adverse since work is being done in the watershed, outside of the proposed program, to improve the water quality in the Los Cerritos Channel and the San Gabriel River. The concentration and loading of the water quality constituents from the watershed will be reduced through compliance with the reissued MS4 Permit, TMDLs, and the WMPs. The potential for significant adverse impacts to the proposed program would, therefore, be significantly reduced.

With regard to local water bodies, erosion could result in an infrequent, temporary impact relating to the contribution of constituents to the San Gabriel River; these inputs would not have a substantial impact on the beneficial uses of the system.

With regard to groundwater quality, sampling conducted to date indicates that groundwater at the site has already been impacted by the historic site land uses. It is likely that sediment in certain areas of the site will require remediation before restoration, which would improve conditions and

be a benefit to groundwater quality. As all of the local groundwater is non-potable, there are no wells in the vicinity of the program area that draw groundwater from the shallow water table for domestic or municipal use. Although the proposed program would increase tidal inundation through the restored marsh and possibly result in some localized increase in salinity within the restoration area, the change to water quality would not be considered to have an adverse impact on water resources because the groundwater in this area is all brackish to saline and is not used for domestic or municipal supply. It is not likely the site's groundwater will be used for direct potable use due to the tidal connection and salt water intrusion. Impacts would be less than significant.

Excavated sediment would be used on site to the extent feasible, but any remaining sediment may be designated for placement in an off-site landfill or in ocean disposal sites at either the Los Angeles (LA-2) or Newport Bay (LA-3) sites. The suitability of on-site excavated sediment for placement at a designated ocean dredged material disposal site would require a Tier III evaluation, which contains sediment quality standards, in accordance with Evaluation of Dredged Material Proposed for Ocean Disposal – Testing Manual (OTM; USEPA/USACE 1991). Sediment would be placed in an ocean disposal site only if it met the standards of the OTM, therefore, there would be no adverse impact as a result of ocean disposal. If the material is determined to be suitable for this placement alternative, specific permitting for ocean disposal or open-water placement would be required for the designated site. Impacts would be less than significant.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant hydrology and water quality impacts as identified in the Final PEIR. With the implementation of Mitigation Measure HYD-1, potential impacts related to hydrology and water quality would be reduced to less-than-significant levels.

**Mitigation Measure HYD-1:** A Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction or restoration 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.

**Basis of Finding:** Mitigation Measure HYD-1 will ensure monitoring and adaptive management is conducted to recognize and address any erosion or sediment quality issues. The MAMP will include sediment erosion and deposition monitoring post large storm events to evaluate whether erosion from the marsh is depositing in the San Gabriel River and increasing the flood risk. The monitoring will also determine if the marsh habitats are being impacted by erosion and provide

measures for addressing the impacts. With implementation of Mitigation Measure HYD-1, impacts will be reduced to a less-than-significant level.

**Impact HYD-3a:** *The proposed program would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on site or off site.*

The proposed program would require ground disturbance, vegetation removal, and/or grading to restore and enhance the wetlands, and build levees and berms around the Central and South Areas. Exposure and removal of topsoil and the underlying sub-soils during construction could generate sediment that, if mobilized by stormwater runoff or runoff from applied water during construction, could deliver sediment-laden runoff to the San Gabriel River or adjacent sites, including the beach, which could result in localized and downstream siltation. Compliance with the General Construction Permit, MS4 Permit, and 401 Certification would ensure that the proposed activities would include adequate stormwater protection through BMPs and monitoring, to limit increased turbidity and decreased water quality from sediment and other pollutants leaving the construction site.

Post-construction, the proposed program would reconnect the San Gabriel River to the Central Area and open up the Central Area to full tidal connection with the river. Reconnection of the river to the floodplain and removal of the levees could cause erosion of the marsh during a large storm event, which could deliver sediment-laden runoff further down the river or to the ocean. If this sediment deposited in the San Gabriel River or the entrance of Alamitos Bay, it could impact flood management or navigation. Thus, the proposed program could result in a potentially significant impact.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant hydrology and water quality impacts as identified in the Final PEIR. With the implementation of Mitigation Measure HYD-1, potential impacts related to hydrology and water quality would be reduced to less-than-significant levels. See HYD-1a, above, for Mitigation Measure HYD-1.

**Basis of Finding:** As indicated above, Mitigation Measure HYD-1 will ensure monitoring and adaptive management is conducted to recognize and address any erosion or sediment quality issues. With implementation of Mitigation Measure HYD-1, impacts will be reduced to a less-than-significant level.

## 2.3.8 Public Services

**Impact PS-1a:** *The proposed program would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection.*

Activities associated with demolition and construction requiring electrical power, fuel, or handling oil would increase the fire risk on site and subsequent potential need for fire protection services. Construction activities would temporarily increase the number of persons on site, which could increase the need for fire protection and emergency medical services. Since construction workers would likely come from the area and would not likely relocate their households as a consequence of working on the proposed program, the short-term increased employment of construction workers on the program area would not result in a notable increase in the residential population. However, in light of the construction activity on the site, impacts associated with fire protection services could be potentially significant.

The proposed program would result in new structures and persons on site, which could increase the fire hazard potential of the area and the subsequent potential need for fire protection and emergency medical services. Since employees and volunteers are anticipated to be local residents or regional commuters, the potential increase in service population would be minimal. In addition, building fees would be required in accordance with the County of Orange's and the City of Long Beach's Fire Facilities Impact Fees to compensate for anticipated impacts to fire services from its operation. OCFA and LBFD would review site design plans for compliance with appropriate safety codes prior to construction. Additionally, fuel modification would result from the proposed program's habitat restoration activities, which would further reduce the potential for fires to occur during operation of the proposed program. Therefore, during operation the proposed program would not result in the need for new or physically altered facilities to maintain acceptable response times for fire protection and emergency medical services. Impacts would be less than significant.

With regard to cumulative impacts, the geographic area for cumulative analysis is the service territory for the providers. With implementation of mitigation measure during construction and compliance with regulatory requirements, the proposed program would not contribute to a cumulatively significant impact.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts to fire protection services during construction as identified in the Final PEIR. With the implementation of Mitigation Measure PS-1, potential construction related impacts to fire protection services would be reduced to less-than-significant levels. Operational impacts would be less than significant.

**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 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.

**Basis of Finding:** Mitigation Measure PS-1 requires fire safety prevention training for construction workers regarding activities that pose a potential fire risk, such as handling of oil and other flammable liquids and welding and cutting. Given that the proposed program would be implemented in multiple phases and the temporary nature of construction work, as well as implementation of Mitigation Measure PS-1, the proposed program will not substantially increase the service demand for fire protection and emergency medical services in the area during construction. Therefore, impacts would be less than significant.

## 2.3.9 Transportation

**Impact TRA-1:** *The proposed program would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.*

Construction of the program components would temporarily generate additional truck and vehicle trips within the cities of Seal Beach and Long Beach and on the regional circulation system although traffic levels would not substantially increase and would be temporary in nature as traffic levels would return to pre-construction conditions once construction is complete. However, construction trucks accessing the program area would use designated truck routes to the extent feasible, which would keep heavy trucks moving at slower speeds along roadways that have been designed to accommodate these types of vehicles. In addition, while full or partial roadway closures are not anticipated at this time to be required during construction of the program components, there could be the need for a roadway closure as the design process progresses. If a full or partial roadway is required during construction, a significant impact to roadway operations could occur.

With regard to potential cumulative construction transportation impacts, the geographic scope for potential cumulative impacts to traffic and transportation is the regional and local roadways within the cities of Seal Beach and Long Beach and the surrounding portions of Orange and Los Angeles counties. Given the different types and size of the projects included in the cumulative scenario, it is reasonable to assume that when considering the amounts of additional truck trips generated by all of the cumulative projects during construction, a potentially significant transportation cumulative impact could occur.

During operation, trips would result from maintenance and employees and visitors to the site. Absent specific trip generation rate for the visitor center land use, the amount of operational trips generated by the proposed program was calculated by applying the trip generation rate of the Public Park land use by the total acreage of the program area (503 acres).<sup>1</sup> Based on that calculation, the proposed program is anticipated to generate approximately 393 trips on weekdays, 986 trips on Saturdays, and 1,102 trips on Sundays. Based on similar, nearby visitor centers, the majority of these trips are not anticipated to occur during the peak traffic hours and would be spread out throughout the day. Therefore, the number of peak hour trips would be minimal while the remainder of trips would be spread throughout the day. The amount of trips

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<sup>1</sup> The trip generation rate for the Public Park land use is 0.78 trips per acre for weekdays, 1.96 trips per acre for Saturdays, and 2.19 trips per acre for Sundays. This estimate provides a conservative estimation of the operational trips generated as that land use is a more intense land use than the proposed land use under the proposed program.

generated by operation and maintenance of the proposed program would not result in a substantial increase to existing traffic volumes and would vary throughout the week as well as the year depending on seasons.

In addition, the proposed program would not alter the local roadway configuration or permanently disrupt bus stops or bike lanes once operational, and therefore would be consistent with all applicable transportation and traffic plans. Furthermore, the proposed program could install new sidewalks around the perimeter of the program area where there are currently none and a crosswalk at the intersection of Shopkeeper Road and 2nd Street to improve public access between the North Area, Long Beach Visitor Center, and Central Area. These components would increase connectivity and safety for pedestrians and bicyclists. Thus, operation of the proposed program would not affect the performance of the local or regional circulation systems and impacts would be less than significant. In addition, the proposed program would not contribute to a cumulative transportation impact during operation.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant transportation impacts during construction that could conflict with local and regional traffic thereby resulting in a conflict with a program plan, ordinance or policy addressing the circulation system as identified in the Final PEIR. With the implementation of Mitigation Measure TRA-1, potential construction related transportation impacts would be reduced to less-than-significant levels. Operational impacts would be less than significant.

**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.

**Basis of Finding:** Implementation of Mitigation Measure TRA-1 requires the preparation and implementation of a traffic control plan in the event of necessary lane closures, which would reduce all effects to the regional and local circulation system, including existing transit routes, bicycle lanes, and emergency response access, to a less than significant level. With implementation of Mitigation Measure TRA-1, transportation impacts during construction of the proposed program will be reduced to a less-than-significant level. In addition, with implementation of Mitigation Measure TRA-1 the proposed program's contribution to cumulative impacts to traffic and transportation would not be cumulatively considerable.

**Impact TRA-3:** *The proposed program would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

**Cumulative Transportation Impacts:** *The proposed program would not result in cumulative impacts to transportation.*

Construction of the proposed program would include the use of heavy trucks to bring construction materials to and from the program area. Construction of the program components could require full or partial road closures, which could result in hazardous driving conditions. Operation of the proposed program would include routine maintenance activities as well as operation of the Seal Beach Visitor Center and passive recreational trails and would not require heavy equipment nor does it include a change to existing roadway configurations. Thus, operation of the proposed program would result in a less-than-significant impact with regard to hazards and incompatible uses.

The geographic scope for potential cumulative impacts to traffic and transportation is the regional and local roadways within the cities of Seal Beach and Long Beach and the surrounding portions of Orange and Los Angeles counties. Given the different types and size of the projects included in the cumulative scenario, it is reasonable to assume that when considering the amounts of additional truck trips generated by all of the cumulative projects during construction, a potentially significant transportation cumulative impact could occur.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant transportation impacts related to geometric design features or incompatible uses as identified in the Final PEIR. With the implementation of Mitigation Measure TRA-1, potential construction related transportation

impacts would be reduced to less-than-significant levels. Operational impacts would be less than significant.

