

## COASTAL CONSERVANCY

Staff Recommendation  
December 4, 2008

### **LAKE MERRITT WATER QUALITY AND HABITAT IMPROVEMENTS**

File No. 05-015.  
Project Manager: Maxene Spellman

**RECOMMENDED ACTION:** Authorization to disburse up to \$9,000,000, which will be reimbursed to the Conservancy by the Wildlife Conservation Board, to the City of Oakland to widen the Lake Merritt channel, create a tidal marsh along the channel's edges, and install several technologies that remove pollutants in the Lake, Alameda County, and to adopt a statement of overriding considerations pursuant to the California Environmental Quality Act

**LOCATION:** Lake Merritt and the channel connecting it to the Oakland Estuary are located in the City of Oakland in Alameda County.

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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#### **EXHIBITS**

- Exhibit 1: [Regional and Location Map](#)
  - Exhibit 2: [Channel Widening and Wetlands Project Boundary](#)
  - Exhibit 3: [Concept Diagram of Channel Reconstruction Project](#)
  - Exhibit 4: [Photos of 12th Street and 10th Street culverts and other photos](#)
  - Exhibit 5: [Project Letters](#)
  - Exhibit 6: [a. Lake Merritt Channel Wetlands and Widening Project Environmental Impact Report, April 2006](#)  
[b. City of Oakland Measure DD Implementation Project Final Environmental Impact Report, adopted February 13, 2008](#)
  - Exhibit 7: [City of Oakland Mitigation, Monitoring and Reporting Program and Statement of Overriding Considerations, adopted April 2, 2008](#)
  - Exhibit 8: ["Summary of Impacts and Mitigation Measures"](#)
  - Exhibit 9: [Conservancy Statement of Overriding Considerations](#)
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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution under Chapter 4.5 (Sections 31160 through 31165) of Division 21 of the Public Resources Code, regarding San Francisco Bay Area resources:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed \$9,000,000 (nine million dollars) to the City of Oakland (“the City”), which amount the Wildlife Conservation Board (“WCB”) will reimburse to the Conservancy, to restore the natural hydrological connection between Lake Merritt and the Oakland Estuary, create tidal marsh habitat along the channel, and install several technologies that remove pollutants at the Lake. This authorization is subject to the following conditions:

1. Prior to the disbursement of funds for this project, the City shall submit for review and written approval of the Executive Officer of the Conservancy:
  - a. A work program, including budget and schedule of completion.
  - b. A sign plan to acknowledge Conservancy funding for the project.
  - c. The names and qualifications of any contractors to be employed on the project.
  - d. Documentation that all permits and approvals necessary to complete the project have been obtained.
2. Prior to the disbursement of funds for this project, the Conservancy and WCB shall enter into a memorandum of understanding authorizing WCB funding for this project as an “approved project” under WCB Agreement WC-3032BT.
3. The City shall provide evidence to the Executive Officer of the Conservancy that it has implemented the Mitigation Monitoring and Reporting Program, attached to the accompanying staff recommendation as Exhibit 7.
4. Following the completion of constructed projects, the City shall provide for the operation and maintenance of the project for its reasonable life, but no less than twenty years.”

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 authorization is consistent with the purposes and objectives of the San Francisco Bay Area Conservancy Program, Chapter 4.5 of Division 21 of the Public Resources Code, Sections 31160-31165.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on September 20, 2007.
3. The Conservancy has independently reviewed and considered the “Environmental Impact Report - Lake Merritt Channel Wetlands and Widening Project” (the “2006 EIR attached to the accompanying staff recommendation as Exhibit 6a”), which specifically analyzed the wetlands and channel widening portions of the City of Oakland Measure DD projects, and the “Environmental Impact Report, City of Oakland Measure DD Implementation Project Environmental Impact Report” (the “2008 EIR”, attached to the accompanying staff

recommendation as Exhibit 6b), which comprehensively addressed all of the Measure DD projects certified by the City of Oakland on February 13, 2008 pursuant to the California Environmental Quality Act (“CEQA”).

4. With respect to the portion of the project to be funded by the Conservancy, the 2006 EIR identifies potentially significant impacts in the areas of biological resources, geology and soils, hazards and hazardous materials, and hydrology and water quality. With regards to these impacts, the Conservancy, as a Responsible Agency under CEQA, finds that the project avoids, reduces or mitigates all of the possible significant environmental effects to a level of insignificance.
5. With respect to the portion of the project to be funded by the Conservancy, the 2008 EIR identifies potentially significant impacts in the additional areas of cultural resources and noise. With regard to these impacts, the Conservancy finds that the project, avoids, reduces or mitigates all of the possible significant environmental effects, with the exception of short term noise impacts, to a level of insignificance.
6. The 2008 EIR identifies potential “significant and unavoidable” short term noise impacts that would result during construction of the project. However, the Conservancy finds that the specific long term environmental and public access benefits outweigh and render acceptable these unavoidable, adverse and temporary noise impacts, as described in the accompanying staff recommendation and 2008 EIR. The Conservancy adopts the Statement of Overriding Considerations (attached to the accompanying staff recommendation as Exhibit 9).”

