COASTAL CONSERVANCY

Staff Recommendation
January 20, 2010

COLORADO LAGOON RESTORATION
DREDGING OF CONTAMINATED SEDIMENTS

File No. 07-032-02
Project Manager: Christopher Kroll

RECOMMENDED ACTION: Authorization to disburse up to $690,997 in grant funds from the National Oceanic and Atmospheric Administration to the City of Long Beach to dredge, treat, and dispose of contaminated sediments from Colorado Lagoon in Long Beach, Los Angeles County.

LOCATION: City of Long Beach, Los Angeles County (Exhibit 1)

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location Map
Exhibit 2: Existing Conditions
Exhibit 3: Habitat Improvements
Exhibit 4: Water/Sediment Quality Improvements
Exhibit 5: Project Letters
Exhibit 6: Final Environmental Impact Report (Separate CD)
Exhibit 7: FEIR Addendum
Exhibit 8: Long Beach resolution certifying the FEIR, adopting mitigation monitoring, and making a statement of overriding considerations
Exhibit 9: City Council resolution certifying the FEIR Addendum and adopting findings for the Addendum

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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed six hundred ninety thousand nine hundred ninety-seven dollars ($690,997) to the City of Long Beach for the dredging, treatment and disposal of contaminated sediments at Colorado Lagoon.

Prior to disbursement of Conservancy funds, the City of Long Beach shall submit for the review and written approval of the Conservancy's Executive Officer:

1. A detailed work program, including budget and schedule.
2. The names and qualifications of any contractors to be employed on the project.
3. A sign plan to acknowledge Conservancy funding for the project.
4. Evidence that all permits and approvals for this project have been issued.

The city shall timely implement all requirements of the Environmental Impact Report and Mitigation Monitoring and Reporting Program pertinent to the work that the Conservancy is funding."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with Chapter 6 of the Public Resources Code (Sections 31251-31270), regarding the enhancement of coastal resources.
2. The proposed project is consistent with the current Project Selection Criteria and Guidelines.
3. Consistent with Public Resources Code Section 31252, Colorado Lagoon is identified in the City of Long Beach's certified Local Coastal Program as an area requiring public action to resolve an existing resource protection problem.
4. The Conservancy has independently reviewed and considered the "Final Environmental Impact Report – Colorado Lagoon Restoration Project," and the Environmental Impact Report Addendum, adopted by the City of Long Beach on October 14, 2008, and October 7, 2010, respectively, under the California Environmental Quality Act, and attached to the accompanying staff recommendation as Exhibits 6 and 7, respectively; collectively "the EIR."
5. With respect to the portion of the project to which the Conservancy will contribute funding, dredging of the western arm, the EIR identifies potentially significant effects, including some possible cumulative effects, in the subject areas of air quality, biological resources, cultural and paleontological resources, hydrology and water quality, hazards and hazardous materials, noise, public services and utilities, recreation and traffic and circulation. With respect to these effects, the Conservancy, as a responsible agency under CEQA, finds that the project avoids, reduces or mitigates the possible significant environmental effects to a level of insignificance, and that there is no substantial evidence that the project will have a significant effect on the environment, as defined in 14 California Code of Regulations Section 15382.

6. The funded activity will help implement the Conservancy's Strategic Plan goals and objectives, specifically Goal 5, Objective 5B (restoration of significant coastal habitats) and Goal 6, Objective 6F (improvement of water quality to benefit coastal resources) by removing contaminated sediment and thereby enhancing habitat and recreational opportunities.

PROJECT SUMMARY:

Staff is recommending that the Conservancy provide a grant of $690,997 to the City of Long Beach for the dredging, treatment and disposal of contaminated sediments from the West Arm of Colorado Lagoon. This grant will come from funds provided to the Conservancy by the National Oceanic and Atmospheric Administration (NOAA) for projects on the Southern California Wetlands Recovery Project Work Plan.