**Basis of Finding:** Implementation of Mitigation Measure TRA-1 would require the preparation and implementation of a traffic control plan to minimize the effects on roadway safety. Therefore, construction of the proposed program would not result in a hazardous design feature within the program area or cumulative construction traffic impacts. Transportation impacts during construction would be less than significant with mitigation.

### 2.3.10 Tribal Cultural Resources

**Cumulative Tribal Cultural Resources Impacts:** *The proposed program would not result in cumulative impacts to tribal cultural resources.*

The geographic scope for cumulative analysis of tribal cultural resources encompasses the broadly defined coastal zone of Orange and Los Angeles Counties, from roughly Santa Monica in the north to Newport Beach in the south. Potential impacts from the proposed program on the tribal cultural landscape are considered significant and unavoidable. The cumulative projects proposed throughout the geographic scope of this analysis have the potential to result in a substantial adverse change in the significance of the tribal cultural landscape as some of these projects are also within or in the vicinity of the tribal cultural landscape. Past projects, such as California State University – Long Beach, United States Veterans Administration Hospital, Rancho Los Alamitos/Bixby Hill, and Heron Pointe, as well as present and foreseeable projects have resulted in or could result in the demolition or material alteration to some aspects of the tribal cultural landscape that convey its significance. Some past projects have encroached upon the wetlands leading to habitat degradation and loss, resulting in the material alteration of waterways, and plant habitat, and animal habitat. Future projects could also materially alter the tribal cultural landscape through the introduction of development that is incompatible with the landscape's setting or through ground disturbance within archaeological sites that contribute to the significance of the landscape. When taken together, past, present, and foreseeable projects result in a significant cumulative impact to the tribal cultural landscape.

The purpose of the proposed program is to restore the wetlands and the proposed program would result in an overall benefit to several of the essential physical characteristics of the landscape, such as the waterways, plants, and animals. Other projects have in the past resulted in greater impacts to the landscape than the proposed program, including impacts to archaeological sites associated with the villages of *Puvungna* and *Motuucheyngna*, as well as other Native American or prehistoric archaeological resources that may have contributed to the significance of the landscape, and impacts to waterways (including wetlands), plant habitat, and animal habitat. The incremental effects of the proposed program are not considered significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant cumulative impacts to tribal cultural resources as identified in the Final PEIR. With the implementation of BIO-1 through BIO-9 (Final PEIR, Section 3.3, *Biological Resources*; Impact BIO-1 and BIO-2, above), and Mitigation

Measures CUL-1, and CUL-4 through CUL-17 (Final PEIR, Section 3.4, *Cultural Resources*; Impact CUL-1), the incremental contribution of the proposed program on impacts to the tribal cultural landscape as a tribal cultural resource would not be cumulatively considerable.

**Basis of Finding:** Mitigation Measures BIO-1 through BIO-9 (Final PEIR, Section 3.3, *Biological Resources*; Impact BIO-1 and BIO-2, above), and Mitigation Measures CUL-1, and CUL-4 through CUL-17 (Final PEIR, Section 3.4, *Cultural Resources*) will incorporate measures to protect biological resources and cultural resources. Since the proposed program will restore the wetlands, the proposed program will provide an overall benefit to several of the essential physical characteristics of the landscape, such as the waterways, plants and animals. Thus, the incremental contribution of the proposed program on impacts to the tribal cultural landscape as a tribal cultural resource would not be cumulatively considerable.

### 2.3.11 Utilities and Service Systems

**Impact UTL-1:** *The proposed program would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.*

**Water Infrastructure.** The proposed program would be constructed and implemented in three phases over a 20-year period. In the long-term, 1st Street would be removed to allow for restoration of the berm and the existing water line would be relocated off site. The design and installation of the new water line would be required to meet applicable City standards. Construction impacts associated with the installation would primarily involve trenching in order to place the water distribution lines below grade and reconnect existing domestic and fire water services for the affected surrounding properties. Prior to ground disturbance, contractors would coordinate with OCWD and LBWD to identify the locations and depth of all lines and send notices in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Compliance with applicable standards and requirements would ensure that impacts to water infrastructure during construction would be less than significant.

During operation, water for the Seal Beach Visitor Center and irrigation as well as fire suppression would be provided by the OCWD and LBWD through domestic water mains surrounding the program boundary that are maintained by the cities of Seal Beach and Long Beach. The water mains are relatively large for irrigation use and available for new water meter services. Construction impacts would be limited to the one to two days required for each meter and lateral installation. Since the design of the visitor center is unknown at this time, impacts could be potentially significant and Mitigation Measure UTL-1 will be implemented to ensure that significant impacts are reduced to a less-than-significant level.

**Wastewater Infrastructure.** All wastewater generated during construction, including water from washing down trucks, equipment, and concrete construction pads, would be stored on site within temporary storage tanks. Construction workers would use portable sanitary units during construction activities for the proposed program. Wastewater generated during construction of the proposed program would be minimal. After settling out the solids, the waste water would be sent to

the Orange County Sanitation District (OCSD) and Los Angeles County Sanitation District (LACSD) treatment facilities for treatment and disposal. Because construction of new or expanded facilities is not required to accommodate the construction of the proposed program, there would be no construction impacts associated with the provision of these facilities to serve the proposed program.

Sanitary wastewater generated at the Seal Beach Visitor Center would be conveyed for treatment using existing sewer lines. The proposed program would result in a large reduction in wastewater compared with oil production. Thus, there would be no requirement for the construction of new or expanded wastewater treatment facilities to serve the proposed program. In addition, the existing sewer lines have sufficient capacity to accommodate the volume of wastewater produced from the proposed program. As stated in the City of Seal Beach Sewer Master Plan (2018), there were no sewer pipe capacity deficiencies identified and sufficient capacity was available at the Adolfo Lopez pump station, the closest pump station to the program area. However, since the design of the visitor center is unknown at this time, impacts could be potentially significant and Mitigation Measure UTL-2 will be implemented to ensure that significant impacts are reduced to a less-than-significant level.

Stormwater. The proposed program would require construction of new flood risk and stormwater management elements, including modifications to Los Angeles County Drainage Area project structures within the program area by modifying the existing levee along the San Gabriel River, constructing new flood risk management structures (e.g., earthen levees and berms, or flood walls), restoring the wetland floodplain, constructing new water-control structures that allow for increased tidal connections, and constructing new stormwater management features (e.g., bioswales). Compliance with applicable regulatory requirements and implementation of BMPs would ensure impacts related to the need to construct or expand stormwater drainage facilities would be less than significant. With regard to cumulative impacts, because the area is urban, developed, and is generally covered with impervious surfaces, development of cumulative projects would not result in a substantial increase in impervious surfaces in the area or substantially increase stormwater and runoff flows through the stormwater drainage system. The increases of runoff from cumulative projects that could combine to impact stormwater drainage capacity would be less than cumulatively significant.

Electric. The proposed program would require infrastructure and utility modifications, including the relocation and undergrounding of electric lines, which could create a temporary environmental disturbance. However, program design features and mitigation measures identified in the MMRP would reduce impacts associated with changes to the infrastructure. As such, construction and operation of the proposed program is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new electric power facilities or expansion of existing facilities, which could cause significant environmental effects the impact would be less than significant. Cumulative electricity infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. As the proposed program would likely tie into existing off-site facilities surrounding the program boundary and construction and operation is not anticipated to adversely affect the electrical infrastructure, the

proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with electric power infrastructure.

Natural Gas. No natural gas consumption would occur during construction of the proposed program. However, construction of the visitor center would involve installation of new natural gas connections to serve the visitor center, creating a temporary environmental disturbance. Given that the area surrounding the visitor center is served by existing natural gas infrastructure, extensive off-site infrastructure improvements would not be needed to serve the program area. Environmental impacts associated with the installation would be less than significant with the implementation of program design features and mitigation measures identified in the MMRP. Construction and operation of the proposed program is not anticipated to adversely affect the natural gas infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new natural gas facilities or expansion of existing facilities, which could cause significant environmental effects the impact would be less than significant. Cumulative natural gas infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. While additional natural gas infrastructure is needed for the proposed program, the proposed program would not result in the construction of new natural gas facilities or expansion of existing facilities. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with natural gas infrastructure.

Telecommunication. Telecommunication service providers already deliver their services to a large number of homes in in the vicinity of the program area. Since service is already provided and the demand would be minimal, it is anticipated that existing telecommunications facilities would be sufficient to support the proposed program's needs for telecommunication services and impacts would be less than significant. Considering the cumulative scenario, expansion of telecommunication infrastructure is typically at the discretion of the service providers and would occur as needed. Installation of new telecommunications infrastructure for the cumulative projects are anticipated to be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with telecommunication infrastructure.

**Finding:** The LCWA finds that impacts regarding stormwater, electrical, natural gas and telecommunications would be less than significant and no mitigation measures for these utilities would be necessary. The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts regarding utilities as identified in the Final PEIR. With the implementation of Mitigation Measures UTL-1 and UTL-2, potential impacts with regard to water and wastewater infrastructure would be reduced to less-than-significant levels.

**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.

**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.

**Basis of Finding:** Mitigation Measure UTL-1 requires obtaining a water will serve letter prior to issuance of a certificate of occupancy for the visitor center to ensure that water mains surrounding the program boundary have sufficient capacity to serve the visitor center. Mitigation Measure UTL-2 requires the completion of a sewer capacity study prior to issuance of a certificate of occupancy for the visitor center to ensure that sewer lines surrounding the program boundary have sufficient capacity to serve the visitor center. Implementation of Mitigation Measures UTL-1 and UTL-2 will ensure that impacts to water and wastewater infrastructure remain less than significant.

**Impact UTL-2:** *The proposed program would have sufficient water supplies available to serve the proposed program and reasonably foreseeable future development during normal, dry and multiple dry years.*

Water use during construction would be typical and would include water for mixing with cement for the visitor center, water for the cleaning of equipment and dust suppression, as well as water for mixing with bentonite clay and cement to plug the wells in the South Area. However, water usage during construction would be minimal and impacts would be less than significant.

During operations, drinking water and other potable water use would be nominal at the Seal Beach Visitor Center in the South Area. Water would also be required for restoration and irrigation to ensure vegetation is established. While the water demand would be nominal and the OCWD and LBWD have sufficient water supplies to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions, Mitigation Measure UTL-1 would be require obtaining a will serve letter to verify that surrounding water mains surrounding the program boundary have capacity to provide service to the visitor center.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts regarding water supply as identified in the Final PEIR. With the implementation of Mitigation Measure UTL-1, potential impacts with regard to water supply would be reduced to less-than-significant levels. (See Impact UTL-1 above for Mitigation Measure UTL-1.)

**Basis of Finding:** Mitigation Measure UTL-1 requires obtaining a water will serve letter prior to issuance of a certificate of occupancy for the visitor center to ensure that water mains surrounding the program boundary have sufficient capacity to serve the visitor center. Implementation of Mitigation Measure UTL-1 will ensure that impacts remain less than significant.

**Impact UTL-3:** *The proposed program would not result in a determination by the wastewater treatment provider which serves or may serve the proposed program that it has adequate capacity to serve the proposed program's projected demand in addition to the provider's existing commitments.*

Wastewater generated during construction, including water from washing down trucks, equipment, and concrete construction pads, would be stored on site within temporary storage tanks. Construction workers would use portable sanitary units. Wastewater generated during construction would be minimal and would be periodically hauled off site for treatment and disposal at the OCSD and LACSD treatment facilities or other appropriate facility. Construction of the proposed program would not require the construction of new or expanded wastewater facilities and impacts would be less than significant.