### **PROJECT SUMMARY:**

The City of Oakland (“the City”) is undertaking far-reaching activities at Lake Merritt and requests funding assistance from the Conservancy to accomplish them. These activities are briefly listed here and described in more detail below:

1. Channel Widening: Hydrological connections between Lake Merritt and the Oakland Estuary will be improved by removing culverts and widening the channel. With respect to the channel widening, the City is requesting Conservancy funding to assist with the barrier removal and widening at 10th Street and 12th Street.
2. Channel Wetlands: The City requests Conservancy funding to create new tidal marsh and restore upland habitat along the channel between 10<sup>th</sup> Street and 12<sup>th</sup> Street to coincide with the channel widening project.
3. Water Quality Improvements: Focused efforts to reduce pollutants and remove debris associated with storm drain outfalls are planned to improve water quality in Lake Merritt.

(See Exhibit 1: “Regional and Project Areas Map” showing the project locations on an overview of Lake Merritt and the Lake Merritt Channel).

Once completed, these Lake Merritt channel projects and water quality improvements will likely increase the numbers and diversity of birds utilizing the newly developed tidal marsh, mudflats, and upland habitat. Shorebirds, herons, egrets, and ducks will benefit from new feeding areas along the Lake Merritt channel. The creation of new upland areas proposed along the channel will also provide increased habitat for landbirds.

### 1. Channel Widening

10<sup>th</sup> Street and 12<sup>th</sup> Street are divided roadways that cross the Lake Merritt channel by passing over constructed dams and sets of box culverts which represent the two most significant constrictions along the Lake Merritt channel connecting the Lake to the San Francisco Estuary. These concrete box culverts create hydraulic constraints that prevent flow interaction, reduce tidal fluctuation, and, among other things, contribute to the low dissolved oxygen levels in the lake.

The City proposes to remove the existing dams and culverts at 10<sup>th</sup> and 12<sup>th</sup> Streets and replace them with retaining walls, two 100 foot wide clear span vehicular bridges, and a pedestrian bridge over 12<sup>th</sup> Street. (*See* Exhibit 3, “Concept Diagram of 12<sup>th</sup> Street Reconstruction Project”). Removal of these constrictions will add to the volume of water exchanged between the Lake and Estuary resulting in increased oxygen levels and greater mixing of frequently stratified saltwater and freshwater. The widening of the channels will increase the tidal range at the Lake by approximately 2.5 feet creating new and healthier intertidal habitats. In association with the project, the City is collaborating with Alameda County to develop and implement new operating procedures for the flood gate at 7<sup>th</sup> Street to encourage efficient operations that do not unnecessarily impede water flows. These improvements, in conjunction with a proposed by-pass at 7<sup>th</sup> Street, will also result in a connection to the Bay to benefit kayakers and other small non-motorized boat operators who will be able to travel between the San Francisco Bay and Lake Merritt.

### 2. Channel Wetlands

The City proposes to create approximately one-acre of tidal marsh and one-acre of upland habitat along the channel abutting one-acre of new open water that was previously under culverts at 12<sup>th</sup> Street. The project will involve grading to create a tidal marsh along the western bank of the channel. During construction the City will implement sedimentation and erosion control measures to prevent sediments or excavated material from entering the Lake Merritt channel. Following construction the City will plant pickleweed in the lower marsh areas, marsh gumplant and salt grass in the upper marsh, and native grasses, shrubs and trees in the upland zones.

Creation of tidal marsh and upland habitat will restore some of the historical marsh and channel features and is expected to provide viable habitat for a number of bird species. The vegetation and soils within the tidal marsh will positively impact water quality by filtering some pollutants and sediments. The native upland area will also provide additional habitat with connectivity to the tidal marsh.

### 3. Water Quality Improvements

The City will implement several technologies that directly address removal of pollutants at Lake Merritt. Up to three new stormwater separators will reduce trash, heavy metals, debris and other suspended pollutants that currently enter the watershed through stormwater runoff that ends up at Lake Merritt. (*See* Exhibit 4: photo of trash deposited at the Lake). Targeted stormwater inlets will be retrofitted with screens and/or baskets to reduce direct inputs to the lake, channel and bay. Finally, this element includes removal of concrete piping and debris, guardrail and asphalt repair, and restoration of on-shore plantings at the stormwater outfall across from the Lake Merritt’s bird islands.