The proposed project will implement recommendations identified in the 2005 Colorado Lagoon Restoration Feasibility Study (RFS), which was funded by a grant from the Conservancy. The project is part of a larger multi-million dollar effort to restore the ecological health of the lagoon based on the findings in the RFS (Exhibit 3). The City of Long Beach has successfully secured over $11 million in funding for implementation of this restoration project, including grants from the State Water Resources Control Board, U.S. Army Corps of Engineers (Army Corps), and the San Gabriel & Lower Los Angeles Rivers and Mountains Conservancy (RMC).

The lagoon restoration project has been divided into two phases. Phase I involves improvements at Colorado Lagoon and consists of the following elements:

- Dredging and removal of up to 72,000 cubic yards of sediment
- Re-contouring of the lagoon banks
- Diversion of low-flow runoff to the sanitary sewer
- Installation of trash collection devices in three major storm drains
- Creation of two vegetated bioswales
- Clearing of the tidal culvert
- Demolition of the northern paved parking lot, access road, and restroom
- Re-vegetation of the former parking area and lagoon banks
- Construction of public access trails
- Replacement of existing observation pier

Work on the Phase I components of the project began in September 2009 and is currently underway. The Phase I project will dramatically improve water quality and habitat values in Colorado Lagoon. The proposed authorization would fund a portion of Phase I.

As shown in Exhibits 3 and 4, Phase II will expand the tidal connection between the lagoon and the ocean via a connection to Marine Stadium and Alamitos Bay. That connection will consist of construction of an open channel between the lagoon and Marine Stadium. This will increase tidal circulation in the lagoon.

In 1998, Colorado Lagoon was listed under Section 303(d) of the federal Clean Water Act as an impaired water body for lead, zinc, sediment toxicity, chlordane, DDT, dieldrin, PAHs, and PCBs. In 2006, Colorado Lagoon was also listed for bacteria. Beach

warnings due to elevated bacteria are frequent; the lagoon consistently receives failing grades on the Heal the Bay Beach Report Card. For several decades, pollutants entering the lagoon through the four major storm drain outfalls have precipitated out of the water column and settled in the sediment on the lagoon floor. Construction of the low-flow diversion and trash trap system will help prevent the recontamination of the lagoon by diverting low flow urban runoff to the City's sanitary sewer. Construction of this state-of-the-art system was completed in November 2010.

The next major step in the restoration effort is to remove, treat and dispose of contaminated sediments (Exhibit 4). Conservancy funding would help to remove approximately 33,000 cubic yards of contaminated sediments from the lagoon, which will help to restore and enhance this critical wetland habitat. It is estimated that the layer of contaminated sediment extends 4 to 5 feet in the West Arm. The excavation design calls for removing 6 feet of sediment at the uppermost portion of the West Arm, with the excavation depth gradually decreasing towards the Central Lagoon. The depth of excavation at the deepest point would be 19 feet below mean sea level. The excavation area will be as wide as possible to remove the maximum quantity of sediment while maintaining stable side slopes around the lagoon perimeter.

Four possible methods of dredging were discussed in the City's 2010 Addendum to the 2008 Environmental Impact Report (EIR) for the project: one dry method and three wet dredging methods. Dry dredging would require de-watering of the West Arm using a temporary coffer dam. The City has selected wet dredging as its preferred method but the ultimate choice of dredging method will be made once all regulatory reviews are completed. In wet dredging the dredge area is not drained of water and, to protect water quality in the rest of the lagoon, a silt curtain is used to separate the dredged from non-dredged areas. Clamshell/bucket-type dredging equipment will be used and temporary piers or berms will be constructed into the lagoon to allow the dredger to access areas of the lagoon not within reach from the shoreline.

The dredge materials will be temporarily stockpiled at the north shore parking lot until they are partially dewatered. While being stockpiled, the sediment will be treated with lime, cement, and other chemical reagents to reduce the toxicity of the lead and zinc in the sediment to a non-hazardous state. Plastic tarps and containment structures will be placed under and around the stockpile area to minimize runoff back into the lagoon. Once the treatment is complete, trucks will haul the dredged material to the Middle Harbor fill project at the Port of Long Beach.

