

## **1.0 EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

This Executive Summary has been prepared according to the California Environmental Quality Act (CEQA) Guidelines Section 15123 for the City of Long Beach Environmental Impact Report (EIR) for the proposed Colorado Lagoon Restoration project. This EIR has been prepared by the City of Long Beach to analyze the proposed project's potential impacts on the environment, to discuss alternatives, and to propose mitigation measures for identified potentially significant impacts that will minimize, offset, or otherwise reduce or avoid those environmental impacts.

### **1.2 SUMMARY OF PROJECT DESCRIPTION**

The Colorado Lagoon (Lagoon) is an approximately 11.7-acre (ac) tidal water body that is connected to Alamitos Bay and the Pacific Ocean through an underground tidal culvert to Marine Stadium. The Lagoon serves three main functions: hosting estuarine habitat, providing public recreation (including swimming), and retaining and conveying storm water drainage. The deteriorated ecological health of the Lagoon has been established for the past several decades. The purpose of the proposed project is to restore the site's ecosystem, improve the estuarine habitat, provide enhanced recreation facilities, improve water and sediment quality, and manage storm water.

The proposed project would be implemented in two phases. Phase 1 includes improvements to the Lagoon through cleaning of the culvert and removal of structural impedances at the culvert (a near-term project component); dredging areas of the Lagoon; implementing storm drain upgrades; removal of the north parking lot, access road, and the restroom on the north shore of the Lagoon; recontouring side slopes; developing Bird Island; revegetating land areas; planting eelgrass in the Lagoon water body; and developing the walking trail and viewing platform at the Lagoon.

Phase 2 of the proposed project includes improvements to Marina Vista Park, including: the long-term project component of building an open channel between the Lagoon and Marine Stadium; constructing two roadway bridges spanning the open channel at East Colorado Street and East Eliot Street; demolishing and replacing two public restrooms in Marina Vista Park; reconfiguring the baseball and youth overlay soccer fields; and developing a walking trail on the eastern side of the open channel and vegetation buffers on both sides of the channel.

Once restored, the Lagoon will have improved water and sediment quality, which would enhance recreational opportunities at the Lagoon, potentially lead to a more diverse invertebrate and fish community, and increase the potential for the Lagoon to support a variety of plant and animal species. Additionally, the Colorado Lagoon Restoration project would provide a walking trail that extends through areas that currently provide no public access.

### 1.3 ALTERNATIVES

The following four alternatives to the proposed project were selected for consideration, including the No Project Alternative and alternative sites as required by CEQA:

- Alternative 1: No Project/No Development
- Alternative 2: Reduced Project Alternative
- Alternative 3: Recreation Alternative (No Open Channel/Develop a Parallel Culvert)
- Alternative 4: Alternative Channel Alignment

In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected by the Lead Agency. These included: consideration of alternative locations; an East Eliot Street open channel alignment; removal of the open channel from the Lagoon to Marine Stadium with construction of a flood protection dike; expanding the central Lagoon dredging area; and capping the contaminated sediment in the western arm of the Lagoon instead of dredging and disposing of the sediment. Each of these alternatives was rejected for differing reasons, as described further in Chapter 5.0, Alternatives.

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the physical impacts that would occur with this alternative. If there were no changes to the existing conditions on site, with the exception of maintenance activities at the existing culvert, there would be minimal increase in construction traffic, noise, or construction or operational air emissions.

The CEQA Guidelines require that if the environmentally superior alternative is the No Project Alternative, “the EIR also identify an environmentally superior alternative among the other alternatives” (CEQA Guidelines Section 15126.6(e)(2)). The Environmentally Superior Alternative, in terms of direct physical effects on the environment, is the Reduced Project Alternative.

The Reduced Project Alternative does not include an open channel between the Lagoon and Marine Stadium or any other improvements within Marina Vista Park. This alternative would only implement improvements (which are the same as the proposed project) at the Lagoon and to the existing culvert connection to Marine Stadium. The Reduced Project Alternative would eliminate Phase 2 of the construction operations planned for the proposed project, thereby reducing the duration of the construction operations and eliminating the pile driving required for the construction of the open channel.

The Reduced Project Alternative meets the project objectives, but not to the same extent as the proposed project. This alternative would include the proposed LCP and zoning amendments as required by the proposed project. Although this alternative would reduce the duration of the project emissions, it would still result in the same significant construction-related air quality emission impacts associated with the proposed project. Also, due to the existing location of sensitive receptors and type of construction, this alternative would still result in significant and unavoidable construction noise impacts. The Reduced Project Alternative would result in reduced impacts for traffic, hazardous materials, and recreation-related construction impacts compared with the proposed project because improvements within Marina Vista Park would not occur with this alternative. However, impacts

related to these topics would still result in less than significant impacts, which is the same as what would occur with implementation of the proposed project. In addition, this alternative would not achieve the same level of beneficial improvements for biological resources and water quality as the proposed project.

The alternatives analysis is described in greater detail in Chapter 5.0, Alternatives.

## **1.4 AREAS OF CONTROVERSY**

Pursuant to State CEQA Guidelines Section 15123, this EIR acknowledges the areas of controversy and issues to be resolved which are known to the City of Long Beach or were raised during the scoping process. Major issues and concerns raised at the scoping meeting included: (1) traffic concerns related to use of the Lagoon's north shore; (2) water and habitat concerns related to the existing conditions; (3) project impacts to recreation within Marina Vista Park; (4) project impacts to areas that have been historically used near the Lagoon; (5) trash around the Lagoon; (6) safety concerns related to development of the open channel linking the two water bodies; (7) transportation and disposal of dredge materials; and (8) capacity in the sewer lines for the low-flow diversion.

The Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts.

## **1.5 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Table 1.A identifies the project environmental impacts, a significance determination, proposed mitigation measures, and level of significance after mitigation is incorporated into the project. Table 1.A also identifies cumulative impacts resulting from the proposed project in conjunction with the approved and pending cumulative projects. Environmental topics addressed in this EIR include: Aesthetics, Air Quality, Biological Resources, Cultural and Paleontological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use, Noise, Public Services and Utilities, Recreation, and Traffic and Circulation.

Refer to Section 2.4 of this EIR for a discussion of additional effects found not to be significant through the Initial Study/Notice of Preparation process.

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
<b>AESTHETICS</b>			
Substantial adverse effect on a viewshed from a public viewing area (such as a park, scenic highway, scenic roadway, or other scenic vista)	Implementation of Phases 1 and 2 of the proposed project will not disrupt existing scenic vistas or viewsheds visible on or from the project site, and will result in the creation of a new scenic vista from the north arm of the Lagoon facing south. There are no scenic vistas located on site or in the surrounding vicinity that have been designated by the City or other agency in an adopted policy or plan. Therefore, the effect of the proposed project on a scenic vista is not considered adverse.	No mitigation is warranted.	Less Than Significant
Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	There are no designated scenic resources on the project site pertaining to rock outcroppings, scenic highways, or historic buildings. There are many mature nonnative trees located throughout the project area. Implementation of the various project components would result in the removal of approximately 100 mature nonnative trees of various species, several of which are unhealthy and dying. Although implementation of the various project components would result in the removal of approximately 100 nonnative trees of various species (including palms and other species from both the Lagoon and Marina Vista Park), implementation of the proposed project would result in an improved healthy native habitat area. While the existing trees provide an aesthetically appealing environment, the removal of trees and the replanting of native habitat will provide an aesthetically appealing environment that is native to Southern California.	See Mitigation Measure BIO-12.	Less Than Significant
Substantial degradation of the existing visual character or quality of the site and its surroundings	Views of the project site from the residential areas and adjacent park and open space areas would be temporarily impacted during construction activities associated with Phase 1 and 2 of the proposed project.	<b>AES-1</b> Prior to issuance of a grading permit, the City of Long Beach Director of Development Services designee shall require the construction contractor to provide screened construction fencing around construction area boundaries to temporarily screen views of construction activities.	Less Than Significant
Creation of a new source of substantial light or glare, which would adversely affect day or nighttime views in the area	Phase 2 of the proposed project would result in a slight increase in lighting on the restroom structures compared to existing conditions. However, the overall increase in light intensity would be negligible compared to the lights on the surrounding street network. Nevertheless, as a precautionary measure, Mitigation Measure AES-2 is proposed to reduce impacts from light and glare.	<b>AES-2</b> Prior to the issuance of a building permit, an Exterior Lighting Plan for the proposed restroom structures shall be prepared. The Lighting Plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property. The Lighting Plan shall be subject to review and approval by the City of Long Beach Director of Development Services.	Less Than Significant
<b>AIR QUALITY</b>			
Conflict with or obstruct implementation of the applicable air quality plan	The proposed project would not result in any population growth and is consistent with the City's General Plan designation for the site. In addition, the proposed project is not expected to result in any increase in long-term regional air quality emissions. Therefore, the project will not conflict with the AQMP.	No mitigation is warranted.	Less Than Significant
Violate any air quality standard or contribute substantially to an existing or projected air quality violation	The project would result in an exceedance of the SCAQMD daily threshold for NO <sub>x</sub> during construction. NO <sub>x</sub> is a precursor to ozone (O <sub>3</sub> ); therefore, construction emissions will contribute to the existing nonattainment status.	Mitigation Measures AQ-2 through AQ-6 will reduce NO <sub>x</sub> emissions.  <b>AQ-2</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the construction equipment to be used on site is based on low-emission factors and high energy efficiency. The City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works shall ensure that the grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.  <b>AQ-3</b> During construction and as noted on construction plans, the Construction Contractor shall ensure that construction equipment is shut off when not in use and idle for more than five minutes.  <b>AQ-4</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the Construction Contractor will time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site. If necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.	Significant and Unavoidable