**Site Description:**

The project site for channel widening is located at the section of the Lake Merritt channel between the southeastern end of Lake Merritt at 10<sup>th</sup> Street and 12<sup>th</sup> Street. The length of the channel extends south from the Lake to its intersection with box culverts at 10<sup>th</sup> Street and 12<sup>th</sup> Street, a pump station at 7<sup>th</sup> Street, and ends with its connection to the Oakland Inner Harbor. (See Exhibit 2, “Channel Widening and Wetlands Project Boundary”). Lands directly adjacent to the channel include urban parklands containing wide stretches of managed turf and a variety of ornamental trees. The parklands are bound to the northwest by the Kaiser Convention Center and to the southeast by the Oakland Unified School District property.

Most of the area adjacent to the channel was marshland or open water until the mid 1800’s when it was filled with material of unknown origin. Today the soils in the project area are classified as moderately coarse sands to a depth of five feet below ground surface. The project site is relatively level and located about 10 to 15 feet above mean sea level.

As part of the Oakland Estuary system, the channel harbors a variety of aquatic species including shrimp, fish, crabs and clams. However, no special status fish species are found in the channel. The channel is now confined to a relatively narrow corridor and numerous structures have been built that limit the amount of tidal flow that can enter and exit Lake Merritt in a given tide cycle. (See Exhibit 4: photos of 10<sup>th</sup> Street and 12<sup>th</sup> Street culverts seen from the channel). While the City plans to open a by-pass channel at 7<sup>th</sup> Street in a future phase, the pump station’s tide gates at 7<sup>th</sup> Street will remain to manage lake levels during the rainy season to reduce the risk of flooding.

Lake Merritt is located on the Pacific Flyway and provides layover, nesting and foraging habitat for migratory birds. The proposed improvements to Lake and channel water quality will result in healthier and possibly more prolific sources of food for migratory population. Additionally, local mammals such as raccoons, rodents and deer, as well as many resident bird species such as egrets, herons, cormorants, terns, grebes, diving ducks, mallards and killdeer utilize the Lake and channel and the trees and shrubbery bordering it. The City will remove approximately forty-eight trees. All but 7 trees targeted for removal consist of the ornamental variety, and several oaks and redwood trees will remain.

Finally, focused efforts to reduce pollutants and remove debris associated with the stormdrain outfall at the northern end of the Lake will improve water quality in a sensitive habitat utilized heavily by migrating and resident bird populations. This northern end site is located next to the Lake Merritt Rotary Nature Center and in the area targeted for construction of the demonstration marsh associated with the bird island restoration project previously authorized (See “Project History”). Water quality control measures at several other locations will also further improve water quality throughout Lake Merritt.

**Project History:** The 145-acre Lake Merritt originally existed as a marshy, brackish tidal slough at the confluence of the San Francisco Bay and four creeks originating in the Oakland hills. The lake was created in 1869 with the construction of a dam at the 12<sup>th</sup> Street Bridge. One year later Dr. Samuel Merritt, the then mayor of Oakland and after whom the lake is named, convinced the state to pass legislation making it the first State Wildlife Refuge in California. Later the installation of box culverts and dams at 12<sup>th</sup>

Street and 10<sup>th</sup> Street, and a flood control pump station at 7<sup>th</sup> Street further restricted tidal circulation. Park areas were subsequently added along the lakeshore. Over time, residential and commercial enterprises have grown around the Lake.

Efforts to improve water quality at Lake Merritt have been underway for decades. However, attention to this issue became more focused when the U.S. Environmental Protection Agency declared the lake an impaired water body. In January 2000, the Lake Merritt Water Quality Technical Committee was created to investigate and develop strategies by which to resolve excess trash, organic enrichment and dissolved oxygen at Lake Merritt. The Committee identified priority sites for stormwater separators and other stormwater quality control measures, which are the subject of the water quality improvements of this staff recommendation.

In 2002, the citizens of Oakland passed the Oakland Clean Water, Safe Waterfront Parks and Recreation Trust Fund (“Measure DD”). It provides bond funding for habitat and access improvements at Lake Merritt and the channel as well as other public work improvements throughout Oakland. Among the Lake Merritt projects specified for funding through Measure DD is the City’s proposal to widen the channel at 10<sup>th</sup> Street and 12<sup>th</sup> Street connecting Lake Merritt to the Oakland Estuary, create tidal marsh and upland habitat along the channel’s shoreline, and implement measures to improve water quality. The project proposed in this recommendation will match the Measure DD funds to enable the City to undertake implementation.

In 2004, the City completed studies of the impact on tides and sediment transport from removing the existing dam and box culverts at 10<sup>th</sup> Street and 12<sup>th</sup> Street and replacing them with 100-foot clear span bridges. The studies show an expected expansion in tidal circulation including increases in tidal exchange, tidal range and water quality conditions at Lake Merritt. The design of the bird island and demonstration marsh project at the opposite end of the Lake, which is not a subject of this recommendation, will incorporate appropriate slopes and other features, taking into account the increase in tidal range expected to result from the widening of the channel.