Operation of the proposed Seal Beach Visitor Center would result in a nominal increase in the amount of sanitary wastewater generated as a result of employees and visitors and would be treated at the existing OCSD treatment facilities. Although the volume of wastewater during operation would nominally increase, the nature of wastewater would remain unchanged and would, therefore, still be acceptable under the existing site discharge requirements. No sewer pipe capacity deficiencies were identified within the City of Seal Beach's Sewer Master Plan 2018 and sufficient capacity was determined at the Adolfo Lopez pump station, the closest pump station to the program area. As the design of the visitor center is unknown at this time, verification of the capacity of the sewer lines would be needed.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that substantially lessen significant impacts regarding wastewater as identified in the Final PEIR. With the implementation of Mitigation Measure UTL-2, potential impacts with regard to wastewater would be reduced to less-than-significant levels.

**Basis of Finding:** As indicated above, Mitigation Measure UTL-2 requires obtaining a sewer capacity study prior to operation of the visitor center to verify that sewer lines surrounding the program boundary have capacity to provide service to the visitor center. With implementation of Mitigation Measure UTL-2, the impact of the additional wastewater from the Seal Beach Visitor Center would be less than significant.

## 2.4 Findings Regarding Impacts Not Fully Mitigated to Less Than Significant

### 2.4.1 Air Quality

**Impact AQ-1a (construction):** *The proposed program would conflict with or obstruct implementation of the applicable air quality plan during construction of the proposed program.*

The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., O<sub>3</sub> and PM<sub>2.5</sub>). The Air Basin is also in non-attainment of the CAAQS (e.g., O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>). Criteria for determining the proposed program's consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook. While maximum daily emissions from construction activities would exceed the SCAQMD regional threshold for NO<sub>x</sub> (Final PEIR, Table 3.2-4; Impact AQ-2, above), with the implementation of mitigation measures, regional construction emissions of NO<sub>x</sub> would be less than significant (Final PEIR,

Table 3.2-7). However, localized impacts to sensitive receptors at the program-level during construction would be considered potentially significant (Impact AQ-3a, below). Operational emissions would be less than significant (Final PEIR, Table 3.2-4) and no mitigation measures would be required. While incorporation of mitigation would reduce regional construction emissions to less than significant, the proposed program could still potentially result in significant localized construction impacts and as such, could conflict with Criterion No. 1 and would result in a potentially significant impact for construction emissions.

Under Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on the SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed program would be required to comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations for controlling fugitive dust and other construction emissions. Construction would only occur for short periods of time in each location, thus construction emissions and duration would be considered short-term and would not conflict with the AQMP. The proposed program would restore wetlands and habitat areas which would reduce emissions in the long term from the existing environmental setting as oil operations cease. The proposed program would not increase population growth as it includes no housing and would generate a minimal number of jobs for maintenance of the facilities. The improvements to pedestrian access would help decrease vehicle miles traveled region-wide as it provides a recreational area near existing residential communities in the cities of Seal Beach and Long Beach thereby reducing the need to travel long distances for recreation. Program emissions would be only a small percentage of overall Basin-wide emissions (Final PEIR, Table 3.2-6). Therefore, the proposed program would not conflict with Criterion No. 2.

Since the proposed program could conflict with Criterion No. 1, the proposed program would conflict with or obstruct implementation of the applicable air quality plan and impacts would be significant.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that reduce significant impacts regarding potential conflict with applicable plans through the reduction of construction emissions as identified in the Final PEIR. The proposed program would implement Mitigation Measure AQ-1, which would reduce NO<sub>x</sub> emissions during construction (see Impact AQ-2a for Mitigation Measure AQ-1). However, specific economic, legal, social, technological, or other considerations, make it infeasible to mitigate this impact to below the level of significance, and even with the implementation of this measure, the proposed program could conflict with applicable air quality plans. Impacts would remain significant and unavoidable.

**Basis for Finding:** Mitigation Measure AQ-1 requires the implementation of construction-related NO<sub>x</sub> reduction measures, such as the use of certain equipment that complies with Tier IV emission controls, use of Best Available Control Technology devices, prohibition of equipment idling in excess of five minutes, prohibition of use of portable generators, and routing of construction trucks. While Mitigation Measure AQ-1 will reduce NO<sub>x</sub> emissions during

construction, the proposed program could conflict with Criterion No. 1 thereby conflicting with applicable air quality plans. Impacts would remain significant and unavoidable.

**Impact AQ-3a (construction):** *The proposed program would expose sensitive receptors to substantial pollutant concentrations during construction of the proposed program.*

**Cumulative Air Quality Impacts:** *The proposed program would result in potentially significant cumulative localized construction air quality impacts.*

The South Coast Air Basin is in attainment of the NAAQS for PM<sub>10</sub>, CO and SO<sub>2</sub>, and also in attainment of the CAAQS for CO and SO<sub>2</sub>. Sensitive receptors surround the program area with residents located adjacent to the southern border of the program area. The program area includes both Seal Beach, located in Source Receptor Area (SRA) 18 and Long Beach, located in SRA 4 (see Final PEIR, Table 3.2-8 for construction screening thresholds). The air quality analysis was conservatively analyzed assuming all subphases of construction associated with the near-term phase were to occur concurrently. Based on this conservative analysis, localized impacts from program construction pertaining to NO<sub>x</sub> emissions would be significant and unavoidable. However, on-site emissions for the proposed program will vary greatly in location and by subphase for the proposed program. Therefore, it is not possible to conduct a quantified localized analysis without speculating due to the uncertainty of the specific locations, timing, and intensity of construction activities, particularly in areas near sensitive receptors. Without a specific quantitative analysis, the impact to sensitive receptors at the program-level during construction would be considered potentially significant.

During operation, all criteria pollutants would be below the SCAQMD regional thresholds (Final PEIR, Table 3.2-5). The unmitigated on-site operational emissions would not exceed any of the operational screening less than significant thresholds since most of the operational emissions are from mobile sources (off site). Emissions associated with operation would be less than significant.

With regard to toxic air contaminants, a quantitative evaluation of emissions from toxic air contaminants, particularly for program construction activities, would be speculative given the uncertainty of the specific locations, timing, and intensity of construction activities. Therefore, a construction Health Risk Assessment (HRA) cannot be conducted for the program-level analysis. Localized air quality emissions, including toxic air contaminants, would be evaluated quantitatively at the project-level when adequate information is known for individual wetland restoration projects. At the program-level, any subsequent projects within the program area would be required to implement Tier IV engines per Mitigation Measure AQ-1, which would reduce NO<sub>x</sub> emissions and other TACs (including diesel particulate matter). However, without a specific construction scenario, impacts to toxic air contaminants at the program-level would be considered potentially significant.

With regard to cumulative impacts, because the City of Seal Beach and City of Long Beach have not adopted their own citywide significance thresholds for air quality impacts, it is appropriate to rely on thresholds established by the SCAQMD (refer to *CEQA Guidelines* Section 15064.7). It would not be meaningful to sum multiple cumulative or related project emissions as there are no

thresholds set for comparison. Additionally, regional emissions from a project have the potential to affect the Air Basin as a whole, and it is not possible to establish a geographical radius from a specific project site where potential cumulative impacts from regional emissions would be limited. Therefore, consistent with accepted and established SCAQMD cumulative impact evaluation methodologies, the potential for the proposed program to result in cumulative air quality impacts is assessed based on the SCAQMD thresholds. Thus, given the potentially significant localized construction impact at the program-level, cumulative localized construction air quality impacts would be potentially significant.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that reduce significant impacts during construction as identified in the Final PEIR. The proposed program would implement Mitigation Measure AQ-1, which would reduce NO<sub>x</sub> emissions during construction (see Impact AQ-2a for Mitigation Measure AQ-1). However, specific economic, legal, social, technological, or other considerations, make it infeasible to mitigate this impact to below the level of significance, and even with the implementation of this measure, the proposed program would expose sensitive receptors to substantial pollutant concentrations during construction. Impacts would remain significant and unavoidable. In addition, given the potentially significant localized construction impact at the project-level, cumulative localized construction air quality impacts would be significant and unavoidable during construction.

**Basis for Finding:** Mitigation Measure AQ-1 requires the implementation of construction-related NO<sub>x</sub> reduction measures, such as the use of certain equipment that complies with Tier IV emission controls, use of Best Available Control Technology devices, prohibition of equipment idling in excess of five minutes, prohibition of use of portable generators, and routing of construction trucks. While Mitigation Measure AQ-1 will reduce NO<sub>x</sub> emissions during construction, construction would result in emissions that would expose sensitive receptors to substantial pollutant concentrations. Impacts would remain significant and unavoidable. Given the potentially significant localized construction impact, cumulative localized construction air quality impacts would be significant and unavoidable during construction.

## 2.4.2 Cultural Resources

**Impact CUL1:** *The proposed program would cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.*

**Cumulative Cultural Resources Impacts:** *The proposed program would result in potentially significant cumulative impacts to historical resources.*

There are 23 potential historical resources within or immediately adjacent to the proposed program area, including 15 archaeological resources (11 prehistoric sites, 3 historic-period sites, and 1 multicomponent site) and 8 historic architectural resources (Final PEIR, Table 3.4-3). In addition, the Los Cerritos Wetlands is part of a tribal cultural landscape identified by some tribal representatives during consultation with the CCC. Furthermore, given that the entire program area was not systematically surveyed as part of this assessment, there could be additional as-yet unidentified archaeological and historical architectural resources within the program area.

The proposed program would implement Mitigation Measure CUL-1 through CUL-17 to reduce impacts to historical resources by requiring qualified cultural resources personnel to conduct future project-specific studies; development of appropriate treatment for significant resources; and archaeological and Native American monitoring of ground disturbance (see Section 3.4, *Cultural Resources*, of this PEIR). The proposed program also includes several mitigation measures (see Mitigation Measures BIO-1 through BIO-11 in Section 3.3, *Biological Resources*, of this PEIR) that would lessen potential construction-related impacts to waterways, plants, and animals that are considered part of the tribal cultural landscape. However, even with implementation of these mitigation measures, impacts to historical resources and archaeological resources would be significant and unavoidable at the program level during construction of the proposed program. Once specific projects are designed, additional cultural resources studies would be completed as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to historical and archaeological resources may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

Operation of the proposed program would include ongoing inspection and maintenance of the perimeter levees and berms, flood walls and water-control structures; removal of non-native vegetation in restored habitat and stormwater management features; trash removal within the restored wetlands; and operation of the visitor centers and associated parking lots. These actions would have no impact to historic architectural resources. If ground disturbance associated with these activities were to occur, it would occur within soils that have already been subject to ground disturbance and archaeological/Native American monitoring, and they are unlikely to unearth archaeological resources. While the proposed program would increase public access to the area, the public access program would constrain visitors to pedestrian trails and bike paths, elevated perimeter pedestrian walkways, and designated viewing areas with overlooks. It would also include educational and interpretive features that would educate the public about the cultural significance of the area, and the implications of unauthorized tampering with resources. Impacts to historic architectural resources and archaeological resources from operation of the proposed program would be less than significant.