Since 2005, the City has received grants from the State Water Resources Control Board, Army Corps, Port of Long Beach, and the RMC to begin to implement the recommendations of the RFS. An American Recovery and Reinvestment Act grant from the State Water Resources Control Board was used to: 1) construct the low-flow diversion structures; 2) clean out the culvert; and 3) construct a bioswale and trash separation devices within the three major storm drains. In addition, the State Water Resources Control Board is contributing $1.8 million and the Army Corps is contributing up to $1 million for the dredging effort. The RMC helped fund the necessary environmental documentation and will contribute up to $1,100,000 to the dredging project. The Port of Long Beach helped fund the environmental documentation and provided an emergency loan to fill an unanticipated budget shortfall for the low-flow diversion system. As

discussed below, the estimated cost of dredging and recontouring the west lagoon arm is approximately $4.6 million. Conservancy funds would be used for the construction (including mobilization) and construction management components of the dredging project.

Site Description: Colorado Lagoon is a 15-acre tidal lagoon in the City of Long Beach and is connected to Alamitos Bay and the Pacific Ocean through a tidal box culvert to Marine Stadium (Exhibit 1). The lagoon is heavily visited: swimming, fishing, picnicking, and wildlife viewing are popular recreational activities at the lagoon. Recreation Park borders the north side of the lagoon and has a nine-hole and eighteen-hole golf course, a baseball and softball field, casting pond, picnic area, dog park, lawn bowling and play ground. Residences and three public schools surround the other three sides of the lagoon.

Colorado Lagoon supports an estuarine ecosystem - 11 of the 18 common southern California salt marsh plants are found at the lagoon. Southern tar plant, a special status species, and eelgrass colonies exist in shallow areas of the lagoon and Marine Stadium. A variety of fish species find spawning and rearing habitat in the lagoon, including juvenile halibut, topsmelt, perch, white sea bass, bottom dwelling gobies and stingrays. Additionally, juvenile clams have been found in the lagoon. The California brown pelican and California Least Tern, special status species, as well as many other species of waterfowl, gulls, and shorebirds visit and dwell in the tidal habitats.

Since the lagoon is a natural low point in the watershed, it has historically accumulated pollutants deposited over the entire watershed that are washed into the storm drains by storm flows and dry weather runoff. In addition to tidal influence, the lagoon receives the majority of its inflow from five reinforced concrete pipes draining storm water and dry weather runoff from the watershed.

Colorado Lagoon's watershed is 1,172 acres comprised primarily of suburban residential development with some parklands, two golf courses and a small amount of commercial and institutional land use. Urban runoff has generally contained many pollutants such as heavy metals, pesticides, petroleum hydrocarbons, nutrients, and bacteria. As noted above, the lagoon was listed in 1998 and 2006 under Section 303(d) of the Clean Water Act as an impaired water body.

Project History: Historically**,** Colorado Lagoon was part of the 2400-acres of the Los Cerritos wetlands at Alamitos Bay. In 1923, the Channel Club dredged a mudflat to form Colorado Lagoon. The 1932 Los Angeles Olympic Committee chose the lagoon for rowing events. In 1968, the City of Long Beach remodeled Marine Stadium for the Olympic Rowing and Canoeing Team Trials. At that time, the north end of the Olympic rowing course was filled as part of construction for the then proposed Pacific Coast Freeway thereby separating Colorado Lagoon from Marine Stadium. The existing culvert was installed to link the lagoon with Marine Stadium, Alamitos Bay, and the Pacific Ocean.

The ecological health of the lagoon has been deteriorating for many decades. Residents of Long Beach and neighboring communities have long swum and fished in the lagoon but there has always been concern about the poor water quality. In 1999, a group of residents

formed the Friends of Colorado Lagoon (FOCL) specifically to advocate for restoration of the lagoon.