In October 2006, the Conservancy authorized \$1,000,000 of Wildlife Conservation Board funds for disbursement to the City for restoration of bird habitat on the Lake’s five bird islands, and for the creation of a demonstration wetland along the Lake’s northern shoreline. The bird island project is located at the opposite end of the Lake from this proposed channel widening and wetland creation project. (*See Exhibit 1: “Project Location Map”* for location of the Bird Island project). The City has completed the engineering drawings and seeks to coordinate construction with the channel widening and water quality improvements. The City will implement the channel widening and marsh creation, the bird island restoration and demonstration marsh, and water quality projects simultaneously, with construction anticipated for completion in 2011.

**PROJECT FINANCING:**

Coastal Conservancy (Prop 50 WCB Funds)	\$ 9,000,000
City of Oakland	<u>\$74,187,900</u>
<b>Total Project Cost</b>	<b>\$83,187,900</b>

The Conservancy's financial contribution is expected to come from funding provided to the Conservancy through an interagency agreement with the Wildlife Conservation Board. These WCB funds are derived from an appropriation from the Water Security, Clean Drinking Water, Coastal Beach Protection Fund of 2002 ("Proposition 50") under a specific authorization found in Section 79572(c) of the Water Code. These funds may be used generally for acquisition, protection and restoration of coastal wetlands and adjacent upland areas, and specifically for projects in the San Francisco Bay Area that accomplish the objectives of the Conservancy as specified in Section 31162 of the Public Resources Code.

Under the interagency agreement with WCB, the Conservancy may use these funds for wetland habitat restoration projects within the nine-county San Francisco Bay Area that implement the restoration goals of the *San Francisco Baylands Ecosystem Habitat Goals Report* ("*Goals Report*") and that meet the priorities of the Conservancy as described in Section 31162 of the Public Resources Code. This project is consistent with the *Goals Report*, which recommends enhancement of the value of Lake Merritt and channel by improving tidal action and restoring tidal marsh, especially along the channel that connect the Lake to the estuary. Improvement to water quality will also reduce potential sources of contamination identified in the *Goals Report*. This project is listed as a "high priority project" under the interagency agreement. The Conservancy will also enter in a Memorandum of Understanding with WCB regarding implementation of this project, pursuant to the terms of the interagency agreement.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

This project is undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160 through 31165, which authorizes the Conservancy to address the resource and recreational needs of the nine-county San Francisco Bay area.

Consistent with the Public Resources Code Section 31162, the project sites are located within Alameda County, one of the nine counties in the San Francisco Bay Area. Pursuant to Section 31162(b), the project will help achieve the goals of the San Francisco Bay Area Program by restoring tidal marshes, which are natural habitats that are of regional importance. The proposed projects will restore tidal marsh along the channel connecting Lake Merritt to the Oakland Estuary and improve Lake Merritt's water quality. This is expected to increase the diversity and quantity of birds utilizing tidal marsh habitat in the Bay region. Pursuant to Section 31162(d), the project will provide open space and natural areas that are accessible to urban populations for educational purposes. Pursuant to Section 31162(a), the project will improve public access around Lake Merritt and from the San Francisco Bay to the Lake. The channel widening and construction of the pedestrian bridge will improve pedestrian and bike access along the Lake's south shore and provide non-motorized boat access through the channel into Lake Merritt where none currently exists.

This project is appropriate for prioritization for the San Francisco Bay Area Conservancy Program, consistent with Public Resources Code Section 31163(c), because it is supported by adopted local and regional plans, serves a regional constituency, can be implemented in a timely way, provides opportunities for benefits that could be lost if the project is not quickly implemented, and includes matching funds from the City of Oakland's Measure DD bond funding and a grant to the City from Caltrans' Federal Highways Bridge Program. The City of

Oakland adopted the following plans and documents supporting the projects: The City of Oakland General Plan's Open Space, Conservation, and Recreation Element (adopted 1996); the Estuary Policy Plan (adopted 1999); the Lake Merritt Master Plan (adopted 2002); and the Addendum for the Oakland Bond Measure DD, the Oakland Clean Water, Safe Waterfront Parks and Recreation Trust Fund Ballot Measure (adopted June 2002). Lake Merritt serves the urban population of Oakland as well as visitors from around the region. The City is poised to begin construction right away with completion scheduled for 2011. The City's financial match, which is over 8 times the Conservancy's contribution, must be spent within this timeframe due to expenditure deadlines of the Measure DD funding source, and a grant to the City from Caltrans' Highways Bridge Program.