With regard to cumulative historic impacts, related projects proposed throughout the geographic scope of the analysis have the potential to impact historic architectural resources as some of the projects would demolish or alter historic architectural resources. When taken together, the incremental contribution of the construction of the proposed program when combined with other projects in the geographic scope is cumulatively considerable.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that reduce significant impacts to historic and archaeological resources during construction as identified in the Final PEIR. Even with implementation of the mitigation measures, impacts will remain significant and unavoidable. Specific economic, legal, social, technological, or other considerations, make it infeasible to mitigate this impact to below the level of significance, and even with the implementation of the measures, the proposed program would result in potentially significant impacts to historic and archaeological resources and impacts would remain significant and unavoidable. In addition, there is no feasible mitigation for

cumulative impacts to historic architectural and archaeological resources other than not undertaking the proposed program.

**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).

**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.

**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 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.

**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.

**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 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 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**.

**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 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 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 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 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:** 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.

**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. 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.

**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 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.

**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**.

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 CUL-16: 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.

**Mitigation Measure CUL-17: 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.

In addition, Mitigation Measures BIO-1 through BIO-11 (Final PEIR, Section 3.3, *Biological Resources*) would also serve to reduce significant impacts.

**Basis of Finding:** Mitigation Measure CUL-1 through CUL-17 require qualified cultural resources personnel to conduct future project-specific studies; development of appropriate treatment for significant resources; archaeological and Native American monitoring of ground disturbance; and preparation of a tribal access plan. The proposed program also includes Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related

impacts to plants and animals that are considered part of the tribal cultural landscape. However, even with implementation of these mitigation measures, impacts to historical resources and archaeological resources would be significant and unavoidable at the program level during construction of the proposed program. Once specific projects are designed, additional cultural resources studies would be completed as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to historical and archaeological resources may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis. In addition, there is no feasible mitigation for cumulative impacts to historic architectural resources and archaeological resources other than not undertaking the proposed program.

**Impact CUL-2:** *The proposed program would cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.*

**Cumulative Cultural Resources Impacts:** The proposed program would result in potentially significant cumulative impacts to archaeological resources. As described under Impact CUL-1, there are 15 known archaeological resources within or in the immediate vicinity of the program area. The entire program area was not systematically surveyed and therefore, there could be additional as-yet-unidentified archaeological resources within the program area. The program area is considered to have a high potential to encounter buried prehistoric and historic-period archaeological resources. Intact prehistoric resources could be encountered below depth of fill, although historic-period archaeological resources, particularly those associated with the oil industry, could be encountered within fill layers. Ground-disturbing activities, such as soil remediation, excavation, and grading, have the potential to adversely impact archaeological resources. Therefore, impact to archaeological resources could be significant.

The proposed program would include ongoing inspection and maintenance although any ground disturbance associated with these activities would occur within soils that have already been subject to ground disturbance and archaeological/Native American monitoring. Operation of the proposed program would include increased public access to the program area, and could potentially result in the vandalism or disturbances to archaeological resources. However, the public access program would constrain visitors to pedestrian trails and bike paths, elevated perimeter pedestrian walkways, and designated viewing areas with overlooks. The proposed program would also include educational and interpretative features that would educate the public about the biological and cultural significance of the area, and the implications of unauthorized tampering with wetlands and its resources. Impacts to archaeological resources from operation of the proposed program would be less than significant.

With regard to cumulative archaeological impacts, related projects proposed throughout the geographic scope of this analysis have the potential to impact archaeological resources as some of the projects would include ground disturbance. When taken together, the incremental contribution of construction of the proposed program when combined with other projects in the geographic scope is cumulatively considerable.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that reduce significant impacts to archaeological resources during construction as identified in the Final PEIR. Even with implementation of the mitigation measures, impacts will remain significant and unavoidable. Specific economic, legal, social, technological, or other considerations, make it infeasible to mitigate this impact to below the level of significance, and even with the implementation of the measures, the proposed program would result in potentially significant impacts to archaeological resources and impacts would remain significant and unavoidable. In addition, there is no feasible mitigation for cumulative impacts to archaeological resources other than not undertaking the proposed program.

**Basis for Finding:** Mitigation Measures CUL-1, and CUL-4 through CUL-15 would reduce impacts to archaeological resources by requiring qualified cultural resources personnel conduct future project-specific studies; development of appropriate treatment for significant resources; and archaeological and Native American monitoring of ground disturbance. In addition, Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. However, even with implementation of these mitigation measures, impacts to archaeological resources would be significant and unavoidable at the program level. In addition, there is no feasible mitigation for cumulative impacts to archaeological resources other than not undertaking the proposed program.

Once specific projects are designed, additional cultural resources studies would be completed as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to historical and archaeological resources may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

### 2.4.3 Tribal Cultural Resources

**Impact TRI-1:** *The proposed program would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).*

**Impact TRI-2:** *The proposed program would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

In connection with the Los Cerritos Wetland Oil Consolidation and Restoration Project, the Los Cerritos Wetlands were identified as part of a tribal cultural landscape by some tribal representatives. Since the publication of the Draft PEIR, although the tribal cultural landscape has not been formally documented, geographically defined, nor evaluated for listing in the California Register or in a local register of historical resources, using its discretion and supported by substantial evidence, the LCWA has determined it to be a tribal cultural resource.

Some of the essential physical features of the tribal cultural landscape would not be impacted (archaeological manifestations of the village sites of *Puvungna* and *Motuucheyngna*), or could be enhanced by the restoration elements of the proposed program (jurisdictional wetlands, plant and animal habitats). However, since the proposed program includes ground disturbing activities that have the potential to result in a substantial adverse change to Native American or prehistoric archaeological resources within the Los Cerritos Wetlands and would also result in a temporary loss of wetland habitat and associated resources that are of value to tribes and that tribes use for spiritual, cultural, and recreational purposes. Since these types of resources contribute to the significance of the tribal cultural landscape, the proposed program could materially impair the landscape's ability to convey its significance even with the implementation of mitigation. Therefore, impacts to tribal cultural resources would be significant and unavoidable at the program level.

With regards to potential impacts to the waterways, plants, and animals, the purpose of the proposed program is to restore the natural waterways and habitat of the Los Cerritos Wetlands. However, there could be temporary impacts associated with the removal of existing salt marshes, which are of importance to some tribes. The proposed program would develop channels that resemble more natural waterways, resulting in a more natural tidal influence between the saltwater/freshwater sources and the wetlands. While the one of the goals of the proposed program is to restore and expand tidal salt marshes, construction could result in the temporary loss of some of the wetlands and associated natural resources to which tribes ascribe value and use for spiritual, cultural, and recreational purposes. However, there would be some salt marsh available throughout the entirety of the construction phase of the proposed program.

Restoration of native habitat would attract wildlife back to the area and would allow for a variety of species to again flourish within the wetlands, creating an ecosystem more closely resembling the one that existed historically and in pre-contact times. However, there could be temporary impacts associated with the removal of existing habitat. While the one of the goals of the proposed program is to restore, maintain, and maximize native habitat and wildlife corridors, construction could result in the temporary loss of some of native habitat and associated biological resources to which tribes ascribe value and use for spiritual, cultural, and recreational purposes.

Operation of the proposed program would include ongoing inspection and maintenance and would increase public access to the program area thereby potentially resulting in the vandalism of or disturbances to potential tribal cultural resources. Any ground disturbance associated with operational activities would occur within soils that have already been subject to ground disturbance and archaeological/Native American monitoring, and they are unlikely to unearth Native American or prehistoric archaeological resources associated with the landscape. With the

implementation of biological mitigation measures (Mitigation Measures BIO1, BIO6, and BIO8 through BIO11) operational impacts to plants and animals would be minimal or would be reduced to less-than-significant levels. Also, resulting modification to existing waterways or creation of new waterways would result in a net increase in jurisdictional wetlands, and with implementation of BIO10, operational impacts on the wetlands would be assessed. As such, no operational impacts are anticipated to wetlands habitat and associated resources that are of value to tribes and that tribes use for spiritual, cultural, and recreational purposes. Operational impacts would be less than significant.

**Finding:** The LCWA finds that changes or alterations have been required in, or incorporated into, the proposed program that reduce significant impacts during construction as identified in the Final PEIR. The proposed program would implement Mitigation Measures BIO-1 through BIO-11 (Final PEIR, Section 3.3, *Biological Resources*) and Mitigation Measures CUL-1, and CUL-4 through CUL-17 (Final PEIR, Section 3.4, *Cultural Resources*). However, specific economic, legal, social, technological, or other considerations, make it infeasible to mitigate this impact to below the level of significance, and even with the implementation of these measures, the proposed program would result in impacts to tribal cultural resources. Impacts would remain significant and unavoidable.

**Basis for Finding:** Implementation of Mitigation Measures CUL-1, CUL-4 through CUL-17 (Final PEIR, Section 3.4, *Cultural Resources*) would lessen the impact to archaeological resources that contribute to the significance of the tribal cultural landscape. Mitigation Measures BIO-1 through BIO-11 (Final PEIR, Section 3.3, *Biological Resources*) would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. However, even with implementation of these measures, the destruction or material alteration of an archaeological resource that contributes to the landscape's significance would constitute a substantial adverse change since it would no longer be present on the landscape. Since avoidance and preservation in place of such resources cannot be guaranteed, impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape are considered significant and unavoidable at the program level.

Once specific projects are designed, additional tribal consultation would be conducted as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape may be mitigated to a less than significant level.

## 2.5 Findings Regarding Program Alternatives

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. As discussed above, the impacts under the proposed program that could not be mitigated below a level of significance are localized air quality impacts during construction; conflict with the AQMP; cumulative air quality impacts; impacts to historical resources; impacts to archaeological resources; cumulative impacts to cultural resources; and impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal

cultural landscape. The PEIR analyzed two alternatives to the proposed program that could reduce some, if not all, of the impacts. Nine alternatives were considered, but were not selected for further environmental analysis due to a failure to meet one or more of the following: most of the Program Goals and Objectives, infeasibility, or an inability to avoid significant environmental impacts. Two alternatives were comprehensively evaluated in the Draft PEIR, including the “no project” and a culvert connection from the San Gabriel River to the Central Area with perimeter levee. CEQA Guidelines Section 15126.6(c) requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. Of the alternatives considered for the EIR, nine were eliminated from further consideration (See PEIR Section 5.2).

CEQA Guidelines Section 15126.6(e)(2) also indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR, and that if the “no project” alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. In general, the environmentally superior alternative is the alternative with the least adverse impacts on the environment.

The impacts of the alternatives are compared to the proposed program’s impacts in PEIR Chapter 5, *Alternatives*, with a summary of comparative impacts provided in PEIR Table 5-1.

### 2.5.1 Alternative 1: No Program (No Build) Alternative

*CEQA Guidelines* Section 15126.6(e) requires that an EIR evaluate and analyze the impacts of the “No-Project” Alternative. Under the No Program (No Build) Alternative (Alternative 1), none of the proposed program components would be implemented and existing conditions would remain unchanged. This alternative assumes the restoration activities and development covered by the Los Cerritos Wetlands Oil Consolidation and Restoration Project would occur. The following would occur under Alternative 1:

- The South Area, which includes the Haynes Cooling Channel site, State Lands Parcel site, South LCWA site, Hellman Retained site, Los Alamitos Pump Station site, and Los Alamitos Retarding Basin site, would continue to exist as under the existing conditions. In particular, the Haynes Cooling Channel would continue to pull water from the Alamitos Bay Marina and discharge water into the San Gabriel River until it is decommissioned as part of the Haynes Generating Station modernization project in 2029. The State Lands Parcel and South LCWA sites would remain as they currently exist. The Hellman Retained site would continue to operate as an active oil field. In addition, the Los Alamitos Retarding Basin would continue to operate as a retention basin as operated by the County of Orange Flood Control District. Furthermore, the Los Alamitos Pump station would continue to operate as a pump station to move the stormwater runoff from the Los Alamitos Retarding Basin into the San Gabriel River. Restricted public access within the South Area would continue to be provided as under existing conditions and the gate on 1st Street would remain as well.
- The Isthmus Area, which includes the Callaway Marsh site, DWP site, Zedler Marsh site, Isthmus LCWA site, and Isthmus Bryant site, would continue to exist as under existing conditions. In particular, the Callaway Marsh site, the Isthmus Bryant site, and DWP site would remain vacant. In addition, the Zedler Marsh site would continue to be enhanced as

part of the LCWA Stewardship Program. Furthermore, the Isthmus LCWA site would continue as an active oil field, which would be maintained and operated by the Signal Hill Petroleum Inc., as under existing condition. Existing public access to trails and other public amenities would be maintained as under existing conditions. In addition, the San Gabriel River Trail would be maintained on the south bank of the San Gabriel River.