In January 2001, FOCL and the City both submitted proposals to the Southern California Wetlands Recovery Project (WRP) for funding for a restoration plan for the lagoon. Both proposals described the need for a study of the lagoon that would address the lagoon's poor water quality and declining habitat value. In June 2001, the WRP Board of Governors added the project to the work plan.

The Conservancy approved a grant to the City of Long Beach in December 2002 to prepare a multi-objective restoration feasibility study. The study was completed in February 2005. In May 2007, the Conservancy approved a grant to the City to complete final design development of the restoration project components identified in the feasibility study.

For many years, the City of Long Beach and County of Los Angeles have been laying the groundwork to address flooding and water quality issues in the Colorado Lagoon watershed. Los Angeles County Department of Public Works is in the process of replacing an existing County storm drain that drains into Colorado Lagoon. The storm drain, referred to as the Termino Avenue Drain, is being replaced in order to alleviate flooding that occurs upstream of the lagoon. This project includes diversion of all Termino Avenue Drain flows and approximately 25% of Project 452, the other main storm drain flowing into the lagoon, away from Colorado Lagoon and into Marine Stadium. This project also includes a dry weather diversion component. The County expects to complete construction by 2012.

PROJECT FINANCING:

West Arm Dredging -

Coastal Conservancy (NOAA Grant)	**$ 690,997**
State Water Resources Control Board	1,800,000
U.S. Army Corps of Engineers	1,000,000
Rivers & Mountains Conservancy	1,100,000
TOTAL	$4,590,997

Phase I Project Budget –

West Arm dredging	$4,590,997
Low-flow diversion	4,544,686
Central Lagoon/North Arm dredging	2,500,000
Access trails/bioswale/demolition	1,250,000
Revegetation	450,000
TOTAL	$13,335,683

With the Conservancy grant, the City would have all the funding necessary to complete the West Arm dredging. The City has already secured funding for the low-flow diversion. The City is still seeking funding for the remaining components of the Phase I project.

The anticipated source of Conservancy funds is from a grant to the Conservancy from the National Oceanic and Atmospheric Administration (NOAA) Community Habitat Restoration Partnership Grant. The majority of the funds from this Partnership are dedicated to implementing restoration projects on the WRP Work Plan that protect and enhance NOAA Trust Resources. Colorado Lagoon Restoration is a project on the WRP Work Plan. NOAA staff has selected this project as a top priority for the use of these grant funds.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code (Sections 31251 *et seq*.) relating to coastal resource enhancement. The proposed project is consistent with Section 31251, which allows the Conservancy to award grants to public agencies for the purpose of enhancement of coastal resources that have suffered loss of natural and scenic values. Colorado Lagoon is a degraded water body and the proposed project would be part of a larger project to restore and enhance the natural and scenic values of the lagoon.

The proposed project is consistent with Section 31252, which requires that all areas proposed for resource enhancement by a state agency or local public agency shall be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource protection problems. The City of Long Beach's certified Local Coastal Program (LCP) contains a policy specifically calling for dredging of the lagoon to remove contaminated sediments and improve water quality, as discussed below.

Under Section 31253, the Conservancy may provide up to the total cost of any coastal resource enhancement project. Consistent with this section, the amount of funding provided by the Conservancy has been determined by the total amount of funding available for coastal resource enhancement projects, the urgency of the project relative to other eligible resource enhancement projects and other factors used by the Conservancy to determine project eligibility and priority. The City of Long Beach has secured $3,900,000 in funding from other sources to implement the proposed project and with this grant would be able to complete this phase of the restoration project. Restoration of Colorado Lagoon has been a priority project for the Conservancy and the Southern California Wetlands Recovery Project for several years.

CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVES:

Consistent with **Goal 5, Objective 5B** of the Conservancy's 2007 Strategic Plan, the proposed project will lead to restoration and enhancement of a significant coastal habitat, Colorado Lagoon.