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		<p><b>AQ-5</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the Construction Contractor will support and encourage ridesharing and transit incentives for the construction crew.</p> <p><b>AQ-6</b> During construction and as noted on construction plans, the Construction Contractor shall ensure that on-road construction trucks and other vehicles greater than 10,000 pounds shall be shut off when not in use and shall not idle for more than 5 minutes.</p>	
<p>Result in a cumulative considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)</p>		<p>Mitigation Measure AQ-1 will reduce fugitive dust and therefore emissions of PM<sub>10</sub>.</p> <p><b>AQ-1</b> Prior to issuance of a grading permit, the City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works shall review and approve final grading plans and contractor agreements to ensure that the following dust suppression measures are incorporated. The following dust suppression measures in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook are included to further reduce the likelihood of air quality impacts:</p> <ul style="list-style-type: none"> <li>• Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).</li> <li>• Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).</li> <li>• Install wheel washers or steel plate rumble strips where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site.</li> <li>• Pave, water, or chemically stabilize all on-site roads as soon as feasible.</li> <li>• Minimize at all time the area disturbed by clearing, grading, earthmoving, or excavation operations.</li> <li>• All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches.</li> <li>• Limit on-site vehicle speeds (on unpaved roads) to 15 mph.</li> </ul>	<p>Significant and Unavoidable</p>
<p>Expose sensitive receptors to substantial pollutant concentrations</p>	<p>The proposed project would have little to no change in off-site vehicle trips; therefore, no significant CO contributions would occur in the project vicinity, and no CO "Hot Spots" are expected. Also, calculated emissions rates for the proposed construction activities would not exceed the localized significance thresholds for the nearest sensitive receptors.</p>	<p><b>AQ-7</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that on-site sensitive land uses, such as the on-site preschool center and the beaches, shall be closed or relocated when construction activities occur within 250 feet.</p>	<p>Less Than Significant</p>
<p>Create objectionable odors affecting a substantial number of people</p>	<p>Heavy-duty equipment in the project area during construction would emit odors. These odors would be limited to the time that construction equipment is operating during the construction period for the project. Mitigation Measure AQ-2 requires that all construction equipment be maintained in accordance with the manufacturer's specifications. Mitigation Measure AQ-3 requires that all construction equipment be turned off when not in use, and Mitigation Measure AQ-6 requires that on-road construction trucks and other vehicles greater than 10,000 pounds be shut off when not in use. These measures reduce impacts associated with objectionable odors from the operation of diesel-powered construction equipment. However, given the duration of construction activity and the proximity of the sensitive receptors, these impacts may still be considered significant after mitigation.</p> <p>During the dredging phases of the proposed project, the dredged materials will be spread out on site to dry before being hauled off site. It is anticipated that the dredged sediment will contain organic materials and that the decomposition of the organic matter when exposed to air may generate unpleasant odors. Therefore, the dredged</p>	<p>See Mitigation Measures AQ-2, AQ-3, and AQ-6 above.</p> <p>See Mitigation Measure HAZ-4.</p> <p><b>AQ-8</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that dredged</p>	<p>Significant and Unavoidable</p>

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	<p>material may result in odor impacts at the adjacent and nearby sensitive land uses. Implementation of Mitigation Measure HAZ-4 in Section 4.6 requires the application of a mixture of Simple Green and water to the excavated sediment as part of an overall Soil Management Plan. Simple Green accelerates the decomposition process and will have the overall result of shortening the duration of odor emissions.</p>	<p>material that shall be dried on site shall be located as far as feasible from the residential, school, and daycare land uses within the project area.</p>	
<b>BIOLOGICAL RESOURCES</b>			
<p>Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-interest species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.</p>	<p>Estuary sea-blite is listed as a CNPS List 1B.2 plant and is considered a Special Plant by the CDFG, and appeared in the literature search for the project area. This species has been observed in the project area and is located along the edge of the Lagoon in the southeast portion of the project area (Figure 2). Recontouring of the slopes of the north arm would impact this plant and avoidance and/or propagation would be necessary.</p> <p>If construction is proposed during the bat breeding season (February 1 through August 31), the project could result in adverse impacts to breeding bats, which are listed as California Species of Concern.</p> <p>Disturbance to the subtidal environment through wet dredging and fill activities may indirectly contribute to the propagation of the invasive seaweed <i>Caulerpa (Caulerpa taxifolia)</i>.</p> <p>Dredge and fill activities may also result in a temporary loss of eelgrass and/or subtidal eelgrass habitat.</p> <p>Foraging marine mammals and sea turtles have the potential to occur in the neighboring Marine Stadium and may be impacted by construction activities in the Lagoon.</p>	<p><b>BIO-1</b> The Director of Parks, Recreation, and Marine shall ensure that the project biologist work with the contractor to preserve the one specimen of estuary sea-blite on site, if feasible. If the original plant cannot be preserved, then cuttings and/or any other propagules of the plant shall be collected from this specimen or a close genetic source (e.g., Seal Beach National Wildlife Refuge) prior to the removal of the specimen. These cuttings and/or propagules shall be used in the revegetation process for the project.</p> <p><b>BIO-2</b> The Director of Parks, Recreation, and Marine shall ensure that the presence or absence of Western yellow bats is investigated by a qualified biologist prior to the removal of any palms or cottonwoods from the project area. If bats are present, a memo shall be submitted to the California Department of Fish and Game (CDFG) to determine appropriate action.</p> <p><b>BIO-3</b> The Director of Parks, Recreation, and Marine shall ensure that a field survey to investigate the presence of the invasive algae <i>Caulerpa taxifolia</i> is conducted 30 to 60 days prior to commencement of construction, by qualified divers certified by the CDFG and National Marine Fisheries Service (NMFS) to conduct such surveys. The pre-construction <i>Caulerpa</i> surveys will be conducted according to the accepted criteria of the Southern California <i>Caulerpa</i> Action Team (SCCAT) for conducting surveys for the invasive algae and in accordance with the NMFS and CDFG <i>Caulerpa</i> survey protocols. In accordance with the recommendations of the SCCAT and according to the NMFS <i>Caulerpa</i> Control Protocol (Version 3, adopted March 12, 2007 [NMFS 2007]), a survey must be conducted in harbor areas that may be disturbed. In areas that are expected to be free of <i>Caulerpa</i>, such as Colorado Lagoon, a 20 percent visual Surveillance Level survey is required to prior to any dredging. The survey will also identify any other marine vegetation in the proposed construction area, including eelgrass. The Director of Parks, Recreation, and Marine, or his/her designee, will transmit the survey results via <i>Caulerpa</i> Survey Reporting Form to NMFS and the CDFG within 48 hours of completion of the survey. If <i>Caulerpa</i> is identified in the project area, the City of Long Beach, NMFS, and the CDFG will be notified within 24 hours of completion of the survey. In the event that <i>Caulerpa</i> is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed Disturbing Activity is eliminated in accordance with Section F of the <i>Caulerpa</i> Control Protocol.</p> <p><b>BIO-4</b> The Director of Parks, Recreation, and Marine shall ensure that a pre-construction eelgrass survey is conducted of the entire Lagoon and within 100 feet from the opening of the culvert into Marine Stadium during the period of March through October. The survey is considered valid by NMFS for a period of no more than 60 days, with the exception that surveys conducted in August through October will be valid until the following March 1. Preconstruction survey results will be provided by the Director of Parks, Recreation, and Marine to NMFS and the CDFG in an appropriate data format for the information to be mapped on the project drawings.</p> <p><b>BIO-5</b> The Director of Parks, Recreation, and Marine shall ensure that a postconstruction survey is conducted within 30 days of the cessation of construction activities to determine the actual area of eelgrass affected for mitigation purposes. If loss of eelgrass is noted in the postdredge survey, the City of Long Beach will be required to mitigate the loss of eelgrass in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP). As per the SCEMP Revision 11 (NMFS 1991), the loss of eelgrass</p>	<p>Less Than Significant</p>

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		<p>habitat must be mitigated at a minimum 1.2:1 ratio.</p> <p><b>BIO-6</b> The Director of Parks, Recreation, and Marine shall ensure that eelgrass mitigation be initiated within 135 days of project inception; projects requiring more than 135 days to complete may result in additional mitigation. A mitigation plan with a schedule is required 30 days prior to any construction or dredge activities. The amount of mitigation necessary will be determined by the difference between a preconstruction and postconstruction survey.</p> <p><b>BIO-7</b> The Director of Parks, Recreation, and Marine shall ensure that an eelgrass transplant report is completed following construction (Initial Report) and monitoring reports conducted at 6, 12, 24, 36, 48, and 60 months posttransplant. The Director of Parks, Recreation, and Marine shall ensure that project achievement of specific milestones and criteria for success, as directed in the SCEMP along with guidelines for remedial actions, are documented. If the success criteria are not met, construction of a Supplementary Transplant Area and monitoring, for an additional five years may be required by NMFS.</p> <p><b>BIO-8</b> A qualified biologist shall be on site during the construction period to monitor the presence of sea turtles and marine mammals. The onsite biological monitor shall have the authority to halt construction operations if it is determined that sea turtles or marine mammals are present and may be adversely affected, and shall determine when construction operations can proceed.</p> <p><b>BIO-9</b> Construction crews and work vessel crews shall be briefed on the potential for marine mammal and sea turtle species to be present, the legal protection of these species, and will be provided with identification characteristics of these animals.</p> <p><b>BIO-10</b> In the event that a sea turtle is sighted within 500 meters of the construction zone, all construction activity shall be temporarily stopped until the sea turtle(s) is safely outside the 500-meter buffer zone. In the event that a marine mammal is sighted within 500 meters of the construction zone, all construction activity shall be temporarily stopped until the marine mammal(s) is safely outside the 500-meter buffer zone. The onsite biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.</p> <p><b>BIO-11</b> The biological monitor shall prepare an incident report of any marine mammal or sea turtle activity in the project area and shall advise the construction manager to have his crews be aware of the potential for additional sightings. The report shall be provided within 24 hours to the CDFG and the NMFS.</p> <p><b>BIO-12</b> The Director of Parks, Recreation, and Marine will endeavor to conduct vegetation clearing and grading outside of the nesting season. If construction is proposed between February 1 and August 31 the Director of Parks, Recreation, and Marine shall ensure that a qualified biologist familiar with local avian species and the requirements of the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code shall conduct a preconstruction survey for nesting birds no more than one week prior to construction. The survey will include the area of impact and suitable habitat up to 300 feet from the area of impact (as appropriate, given the anticipated nature of project impacts). The results of the survey will be recorded in a memo and submitted to the City of Long Beach within 48 hours. If the survey is positive, and the nesting species are subject to the MBTA or California Fish and Game Code, the memo shall be submitted to the CDFG to determine appropriate action. If the survey is negative or inconclusive, either due to ambiguous behavior by birds or overly dense vegetation, a qualified biologist shall be retained to monitor the site during initial vegetation clearing and grading, as well as during other activities that would have the potential to disrupt</p>	