**CONSISTENCY WITH CONSERVANCY'S  
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 10, Objectives C and F** of the Conservancy's Strategic Plan, an element of the proposed project will create one acre of tidal marsh and one acre of upland habitat along the Lake Merritt channel.

Consistent with **Goal 11, Objective L**, the City will design the pedestrian bridge over 12<sup>th</sup> Street to be ADA-compliant.

**CONSISTENCY WITH CONSERVANCY'S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed projects are consistent with the Conservancy's Project Selection Criteria and Guidelines last updated September 20, 2007, 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 of the public:** These projects are supported by State Senator Perata and Assemblyman Swanson, the Oakland City Council, the Lake Merritt Institute, the Lake Merritt Junior Center for Arts and Science, the Golden Gate Chapter of the Audubon Society, Waterfront Action, the Coalition of Advocates for Lake Merritt, the Association for Bay Area Governments, and the Jack London Aquatic Center. The channel widening, wetland creation and water quality improvements received support from 80.2% of Oakland voters who passed measure DD; and dozens of community organizations that participated in the development of the Lake Merritt Master Plan. (*See Exhibit 5: Project Letters*).
4. **Location:** Although located in urban downtown Oakland, Lake Merritt is connected to the Oakland Estuary and San Francisco Bay and is subject to tidal influence. The Lake Merritt Channel connects the Lake to the Estuary, so its widening will improve the tidal fluctuation, water circulation, and water quality. The addition of new tidal marsh in combination with

channel widening and water quality improvements will increase and enhance shorebird habitat.

5. **Need:** Without the Conservancy's participation, the City would not have sufficient funding to complete the projects.
6. **Greater-than-local interest:** The project will provide natural resources to the region as well as to the residents of Oakland. Located at a nexus of public access routes, cultural and educational institutions, and within the Pacific Flyway, the Lake attracts a range of visitors and will likely affect a greater number and diversity of birds.

### **Additional Criteria**

7. **Urgency:** The \$198 million provided by the City's Measure DD bond measure are made available through a pre-determined schedule. The portion of this money dedicated to the proposed project as well as other grants to the City as the match to Conservancy funding will be lost if not implemented soon.
8. **Resolution of more than one issue:** The many aspects of this project will address several issues including removal of one of the largest structural constraints to tidal connections between the Lake and the San Francisco Bay. The project will also address the problem of the Lake's listing as an impaired water body by the installation of technologies to remove pollutants from the Lake. Both of these elements will increase avian habitat in the San Francisco Bay, thereby also demonstrating to urban populations the types of estuarine habitats that are widespread in the region, but not currently within the Oakland urban environment.
9. **Leverage:** See the "Project Financing" section above.
10. **Innovation:** The bold vision of the project is innovative at its core in that it involves an enormous reconstruction project to make significant improvements to the natural environment in an urban setting. Also, the removal of the box culverts at 10<sup>th</sup> Street and 12<sup>th</sup> Street will involve incremental improvement of groundwater recharge through the use of biofiltration swales and stormwater detention basins.
11. **Readiness:** The City of Oakland will begin the bid process in early 2009 followed by the start of construction in summer of 2009.
12. **Realization of prior Conservancy goals:** "See "Project History" above."

### **CONSISTENCY WITH SAN FRANCISCO BAY PLAN:**

Lake Merritt is outside the jurisdiction of the *San Francisco Bay Plan (Bay Plan)*. However, the Lake Merritt Channel is within its jurisdiction and is consistent with the *Bay Plan* adopted by the San Francisco Bay Conservation and Development Commission (BCDC) in 1969, as amended.

The pertinent sections are found in “Part III, The Bay as a Resource: Findings and Policies” (specifically “Fish, Other Aquatic Organisms, and Wildlife” and “Tidal Marshes and Tidal Flats”). Excerpts from the applicable policies and consistency with the proposed creation of tidal marsh along both sides of the channel, are presented below.

Policy Concerning “Fish, Other Aquatic Organisms, and Wildlife” - Policy 1: “...to the greatest extent feasible, the Bay’s tidal marshes, tidal, and subtidal habitat, should be conserved, restored and increased.” The channel project includes creation of one acre of tidal marsh to increase this valued Bay habitat.

Policy Concerning “Tidal Marshes and Tidal Flats” - Policy 4 : “Former tidal marshes and tidal flats...should be restored to tidal action in order to replace lost historic wetlands...” The proposed creation of tidal marsh along the Lake Merritt channel will replace a portion of the historic marsh that once existed here.