Consistent with **Goal 6, Objective 6F** of the Conservancy's 2007 Strategic Plan, the proposed project will lead to the improvement of water quality to benefit coastal resources by removing contaminated sediments from Colorado Lagoon.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on June 4, 2009, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support from the public:** The proposed project has widespread public support from such groups as Friends of Colorado Lagoon, Audubon Society, and the Belmont Heights Neighborhood Association. FOCL has been advocating for restoration of the lagoon for many years (Exhibit 5).
4. **Location:** The proposed project would be located within the coastal zone **of the Ci**ty of Long Beach in Los Angeles County.
5. **Need:** The City of Long Beach has secured almost all the funding needed for the dredging of the West Arm of the lagoon. Conservancy funding is needed to allow the City to complete this project.
6. **Greater-than-local interest:** Colorado Lagoon is a tidally influenced marine ecosystem and supports a number of estuarine dependent species. The lagoon's beaches receive approximately 50,000 visitors a year.
7. **Sea level rise vulnerability:** The proposed authorization would fund a portion of the dredging component of a larger lagoon restoration project. The dredging component of the project will remove accumulated sediments from the West Arm of the lagoon. The benefits of this project will not be impacted by sea level rise. The City is currently preparing an addendum to the 2008 Environmental Impact Report for this project that will address the restoration project's vulnerability to sea level rise.

Additional Criteria

9. **Resolution of more than one issue:** The proposed project will improve the lagoon's water quality and habitat as well as benefit continued public recreational use of the lagoon.
10. **Leverage:** See the "Project Financing" section above.

13. **Readiness:** The City intends to hire contactors and begin the work in the spring of 2011.

18. **Minimization of Greenhouse Gas Emissions:** The 2008 Environmental Impact Report does not address greenhouse gas emissions in great detail but does includes mitigation measures intended to reduce the release of emissions as part of construction involved in several elements of the larger restoration project. The CEQA section below discusses this issue in more detail.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The City of Long Beach has a Local Coastal Program (LCP) that was certified by the California Coastal Commission on July 22, 1980. An amendment to the LCP that amends the Resources Management Plan portion of the LCP as it relates to Colorado Lagoon was approved by Coastal Commission on January 14, 2010, and by th**e** Long Beach City Council on June 15, 2010. New policies added as part of the amendment and relevant to the proposed project include the following:

5.4 Restoration Implementation Regulations

Marine Resources and Environmentally Sensitive Habitat Areas

a. Colorado Lagoon is an environmentally sensitive habitat area that shall be restored and protected against any significant disruption of habitat values.

b. Native clam populations, and populations of other special interest wildlife species, shall be protected and enhanced by habitat restoration efforts.

e. The lagoon shall be dredged to remove contaminated sediments and to improve water circulation.

The proposed project is consistent with the policies of the City of Long Beach's certified LCP as amended on June 15, 2010.

COMPLIANCE WITH CEQA:

On October 14, 2008, the City of Long Beach, as the lead agency under the California Environmental Quality Act ("CEQA"), certified a comprehensive Final Environmental Impact Report, made findings, adopted a mitigation monitoring and reporting program, and adopted a statement of overriding considerations for the Colorado Lagoon Restoration Project. On October 7, 2010, the city planning commission adopted a CEQA Addendum to address information that has arisen since 2008 but does not require recirculation of a CEQA document. These documents (collectively, "the EIR") are Exhibits 6-8. The city filed a Notice of Determination for the 2008 EIR on October 15, 2008.

The aim of the overall Colorado Lagoon Restoration Project is to restore the site's ecosystem, improve the estuarine habitat, provide enhanced recreational facilities, improve water and sediment quality, and manage stormwater. In the current authorization, the Conservancy, as a responsible agency under CEQA, is funding dredging, treatment, and disposal of contaminated

sediments from the western arm of the wishbone-shaped lagoon.

The EIR includes analysis of the potential environmental effects of the portion of the project (sediment removal, transport, and disposal) to be funded by the Conservancy, and incorporates changes and mitigation measures to address the adverse effects. These effects are in the areas of air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, recreation, and transportation/traffic.