- The Central Area, which includes a portion of the Pumpkin Patch site, Long Beach City Property site, Central LCWA site, Central Bryant site, and San Gabriel River, would continue to exist as under existing conditions. The Pumpkin Patch site and Long Beach City Property site, in particular, would continue as approved under the Los Cerritos Wetlands Oil Consolidation and Restoration Project EIR (State Clearinghouse Number 2016041083). This would include construction of an aboveground pipeline system from the corner of 2nd Street and Studebaker Road to the Pumpkin Patch site. The Pumpkin Patch site would be remediated and graded, and new oil facilities would be constructed at the site. After 20 years, in the second phase of the project, oil operations would be removed from the Long Beach City Property site and contaminated areas would be remediated. The Long Beach City Property site would remain vacant. The Central LCWA site would continue to operate as an active oil field and the Central Bryant site would continue to operate as a vacant site. The San Gabriel River levees along the south and north banks of the river would remain intact. Restricted access to the Central LCWA site would be maintained.
- The North Area includes the Northern Synergy Oil Field site, Southern Synergy Oil Field site, and Alamitos Bay Partners site. As part of the Los Cerritos Wetlands Oil Consolidation and Restoration Project, existing oil operations and associated facilities would be consolidated and removed and a wetlands habitat restoration project would be implemented on the Northern and Southern Synergy Oil Field sites. The first phase of the project would be focused on the 76.52-acres Northern Synergy Oil Field site, and provide the conditions necessary for the reestablishment of coastal salt marsh habitat and associated hydrologic, biogeochemical, and habitat functions. The first phase of the project would also include work on the Southern Synergy Oil Field site, including relocating the existing office building on-site to house the Long Beach Visitor Center, and construction of a parking lot, trails, overlook, sidewalk enhancements, and bikeway improvements. After 20 years, in the second phase of the project, all remaining wells would be removed and the 73.07-acres Southern Synergy Oil Field site would be restored to tidal salt marsh by breaching or lowering the earthen berm and removing the sheet pile wall. The Alamitos Bay Partners site would be maintained as an active oil field as with existing conditions.

### 2.5.1.1 Environmental Impacts

Under Alternative 1, none of the proposed program components would be implemented and existing conditions would remain unchanged. Therefore, Alternative 1 would avoid the proposed program's significant and unavoidable construction air quality impacts, historical resource impacts, archeological impacts, and tribal cultural resources impacts. All impacts associated with Alternative 1 would be similar or less than the proposed program because there would be no new construction or development, with the following exceptions: scenic vistas, drainage patterns related to flooding on or off site, water quality control plan, and consistency with land use plans, policies, or regulations. Under Alternative 1, although construction impacts to a scenic vista would be less than the proposed program, overall operational impacts would be greater since conditions would remain the same. In addition, existing levees along the San Gabriel River do not account for sea-level rise, while the levees proposed under the proposed program would be designed to account for sea-level rise. As such, impacts under Alternative 1 would be greater than

the less-than-significant impacts related to flooding on or off site. Furthermore, the benefits to water quality would not be realized under this alternative as with the proposed program, which includes implementation of a restoration program that would allow for tidal flows into the vegetated wetlands and would create favorable water quality conditions by limiting retention time and enhancing tidal exchange. Additionally, Alternative 1 would not include habitat restoration (beyond restoration activities covered by the Los Cerritos Wetlands Oil Consolidation and Restoration Project). As such, Alternative 1 would conflict with land use plans, policies, or regulations related to habitat restoration including the Hellman Ranch Specific Plan, adopted South East Area Development and Improvement Plan (SEADIP), the proposed Southeast Area Specific Plan (SEASP) 2060 (for informational purposes), the California Coastal Act, and Long Beach Local Coastal Program.

### **2.5.1.2 Ability to Achieve Program Objectives**

No restoration activities or new development of a Seal Beach Visitor Center would be introduced on the program area under Alternative 1 and existing oil production would continue. No oil production facilities would be decommissioned to allow for restoration of tidal wetlands and habitat buffers and no visitor center or public access trails (beyond those covered by the Los Cerritos Wetlands Oil Consolidation and Restoration Project) would be constructed. As a result, none of the proposed program objectives would be achieved by Alternative 1.

### **2.5.1.3 Finding**

Although the majority of the impacts associated with this alternative would be similar or less than the proposed program, this alternative would result in greater impacts with respect to scenic vistas, drainage patterns related to flooding on or off site, water quality control plan, and consistency with land use plans, policies, or regulations. In addition, this alternative would not accomplish any of the program objectives. For these reasons, the LCWA rejects Alternative 1.

## **2.5.2 Alternative 2: Culvert Connection to San Gabriel River with Perimeter Levee**

Under Alternative 2, a culvert or set of culverts would be installed within the northern San Gabriel River levee to connect the river to the Central Area rather than breaching the levee as in the proposed program. The following would occur under Alternative 2:

- The South Area, which includes the Haynes Cooling Channel site, State Lands Parcel site, South LCWA site, Hellman Retained site, Los Alamitos Pump Station site, and Los Alamitos Retarding Basin site, would be restored as described for the proposed program. Public access would be improved as described for the proposed program.
- The Isthmus Area, which includes the Callaway Marsh site, DWP site, Zedler Marsh site, Isthmus LCWA site, and Isthmus Bryant site, would be restored as described for the proposed program. Public access would be improved as described for the proposed program.
- The Central Area, which includes the Pumpkin Patch site, Long Beach City Property site, Central LCWA site, Central Bryant site, and San Gabriel River, would be restored similar to the proposed program, except instead of breaching the San Gabriel River to restore tidal connection to the site, a culvert or set of culverts would be installed in the levee to provide

tidal connection to the site. The following sections describe the changes from the proposed program that would be included in this alternative.

- The North Area, which includes the Northern Synergy Oil Field site, Southern Synergy Oil Field site, and Alamitos Bay Partners site, would be restored as described for the proposed program. Public access would be improved as described for the proposed program.

### **2.5.2.1 Environmental Impacts**

Under Alternative 2, a culvert or set of culverts would be installed within the northern San Gabriel River levee to connect the river to the Central Area rather than breaching the levee as in the proposed program. Additionally, the height and footprint of the Perimeter and Interim Levees would be reduced, compared to the proposed program. As such, all components of this alternative would remain the same as the proposed program except for the change to install a culvert or set of culverts rather than breach the levee in the Central Area and to reduce the height and footprint of the levees. Impacts related to noise and vibration were found to be greater under Alternative 2 as equipment associated with the installation of the culvert(s) within the San Gabriel River levee would require the use of vibratory pile drivers. Use of this equipment would generate noise greater under Alternative 2 as compared to the proposed program. Impacts related to soil erosion and top soil, GHG emissions, and wasteful, inefficient, and unnecessary consumption of energy would be less than the impacts under the proposed program. Impacts related to biological resources related to candidate, sensitive or special-status species, riparian habitat or sensitive natural communities, state or federally protected wetlands, native residential or migratory fish or wildlife species would be less than the impacts under the proposed program, but Alternative 2 would also create less wetland habitat than the proposed program because a portion of the levee along the San Gabriel River would not be removed and restored to wetlands. All impacts associated with the remaining environmental issues would be similar to impacts associated with the proposed program.

### **2.5.2.2 Ability to Achieve Program Objectives**

Similar to the proposed program, Alternative 2 would meet all of the program objectives, in that it contains the same components as the proposed program.

### **2.5.2.3 Finding**

Alternative 2 would not avoid or substantially lessen the proposed program's significant and unavoidable air quality, cultural resources, or tribal cultural resources impacts. While some of the environmental impacts, such as biological resources related to candidate, sensitive or special-status species, riparian habitat or sensitive natural communities, state or federally protected wetlands, native residential or migratory fish or wildlife species, soil erosion and top soil, GHG emissions, and wasteful, inefficient, and unnecessary consumption of energy may be reduced as compared to the proposed program, many of the other environmental impacts of this alternative would be similar to the proposed program. For these reasons, the LCWA rejects Alternative 2. However, while the LCWA is approving the Program as defined in EIR Chapter 2, Project Description, circumstances could change and some of the program uncertainties could be resolved. If uncertainties are resolved and LCWA were to determine that Alternative 2 is feasible and would provide benefits, LCWA may choose to implement Alternative 2. If this were to occur, the appropriate CEQA process would be followed.

## 2.6 Findings Regarding the Final EIR

Under Section 15088.5 of the CEQA Guidelines, recirculation of an EIR is required when “significant new information” is added to the EIR after public notice is given of the availability of the Draft EIR for public review but prior to certification of the Final EIR. The term “information” can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.

“Significant new information” requiring recirculation includes, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (CEQA Guidelines, § 15088.5.)

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is “not intend[ed] to promote endless rounds of revision and recirculation of EIRs.” (*Laurel Heights Improvement Assn. v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132.) “Recirculation was intended to be an exception, rather than the general rule.” (*Ibid.*)

LCWA recognizes that the Final EIR contains additions, clarifications, modifications, and other changes to the Draft PEIR. LCWA has determined that none of this material constitutes significant new information that requires recirculation of the Draft PEIR for further public comment under *CEQA Guidelines* Section 15088.5. The additional material clarifies existing information prepared in the Draft PEIR and does not present any new substantive information. None of this new material indicates that the proposed program would result in a significant new environmental impact not previously disclosed in the Draft PEIR. Additionally, none of this material indicates that there would be a substantial increase in the severity of a previously identified environmental impact that would not be mitigated, nor that there would be any of the other circumstances requiring recirculation described in Section 15088.5.

## CHAPTER 3

# Statement of Overriding Considerations

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### 3.1 Introduction

The LCWA is the Lead Agency under CEQA for preparation, review and certification of the Final PEIR for the Los Cerritos Wetlands Restoration Plan. As the Lead Agency, the LCWA is also responsible for determining the potential environmental impacts of the proposed action and which of those impacts are significant, and which can be mitigated through imposition of mitigation measures to avoid or minimize those impacts to a level of less than significant. CEQA requires the Lead Agency to balance the benefits of a proposed action against its significant unavoidable adverse environmental impacts in determining whether or not to approve the proposed program. In making this determination the LCWA is guided by *CEQA Guidelines* Section 15093 which provides as follows:

- (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposal (sic) project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- (b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

In addition, Public Resources Code Section 21081(b) requires that where a public agency finds that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives identified in an EIR and thereby leave significant unavoidable effects, the public agency must also find that overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects of the project.

Pursuant to Public Resources Code Section 21081(b) and *CEQA Guidelines* Section 15093, the LCWA has balanced the benefits of the proposed program against the following unavoidable adverse impacts associated with the proposed program and has adopted all feasible mitigation measures with respect to these impacts. The LCWA also has examined alternatives to the

proposed program, none of which both meet the project objectives and is environmentally preferable to the proposed program for the reasons discussed in the Findings and Facts in Support of Findings.