### **COMPLIANCE WITH CEQA:**

The City of Oakland has completed environmental review as the lead agency under the California Environmental Quality Act (“CEQA”) for projects along the Lake Merritt channel in Oakland to construct improvements to enhance habitat and restore estuary, channel and parkland areas. The City’s current undertaking is part of a larger Lake Merritt project, partially funded under Oakland Measure DD, that entails renovation of Lake Merritt Park and related recreational facilities, creation of a connection between Lake Merritt and the Oakland Estuary, and implementation of water quality protection measures for Lake Merritt (collectively the “Measure DD projects”), the last two of which are the subject of this authorization. The portion of the Measure DD projects proposed for Conservancy funding include the creation of a tidal marsh, widening of the channel at the south end of Lake Merritt, and implementation of water quality protection measures for Lake Merritt. The project will include two vehicular bridges, one pedestrian bridge, channel widening, abutments under the bridges, one small wetland, landscaping, stabilization, replanting in the wetlands and adjacent park, installation of up to three stormwater separators, and other water quality control measures.

The City, as the CEQA lead agency, certified two EIRs specifically analyzing the impacts of the Measure DD projects: 1) the “Environmental Impact Report - Lake Merritt Channel Wetlands and Widening Project” (the “2006 EIR”), which specifically analyzed the wetlands and channel widening portions of the Measure DD projects, and 2) the “Environmental Impact Report, City of Oakland Measure DD Implementation Project Environmental Impact Report” (the “2008 EIR”), which comprehensively addressed all of the Measure DD projects.

These two EIRs relied on several layers of CEQA review previously completed by the City since 1998. The documents that constitute the multi-layered review by the City include programmatic Environmental Impact Reports for the Land Use and Transportation Element (adopted June 1998), the Estuary Policy Plan and the Coliseum Area Redevelopment Plan (adopted June 1998); the Mitigated Negative Declaration for the General Plan Open Space, Conservation and Recreation Element (adopted October 1995); and the Addendum for the Oakland Clean Water, Safe Waterfront Parks and Recreation Trust Fund Ballot Measure (Measure DD) (adopted June 2002).

The 2006 EIR specifically addressed the impacts of the channel widening, expanded channel improvements associated with the 10<sup>th</sup> Street and 12<sup>th</sup> Street reconstruction project and the creation of a tidal marsh. The City certified the EIR on July 5, 2006. In June, 2006, a suit was filed against the City challenging the adequacy of the EIR (*Friends of the Lake v. City of Oakland*) and asking that the court issue a writ of mandate. The plaintiffs alleged that the City inadequately analyzed the impacts caused by tree removal and to nests of birds of prey; improperly tiered off of previously approved EIRs; and failed to adequately consider a range of alternatives, among other things. After an evidentiary hearing, the court entered judgment in favor of the City. The plaintiff's filed a Notice of Appeal in December 2007; however, they never filed an opening brief and the case was ultimately dismissed by the Court of Appeal.

In 2008, the City also undertook a more comprehensive environmental analysis of potential impacts for all of the projects to be implemented pursuant to Measure DD. The Oakland Planning Commission certified the 2008 EIR, after the City Council denied an appeal of the EIR certification, on April 2, 2008. The Oakland Planning Commission also adopted a Mitigation, Monitoring and Reporting Program ("MMRP") and Statement of Overriding Considerations for significant unavoidable noise impacts. (See Exhibit 7, "Mitigation, Monitoring and Reporting Program and Statement of Overriding Considerations"). The 30-day statute of limitations to challenge the 2008 EIR has run, and no challenge to it was filed.

The portions of the project to be funded by the Conservancy, as a responsible agency, are analyzed by both the 2006 EIR, and as the "Group 1" projects under the 2008 EIR. Staff has independently reviewed and considered the 2006 and 2008 EIRs. With respect to the portions of the project to be funded by the Conservancy, the 2008 EIR identifies potentially significant impacts in the areas of hydrology and water quality, biological resources, cultural resources, hazards and hazardous materials, and noise. With the exception of noise impacts, staff finds that the project, with measures included in the project design and as mitigation included in the MMRP, avoids, reduces or mitigates these impacts to a *less than significant level* (as discussed in more detail below). The City lists mitigation measures in these areas, summarized in Table II-1 of the EIR. (See Exhibit 8, "Summary of Impacts and Mitigation Measures"). With respect to the Conservancy funded components, the 2006 EIR identified essentially the same impacts that will be mitigated by the 2008 MMRP.

Along with the 2008 EIR, the City adopted the MMRP to assure that the mitigation measures are properly implemented (attached as Exhibit 7). The MMRP lists the action and implementation timing, the party responsible for implementation, the party responsible for monitoring, and the monitoring timing for each mitigation measure. The MMRP will minimize adverse environmental effects of the Conservancy funded portions of the projects.