The mitigation measures direct construction actions to address emissions and dust; construction monitoring of sensitive environmental and cultural resources; establishment of buffers around sensitive wildlife areas; cultural resource mapping, testing, and protection; use of best management practices (BMPs) for water quality protection; and sediment testing. The mitigation measures required by the EIR are addressed in a Mitigation Monitoring and Reporting Program (MMRP) contained in the EIR. For each mitigation measure, the MMRP lists actions and implementation timing, the party responsible for implementing and for monitoring, and the monitoring schedule.

Staff believe that the Conservancy's project, with measures included in the project design and as mitigation, avoids, reduces or mitigates the potentially significant effects to a less than significant level (as discussed in more detail below).

The potential significant environmental effects identified in the 2008 EIR related to the Conservancy's current authorization and the corresponding mitigation measures are as follows:

Air Quality

The city's overall project will result in an exceedance of the South Coast Air Quality Management District (SCAQMD) daily threshold for NOx during construction. The mitigation measures adopted as part of the EIR include the following: 1) construction equipment will be low-emission and high energy efficiency as well as tuned and maintained; 2) construction equipment will be shut off when not in use; 3) construction will avoid peak hour traffic; 4) ridesharing and use of public transit will be encouraged for the construction workers; 5) dust suppression measures are required; 6) some sensitive facilities, e.g. preschool, beaches, will be closed or relocated when construction is within 250 feet; and 7) dredged materials will be located away from residential areas, the school, and the daycare facility. The city concluded that even after these mitigation measures are implemented, the overall project will still have significant and unavoidable short-term environmental impacts. However, the dredging portion of the project will not have significant unavoidable effects (see the discussion of the 2010 Addendum, below).

Biological Resources

Disturbance of the subtidal environment may contribute to the propagation of the invasive seaweed *Caulerpa taxifolia*. The City will ensure that a field survey is conducted 30 to 60 days prior to commencement of construction to determine the presence or absence of Caulerpa. The results of the survey will be conveyed to National Marine Fisheries Service (NMFS) and to the California Department of Fish and Game ("CDFG"), and, if any Caulerpa is identified in the project area, appropriate measures will be taken in accordance with Section F of the NMFS's Caulerpa Control Protocol.

Dredge and fill activities may result in loss of eelgrass and/or subtidal eelgrass habitat in the lagoon. The City will conduct a pre-construction eelgrass survey and the survey results will be mapped and provided to NMFS and CDFG. A post-construction survey will be conducted as well and if eelgrass is impacted by the project the City will mitigate the loss of eelgrass in accordance with the southern California Eelgrass Mitigation Policy at a minimum ratio of 1.2:1. The City will ensure that eelgrass mitigation is initiated within 135 days of project inception and an eelgrass transplant report will be completed following construction and monitoring reports at 6, 12, 24, 36, 48, and 60 months after completion of the transplant.

To avoid any adverse impacts of construction on sea turtles and marine mammals, the City will ensure that a qualified biologist is on site during construction to watch for the presence of turtles and marine mammals. The biologist will have the authority to halt construction if sea turtles or marine mammals are determined to be present in the project area. Construction workers will be given instructions on protection of sea turtles and marine mammals. The construction area will have a 500 meter buffer zone around it and all construction activity will be stopped if a sea turtle or marine mammal is sighted within the buffer zone. An incident report will be prepared by the biologist if any sightings occur during construction and the report will be provided to CDFG and NMFS within 24 hours.

Cultural and Paleontological Resources

Dredging in the lagoon may impact subsurface archaeological resources, if any (none are known). A qualified archaeologist will be retained and s/he will have the authority to temporarily halt or redirect work if archaeological resources are discovered during construction. If archaeological resources are identified during construction, standard professional archaeological practices will used to characterize the resources and mitigate any impacts.

If human remains are encountered during construction, the County Coroner will be notified and appropriate actions taken.