The LCWA, the Lead Agency for this proposed program, having reviewed the Final PEIR, and reviewed all written materials within LCWA's public record and heard all oral testimony presented at the LCWA Board public hearing, adopts this Statement of Overriding Considerations, which balances the benefits of the proposed program against its significant unavoidable adverse environmental impacts in reaching its decision to approve the proposed program.

## 3.2 Significant Unavoidable Adverse Environmental Impacts

Although many of the proposed program impacts have been substantially avoided or mitigated, as described in the Findings and Facts in Support of Findings, there remain some potential impacts concerning air quality, cultural resources, and tribal cultural resources for which complete mitigation is not feasible. For these impacts, mitigation measures were identified and adopted by the Lead Agency, however, even with implementation of the measures, the LCWA finds that the impacts described below cannot be reduced to a level of less than significant. The impacts and alternatives are described below and were also addressed in the Findings. As identified in the Final PEIR, implementation of the proposed program would result in the following significant impacts even after imposition of all feasible mitigation measures:

- **Impact AQ-1a (construction), Impact AQ-3a (construction), Cumulative:** If all subphases of construction associated with the near-term phase were to occur concurrently (which was conservatively analyzed in the earliest possible year), maximum daily emissions from construction activities would exceed the SCAQMD regional threshold for NO<sub>x</sub>. With implementation of mitigation measures, regional impacts would be mitigated to a less than significant level. However, localized impacts to sensitive receptors at the program-level would be considered potentially significant even after incorporation of mitigation. Therefore, localized impacts from program construction pertaining to NO<sub>x</sub> emissions would be significant and unavoidable (Impact AQ-3), if all subphases of construction associated with the near-term phase were to occur concurrently (which was conservatively analyzed in the earliest possible year). In addition, as the proposed program would have a localized impact from NO<sub>x</sub> emissions, the proposed program would also conflict with Criterion 1 for determining the proposed program's consistency with the AQMP (Impact AQ-1a and Impact AQ-3a).
- **Impact CUL-1, Impact CUL-2, and Cumulative:** There are 23 potential historical resources within or immediately adjacent to the program area, including 15 archaeological resources and 8 historical architectural resources. In addition, the Los Cerritos Wetlands is part of a tribal cultural landscape identified by some tribal representatives during consultation with the CCC. Furthermore, given that the entire program area was not systematically surveyed as part of this assessment, there could be additional as-yet unidentified archaeological and historical architectural resources within the program area. As such, the proposed program would implement Mitigation Measure CUL-1 through CUL-17 to reduce impacts to historical resources by requiring qualified cultural resources personnel to conduct

future project-specific studies; development of appropriate treatment for significant resources; and archaeological and Native American monitoring of ground disturbance. The proposed program also includes Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. However, even with implementation of these mitigation measures, impacts to historical resources and archaeological resources would be significant and unavoidable at the program level during construction of the proposed program. Once specific projects are designed, additional cultural resources studies would be completed as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to historical and archaeological resources may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

- **Impact TRI-1 and Impact TRI-2:** Since the publication of the Draft PEIR, although the tribal cultural landscape has not been formally documented, geographically defined, nor evaluated for listing in the California Register or in a local register of historical resources, using its discretion and supported by substantial evidence, the LCWA has determined it to be a tribal cultural resource. Implementation of Mitigation Measures CUL-1 and CUL-4 through CUL-17 would lessen the impact to archaeological resources that contribute to the significance of the tribal cultural landscape. The proposed program also includes Mitigation Measures BIO-1 through BIO-11 that would lessen potential construction-related impacts to plants and animals that are considered part of the tribal cultural landscape. Even with implementation of these measures, the destruction or material alteration of an archaeological resource that contributes to the landscape's significance would constitute a substantial adverse change since it would no longer be present on the landscape. Since avoidance and preservation in place of such resources cannot be guaranteed, impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape are considered significant and unavoidable at the program level. Once specific projects are designed, additional tribal consultation would be conducted as necessary and impacts resulting from specific projects would be considered. It is possible that project-level impacts to Native American or prehistoric archaeological resources that convey the significance of the tribal cultural landscape may be mitigated to a less than significant level. Project-level impacts would be analyzed as part of future CEQA analysis.

### 3.3 Statement of Overriding Considerations

The LCWA, after balancing the specific economic, legal, social, technological, and other benefits of the proposed program, has determined that the unavoidable adverse environmental impacts identified above may be considered acceptable due to the following specific considerations, which outweigh the unavoidable, adverse environmental impacts of the proposed program in accordance with CEQA Section 21081(b) and CEQA Guideline Section 15093.

1. Until the late 1800s, the wetlands within and beyond the program area spanned approximately 2,400 acres and consisted of a network of tidal channels, vegetated wetlands, and upland areas. Beginning 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. Today, nearly all of the program area has been converted from its historic wetland habitat, though a few remnant and degraded historic habitats remain. This is part of a larger regional trend: approximately 90% of the historical coastal wetlands in the region have been lost due to human impacts. What is left today in Southern California is a

patchwork of remnant systems, many of which have altered hydrology and reduced biodiversity.

2. The restoration of the Los Cerritos Wetlands has been identified by the Southern California Wetlands Recovery Project as a priority project for the region and is included in their work plan as a key project. The proposed program would restore wetland, transition, and upland habitats throughout the program area in order to provide enhanced and more extensive habitat for wetland species.
3. The proposed program will restore the natural waterways and habitat of the Los Cerritos Wetlands and will create a more natural connection between the wetlands and surrounding water sources. The proposed program will restore the tidal wetland processes and functions and will increase estuarine habitat with a mix of tidal channels, mudflat, salt marsh, and brackish/freshwater marsh and ponds. Implementation of the proposed program will provide adequate area for wetland-upland ecotone and upland habitat to support wetlands.
  - c. The proposed program will restore and maintain native habitat and maximize wildlife corridors.
  - d. The proposed program will remediate or contain contaminated soil and groundwater, thereby improving environmental conditions within the wetlands.
  - e. The proposed program will preserve and enhance tribal members access to, and use of, the restoration project area for religious, spiritual, or other cultural purposes through a written tribal access plan.
  - f. The proposed program will create educational or interpretive features that will allow for the public to learn more about and experience the restored wetlands habitat and tribal cultural landscape.
  - g. The proposed program will provide a recreational amenity through the creation of pedestrian trails and elevated perimeter pedestrian walkways. The location for the trails and overlook will be protective of sensitive habitat and adjacent land uses.
  - h. The proposed program will provide improved public access to the wetlands both on foot and by bicycle within a populated urban area in the City of Seal Beach and City of Long Beach. The area will be accessible to local area residents, employees, and visitors through the provision of amenities, including a visitor center and trails, that can reduce transportation-related fuel demand.
  - i. The proposed program will create large contiguous wetland areas thereby contributing to wildlife corridors within the Los Cerritos Complex and between the Los Cerritos Complex and adjacent natural areas within the region.
  - d. Through the creation of native upland vegetation buffers between habitat areas and human development, the proposed program will mitigate urban impacts, such as noise, light, unauthorized human encroachment, domestic animals, and wastewater runoff.
  - e. The proposed program will accommodate climate changes through the incorporation of topographic and habitat diversity as well as natural buffers and transition zones that will accommodate migration of wetlands with rising sea levels.
  - f. The proposed program will provide a large open space resource for Long Beach and Seal Beach areas for residents and visitors which will improve the quality of life, including public health and wellbeing, thereby indirectly contributing to the economy.

- g. The proposed program will utilize scientific investigations to adaptively manage each restoration project.
- h. The proposed program will implement phasing so that subsequent phases are informed by previous phases as conditions change with time.
- i. The proposed program will provide critical habitat for migratory bird species along the pacific flyway and at the terminus of the San Gabriel River watershed.
- j. The proposed program will provide critical habitat through enhancement and restoration for a variety of special status species, many of which are state- and/or federally-listed.
- k. The proposed program will control numerous species of invasive non-native plant species and replace those populations with diverse coastal plant communities specific to the region.

The proposed program will increase the opportunity for the involvement of the public in stewardship programs, citizen science programs, and environmental education programs.

### 3.4 Conclusion

In conclusion, the LCWA has identified and analyzed all potentially significant impacts of the proposed program and has concluded that construction-related air quality impacts, cultural resource impacts and tribal cultural resource impacts will remain unavoidable and adverse after all mitigation measures have been examined. In addition, these impacts would also result from implementation of Alternative 2. The LCWA has identified economic and social benefits and important public policy objectives that will result from implementation of the proposed program. The proposed program will provide benefits to members of the public from surrounding cities and the region. The LCWA has sought to balance these substantial economic and social benefits against the significant and unavoidable adverse environmental effects of the proposed program. Given the substantial social and public benefits that will accrue to the region from the implementation of the proposed program, the LCWA finds that the proposed program's identified benefits override the program's identified significant environmental impacts.

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## CHAPTER 4

# Mitigation Monitoring and Reporting Program

### 4.1 Introduction to the Mitigation Monitoring and Reporting Program

Pursuant to Public Resources Code (PRC) Section 21081.6 and *CEQA Guidelines* Section 15097, a lead agency is required to adopt a mitigation monitoring and reporting program (MMRP) for assessing and ensuring compliance with the required mitigation measures applied to a proposed project for which an EIR has been prepared. As stated in PRC Section 21081.6(a):

*... the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.*

Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the PEIR. The lead agency, Los Cerritos Wetlands Authority, may delegate reporting or monitoring responsibilities to another public agency or a private entity that accepts such delegation. LCWA, however, remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

### 4.2 Mitigation Monitoring and Reporting Program Matrix

**Table 4-1**, *Mitigation Monitoring and Reporting Program*, lists mitigation measures and project design features that are required to reduce the significant effects of the proposed project. These measures correspond to those discussed in Draft EIR Sections 3.1 through 3.16, and those revised in this Final EIR (see Chapter 9, *Draft EIR Revisions*). To ensure that the mitigation measures are properly implemented, a monitoring program has been devised that identifies the timing and responsible entity for monitoring each measure. LCWA will have the responsibility for implementing the measures, and various public agencies will have the primary responsibility for enforcing, monitoring, and reporting the implementation of the mitigation measures.