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		nesting behavior. The monitor shall be empowered by the City to halt construction work in the vicinity of the nesting birds if the monitor believes the nest is at risk of failure or the birds are excessively disturbed.	
Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.	<p>Recontouring the Lagoon during the Habitat Improvements project component will result in impacts to southern coastal salt marsh and mudflat habitat. Therefore, because the net increase of salt marsh and mudflat habitat is proposed as a project component, there are no permanent adverse impacts to native vegetation communities. Additionally, a long-term maintenance plan will be prepared to ensure success of the native habitat through removal of invasive and exotic species. Therefore, impacts are considered less than significant.</p> <p>Dredging, excavating, recontouring and filling will all result in a temporary loss of subtidal benthic habitat. Recruits from other areas of the Lagoon or the Marine Stadium will rapidly recolonize the benthic habitat after completion of sediment modifications. The community is expected to be colonized by a similar suite of species that is currently found in the area and construction will not result in a permanent loss. Therefore impacts are considered to be less than significant.</p>	No mitigation is warranted.	Less Than Significant
Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	All impacts to Jurisdictional Areas are considered less than significant due to the temporary nature and the net increase in jurisdictional areas that will result from the project implementation.	No mitigation is warranted.	Less Than Significant
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.	<p>The project area currently does not function as a high quality wildlife movement corridor. No substantial adverse changes in this condition will occur as a result of project implementation. Therefore impacts are less than significant.</p> <p>Eelgrass beds provide nursery habitat for some species of invertebrates and fish. Eelgrass within the Lagoon or Marine Stadium may be impacted during construction, recontouring and removal of sediment.</p> <p>Avian species, including raptors, may nest in suitable trees and shrubs throughout the Lagoon and adjacent habitat. The Cooper's hawk pair that was observed nesting in an ornamental tree on the northeast corner of the project site is not expected to be significantly adversely affected, unless construction activity occurs near the nest or the nest is removed during the breeding season. There is a large quantity of available mature trees in the surrounding park and urban landscape that can provide suitable alternative nest sites for the pair. Therefore, if construction is proposed during the nesting season (February 1 through August 31), the project could result in adverse impacts to nesting birds. Impacts that result in nest failure (either directly through nest removal or indirectly due to disruption from human-induced activities) are potentially significant.</p>	See Mitigation Measures BIO-4 through BIO-7 and BIO-12 above.	Less than Significant.
Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	<p>The County of Los Angeles has assigned the designation of Significant Ecological Areas (SEA) to biologically important areas within Los Angeles County for the purpose of conserving biological diversity. Since the proposed project site is located outside of the SEA designation, no impacts would occur.</p> <p>The City of Long Beach Municipal Code (Ordinance C-7642) requires that a permit be obtained from the Director of Public Works prior to removal of trees from City-owned property. The City also requires that the trees be identified, mapped, and measured prior to removal. The project will remove existing trees, including, but not limited to, the Mexican Fan Palm (<i>Washingtonia robusta</i>) along the access road on the west side of the northern arm of the Lagoon as well as others in the Lagoon, Marina Vista Park, and Marine Stadium.</p>	<p><b>BIO-13</b> The Director of Parks, Recreation and Marine shall ensure that the Project Biologist identifies, maps, and measures all trees that will be removed as a result of project activities. Ornamental trees removed as a result of open channel construction and reconfiguring of the sports fields within Marina Vista Park will be replaced on a 1:1 basis with California (or western) sycamores (<i>Platanus racemosa</i>). The replacement trees to be installed will be incorporated into the areas used as native upland restoration areas for the overall project improvements. The Director of Parks, Recreation and Marine will obtain the services of a qualified biologist to monitor and document the mitigation effort. Over the 5-year period following tree installation, the following performance standards shall be included in the compensatory habitat maintenance plan for the Colorado Lagoon Improvement project, which will be prepared concurrent with permit applications and subject to agency approval:</p> <ul style="list-style-type: none"> <li>• Increase in height by a minimum of 24 inches per year for the first 5 years.</li> </ul>	Less than significant

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		<ul style="list-style-type: none"> <li>Trees determined to be in good health annually by an ISO Certified arborist for the first 5 years following installation.</li> </ul>	
Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.	No conservation plans exist for the project site. Therefore no impacts to the provisions of any adopted conservation plan are expected.	No mitigation is warranted.	Less than significant.
Has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.	Culvert cleaning, demolition of the existing concrete culvert, and construction of the open channel could eliminate the tidal connection during those activities. Extended interruption of the tidal connection could lead to stagnation and water quality problems that could affect recreation, habitat, fish and wildlife. To maintain water quality in the Lagoon during construction, the culvert will be opened once every two weeks of construction during the period of the greatest tidal fluctuations, if feasible, for two (2) to three (3) days to allow for tidal exchange. In addition, two lake aerators will be installed and utilized during construction that closes off the culvert. Opening of the culvert and installation of aerators would reduce the potential for stagnation to occur.	No mitigation is warranted.	Less than significant.
<b>CULTURAL AND PALEONTOLOGICAL RESOURCES</b>			
Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5	Marine Stadium has been identified as a historical resource and is listed on the California Register, the CHL (as No. 1014), and the PHI (as No. 19-186115), and is determined to be a significant Point of Historical Interest. The proposed project would not detract from the integrity of any historical, structural, or operational elements of Marine Stadium that contribute to its being a historic resource. Therefore, no substantial adverse change in the significance of a historic resource as defined in Section 15064.5 would occur.	No mitigation is warranted.	Less Than Significant
Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	The proposed project components are within previous dredge and/or fill areas and depths. Therefore, implementation of the proposed project would not disturb sensitive archaeological soils, and an adverse change in the significance of an archaeological resource pursuant to Section 15064.5 would not occur.	<p>Precautionary mitigation measures have been included in the event that unanticipated archaeological resources are discovered.</p> <p><b>CULT-1</b> In conjunction with the submittal of applications for rough grading permits, the Director of Development Services, shall verify that a Los Angeles County certified archaeologist has been retained, shall be present at the pregrading conference, and shall establish procedures for temporarily halting or redirecting work if unrecorded archaeological resources are discovered during grading to permit the sampling, identification, and evaluation of archaeological materials as appropriate. If archaeological materials are identified during construction, standard professional archaeological practices shall be initiated to characterize the resources and mitigate any impacts to those resources. Included within this approach will be the development of a curation agreement for the permanent care of materials collected from the project. This agreement would be negotiated with a suitable repository.</p> <p><b>CULT-3</b> In accordance with the recommendations of the Gabrielino Tongva Indians of California Tribal Council and the Gabrielino/Tongva San Gabriel Band of Mission Indians, monitoring by a qualified Native American from either one or both of these groups shall take place when, and if, ground-disturbing activities occur in undisturbed native soil. The project archaeologist will notify the Director of Development Services immediately upon exposure of native soils, so that a qualified Native American monitor can be retained to monitor further excavation and/or grading.</p>	Less Than Significant
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	The proposed project components are within previous dredge and/or fill areas and depths. Therefore, implementation of the proposed project would not disturb sensitive paleontological soils. Hence, the proposed project would not directly or indirectly destroy a unique paleontological resource, site or unique geologic feature.	No mitigation is warranted.	Less Than Significant
Disturb any human remains, including those found outside of formal cemeteries	The project site has undergone extensive ground disturbance associated with dredge and fill and the project site has been used continually as a public park since the fill activities. As a result, the proposed project is not anticipated to disturb any human remains, including those outside of formal cemeteries.	<p>Precautionary mitigation measures have been included in the event that unanticipated human remains are discovered.</p> <p><b>CULT-2</b> If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains</p>	Less Than Significant

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
		<p>are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.</p>	
<b>GEOLOGY AND SOILS</b>			
<p>Expose people or structures to 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, strong seismic ground shaking, and seismic-related ground failure, including liquefaction or landslides.</p>	<p>The project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, nor is it currently identified by the regulatory community as being located within zones of either primary or secondary co-seismic surface deformation (e.g., pressure ridges, escarpments, fissures). Thus, the site is not expected to experience primary surface fault rupture or related ground deformation. However, since the site is 4 mi from the Newport-Inglewood Structural Zone (Figure 4.5.2), significant ground shaking or secondary seismic ground deformation effects would occur at the site should a major seismic event occur along the Newport-Inglewood Structural Zone.</p>	<p><b>GEO-1</b> Prior to issuance of building permits for the structural components of the proposed project, such as channel and bridge development and slope recontouring, the City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works are required to review and approve final design plans to ensure that geotechnical hazard-resistant designs have been incorporated into the final engineering drawings in accordance with the most current California Building Code and the recommended seismic design parameters of the Structural Engineers Association of California. Ultimate site seismic design acceleration shall be determined by the project structural engineer during the project design phase.</p> <p><b>GEO-2</b> A project geotechnical report shall be submitted to the City of Long Beach Building Official prior to the issuance of permits to construct the proposed bridges and open channel. The geotechnical recommendations shall be incorporated into the design plans to the satisfaction of the Building Official and Director of Public Works.</p>	<p>Less Than Significant</p>
<p>Substantial soil erosion or the loss of topsoil.</p>	<p>After the completion of construction activity and establishment of the landscaped areas, erosion potential will be minimal. All soils used in the project would be properly compacted in accordance with City of Long Beach (City) specifications. The project design incorporates the use of riprap, erosion control blankets, and other erosion controls to reduce erosion and scour through the open channel. The project would also be subject to Storm Water Pollution Prevention Plan (SWPPP) requirements for erosion and sedimentation control during construction. Best management practices (BMPs) would be undertaken to control runoff and erosion from earth-moving activities such as excavation, recontouring, and compaction. All trenching and recontouring activities would be performed under the observation of a qualified engineer. The project would be required to adhere to all applicable construction standards with regard to erosion control. Additionally, mitigation measures are required to reduce fugitive dust and transport of soil (refer to Section 4.2, Air Quality, and Section 4.7, Hydrology and Water Quality, respectively). With implementation of these standard control measures, soil erosion potential will be reduced to less than significant levels.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.</p>	<p>Due to the presence of loose, unconsolidated silty sands underlain by sandy silts and a shallow groundwater table (groundwater levels are 5 ft at Marine Stadium), potential subsidence and liquefaction risks are considered moderate to high. According to the California Department of Conservation's Seismic Hazard Zones Map for the <i>Long Beach</i> quadrangle, the site is located within an area where liquefiable materials are mapped and/or where liquefaction has occurred in the past. A potential result of soil liquefaction on site is lateral spreading, which is the differential movement of the ground surface due to open face excavations. The project area is surrounded by developed areas, and site topography is relatively level; therefore, the possibility of a seismically induced landslide is remote.</p>	<p>See Mitigation Measures GEO-1 and GEO-2 above.</p>	<p>Less Than Significant</p>
<p>Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property.</p>	<p>The soils testing on the project site indicate a lot of variation with no consistent pattern of stratification among sites. The soil sample core logs, however, do indicate that clays and sandy clays are abundant in this area, which indicate a potential for volume changes. However, because groundwater levels are approximately 5 ft at Marine Stadium, the soils are anticipated to remain relatively wet and are not anticipated to experience cycles of wetting and drying or volume changes, which would reduce the potential effects of the expansive soils on site.</p>	<p>See Mitigation Measure GEO-1 above.</p>	<p>Less Than Significant</p>