Hazards and Hazardous Materials

The sediments in the lagoon are known to contain hazardous substances such as lead and zinc. The project includes a procedure to treat the sediment after it is removed from the lagoon but before it is transported off site for disposal. In addition, the City will prepare a health and safety plan to ensure compliance with federal, state, and local regulations during construction. In addition, a soil management plan will be prepared consistent with the Office of Environmental Health Hazard Assessment (OEHHA) standards. OEHHA will review the plan and may proposed additional requirements that will be incorporated into the plan.

Hydrology and Water Quality

Temporary impacts to water quality will occur as a result of project construction. To address these impacts, the City will ensure that: 1) the project complies with the requirements of the State General Construction Activity National Pollution Discharge Elimination System (NPDES) permit; 2) erosion and sediment control best management practices (BMPs) are incorporated into the construction plans; 3) a storm water pollution prevention plan will be prepared and approved by the City prior to the issuance of any grading or building permits; 4) during dredging, specific measures will be used to control dispersion of contaminated sediments; 5) BMPs for all dredging activities have been incorporated into project plans.

Noise

Construction activities will result in a temporary increase in existing ambient noise levels in the project area. The City will limit loud construction activity to certain hours. In addition, mufflers will be used to reduce construction equipment noise and equipment will be placed so that noise is directed away from sensitive receptors. However, intermittent and temporary noise from construction activity for the city's overall project will, in some cases, remain significant and unavoidable. The activities funded by the Conservancy will not cause unavoidable, significant effects. (See the discussion of the 2010 CEQA Addendum, below.)

Public Services and Utilities

Project construction will require disposal of solid waste such as dredge material. The City will prepare a solid waste management plan to promote safe disposal of solid waste.

Recreation

Short-term construction-related effects will adversely impact recreational use of the project area during construction. To address this, the City will direct local residents and community groups to nearby city parks and facilities that offer swimming, picnicking, and other passive recreation activities engaged in at the lagoon.

Traffic and Circulation

Construction will generate approximately 90 daily passenger car equivalent (PCE) trips. The City will design and implement a construction area traffic management plan. The plan will address traffic control for the project. The city has concluded that, with mitigation measures, the traffic effects will not be significant.

Response to Public Comments

The City released the draft 2008 EIR for public comment on May 28, 2007, and received approximately 45 comment letters from individuals and organizations. Several comment letters raised concerns about recontamination of the lagoon once the contaminated sediments presently in the lagoon are removed as part of the restoration project. The City responded that project best management practices (BMPs) such as low flow diversion and bioswales and implementation of the Long Beach Stormwater Management Plan and development and implementation of total maximum daily loads (TMDLs) for various contaminants currently entering the lagoon will ultimately reduce "total loading" to the lagoon and thereby significantly reduce the risk of "recontamination" of the lagoon. In addition, the City revised mitigation measure WQ-9 to require weekly monitoring of sediment quality for at least three years.

2010 CEQA Addendum

In September 2010, the city prepared a CEQA Addendum for its project in order to review changes to the project and to existing conditions that have occurred since the 2008 EIR was adopted, including changes to the CEQA Guidelines regarding climate change, but not requiring a supplemental EIR. The City planning commission approved the Addendum on October 7, 2010, finding no substantial changes to the proposed project or surrounding circumstances that would require major revisions to the 2008 EIR, and no new information of substantial importance requiring more than the Addendum. (Since 2008, the city has also obtained a coastal development permit and a Water Quality Certification from the Los Angeles Regional Water Quality Control Board (LA RWQCB). The Corps of Engineers also issued a Nationwide Permit Authorization for the restoration component of the project.) On November 16, 2010, the City

Council denied an appeal of the Planning Commission approval of the Addendum and upheld the Commission's decision to approve the Addendum (Exhibit 9).

With respect to the dredging, treatment and hauling of spoils in the western arm that the Conservancy will help fund, the Addendum indicates that the amount of spoils removed will increase from 16,000 cubic yards to 26,000 cubic yards of hazardous material and 3,000 cubic yards of non-hazardous material; recent testing has shown more contamination, and more stringent targets by the LA RWQCB. An additional two variants of dredging approach have also been considered. Spoils will now be treated on site and sent to a landfill at the Port of Long Beach by truck or barge. The extension of the dredging period will increase from ten months to fifteen, meaning a longer period of noise and emissions. Also, new dredging alternatives, if implemented, would require heavy equipment to haul spoils to Marine Stadium. However, the Addendum clarifies that dredging and hauling activities, when mitigated, will not cause unavoidable significant noise effects.