In addition to the mitigation required by the MMRP, the 2008 EIR finds that the project's design features and/or implementation of City standards and conditions of approval reduce the project's potential impacts in the areas of geology, soils and seismicity, air quality, planning policy, public services and recreation, utilities and infrastructure, and aesthetics. Some of the impacts will be reduced to less than significant through the compliance with City ordinances, and state and federal regulations during project implementation. Of note are the City's uniformly applied Development Standard Conditions of Approval which are adopted as requirements of an individual project when it is approved by the City and are designed to substantially mitigate environmental effects. For all Measure DD projects the City's Conditions of Approval have been incorporated as part of the project.

The impacts identified by the 2008 EIR and relevant mitigation measures for the projects anticipated for approval by the Conservancy under this authorization are as follows:

Biological Resources:

Construction of some components within the Lake Merritt channel may impact waters of the U.S. and state. The City will obtain appropriate permits from the Army Corps of Engineers (Section 404 permit), the State Water Board (Section 401 water quality certification), and California Department of Fish and Game (DFG) (Lake and Streambed Alteration Agreement). Impacts to jurisdictional wetlands shall be mitigated at a minimum replacement ratio of one acre created and preserved for every acre impacted.

The introduction of small boat traffic to the Lake Merritt channel would result in increased disturbance levels to wintering migratory ducks and other waterbirds. Small boat use shall be restricted to the non-wintering period of April-September, when waterbird abundance is low. During closure, booms and signs shall be placed across the outlet to the channel from Lake Merritt and at the 7<sup>th</sup> Street tide gate to prevent boat access. This would reduce the impact to a *less than significant level*.

The removal of any protected trees will be subject to the requirements of the City's Protected Tree Ordinance, and the removal of all trees will be subject to the City's Tree Preservation and Removal Ordinance, the implementation of which will avoid any significant impact. For example, the City will control the timing of tree removal and will plant two replacement trees for every one tree removed. The 2008 EIR notes, however, that no trees will be planted in the newly created wetlands proposed along the channel between 10<sup>th</sup> and 12<sup>th</sup> Streets. The City will also assure compliance with the Creek Protection Ordinance, which requires measures such as placement of wattles and booms to limit transport of sediment, and replanting.

Tree removal within the project area could impact nesting Cooper's hawk, a California Species of Special Concern, and sharp-shinned hawks. Implementation of the City's Standard Condition of Approval (Condition 32) will reduce potential impacts to these nesting hawks to a *less than significant level*. The pre-construction survey shall be conducted within 15 days prior to the start of work from March 15 through May (nesting season) and within 30 days prior to the start of work from June through August 15. Also, all attempts will be made to schedule tree removal before the start of the nesting season, or if removal is slated during the nesting season and the survey finds nesting birds, suitable buffers will be flagged off.

Cultural Resources:

Project activities within the Lake Merritt Channel may impact subsurface prehistoric archaeological materials that may qualify as historical resources under CEQA. A qualified archaeologist shall monitor initial project construction ground disturbing activities in the 12<sup>th</sup> and 10<sup>th</sup> Street reconstruction areas because shell scatters were recorded within the channel area. The protocols for monitoring and data recovery outlined in the Archaeological Monitoring and Discovery Plan, 12th Street Reconstruction Project shall be implemented for both the 12<sup>th</sup> and 10<sup>th</sup> Street projects. Monitoring shall continue as needed based on initial observations. If the monitor observes prehistoric archaeological materials, he or she shall ensure that appropriate actions are taken as described in the 2008 EIR on page 21 and 22 of Attachment E. (*See Exhibit 8, "Summary of Impacts and Mitigation Measures"*).

Hydrology and Water Quality:

Existing groundwater wells that may be encountered and/or damaged by proposed project activities, could act as conduits for migration of pollutants to the underlying groundwater aquifer. Therefore, the 2008 EIR mitigation measures require that any existing wells discovered during construction shall be either abandoned in compliance with the California Department of Water Resources California Well Standards and Alameda County Environmental Health Department requirements prior to final approval of the grading plan, or inspected by a qualified professional to determine whether each well is properly sealed to prevent impacts. If not properly sealed, the City shall retain a qualified well driller to install the required seal.

To protect water quality during construction of the 10<sup>th</sup> and 12<sup>th</sup> Streets projects, the City will require compliance with the City's NPDES permit and local ordinances. The contractor will be required to obtain a Creek Protection Permit and, in accordance with the City's Standard Conditions of Approval develop and implement an Erosion Control Plan and other measures protective of water quality (Conditions 43, 69, and 74). These construction techniques include performing shoreline and foundation works in a 'dry' environment by constructing cofferdams around the shoreline installations and filtering and removing the water from the work site. During the de-watering process, removed water would be passed through a sediment-settling device before being returned to the channel. Other measures include installation of bio-swales, detention basins and drainage inlets with filters to improve stormwater runoff water quality, stabilization and armoring of channel banks to reduce scouring and erosion along the channel, and installation of storm water runoff facilities to treat at least 85 percent of the average annual runoff from the site.