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	Adherence to all applicable seismic codes and requirements during project implementation would reduce impacts related to expansive soils that could result from the proposed project components to a less than significant level. Mitigation Measure GEO-1 also reduces potential landslide impacts to a less than significant level.		
Be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	The proposed project would utilize the existing sewer system. The project does not include the use of septic tanks or alternative methods for disposal of wastewater into the subsurface soils.	No mitigation is warranted.	Less Than Significant
<b>HAZARDS AND HAZARDOUS MATERIALS</b>			
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	Based on sampling performed for the Lagoon sediments, sediments excavated from the Lagoon may be potentially impacted. All dredging, transport, and disposal of Lagoon sediments will be in compliance with the Health and Safety Plan. In order to ensure that all materials being stored on site would not be accidentally released into the environment, the Soil Management Plan will be implemented.	<p><b>HAZ-3 Health and Safety Plan:</b> Prior to issuance of any demolition, grading, or street work permits for the project, a Health and Safety Plan shall be prepared by the designated contractor and reviewed by the City of Long Beach or their designated consultant to ensure that all workers are in compliance with federal, State, and local regulations during construction. The Health and Safety Plan shall include:</p> <ul style="list-style-type: none"> <li>• A summary of all potential risks to construction workers, monitoring programs, maximum exposure limits for all site chemicals, and emergency procedures.</li> <li>• The identification of a Site Health and Safety Officer.</li> <li>• Methods of contact and the phone number, office location, and responsibilities of the Site Health and Safety Officer.</li> <li>• Specification that the Site Health and Safety Officer shall be contacted immediately by the contractor should any potentially toxic chemical, other than the chemicals already disclosed, be detected above the exposure limits or if evidence of undocumented soil contamination is encountered during site preparation and construction.</li> <li>• Any potentially contaminated groundwater encountered during construction activities must be properly characterized and removed in accordance to all applicable State and federal policies.</li> </ul> <p>The Health and Safety Plan is to be provided to all contractors on the project site. The Health and Safety Plan is required to be amended as needed if different site conditions are encountered by the Site Health and Safety Officer.</p> <p><b>HAZ-4 Soil Management Plan:</b> The Office of Environmental Health Hazard Assessment (OEHHA) shall review the removal workplan and shall list any additional requirements. Implementation of the workplan shall be overseen by the OEHHA for compliance with local, State, and federal regulations. Any additional sampling or contaminant material removal shall be subject to these same regulations. As part of the soil management plan, all disposal material will be characterized prior to disposal at a State landfill site. All hazardous waste will be disposed of in a Class I landfill. All other soils or solid waste will be disposed of at an unclassified landfill. In addition, during construction activities of the potentially impacted soils on site, monitoring will be required by the SCAQMD. This on-site monitoring will be performed in conformance with the SCAQMD Site Specific Rule 1166 Permit obtained by the City of Long Beach prior to commencement of grading activities. Typically a field instrument such as an organic vapor analyzer (OVA) will be used to record the concentrations of volatile organic compounds (VOCs) detected in potentially impacted soils while these soils are being excavated and/or treated on site. A daily log of the OVA readings, in addition to a copy of the Site-Specific Rule 1166 Permit, will be kept on site by the construction team for the duration of the work performed with these potentially impacted soils.</p> <p>The Site Health and Safety Officer shall contact the City of Long Beach if evidence of potential soil contamination is encountered during site preparation, demolition, or construction activities. Evidence of potential soil contamination may include discolored</p>	Less Than Significant

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	<p>As part of the proposed project, three existing restrooms located on the North Shore of the Lagoon, in Marina Vista Park, and Marine Stadium will be demolished. Due to the age of the existing restroom structures, there is a potential for lead-based paints (LBPs) and/or PCBs to be present within the structure.</p> <p>The first phase of the proposed project will also include the removal of the north parking lot and the creation of an East 6th Street access road. Proposed grading activities are anticipated as part of the proposed project and may require the removal or relocation of existing PCB-containing transformers. During the proposed project activities, all soil surrounding existing transformers should be sampled prior to disturbance.</p>	<p>soils, soils that behave differently when compacted, and/or soils with an odor.</p> <p>After inspection by personnel from the City of Long Beach, these potentially impacted soils may be segregated. Soil samples collected and submitted for appropriate analyses and the soils may either be transported off site for appropriate disposal or may be treated on site with appropriate regulatory agency oversight.</p> <p>If excavation of potentially impacted soils is necessary, the excavated sediments/soil will be passed through a sieve to ensure that debris 4-inches circumference and greater is removed from the material. During the sieving process a mixture of Simple Green and water (10:1) will be lightly applied to the excavated sediments/soils. The excavated sediments/soils will be evenly spread to facilitate the efforts of workers as they manually pick through the material to remove any debris 4-inches circumference and greater that managed to pass through the sieve. Upon completion of debris removal this material will be stockpiled and covered with plastic sheeting to comply with the Rule 1166 permit, if warranted, i.e., if the volatile organic compound (VOC) monitoring of the excavation, sieving process and stockpiles exceeds 50 milligrams per kilogram (mg/kg).</p> <p><b>HAZ-1 Pre-Demolition Surveys:</b> Prior to issuance of any demolition, grading, or street work permits for the project, a pre-demolition survey for polychlorinated biphenyls (PCBs) and lead-based paints (LBPs) will be performed. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (e.g., ASTM E 1527-00, and 40 CFR, Subchapter R, Toxic Substances Control Act [TSCA], Part 716). All identified PCBs and LBPs shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, 763). Air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations and to provide safety to workers and the adjacent community (e.g., South Coast Air Quality Management District [SCAQMD]). The City of Long Beach Public Works Department shall provide documentation (including all required waste manifests, sampling and air monitoring analytical results, etc.) to the Department of Human and Health Services that abatement of any LBPs has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, 795).</p> <p><b>HAZ-2</b> The City of Long Beach or their designated consultant will ensure that all utility pole-mounted transformers or pad mounted transformers within the project area will be inspected for leaks prior to disturbance or removal. Leaking transformers should be considered a potential for PCB hazard, unless tested, and should be handled accordingly.</p>	
<p>Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment</p>	<p>The first phase of the proposed project will also include the removal of the north parking lot and the creation of an East 6th Street access road. Proposed grading activities are anticipated as part of the proposed project and may require the removal or relocation of existing PCB-containing transformers. During the proposed project activities, all soil surrounding existing transformers should be sampled prior to disturbance.</p>	<p>See Mitigation Measure HAZ-2 above.</p>	<p>Less than significant.</p>
<p>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mi of an existing or proposed school</p>	<p>Rogers Middle School is located within 0.15 mile from the project site. In addition, the Colorado Lagoon Playgroup Preschool, which is a private program for 3- to 5-year-old children is located on the south side of the Lagoon. Implementation of the proposed project, specifically construction activities, has the potential to affect the sensitive receptors at the school locations.</p>	<p>As described above, all hazardous materials, substances or waste will be handled in accordance with local, state, and federal regulations, and in accordance with Mitigation Measures HAZ-1 through HAZ-4.</p>	<p>Less than significant.</p>
<p>Cumulative Hazards and Hazardous Waste Impacts</p>	<p>With mitigation, the project site does not currently pose any health and safety hazards.</p>	<p>No mitigation is warranted.</p>	<p>Less than significant.</p>

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	<p>Other properties within the City with known hazardous waste contamination are required to remediate their contamination in accordance with federal and State regulations. Since the proposed project does not include uses that would generate or use substantial amounts of hazardous waste, and since construction activities or site operation will not cause additional short-term or long-term health risks related to hazards and hazardous waste (after implementation of the measures identified in this section), the project does not contribute to potential cumulative hazards and hazardous materials impacts. Cumulative hazards and hazardous waste impacts are less than significant.</p>		
<b>HYDROLOGY AND WATER QUALITY</b>			
<p>Violate any water quality standards or waste discharge requirements, and/or otherwise substantially degrade water quality.</p>	<p>Temporary impacts to water quality will occur as the result of construction of the physical improvements to the Lagoon. These project components include the culvert cleaning/removal of tidal gates/structural impedances, construction of the open channel and two bridges, removal of contaminated sediments, storm drain upgrades, replacement of local hard drain outlets with bioswales, removal of north parking lot and access road, side slope recontouring, habitat restoration, and Marina Vista Park and Marine Stadium improvements.</p>	<p><b>WQ-1</b> During demolition, grading, and construction, the construction contractor shall ensure that the project complies with the requirements of the State General Construction Activity National Pollution Discharge Elimination System (NPDES) Permit. Prior to issuance of demolition and grading permits, the construction contractor shall demonstrate to the City that coverage has been obtained under the State General Construction Activity NPDES Permit by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board (SWRCB) and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) number or other proof of filing to the City Building Official.</p> <p><b>WQ-2</b> Prior to issuance of a grading permit, the City of Long Beach Building Official shall ensure that construction plans for the project include features meeting the applicable construction activity best management practices (BMPs) and erosion and sediment control BMPs published in the <i>California Storm water BMP Handbook—Construction Activity</i> or equivalent. The construction contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the City that includes the BMP types listed in the handbook or equivalent. The SWPPP shall be prepared by a civil or environmental engineer and will be reviewed and approved by the City Building Official prior to the issuance of any grading or building permits. The SWPPP shall reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and systems, design and engineering methods, and such other provisions as appropriate. A copy of the SWPPP shall be kept at the project site.</p> <p>The construction contractor shall be responsible for performing and documenting the application of BMPs identified in the SWPPP. The construction contractor shall inspect BMP facilities before and after every rainfall event predicted to produce observable runoff and at 24-hour intervals during extended rainfall events, except on days when no ongoing site activity takes place. Prestorm activities will include inspection of the major storm drain grate inlets and examination of other on-site surface flow channels and swales, including the removal of any debris that blocks the flow path. Poststorm activities will include inspection of the grate inlets for evidence of unpermitted discharges. The construction contractor shall implement corrective actions specified by the City Building Official, as necessary, at the direction of the City Director of Public Works. Inspection records and compliance certification reports shall be submitted to the City Director of Public Works on a monthly basis and shall be maintained for a period of three years. Inspections shall be scheduled monthly during the dry season and weekly during the wet season for the duration of project construction or until all areas are revegetated.</p> <p><b>WQ-3</b> The Construction Contractor shall ensure, and the Director of Development Services shall verify, that during cleaning/clearing of the culvert, the culvert shall be opened once every 2 weeks during the period of the greatest tidal fluctuations for 2 to 3 consecutive days to allow for maximum tidal exchange between Marine Stadium and Colorado Lagoon. The tidal exchange will occur during spring tides, if feasible, to allow for exchange during the period of greatest tidal fluctuation to achieve maximum water quality benefit. If, for erosion, flooding, or other engineering reasons, the Project</p>	<p>Less Than Significant</p>