**TABLE 4-1  
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<b>Aesthetics</b>			
<p><b>Mitigation Measure AES-1: Lighting Plan.</b> 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.</p>	<p>Written verification; visual inspection.</p>	<p>By LCWA prior to issuance of grading permit and continuously during construction.</p>	<p>City of Long Beach City of Seal Beach</p>
<b>Air Quality</b>			
<p><b>Mitigation Measure AQ-1: Construction NO<sub>x</sub> Reduction Measures.</b> The Applicant for the proposed program shall be responsible for the implementation of the following construction-related NO<sub>x</sub> reduction measures:</p> <ul style="list-style-type: none"> <li>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</li> </ul>	<p>Included in contractor's scope of work; written verification</p>	<p>By LCWA continuously during construction.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <ul style="list-style-type: none"> <li>• Require all main engines for tugboats to comply with EPA-Certified Tier IV emission controls.</li> <li>• Eliminate the use of all portable generators. Require the use of electricity from power poles rather than temporary diesel or gasoline power generators.</li> <li>• 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.</li> <li>• 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.</li> <li>• Reroute construction trucks away from congested streets or sensitive receptor areas.</li> <li>• 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.</li> <li>• 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.</li> </ul>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<b>Biological Resources</b>			
<p><b>Mitigation Measure BIO-1: Avoidance of Special-Status Plants.</b> 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).</p> <p>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</p>	<p>Written verification.</p>	<p>Prior to LCWA’s approval of project plans or publication of subsequent CEQA documents</p>	<p>City of Long Beach                      City of Seal Beach                      California Coastal Commission                      California Department of Fish and Wildlife</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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 species for a minimum of three years after revegetation completion for a specific area.</p>			
<p><b>Mitigation Measure BIO-2: Environmental Awareness Training and Biological Monitoring.</b> 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.</p> <p>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.</p>	<p>Included in construction contractor's scope of work and agreements; written verification</p>	<p>Prior to commencement of construction activities</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife</p>
<p><b>Mitigation Measure BIO-3: Belding's Savannah Sparrow Breeding Habitat.</b> 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</p>	<p>Written verification</p>	<p>Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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 &amp; 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.</p>			
<p><b>Mitigation Measure BIO-4: Nesting Bird and Raptor Avoidance.</b> 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:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<p>Written verification</p>	<p>Prior to LCWA's approval of project plans or subsequent CEQA documents.</p>	<p>City of Long Beach                      City of Seal Beach                      California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure BIO-5: Habitat Assessment and Pre-Construction Surveys for Burrowing Owl.</b> 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 and/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.</p>	<p>Written verification; submittal of Burrowing Owl Management Plan</p>	<p>Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife</p>
<p><b>Mitigation Measure BIO-6: Minimization of Light Spillage.</b> 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.</p>	<p>Submittal of Program Lighting Plan</p>	<p>Prior to commencement of construction activities</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure BIO-7: Pre-Construction Bat Surveys.</b> 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 with roosts are not directly impacted (e.g., removed) until after the roosting period.</p> <p>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,</p>	<p>Written verification; submittal of Bat Exclusion Plan (if needed)</p>	<p>Prior to final approval of the area's restoration plan.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife</p>

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<p>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.</p>			
<p><b>Mitigation Measure BIO-8: Focused Surveys for Special-Status Wildlife Species.</b> 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.</p> <p>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</p>	<p>Written verification; submittal of Wildlife Avoidance Plan (if needed)</p>	<p>Prior to LCWA's approval of the project plans or publication of subsequent CEQA documents.</p>	<p>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</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Mitigation Measure BIO-9: Revegetation of Sensitive Natural Communities.</b> Sensitive natural communities located on the program area include: <i>Anemopsis californica</i> – <i>Helianthus nuttallii</i> – <i>Solidago spectabilis</i> Herbaceous Alliance, <i>Arthrocnemum subterminale</i> Herbaceous Alliance, <i>Baccharis salicina</i> Provisional Shrubland Alliance, <i>Cressa truxillensis</i> – <i>Distichlis spicata</i> Herbaceous Alliance, <i>Frankenia salina</i> Herbaceous Alliance, <i>Isocoma menziesii</i> Shrubland Alliance, <i>Leymus cinereus</i> – <i>Leymus triticoides</i> Herbaceous Alliance, <i>Salicornia pacifica</i> Herbaceous Alliance, <i>Salix gooddingii</i> Woodland Alliance, <i>Schoenoplectus californicus</i> – <i>Typha (angustifolia, domingensis, latifolia)</i> Herbaceous Alliance and <i>Spartina foliosa</i> Herbaceous Alliance.</p> <p>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.</p>	<p>Written verification; submittal of a Mitigation, Maintenance and Monitoring Program</p>	<p>Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California Department of Fish and Wildlife</p>

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<p><b>Mitigation Measure BIO-10: Jurisdictional Resources Permitting.</b> 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:</p> <ol style="list-style-type: none"> <li>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.                     <ol style="list-style-type: none"> <li>a. Nationwide Permit or equivalent permit issued from USACE;</li> <li>b. Water Quality Certification issued from the Los Angeles RWQCB;</li> <li>c. Streambed Alteration Agreement issued from CDFW; and</li> <li>d. Coastal Development Permit issued from CCC.</li> </ol> </li> <li>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.</li> <li>3. The project proponent shall comply with the mitigation measures detailed in permits issued from the USACE, RWQCB, CDFW, and CCC.</li> </ol>	<p>Written verification</p>	<p>Prior to LCWA's approval of project plans or publication of subsequent CEQA documents.</p>	<p>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</p>
<p><b>Mitigation Measure BIO-11: Monitoring and Adaptive Management Plan.</b> In conjunction with Section 3.8, <i>Hydrology and Water Quality</i>, a Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction 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</p>	<p>Written verification; submittal of Monitoring and Adaptive Management Plan</p>	<p>Prior to commencement of construction activities</p>	<p>City of Long Beach                      City of Seal Beach                      California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <p>The MAMP shall be submitted for review and approval to responsible permitting agencies prior to commencement of construction or restoration activities.</p>			
<b>Cultural Resources</b>			
<p><b>Mitigation Measure CUL-1: Cultural Resources Personnel Professional Qualifications Standards.</b> 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).</p>	<p>Included in construction contractor's scope of work and agreements; written verification</p>	<p>By LCWA prior to the commencement of construction.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure CUL-2: Historic Resources Assessment.</b> 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</p>	<p>Written verification, submittal of assessment</p>	<p>By LCWA prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Mitigation Measure CUL-3: Historic Resources Evaluation.</b> 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 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.</p>	<p>Written verification, submittal of evaluation</p>	<p>By the LCWA prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure CUL-4: Archaeological Resources Assessment.</b> 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</p>	<p>Written verification, submittal of report</p>	<p>By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>geotechnical studies); a pedestrian field survey; recodation 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.</p>			
<p><b>Mitigation Measure CUL-5: Extended Phase I Archaeological Investigation.</b> 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 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</p>	<p>Written verification, submittal of report</p>	<p>By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Mitigation Measure CUL-6: Phase II Archaeological Investigation.</b> 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</p>	<p>Written verification, submittal of report</p>	<p>By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach                      City of Seal Beach                      California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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 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.</p>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure CUL-7: Avoidance and Preservation in Place of Archaeological Resources.</b> 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.</p>	<p>Field verification, written report</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure CUL-8: Phase III Archaeological Resources Data Recovery and Treatment Plan.</b> 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 <i>CEQA Guidelines</i> 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 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</p>	<p>Written verification, submittal of plan</p>	<p>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).</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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:</p> <ul style="list-style-type: none"> <li>a. <i>Research Design.</i> 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.</li> <li>b. <i>Data Recovery for Resources Eligible under Criterion 4.</i> 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).</li> <li>c. <i>Treatment for Resources Eligible under Criteria 1, 2, or 3.</i> 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</li> </ul>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <p>d. <i>Security Measures.</i> The plan shall include recommended security measures to protect archaeological resources from vandalism, looting, and non-intentionally damaging activities during field work.</p> <p>e. <i>Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.</i> The plan shall outline the protocols and procedures to be followed in the event <i>that</i> 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.</p> <p>f. <i>Reporting Requirements.</i> 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.</p> <p>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.</p> <p>g. <i>Curation or Disposition of Cultural Materials.</i> The plan shall outline the requirements for final <i>disposition</i> of all cultural materials collected during data recovery. Disposition of all archaeological materials shall be in accordance with Mitigation Measure CUL-15: Curation and</p>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <p>h. <i>Protocols for Native American Coordination and Monitoring.</i> 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.</p>			
<p><b>Mitigation Measure CUL-9: Archaeological Resources Monitoring and Mitigation Plan.</b> 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:</p> <p>a. <i>Establishment of Environmentally Sensitive Areas.</i> The plan shall outline areas that will be designated Environmentally Sensitive Areas (including maps), if needed. Significant or unevaluated <i>archaeological</i> 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 <i>delineated</i> with exclusion markers to ensure avoidance. These 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.</p>	<p>Written verification, submittal of plan</p>	<p>By the LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>b. <i>Provisions for Archaeological Monitoring.</i> 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.</p> <p>c. <i>Procedures for Discovery of Archaeological Resources.</i> 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.</p> <p>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 <i>landscape</i>, then <i>avoidance</i> 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</p>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>that are scientifically important, are considered, including those related to the tribal cultural landscape.</p> <p>d. <i>Procedures for Discovery of Human Remains and Associated Funerary Objects or Grave Goods.</i> The plan shall outline the protocols <i>and</i> procedures to be followed in the event that <i>human</i> 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.</p> <p>e. <i>Reporting Requirements.</i> 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 <i>beyond</i> 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.</p> <p>f. <i>Curation or Disposition of Cultural Materials.</i> 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.</p> <p>g. <i>Protocols for Native American Coordination and Monitoring.</i> 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.</p>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure CUL-10: Construction Worker Cultural Resources Sensitivity Training.</b> 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.</p>	<p>Included in construction contractor's scope of work; written verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure CUL-11: Archaeological Resources Monitoring.</b> 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. Generally, work areas more than 500 feet from one another</p>	<p>Field verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Mitigation Measure CUL-12: Native American Coordination.</b> 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.</p>	<p>Written verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure CUL-13: Native American Monitoring.</b> 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</p>	<p>Written verification, field verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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 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.</p> <p>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.</p>			
<p><b>Mitigation Measure CUL-14: Archaeological Resources Discoveries.</b> 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 <i>CEQA Guidelines</i></p>	<p>Field verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Mitigation Measure CUL 15: Curation and Disposition of Cultural Materials.</b> 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 Juafeno) 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.</p> <p>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</p>	<p>Written verification, submittal of curation agreement</p>	<p>By LCWA prior to the start of each project</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California State Lands Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <p>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.</p> <p>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.</p>			
<p><b>Mitigation Measure CUL16: Future Native American Input.</b> 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.</p>	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
<p><b>Mitigation Measure CUL17: Tribal Access Plan.</b> 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.</p>	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
<p><b>Mitigation Measure CUL-18: Human Remains Discoveries:</b> 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</p>	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
<p>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 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.</p> <p>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.</p> <p>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.</p>			