Although more dredging and hauling will result in additional truck trips than originally calculated, the spoils will be hauled to the Port of Long Beach rather than to Bakersfield, a much shorter distance, resulting in reduced emissions. Short-term peak NOx emissions for a later phase of the city's project will exceed daily thresholds, even after mitigation; however, the first phase of the project, to which the Conservancy will contribute, will not cause exceedance of SCAQMD thresholds for construction emissions.

Traffic impacts from truck trips are not expected to cause unavoidable significant environmental effects once mitigated. The Addendum adds to the Mitigation Monitoring and Reporting Program a requirement that if the separate Termino Drain project overlaps with the city's project, the city engineer will coordinate traffic by identifying the construction routes, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas, and addressing traffic control for any street closure, detour, or other disruption to traffic circulation and public transit. Also, newly proposed dredging alternatives, if implemented, would rely on increased barge hauling, thus reducing traffic impacts.

Odors from dredging will remain qualitatively the same, though for an increased time, and are addressed by mitigation measures. By treating the spoils on site with additives and storing them (until hauled away) as far from sensitive receptors as possible, the city will reduce the effects to a level less than significant.

The revised project will now require the use of specialized equipment that will reduce construction emissions from dredging.

With respect to climate change, the Addendum recognizes the requirements of recent CEQA Guidelines amendments. The Addendum states that it has relied on draft significance criteria "considered by the SCAQMD [South Coast Air Quality Management District] by its Stakeholder Working Group in November 2009." In the absence of better regulatory guidance, the Addendum selects for comparison a significance criterion for commercial projects (lower than that for residential or mixed use) of 1,400 metric tons of CO_2 equivalent per year, on the basis of the Working Group's assertion that projects meeting that standard will not interfere with achieving the state's emission reduction objectives in California's "AB 32" legislation and the Governor's Executive Order S-03-05.

The overall project as described in 2008 EIR would produce 16 metric tons per day of CO_2

equivalents (as calculated with URBEMIS2007). The highest emissions would result from sediment removal, including from the western arm. According to the Addendum, the revised project would result in an increase, partially offset by idling restrictions and shorter hauling trips. But for all dredging alternatives, according to the Addendum, emissions are below the selected threshold, and so less than significant.

The Addendum further asserts that the revised project will not cause a change to "operational greenhouse gas emissions" since the completed project will not contain any stationary sources and will not change the anticipated vehicle trips. Revegetation, a part of the large project, could result in some carbon sequestration.

The Addendum includes a discussion of qualitative steps to reduce the short-term greenhouse gas emissions, including substantially shorter hauling trips than originally contemplated and anti-idling requirements. (Use of low-emission equipment will apparently reduce emissions but not necessarily greenhouse gases.)

The city apparently reaches its conclusion that greenhouse gas emissions will not exceed the city's selected annual threshold by dividing the quantified, anticipated construction emissions by the years of expected life of the improvements. Although Conservancy staff does not necessarily concur with this approach, the new, pertinent CEQA Guidelines allow qualitative as well as quantitative analysis of greenhouse gas emissions and attempts to reduce them. Staff believes that the city has done what it can to quantify the emissions and, qualitatively, to reduce them as much as reasonably possible.

Conclusion

Conservancy staff has independently reviewed the 2008 EIR and 2010 EIR Addendum and recommends that the Conservancy find that there is no substantial evidence that the Conservancy's project, as mitigated, will have a significant effect on the environment. Mitigation measures included in the project design, as mitigation requirements in the Mitigation and Monitoring Reporting Program, and as required by state and federal law and City ordinances, will reduce impacts to less than significant levels.

Upon approval of the project, staff will file a CEQA Notice of Determination.