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		<p>Engineer determines that tidal exchange during spring tides is not feasible, an alternative tidal exchange regime will be implemented subject to approval by the Directors of Development Services and Parks, Recreation, and Marine Services. In addition to coordination with the tidal regime, two subsurface aeration systems shall be installed and utilized during construction activities that close off the tidal flow of the culvert. The use of silt screen around each end of the culvert shall be implemented during culvert flushing to minimize sediment/turbidity impacts to the adjacent receiving waters.</p> <p><b>WQ-4</b> The Director of Director of Health and Human Services shall continue to monitor bacteria levels in the Colorado Lagoon on a daily basis during cleaning of the culvert and during construction of the open channel in order to ensure the integrity of the water is maintained for swimming in Colorado Lagoon during construction activities associated with the culvert and open channel. If water quality exceeds the water contact recreational beneficial use water quality standards, the Directors of the Health and Human Services, Recreation and Marine Services, shall post the site and close the beach, if necessary.</p> <p><b>WQ-5</b> Prior to commencement of grading activities, the construction contractor shall determine, and report to the Director of Development Services and Public Works, whether dewatering of groundwater will be necessary during project construction and whether dewatering activities will require discharge to the storm drain system or surface waters. Discharge of dewatered groundwater to the storm drain system or surface waters will require compliance with the <i>Waste Discharge Requirement for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</i> (Order No. R4-2003-0111, NPDES No. CAG994004), or subsequent permit. This will include submission of a Report of Waste Discharge (ROWD) and an application for coverage under the permit to the Los Angeles Regional Water Quality Control Board at least 45 days prior to the start of dewatering and compliance with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related discharges.</p> <p><b>WQ-6</b> During dredging, the City Director of Development Services shall require that the contractor employs measures to control dispersion of contaminated sediments. Equipment used for dredging shall be modified or specifically designed to control the dispersion of sediments. In addition, the City shall require that contractor to implement specific measures as required by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and other regulatory agencies during the permitting process. The operations could include the use automatic rather than manual monitoring of the dredging operations, which would allow continuous data logging with automatic interpretation and automatic adjustments to the dredging operations for real-time feedback for the dredge operator. Automatic systems could also be used to monitor turbidity and other water quality conditions in the vicinity of the dredging operations and allow real-time adjustments by the dredging operators to control temporary water quality effects. The specific measures to be implemented would be subject to approval by the Corps, RWQCB, and other regulatory agencies during the permitting process.</p> <p><b>WQ-7</b> Prior to the issuance of any construction permits, the City Director of Development Services shall verify that Best Management Practices (BMPs) for all dredging activities, such as a silt curtain, have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable. The construction contractor shall be responsible for performing and documenting the application of the BMPs.</p> <p><b>WQ-8</b> Prior to the issuance of any construction permits, the Director of Development Services shall demonstrate in the record that silt curtains for all construction activities involving</p>	

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		<p>excavation and grading directly adjacent to or within the Lagoon waters, have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable. The construction contractor shall be responsible for performing and documenting the application of BMPs, such as the silt curtain, identified in this document.</p> <p><b>WQ-9</b> The Director of Health and Human Services shall continue to monitor bacteria levels in the Colorado Lagoon on a weekly basis. If water quality exceeds the water contact recreational beneficial use water quality standards, the Directors of the Health and Human Services, and Parks, Recreation and Marine Services, shall post the site and close the beach, if necessary. In addition, the Directors of the Department of Health and Parks, Recreation and Marine Services, and Development Services shall review the monitoring data on an annual basis and evaluate the water contact recreational beneficial use of the Lagoon.</p>	
<p>Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).</p>	<p>The project site is not located within a groundwater recharge basin, and there are no production wells within the vicinity. Therefore, there would be no impact to groundwater supply with implementation of the proposed project. Due to the variable depth of groundwater at the project site, groundwater dewatering may be required during construction dredging activities. Dewatering activities would be temporary and the volume of groundwater that may be removed would not be substantial. Based on the proposed project (restoration project), groundwater withdrawal would not be required during operation of the project. Therefore, impacts to groundwater would not be significant.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; and/or create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.</p>	<p>The culvert cleaning would increase tidal flushing but would not generate flow speeds as to cause erosion at each end, as the culvert was designed to function at this capacity. Therefore, impacts from the culvert cleaning related to erosion are less than significant.</p> <p>The storm drain upgrades would redirect low flows to the sanitary sewer system, but would not alter the drainage pattern of the site. Low flows will continue to flow toward the Lagoon but would be diverted to the sanitary sewer instead of entering the Lagoon. Therefore, the drainage pattern would not change from existing conditions, and the rate or amount of dry weather surface runoff discharging into the Lagoon would be less than existing conditions due to the dry weather runoff diversion to the sanitary sewer.</p> <p>Implementation of the TADP would result in a diversion of approximately 55 percent of the storm water volume currently entering the Lagoon. Therefore, implementation of the TADP will decrease flood elevations within the Lagoon to elevations below the lowest perimeter elevations surrounding the Lagoon, thereby confining flood waters to the Lagoon. Therefore, storm flows from the remaining storm drains into the Lagoon will have enough freeboard to protect against flooding near East Eliot Street, where historical flooding problems have existed. Therefore, the proposed project would not increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, and no mitigation is required.</p> <p>Flows from the four local storm drains that are not diverted to the wet well would flow into vegetated bioswales. The proposed bioswales would not alter the overall drainage pattern of the site. The bioswale would promote infiltration and reduce the flow velocity of storm water runoff. Therefore, impacts associated with drainage and runoff volume are considered less than significant.</p> <p>The drainage pattern or the rate or amount of surface runoff would not change from existing conditions as a result of the proposed open channel and bridges. The use of erosion-control blankets and riprap within the proposed open channel will reduce potential erosion impacts to less than significant levels.</p> <p>Removal of the north parking lot, access road, and restroom structure would result in</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>

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	<p>the decrease of approximately 2.26 ac of impervious surface. Therefore, this component would result in a potential decrease in the surface runoff from the site and would have a positive impact on the site.</p> <p>Bird Island would be created by removing a portion of the existing bank by excavating soils on the inland portion of the island until an island is created. To prevent soil erosion over time, the island would be graded with appropriate slopes to prevent erosion, and an erosion control blanket would be installed on the newly graded slopes. With proper implementation of construction BMPs and proper design of the island (i.e., graded slopes and use of erosion control blankets), impacts related to the erosion of Bird Island would be less than significant.</p>		
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map.	No housing is proposed as part of the proposed project.	No mitigation is warranted.	Less Than Significant
Place within a 100-year flood hazard area structures that would impede or redirect flood flows.	The project site is located in Flood Zone X and Flood Zone AE on the Flood Insurance Rate Map (FEMA FIRM Panel No. 0601360025C). Combined with the reduction of low flow and storm flow entering the Lagoon due to the TADP, the proposed project components would enhance the existing flood conveyance facilities and increase flood protection over existing conditions. Therefore, the proposed project is expected to result in a beneficial effect related to flood protection.	No mitigation is warranted.	Less Than Significant
Expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam.	The proposed project is not within an inundation for the failure of a levee or dam. Therefore, flooding as a result of the failure of a levee or dam is considered less than significant.	No mitigation is warranted.	Less Than Significant
Expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.	<p>The proposed project is within a seiche and tsunami influence area. The proposed project would not change or worsen this existing condition, and there is an established warning system in place that would provide early notification of an advancing tsunami that would allow for evacuation. Los Angeles County uses the Emergency Alert System (EAS) and Emergency News Network (ENN) to warn the public about an anticipated tsunami.</p> <p>Because the site is not located in a hilly area, it is not considered to be at a high risk for inundation by mudflow. Therefore, the impacts of the proposed project related to potential inundation of the Lagoon are considered less than significant.</p>	No mitigation is warranted.	Less Than Significant
<b>LAND USE</b>			
Physically divide an established community	The proposed project would not change the existing uses within or adjacent to the project site. The Lagoon and Marina Vista Park are existing neighborhood parkland/open space uses, which would continue with implementation of the proposed project. Therefore, the proposed project would not divide an established community or disrupt the existing physical arrangement of the surrounding area.	No mitigation is warranted.	Less Than Significant
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect	The proposed project would make long-term improvements to the existing land uses on the project site. These improvements would enhance the value of the site's existing uses, and no conflict with any applicable land use plan, policy, or regulation would occur.	No mitigation is warranted.	Less Than Significant
Substantially conflict with existing on-site or adjacent land uses	The proposed project would make long-term improvements to the existing land uses on the project site. These improvements would enhance the value of the site's existing uses, and no conflict with existing on-site or adjacent land uses would occur.	No mitigation is warranted.	Less Than Significant
Conflict with any applicable habitat conservation plan or natural community conservation plan	There are no adopted HCPs or NCCPs applicable to the project site. Therefore, the proposed project would not result in effects to an adopted HCP or NCCP.	No mitigation is warranted.	Less Than Significant
<b>NOISE</b>			
Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies.	Construction of the proposed project improvements would result in a temporary periodic increase in existing ambient noise levels in the project area, which would be in excess of the City of Long Beach's daytime exterior noise standards. Due to the proximity between construction activities and the existing sensitive receptors, project-related construction activities would result in a significant noise impact that would be intermittent and temporary.	<p><b>NOI-1</b> The City of Long Beach (City) Noise Control Officer shall ensure that the construction contractor limits construction activity, which produces loud or unusual noise that annoys or disturbs a reasonable person of normal sensitivity to between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday and 9:00 a.m. and 6:00 p.m. on Saturdays and no construction activities on Sundays and federal holidays in accordance with City standards.</p>	Significant and Unavoidable