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<b>Geology and Soils</b>			
<p><b>Mitigation Measure GEO-1: Retention of a Qualified Professional Paleontologist.</b> 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).</p>	<p>Included in construction contractor's scope of work; written verification</p>	<p>By LCWA prior to the commencement of construction.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Mitigation Measure GEO-2: Project-Level Paleontological Resources Review and Monitoring Recommendations.</b> Prior to LCWA approval of any near-term, mid-term, and long-term project, the Qualified Professional Paleontologist shall review the <i>Los Cerritos Wetlands Program Paleontological Resources Assessment</i> (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.</p>	<p>Written verification, submittal of technical memoranda</p>	<p>By LCWA, prior to approval of project plans or preparation of subsequent CEQA documents.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure GEO-3: Paleontological Resources Sensitivity Training.</b> 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.</p>	<p>Written verification</p>	<p>By LCWA prior to commencement of ground disturbance and continuously during construction.</p>	<p>City of Long Beach City of Seal Beach and/or California Coastal Commission</p>
<p><b>Mitigation Measure GEO-4: Paleontological Resources Monitoring.</b> 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.</p>	<p>Written verification</p>	<p>By LCWA, prior to the commencement of ground disturbing activities and continuously during construction.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure GEO-5: Paleontological Discoveries.</b> 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.</p>	<p>Field verification; written verification</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California State Lands Commission</p>
<p><b>Mitigation Measure GEO-6: Preparation, Identification, Cataloging, and Curation Requirements.</b> All significant fossil discoveries shall be prepared to the point of 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.</p>	<p>Field verification; written verification, signed curation agreement</p>	<p>By LCWA continuously throughout construction</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission California State Lands Commission</p>
<p><b>Mitigation Measure GEO-7: Reporting Requirements.</b> 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</p>	<p>Written verification, submittal of weekly reports</p>	<p>By LCWA throughout the construction period in which monitoring is required.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Hazards and Hazardous Materials</b></p>			
<p><b>Mitigation Measure HAZ-1: Health and Safety Plan.</b> 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:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals;</li> <li>• Specified personal protective equipment and decontamination procedures, if needed;</li> <li>• Emergency procedures, including route to the nearest hospital; and</li> </ul> <p>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 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.</p>	<p>Written verification, submittal of plans.</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Long Beach City of Seal Beach Orange County Environmental Health Division Long Beach/Signal Hill Joint Powers Authority</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure HAZ-2: Soil, Landfill Materials, and Groundwater Management Plan.</b> 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.</p> <p>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.</p> <p>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.</p>	<p>Written verification, submittal of report</p>	<p>By the LCWA prior to the issuance of a grading permit</p>	<p>City of Long Beach                      City of Seal Beach                      Orange County Environmental Health Division                      Long Beach/Signal Hill Joint Powers Authority</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<b>Hydrology and Water Quality</b>			
<p><b>Mitigation Measure HYD-1:</b> A Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction or restoration 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 concentrations 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).</p> <p>The MAMP shall be submitted for review and approval to permitting agencies prior to commencement of construction or restoration activities.</p>	Written verification, submittal of report	By the LCWA prior to the commencement of construction	City of Long Beach City of Seal Beach California Coastal Commission
<b>Noise</b>			
<p><b>Noise Reduction Measure NOISE-1: Staging Areas and Mufflers.</b> 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.</p>	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
<p><b>Noise Reduction Measure NOISE-2: Limit Grading.</b> 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).</p>	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
<p><b>Noise Reduction Measure NOISE-3: Noise Barriers.</b> 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</p>	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

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p>			
<p><b>Public Services</b></p>			
<p><b>Mitigation Measure PS-1: Fire Prevention and Protection Training.</b> 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 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.</p>	<p>Written verification</p>	<p>By the LCWA prior to the commencement of construction activities.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>
<p><b>Transportation</b></p>			
<p><b>Mitigation Measure TRA-1:</b> 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</p>	<p>Written verification, submittal of plan</p>	<p>By the LCWA construction contractor prior to the commencement of construction.</p>	<p>City of Long Beach City of Seal Beach California Coastal Commission</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p>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.</p> <p>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.</p> <p>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.</p>			
<b>Utilities and Service Systems</b>			
<p><b>Mitigation Measure UTL-1: Water Will Serve Letter.</b> 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.</p>	<p>Written verification.</p>	<p>By the LCWA prior to issuance of a certificate of occupancy.</p>	<p>City of Seal Beach</p>

Mitigation Measure	Method of Verification	Responsibility/Timing of Implementation	Enforcement Agency
<p><b>Mitigation Measure UTL-2: Sewer Capacity Study.</b> 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.</p>	<p>Written verification.</p>	<p>By the LCWA prior to issuance of a certificate of occupancy.</p>	<p>City of Seal Beach</p>

November 5, 2020 - Item 10

Resolution 2020-08

RESOLUTION OF THE LOS CERRITOS WETLANDS AUTHORITY  
CERTIFYING THE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT  
PREPARED FOR THE LOS CERRITOS WETLANDS RESTORATION PLAN  
AND ADOPTING FINDINGS AND FACTS, STATEMENT OF OVERRIDING  
CONSIDERATIONS, AND A MITIGATION MONITORING AND REPORTING PROGRAM  
PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT  
(STATE CLEARINGHOUSE NO. 2019039050)

WHEREAS, the Los Cerritos Wetlands Authority (LCWA) has been established between the Coastal Conservancy, the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the City of Seal Beach and the City of Long Beach to facilitate the acquisition, protection, conservation, restoration, maintenance and operation an environmental enhancement of the Los Cerritos Wetlands; and

WHEREAS, the LCWA has further been established to focus on projects which will provide open space, habitat restoration, and watershed improvement projects within the Los Cerritos Wetlands; and

WHEREAS, the Los Cerritos Wetlands Restoration Plan (proposed program) proposes a restoration program for the Los Cerritos Wetlands Complex; and

WHEREAS, the proposed program identifies conceptual restoration designs for approximately 503 acres of land located on the border of Orange County and Los Angeles County in the cities of Seal Beach and Long Beach, to restore wetland, transition, and upland habitats throughout the program area; and

WHEREAS, a Program Environmental Impact Report is a public document used by local regulators and the public in their review of the potential environmental impacts of proposed activities, alternatives, and mitigation measures that would minimize or avoid potential environmental effects, and may be used to evaluate a plan or program that has multiple components (projects and actions) or addresses a series of actions that are related; and

WHEREAS, the LCWA is the Lead Agency pursuant to the California Environmental Quality Act (CEQA) responsible for preparing the Final Program Environmental Impact Report for the proposed program (Final PEIR); and

WHEREAS, the Final PEIR more fully describes the proposed program, a copy of which, including the complete proposed Project Description, is incorporated into this Resolution by this reference as if fully set forth herein; and

WHEREAS, program implementation will require certification of the Final PEIR; and

WHEREAS, pursuant to CEQA Guidelines Sections 15082 and 15063, the LCWA prepared and circulated an NOP and Initial Study (NOP/IS) from March 8, 2019, to April 8, 2019 to determine

the appropriate scope of analysis for the PEIR. The NOP/IS was circulated to solicit input from interested public agencies and interested individuals on the scope and content of the PEIR; and

WHEREAS, pursuant to CEQA Guidelines Section 15083, the LCWA held a scoping meeting during the 30-day scoping period on March 21, 2019, at the Community Center in Recreation Park, 4900 East 7<sup>th</sup> Street, Long Beach, CA. The purpose of the meeting was to present the proposed program and receive public input regarding the proposed scope of the PEIR analysis; and

WHEREAS, pursuant to CEQA Guidelines Section 15085, a Notice of Completion (NOC) was sent to the Office of Planning and Research on May 8, 2020, for distribution to the responsible regional agencies.

WHEREAS, a Notice of Availability (NOA) for the Draft PEIR for the proposed program (Draft PEIR) was sent to interested persons and organizations, sent to the State Clearinghouse in Sacramento for distribution to public agencies, and posted on LCWA's website on May 8, 2020. The NOA was posted at the Los Angeles County Clerk's office and on the Project Site on May 11, 2020. The NOA was also posted at the Orange County Clerk's office on May 12, 2020. A 45-day public review period was initiated on May 8, 2020, and ending June 22, 2020. The public review period was extended by 15 days to July 6, 2020 for a total of 60-days.

WHEREAS, due to the COVID-19 pandemic and closure of public libraries and gathering spaces, in-person viewing of the Draft PEIR was made available only on an appointment basis by contacting the LCWA; and

WHEREAS, during the 45-day public review and comment period for the Draft PEIR, LCWA publicly noticed and held 2 virtual public meeting webinars on the Draft PEIR on May 21, 2020 and on June 4, 2020 to present the Draft PEIR and solicit input and comments from public agencies and the general public; and

WHEREAS, pursuant to CEQA Guidelines Section 15088, the LCWA evaluated written public comments received during the public review period from tribes, public agencies, organizations, and individuals, and provided written responses to each comment, which are included in the Final PEIR; and

WHEREAS, the Final PEIR contains the following chapters: Chapter 1 Introduction to the Final PEIR, Chapter 2 Responses to Comments, Chapter 3 Draft PEIR Revisions, Chapter 4 Mitigation and Monitoring and Reporting Program, Appendix A Revised Draft PEIR sections, and Appendix B Monitoring and Adaptive Management Plan; and

WHEREAS, on October 22, 2020, LCWA posted on its website the Final PEIR, and circulated a Notice of Public Hearing two weeks prior to certification of the Final PEIR. Pursuant to Public Resources Code Section 21092.5, copies of the written responses to public agencies were forwarded to those agencies at least 10 days prior to certification of the Final PEIR; and

WHEREAS, the additional clarifications and revisions to the Draft PEIR in response to comments received and/or typographical errors, included in the Final PEIR, did not constitute significant new information that requires recirculation of the Draft PEIR for further public comment under CEQA Guidelines section 15088.5; and

WHEREAS, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, LCWA is required to adopt a mitigation monitoring and reporting program for assessing and ensuring compliance with the required mitigation measures applied to a proposed project for which an EIR has been prepared; and

WHEREAS, pursuant to CEQA Guidelines Sections 15091 and 15093 and Public Resources Code Section 21081, written findings must be made by LCWA in connection with certification of an environmental impact report prior to approval of the project, for each alternative and each significant environmental impact identified in the Draft PEIR and Final PEIR; and

WHEREAS, CEQA Guidelines require that where the decision of a public agency allows the occurrence of significant environmental effects that are identified in the EIR, but are not fully mitigated to a level of insignificance, that the public agency state in writing the reasons for approving the proposed program despite its significant environmental effects in a Statement of Overriding Considerations, in accordance with CEQA Guidelines Section 15093 and Public Resources Code Section 21081(b); and

WHEREAS, in accordance with CEQA requirements set forth herein, LCWA has prepared a Mitigation Monitoring and Reporting Program, incorporated into this Resolution by this reference as if fully set forth herein; and

WHEREAS, LCWA has prepared Findings and Fact, incorporated into this Resolution by this reference as if fully set forth herein; and

WHEREAS, LCWA has prepared a Statement of Overriding Considerations, incorporated into this Resolution by this reference as if fully set forth herein; and

WHEREAS, the LCWA Governing Board has had the opportunity to review the Final PEIR as well as the staff report related to the Final PEIR, and determined that the Final PEIR considered all potentially significant environmental impacts of the proposed program and are complete and adequate and fully comply with all requirements of CEQA; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; NOW

*Therefore be it resolved, that the LCWA hereby:*

1. FINDS that the Final PEIR prepared for the Los Cerritos Wetlands Restoration Plan was adequate and completed in compliance with CEQA.
2. FINDS that the Final PEIR was presented to the LCWA Governing Board, and the LCWA Governing Board has reviewed and considered the information contained in the Final PEIR.
3. FINDS that the Final PEIR reflects the LCWA Governing Board's independent judgement and analysis.
4. FINDS that the Final PEIR incorporates in full the Draft PEIR, including an Executive Summary, Chapters 1 – 6, and Appendices A – L.
5. ADOPTS the Mitigation Monitoring and Reporting Program.

6. ADOPTS Findings and Facts and a Statement of Overriding Considerations.
7. ADOPTS the staff report dated November 5, 2020.
8. CERTIFIES the Final PEIR for the Los Cerritos Wetlands Restoration Plan.
9. DIRECTS the Executive Officer, or designee, to file a Notice of Determination within five (5) working days after approval of the Project.
10. DIRECTS the Executive Officer, or designee, to make the documents and other materials that constitute the administrative record for LCWA's actions related to the proposed program available at the LCWA's main office, 100 N. Old San Gabriel Canyon Road, Azusa, California to facilitate public access to these documents.

*~ End of Resolution ~*

Passed and Adopted by the Board of the Los Cerritos Wetlands Authority  
On November 5, 2020

\_\_\_\_\_  
Sam Schuchat, Board Chair

ATTEST: \_\_\_\_\_  
Christina Bull Arndt  
Deputy Attorney General