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
	<p>The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity.</p>	<p><b>NOI-2</b> During all site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards, as documented in construction plans and verified by the City Building Official.</p> <p><b>NOI-3</b> The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, as documented in construction plans and verified by the City Building Official.</p> <p><b>NOI-4</b> The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction, as documented in construction plans and verified by the City Building Official.</p> <p><b>NOI-5</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that on-site sensitive land uses, such as the on-site preschool and the beaches, shall be closed or relocated when construction activities occur within 315 feet or pile driving occurs within 706 feet.</p> <p><b>NOI-6</b> Prior to issuance of a grading permit, the Director of Parks, Recreation, and Marine shall hold a community pre-construction meeting, in concert with the Construction Contractor, to provide information regarding the construction schedule. The construction schedule information shall include the duration of each construction activity and the specific location, days, frequency, and duration of the pile driving that will occur during both Phase 1 and Phase 2 of the project construction. Public notification of this meeting shall be done in the same manner as the Notice of Availability mailings for this Draft Environmental Impact Report (EIR).</p> <p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.</p>	<p>The primary source of vibration during construction would be generated by the proposed pile driving. The vibration level at the residential uses in the project vicinity would not exceed the impact threshold and there is virtually no risk of resulting in architectural damage to normal buildings.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p>The proposed project would retain the existing recreation and open space uses of the project site, and would not result in additional noise sources. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p>Construction of the proposed project improvements would result in a temporary periodic increase in existing ambient noise levels in the project area that would be in excess of the City's daytime exterior noise standards. Therefore, project-related construction activities would result in a short-term significant noise impact that would be intermittent and temporary.</p>	<p>See Mitigation Measures NOI-1 through NOI-5 above.</p>	<p>Significant and Unavoidable</p>
<b>PUBLIC SERVICES AND UTILITIES</b>			
<p>Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services including fire protection, police protection, schools, libraries, or other public facilities.</p>	<p>The proposed project is not anticipated to result in an increase in calls for police services or require additional personnel to maintain acceptable service ratios, response times, or other performance objectives. Similarly, the project will not require new or expanded police facilities.</p> <p>The proposed project will not increase demand or negatively impact capacity in the LBUSD. Specifically, the available capacity of the schools in the vicinity of the proposed project will not be affected by the project. Therefore, the proposed project would not create a need to expand or construct new school facilities to maintain acceptable service levels.</p>	<p>No mitigation is warranted.</p> <p>No mitigation is warranted.</p>	<p>Less Than Significant</p> <p>Less Than Significant</p>

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
	<p>The proposed project will not result in an increase of population in the project area that would result in increased demands on the existing library facilities.</p> <p>The project does not include residential units, public facility buildings, or other structures that would increase the existing fire hazards on site. Therefore, the project is not anticipated to result in an increase in calls for emergency fire services. Development of an open channel with tidal flows would create an area with potential safety concerns that could result in the need for a reallocation of lifeguard services. Therefore, as required by Mitigation Measure PSU-1, upon completion of construction of the open channel, the Long Beach Fire Department and the City Department of Parks, Recreation, and Marine will monitor lifeguard services in the project area to ensure adequate staffing.</p>	<p>No mitigation is warranted.</p> <p><b>PSU-1</b> Upon completion of construction of the open channel within Marina Vista Park, the Long Beach Fire Department and the Long Beach Department of Parks, Recreation, and Marine shall assess and monitor lifeguard services, and reallocate staff as warranted, at the Lagoon and Marina Vista Park, to ensure adequate staffing.</p>	<p>Less Than Significant</p> <p>Less Than Significant</p>
<p>Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB).</p>	<p>The proposed project would not exceed wastewater treatment requirements of the RWQCB.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.</p>	<p>The proposed project includes demolishing the restroom on the north shore of the Lagoon and two restrooms in Marina Vista Park near the end of the proposed open channel. The restrooms in Marina Vista Park and Marine Stadium will be replaced in similar locations (but outside of the open channel alignment) with new facilities that are the preferred design of the LBPD. The new restrooms will be equipped with low-flow faucets and toilets (pursuant to Title 24 of the California Administrative Code) that would reduce the amount of water consumed by the fixtures, thereby also reducing the amount of wastewater generated when compared to existing conditions. Therefore, due to the use of low-flow facilities, the restroom component of the project would result in a small reduction of wastewater generation. Hence, the restroom component of the proposed project would not require new or expanded wastewater treatment capacity.</p> <p>The proposed project includes construction of a system that would divert dry weather runoff and most storm first-flush discharges from three major storm water drain lines to a wet well that would discharge into the LACSD sanitary sewer system. Based on the 5-hour-per-day allowed pumping period (midnight to 5:00 a.m.), the diversion flows from the wet well are estimated to average 110,000 gallons per day (gpd), which would equate to approximately 367 gallons per minute (gpm) into the sewer line. The additional wastewater flows that would result from operation of the storm water diversion system would not require expansion of the sewer system or the JWPCP in order to accommodate the additional flows.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.</p>	<p>The proposed project would construct storm water drainage facilities, which could result in significant environmental effects. Potential impacts related to the construction of the storm water drainage facilities are evaluated along with other potential construction-related impacts within the following Sections: Aesthetics; Air Quality; Cultural and Paleontological Resources; Geology and Soils; Hydrology and Water Quality; Land Use; Noise; Recreation; and Transportation and Circulation.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Require new or expanded water entitlements to have sufficient water supplies available to serve the project.</p>	<p>The proposed project includes demolishing the restroom on the north shore of the Lagoon and two restrooms near the Marine Stadium end of the proposed open channel (one in Marina Vista Park and one south of East Eliot Street at Marine Stadium). The new restrooms will be equipped with low-flow faucets and toilets (pursuant to Title 24 of the California Administrative Code) that would reduce the amount of potable water consumed by the fixtures compared to existing conditions. Therefore, due to the use of low-flow facilities and the reduction from three restrooms to two, the restroom component of the project would result in a small reduction of potable water use compared to existing conditions. Hence, the proposed project would not require new or expanded potable water entitlements in order to have sufficient potable water supplies to serve the project.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
	<p>The proposed project includes revegetation of various areas at the Lagoon. Revegetation of the nontidal areas at the Lagoon would include installing a temporary irrigation system (using reclaimed water) that would be utilized to irrigate the new vegetation until it becomes fully established. The proposed project would result in a temporary (approximately 3 years) increase of 10,177 gpd of reclaimed water use. This increase in reclaimed water demand is equal to 0.15 percent of the City's unused reclaimed water supply. As ample reclaimed water supplies exist, this temporary increase would not result in a significant impact to reclaimed water supplies. In addition, since reclaimed water supply lines are in place and currently serving the area, no extension of supply infrastructure (other than the temporary on-site irrigation system) are required to serve the project.</p> <p>The LBWD has stated that intermittent nighttime water pressure decreases currently occur within the reclaimed water system in the project vicinity. Because the main use of the reclaimed water is for landscape irrigation, most users irrigate at night, which results in times of decreased water pressure. However, the LBWD has stated that no water pressure decreases occur during the daytime or non-peak irrigation hours. Because intermittent nighttime water pressure declines are an existing condition, Mitigation Measure PSU-2, which requires coordination with LBWD to schedule temporary irrigation at the Lagoon to occur during non-peak water usage times, has been included to ensure that the proposed project does not exacerbate the existing intermittent nighttime water pressure declines.</p>	<p>No mitigation is warranted.</p> <p><b>PSU-2</b> During the irrigation and establishment of newly vegetated areas at the Lagoon, the Long Beach Department of Parks, Recreation, and Marine shall coordinate with the Long Beach Water Department (LBWD) to develop a schedule for the use of reclaimed water for temporary irrigation purposes at the Colorado Lagoon. The temporary irrigation of Lagoon areas shall occur during non-peak water usage times so as to ensure that the proposed project does not exacerbate the existing intermittent nighttime reclaimed water pressure decreases.</p>	<p>Less Than Significant</p> <p>Less Than Significant</p>
<p>Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve projected demand in addition to the provider's existing commitments.</p>	<p>Project-generated wastewater will not exceed the existing capacity of the sewer delivery system and will not require the construction of new sewer delivery facilities other than those to be constructed on site for the storm water diversion system. In addition, based on the anticipated flows and existing available capacity of the JWPCP, the proposed project would not exceed wastewater treatment requirements of the Los Angeles RWQCB or require the construction or expansion of the JWPCP facilities. Likewise, the proposed project is not anticipated to result in a determination by the LACSD that inadequate capacity exists to serve the project in addition to existing commitments.</p>	<p>No mitigation is warranted.</p>	<p>Less than Significant.</p>
<p>Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.</p>	<p>Construction of the project would result in solid waste that would need to be disposed of in off-site facilities. The types of solid waste that would be generated include: dredge material, excavation soils, asphalt, concrete, rock, marine growth, and building materials. AB 939 requires that every city and county in California implement programs to recycle, reduce refuse at the source, and compost waste to achieve a 50 percent reduction in solid waste being taken to landfills. In order to assist in meeting this goal, the proposed project will be required to incorporate the collection of recyclable materials into project design and to require contractors to reuse construction supplies, including landscape containers, where practicable or applicable to the extent feasible. Mitigation Measure PSU-3 will assist the City in its effort to meet its waste reduction goals by facilitating recycling on site during construction and operation of the proposed project.</p>	<p><b>PSU-3</b> A solid waste management plan for the proposed project shall be developed by the City of Long Beach Department of Parks, Recreation, and Marine, and submitted to the City of Long Beach Environmental Services Bureau for review and approval prior to issuance of permits. The plan shall identify methods to promote recycling and reuse of construction materials as well as safe disposal consistent with the policies and programs outlined by the City of Long Beach. The plan shall identify methods of incorporating source reduction and recycling techniques into project construction and operation in compliance with State and local requirements such as those described in Chapter 14 of the California Code of Regulations and AB 939.</p>	<p>Less than Significant.</p>
<p>Not be in compliance with federal, State, and local statutes and regulations related to solid waste.</p>	<p>The proposed project would not result in significant impacts related to landfill capacity or compliance with federal, State, and local statutes and regulations related to solid waste.</p>	<p>See Mitigation Measure PSU-3 above.</p>	<p>Less Than Significant</p>
<b>RECREATION</b>			
<p>Increase demand on the City Department of Parks, Recreation, and Marine's services and facilities beyond its capacity, thereby accelerating or leading to substantial physical deterioration of existing recreation facilities.</p>	<p>The proposed project does not include residential development or other factors that will increase demand on City Department of Parks, Recreation, and Marine services and facilities beyond its capacity. In addition, the proposed project will not preclude the use of any existing recreation facilities in the project vicinity. The project will provide additions/enhancements to the existing recreational facilities on the project site. Therefore, there are no adverse impacts related to increased demand on existing parks and recreation facilities.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>
<p>Include recreational facilities or require the construction or expansion of recreational facilities that</p>	<p>The proposed project would make improvements to the recreational amenities at the Lagoon. These improvements would enhance the existing recreational uses on site.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
<p>might have an adverse physical effect on the environment.</p>	<p>Therefore, the proposed project would not result in any long-term adverse impacts related to recreation at the Lagoon.</p> <p>The development of Bird Island, would utilize some of the land area that is currently golf course. Additionally, the storm drain diversion system would involve the installation of an underground wet well and pump station on the golf course at the corner of East 6th Street and Park Avenue. These improvements will result in the use of a small portion of the golf course. However, the locations of Bird Island and the pump station would not impede the golf course uses, specifically the long and short tees of the 7th hole. Therefore, the proposed project would not result in significant adverse impacts related to recreation at the Recreation Park 9-hole golf course.</p> <p>The proposed project would make changes to the recreation amenities within Marina Vista Park. Development of the open channel would result in a conversion of 2.02 ac of parkland from an active recreation use to a passive recreation use. Although there will be a change to the use of approximately 2.02 ac of Marina Vista Park as a result of the open channel, there would be no loss of City parkland and no conversion from parkland to non-parkland use. The proposed project would not result in any long-term adverse impacts related to recreation within Marina Vista Park.</p> <p>The proposed open channel component would make long-term changes within the 0.28 ac area at Marine Stadium. The construction of the open channel over a portion of the 0.28 ac triangle will not preclude the continued use of the remaining land area for passive and active recreation uses. Therefore, the proposed project would not result in significant adverse impacts related to recreation at Marine Stadium.</p> <p>Short-term construction-related effects will result from development of the proposed improvements. Use of the project area for recreational activities would be adversely impacted during the construction phases of the project.</p>	<p>No mitigation is warranted.</p> <p>No mitigation is warranted.</p> <p>No mitigation is warranted.</p> <p><b>REC-1</b> The City of Long Beach Director of Parks, Recreation, and Marine will ensure that during construction activities affecting Colorado Lagoon (Lagoon) (e.g., dredging, recontouring the Lagoon side slopes, revegetation, storm drain improvements, and development of the walking trail and viewing platform), City Department of Parks, Recreation, and Marine staff will provide local residents and neighborhood groups with information regarding the availability of other nearby City parks and facilities that offer swimming, picnicking, and other passive recreation opportunities enjoyed at the Lagoon. Information regarding Lagoon closures will also be made available on the City's Web site, through outreach to the neighborhood groups, and other means as appropriate.</p> <p><b>REC-2</b> The City of Long Beach Director of Parks, Recreation, and Marine will ensure that during construction activities affecting Marina Vista Park (such as culvert improvements, channel construction, and activities affecting the sports fields), City Department of Parks, Recreation, and Marine staff will determine what specific neighborhood groups and/or league uses of Marina Vista Park will be temporarily affected by construction activity, and will coordinate with these groups and local residents to identify other nearby available City parks and other facilities to meet the temporarily displaced recreation uses, including the Summer Concert Series. City staff also will provide information to City residents when swimming is closed at the Lagoon as a result of project construction activities on the City's Web site, through outreach with neighborhood groups, and other means as appropriate.</p>	
<b>TRAFFIC AND CIRCULATION</b>			
<p>Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the v/c ratio on roads, or congestion at intersections).</p>	<p>Construction activity is anticipated to add approximately 90 daily passenger car equivalent (PCE) trips, 28 a.m. peak-hour PCE trips, and 30 p.m. peak-hour PCE trips in Phase 1, and 34 daily PCE trips, 4 a.m. peak-hour PCE trips, and 14 p.m. peak-hour PCE trips in Phase 2. All of the truck trips would travel on East 7th Street. The addition of up to 32 p.m. peak-hour, construction-related, short-term trips would add less than one-half of 1 percent of the capacity of the roadway during the peak hour. In addition, most truck trips would occur during the day, when ambient traffic is less. Therefore,</p>	<p><b>TR-1</b> Prior to the issuance of a grading permit for each of the two construction phases, the City of Long Beach shall, under the direction of the City of Long Beach Traffic Engineer, design and implement a construction area traffic management plan. The plan shall be designed by a registered Traffic Engineer and shall address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes. The plan shall identify the routes that construction vehicles will use to access the site, the hours of construction traffic, traffic controls and detours, and off-site vehicle</p>	<p>Less Than Significant</p>

Threshold of Significance	Potential Environmental Impact	Mitigation Measure <sup>1</sup>	Level of Significance After Mitigation
<p>Cumulative construction impacts could occur if TADP and project construction occur concurrently.</p>	<p>construction of the proposed project would not cause an increase in traffic that is substantial in relation to the existing traffic load of the street system. In addition, construction traffic effects are temporary during the period of construction, and the number of construction workers and truck trips would vary depending on the specific construction activities.</p> <p>During construction of the two at-grade bridges spanning the open channel (Phase 2), East Colorado Street will be closed between East Eliot Street and Panama Avenue during construction of the Colorado Street Bridge, and East Eliot Street (which contains a Class I bikeway) will be closed between East Colorado Street and Boathouse Lane during construction of the Eliot Street Bridge. Construction of the bridges would occur one at a time so as to provide adequate circulation during construction. Construction is anticipated to take approximately 6 months for each bridge. When East Colorado Street is closed, East Eliot Street would serve as an alternate route. Similarly, when East Eliot Street is closed, East Colorado Street would be the alternate route. Likewise, when the East Eliot Street bikeway is closed, the existing bikeways on East Appian Way would serve as alternate routes. the closure of either East Colorado Street or East Eliot Street for a temporary period (6 months for each road consecutively) during construction of the open channel and bridges is not anticipated to adversely affect traffic. However, to ensure that impacts related to construction traffic are less than significant, implementation of a construction management plan would be required to minimize traffic impacts to the local circulation system in the area.</p>	<p>staging areas. The plan shall also require the City to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt.</p> <p>See Mitigation Measure TR-1 above.</p> <p><b>TR-2</b> Prior to the issuance of a grading permit for each of the two construction phases, the City of Long Beach shall, under the direction of the City of Long Beach Traffic Engineer, address the truck route and circulation effects of TADP construction, should the TADP be under construction in the vicinity of the project site during either Phase 1 or Phase 2 construction of the Colorado Lagoon Restoration project. The coordination shall identify the construction routes, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas, and address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes.</p>	
<p>Exceed, either individually or cumulatively, a LOS standard established by the county congestion management agency for designated roads or highways.</p>	<p>The intersection of East 7th Street and PCH has an existing LOS of F in the a.m. and p.m. peak hours (which is below the City's established threshold of LOS D as the minimum operating level for roadway segments and intersections) and is located in the project vicinity and along the haul route. To ensure the proposed project does not further impacts the intersection of East 7th Street and PCH, Mitigation Measure TR-1, has been included to reduce the impact of construction traffic on the local circulation system.</p>	<p>See Mitigation Measure TR-1 above.</p>	<p>Less Than Significant</p>
<p>Result in inadequate parking capacity.</p>	<p>The west parking lot provides 56 parking spaces, which is adequate to accommodate the parking demand while providing 18 surplus parking spaces. In addition, on-street parking will remain available on East Colorado Street and East 6th Street. In addition, it is assumed that parking will continue to be available at the off-site parking lot to the south; however, the City does not control, nor guarantee, parking for Lagoon use at this off-site location. Even without availability of the off-site parking lot, the parking surveys and zoning code requirements demonstrate that removal of the north shore parking lot will not cause a parking deficiency or overcrowding of the remaining parking areas.</p>	<p>No mitigation is warranted.</p>	<p>Less Than Significant</p>

## 2.0 INTRODUCTION

### 2.1 INTRODUCTION

This Environmental Impact Report (EIR) has been prepared to evaluate specific environmental impacts associated with the proposed Colorado Lagoon Restoration project (the proposed project) in the City of Long Beach (City). The City is the Lead Agency with authority to prepare this EIR and, after completion of the public comment/response process, is the Certifying Agency for the Final EIR. This EIR is intended to serve as an informational document to be considered by the City and the Responsible Agencies during deliberations on the proposed project. The anticipated project approvals associated with the proposed project are described in Section 3.0, Project Description.

The City determined that the proposed project may have a significant effect on the environment and that an EIR would be required to more fully evaluate potential adverse environmental impacts that may result from the proposed project. As a result, this EIR was prepared in accordance with the California Environmental Quality Act of 1970 (CEQA), as amended (Public Resources Code Section 21000 et seq.), and the State CEQA Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Section 15000 et seq.). This EIR also complies with the procedures established by the City of Long Beach for implementation of CEQA.

Questions regarding the preparation of this document and City review of the project should be referred to:

**City of Long Beach**  
Department of Development Services  
333 West Ocean Boulevard, 5th Floor  
Long Beach, California 90802  
Attention: Craig Chalfant  
(562) 570-6368

### 2.2 PURPOSE AND TYPE OF EIR/INTENDED USES OF EIR

The purpose of this EIR is to inform decision-makers and the general public of any significant adverse environmental effects associated with the proposed actions and to identify appropriate and feasible mitigation measures and alternatives that may be adopted to minimize or eliminate any significant project or cumulative effects. This EIR also includes an evaluation of reasonable alternatives to the proposed project, including:

- No Project/No Development Alternative
- Reduced Project Alternative
- Recreation Alternative/No Open Channel, Develop a Parallel Culvert Alternative
- Alternative Channel Alignment

The CEQA Guidelines Section 15126.6(f)(2)(A) states, “The key question [with regard to alternative locations] and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” The proposed project is location-specific, as the project is to upgrade an existing water body and associated lands and habitat. Because the project is specific to the Colorado Lagoon (Lagoon), there are no alternative locations for the proposed project, which consists of improvements to the Lagoon. Therefore, the Draft EIR does not include analysis regarding alternative locations.

The approach of this Project EIR is consistent with Section 15161 of the State CEQA Guidelines. A “Project EIR” focuses primarily on the changes in the environment that would result from transition of the project site in its current condition to development and operation of the proposed project. Therefore, this EIR examines all phases of the project, including site preparation, construction, and ongoing operation of the project.

Pursuant to Section 15105 of the State CEQA Guidelines, the Draft EIR for the Colorado Lagoon Restoration project will be circulated for public review and comment for a period of 45 days.

### **2.3 NOTICE OF PREPARATION AND AREAS OF CONTROVERSY**

On November 7, 2007, a Notice of Preparation (NOP) was distributed by the City for the proposed Colorado Lagoon Restoration project. The State of California Clearinghouse issued a project number for the Draft EIR (SCH No. 2007111034). In accordance with State CEQA Guidelines Section 15082, the NOP was circulated to the agencies and individuals listed in Appendix A for a period of 30 days, during which time written comments were solicited pertaining to environmental issues/topics that the Draft EIR should evaluate. The NOP and responses to the NOP from agencies, organizations, and individuals are included in Appendix A of this EIR.

The City held a public scoping meeting on November 14, 2007, to present the proposed project and to solicit input from interested individuals regarding environmental issues that should be addressed in this Draft EIR. Major issues and concerns raised at the scoping meeting included: (1) traffic concerns related to use of the Lagoon’s north shore; (2) water and habitat concerns related to the existing conditions; (3) project impacts to recreation within Marina Vista Park; (4) project impacts to areas that have been historically used near the Lagoon; (5) trash around the Lagoon; (6) safety concerns related to development of the open channel linking the two water bodies; (7) transportation and disposal of dredge materials; and (8) capacity in the sewer lines for the low-flow diversion.

The Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts of the proposed project.

## **2.4 EFFECTS FOUND NOT TO BE SIGNIFICANT**

As required by State CEQA Guidelines, Section 15128, this EIR identifies the potential effects of the proposed project that were determined to be significant and adverse. The proposed project would not result in adverse impacts related to the following: Agricultural Resources, Mineral Resources, and Population and Housing. These issues are briefly discussed below along with reasons they were determined not to be significant. For further information and additional discussion, please refer to the Initial Study and NOP in Appendix A of this EIR.

### **2.4.1 Agricultural Resources**

The project site is located in an urbanized area and is not used for agricultural purposes. The project is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Since agricultural uses are not present, the proposed project does not conflict with existing zoning for agricultural uses or any use protected by a Williamson Act contract. The proposed project would not convert farmland to a nonagricultural use. Likewise, the proposed project site would not contribute to environmental changes that could result in the conversion of farmland to nonagricultural use. Therefore, this issue is not evaluated further in this EIR.

### **2.4.2 Mineral Resources**

The proposed project site is not within a mineral resource recovery site designated on a local General Plan, Specific Plan, or other land use plan. The project site contains no known mineral resources that would be of value to the region or to the residents of the State of California. Although oil extraction activity occurs within the southeast portion of Long Beach, there is no indication that oil is buried beneath the surface of the project site. Further, the proposed project does not involve the extraction of minerals and would not impact any known mineral resource recovery sites. Therefore, the proposed project is not expected to result in a loss of availability of a known and valuable mineral resource, nor would the proposed project result in a loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan. Therefore, this issue is not evaluated further in this EIR.

### **2.4.3 Population and Housing**

The proposed project is not a residential development and will not result in the creation of new jobs. No housing units are located on the project site, and housing displacement impacts will not occur. The project does not provide infrastructure capacity enhancements or other improvements that could induce population growth. Rather, the proposed project is expected to better serve the existing and future recreational and environmental demands of the community. Therefore, this issue is not evaluated further in this EIR.

## **2.5 FORMAT OF THE EIR**

Pursuant to State CEQA Guidelines Section 15120(c), this EIR contains the information and analysis required by Sections 15122 through 15131. Each of the required elements is covered in one of the sections described below.

### **2.5.1 Section 1.0: Executive Summary**

Section 1.0 contains the Executive Summary of the EIR document, listing all significant project impacts, mitigation measures that have been recommended to reduce any significant impacts of the proposed project, and the level of significance of each impact following mitigation. The summary is presented in a matrix (tabular) format.

### **2.5.2 Section 2.0: Introduction**

Section 2.0 contains a discussion of the purpose and intended use of the EIR, a background on project initiation and the NOP, and areas of controversy known to the Lead Agency, including issues raised by the public. A summary discussion of effects found not to be significant and, therefore, not included in the EIR analysis is also included in this section.

### **2.5.3 Section 3.0: Project Description**

Section 3.0 includes a discussion of the project's geographical setting, the history of the project site, and the project's goals, objectives, characteristics, and components.

### **2.5.4 Section 4.0: Environmental Analysis, Impacts, and Mitigation Measures**

Section 4.0 includes an analysis of the project's environmental impacts. It is organized into topical sections, including Aesthetics, Air Quality, Biological Resources, Cultural and Paleontological Resources, Geology and Soils, Hazardous Materials, Hydrology and Water Quality, Land Use, Noise, Public Services and Utilities, Transportation and Circulation, and Recreation. The environmental setting discussions describe the "existing conditions" of the environment on the project site and in the vicinity of the site as they pertain to the environmental issues being analyzed (Section 15125 of the State CEQA Guidelines).

The project impact discussions identify and focus on the significant environmental effects of the proposed project. The direct and indirect significant effects of the project on the environment are identified and described, giving due consideration to both the short-term and long-term effects, as necessary (Section 15126.2[a] of the State CEQA Guidelines).

Cumulative impacts are based on the build out of the project and the surrounding area, including all other known proposed projects in the surrounding area.

The discussions of mitigation measures identify and describe feasible measures that could minimize or lessen significant adverse impacts for each significant environmental effect identified in the EIR (Section 15126[c] of the State CEQA Guidelines). The level of significance after mitigation is reported in each section. Unavoidable adverse effects are identified where mitigation is not expected to reduce the effects to insignificant levels.

### **2.5.5 Section 5.0: Alternatives to the Proposed Project**

In accordance with CEQA, the alternatives discussion in Section 5.0 describes a reasonable range of alternatives that could feasibly attain the basic objectives of the project and that are capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance. Alternatives analyzed in Section 5.0 include: No Project/No Development Alternative; Reduced Project Alternative; Recreation Alternative/No Open Channel, Develop a Parallel Culvert Alternative; and Alternative Channel Alignment.

### **2.5.6 Section 6.0: Long-Term Implications of the Project**

Section 6.0 includes CEQA-mandated discussions required by Section 15126 of the State CEQA Guidelines regarding: (a) significant irreversible environmental changes that would result from implementation of the proposed project, and (b) growth-inducing impacts of the proposed project.

### **2.5.7 Section 7.0: Mitigation Monitoring and Reporting Program**

Section 7.0 provides a list of all proposed project mitigation measures, defines the party responsible for implementation, and identifies the timing for implementation of each control measure.

### **2.5.8 Section 8.0: Inventory of Unavoidable Adverse Impacts**

Section 8.0 describes those significant adverse environmental impacts for which either no mitigation or only partial mitigation is feasible.

### **2.5.9 Sections 9.0, 10.0, and 11.0**

Sections 9.0, 10.0, and 11.0 respectively provide: the organizations and persons contacted during preparation of the Draft EIR; the Draft EIR preparers, technical report authors, and other experts included in preparation of the Draft EIR; and the references used by the authors.

## **2.6 INCORPORATION BY REFERENCE**

As permitted in Section 15150 of the State CEQA Guidelines, this EIR has referenced several technical studies, analyses, and reports. Information from the documents that have been incorporated by reference has been briefly summarized in the appropriate section(s) of this EIR along with a description of how the public may obtain and review these documents. The documents and other sources that have been used in the preparation of this EIR are listed below.

- Colorado Lagoon Restoration Feasibility Work Program. City of Long Beach. December 2003.
- Colorado Lagoon Restoration Feasibility Study Final Report. Moffatt & Nichol. February 4, 2005.
- Colorado Lagoon Watershed Impacts Report/Restoration Feasibility Study. HDR and CGvL. July 30, 2004.

- Opportunities and Constraints Report – Colorado Lagoon Restoration Feasibility Study. Moffatt & Nichol. September 15, 2004.
- Development and Analysis of Restoration Alternatives – Colorado Lagoon Restoration Feasibility Report. Moffatt & Nichol. November 11, 2004.
- List of Preferred Alternatives. Moffatt & Nichol. 2004.
- Habitat assessment for the Colorado Lagoon restoration feasibility study for the City of Long Beach. Prepared by Chambers Group, Inc. for Moffat & Nichol, 25 p. plus appendices. 2004.

Each of the resources listed above is a series of feasibility studies prepared to evaluate potential restoration opportunities at the Lagoon. The resources are sequential and each one builds upon the other. The purpose of the Colorado Lagoon Restoration Feasibility Studies was to evaluate and recommend feasible opportunities to restore the marine ecosystem and support safe recreation while improving water and sediment quality and managing storm water in the Lagoon. The Habitat Assessment listed above was prepared in accordance with the feasibility studies. The purpose of the Habitat Assessment was to describe the existing biological resources and habitat quality at the Colorado Lagoon, and to identify potential opportunities to improve the native habitat. These reports were used as the basis of the project description development for this EIR.

- Termino Avenue Drain Project Draft Environmental Impact Report. County of Los Angeles Department of Public Works. February 2007.
- Colorado Lagoon Culvert Inspection Report. Global Inshore Inc. April 12, 2005.
- Termino Avenue Drain Hydrologic and Water Quality Analyses Report. Everest International Consultants, Inc. February 2007.
- Recirculated Draft Termino Avenue Drain Project Environmental Impact Report. April 2008.

Each of the resources listed above was used to prepare the EIR prepared by the County of Los Angeles (County) to evaluate potential environmental effects that may result from the proposed Termino Avenue Drain Project (TADP). The TADP is a storm drain improvement project designed to improve flood control in the area and improve water quality into receiving waters. The TADP redirects flows from four drains on the south shore of the Lagoon to Marine Stadium. Therefore, the TADP EIR provides information on the existing hydrologic conditions of the Lagoon and the conditions after implementation of the TADP. Therefore, applicable hydrologic information was used as the basis of analysis for this EIR. Based on comments received during the public review period for the February 2007 TADP EIR, revisions were made to portions of the TADP EIR, and those modified portions are being recirculated for public review pursuant to Section 15088.5(c) of the CEQA Guidelines. Specifically, the project description has been revised and new significant information has been added to the EIR regarding the potential for green sea turtles to occur within the TADP area, which required further analysis and discussion. In addition, supplemental information related to air quality and global climate change was provided in the Recirculated EIR.

- Draft Human Health Risk Assessment. Prepared by Mearns Consulting Corporation. April 2008.

A Human Health Risk Assessment (HHRA) was prepared for the proposed project site. The HHRA was prepared to assess risks and hazards to human health due to exposure to the metal lead from excavated soils from the proposed project components. This report is used in this EIR to draw conclusions on risks to construction works and park users and on the acceptability of the reuse of soils on site.

- Alamitos Bay Marina Renovation Project, Marine Biological Impact Assessment. Coastal Resources Management, Inc. (CRM). 2007.

CRM was retained by the City to conducted marine biological surveys in Alamitos Bay, Long Beach, California, to prepare a project environmental assessment focused on eelgrass (*Zostera marina*) habitat, an Essential Fish Habitat (EFH) analysis, and last, a comprehensive marine resources Environmental Assessment for the Alamitos Bay Marina Rehabilitation Project. Information presented in this report, specifically in regards to the Green Turtle, was used to draw conclusions for the presence of the Green Turtle in Marine Stadium and potential impacts to this species from the proposed project.