Hazards and Hazardous Materials:

The reconstruction of 12<sup>th</sup> Street would temporarily close a designated emergency evacuation route. To address this, the 2008 EIR mitigation measure requires the City to prepare in advance of construction, detour plans for emergency an evacuation route along 12<sup>th</sup> Street in accordance with the City's Office of Emergency Services requirements.

A hazardous materials study done (Phase I Environmental Assessment) for the Lake Merritt channel and properties within ¼ mile, found that near 10<sup>th</sup> and 12<sup>th</sup> Streets commercial development has generated hazardous materials that may include asbestos and/or lead based paint that may have been used during construction and maintenance of existing bridges, and aerially-deposited lead from vehicle emissions. A Phase II Environmental Assessment done at the 12<sup>th</sup> Street reconstruction site that found soluble lead concentrations above California hazardous waste thresholds, and excavated soil may constitute hazardous waste, once excavated. Although a Phase II Environmental Assessment was not done at 10<sup>th</sup> Street, the City will implement regulations and mitigations for both 12<sup>th</sup> and 10<sup>th</sup> Street projects as follows:

If contaminated soils are encountered during construction, the City will implement its State Conditions of Approval (50 and 52) and would implement remediation pursuant to state and federal law, which would reduce these potential impacts to a *less than significant level*.

To address potential impacts to construction workers during excavation, the City will implement city, state and federal hazardous materials and worker health and safety requirements. The City's Standard Conditions of Approval (Conditions 51, 53, 54, and 56) require the City to document surveys by a qualified environmental professional prior to issuance of grading, demolition and

building permits (Condition 51), removal of lead-based paint and asbestos prior to these activities (Conditions 53 and 54), and if hazardous materials are found, create a health and safety plan to protect construction workers (Condition 56). Also, U.S. Environmental Protection Agency and the U.S. Department of Housing and Urban Development require removal of hazardous materials prior to demolition. The federal and California Office of Safety and Health Administration require the preparation and implementation of a project-specific Health and Safety Plan for site workers. Implementation of all these measures is considered to reduce potential impacts to *less than significant*.

Noise:

Pile drives during the construction of the pedestrian and bicycle bridges would generate noise levels that exceed the City's long-term construction noise standards. The City will implement Standard and Uniformly Applied Conditions of Approval which will generally reduce the impacts to less than significant levels. However, in some cases the impact would be significant and unavoidable.

Statement of Overriding Considerations:

The City adopted a Statement of Overriding Considerations for these significant noise impacts and found that the long term benefits of the project for the environment, recreation, health and safety, aesthetics and other benefits far outweigh the short term noise impacts during construction. The Statement is also based on the fact that the project implements Measure DD adopted plans and policies approved by the voters. Staff concurs with the City's certification and recommends that the Conservancy adopt its own Statement of Overriding Considerations (Exhibit 9) and find that the environmental and public access benefits outweigh and render acceptable the short-term, unavoidable, adverse noise impacts.

Response to Comments:

The City released the draft 2008 EIR for public comment on July 20, 2007, and received approximately 26 comment letters from individuals and organizations. Most letters indicated support for the project or provided additional information or suggestions not related to environmental impacts. The primary objection to the draft 2008 EIR concerned tree removal and impacts to wildlife. (Comments are contained in the Appendix I to the EIR).

With respect to concerns about tree removal, the City added language detailing the specific number of trees to be removed, their condition, number of trees retained and number planted, the economic and aesthetic benefits of replanting, and the additional carbon sequestering expected in five years resulting from planting twice as many trees as are removed. With respect to wildlife impact, the Golden Gate Audubon wrote in general strong support of the project but expressed concern that noise impacts from driving piles would likely cause a significant affect to wildlife by causing them to relocate to nearby areas. The City responded by stating that it considered potential impacts based on the intensity and duration of the project activity and concluded that there is no risk of injury or death, only temporary displacement of migratory waterbirds to other nearby areas of suitable habitat.

Finally, Friends of the Lake (the plaintiffs that previously filed a lawsuit challenging the 2006 EIR) questioned the 2008 EIR's analysis of the significance of the cumulative impacts of all the Measure DD projects. The City defended its analysis of cumulative impacts, and added language to the 2008 EIR enumerating the beneficial impacts and a statement that the benefits outweigh

any short term incremental impacts that are mitigated by the City's Conditions of Approval and other mitigation measures.

With respect to the Conservancy funded portion of Measure DD projects, Conservancy staff has independently reviewed the 2006 and 2008 EIRs and recommends that the Conservancy find that the project, as mitigated, will not result in any significant adverse effects on the environment, with the exception of short-term noise impacts. Mitigation measures included in the project design, as mitigation requirements in the Mitigation, Monitoring, and Reporting Program, and as required by state and federal law and City ordinances will reduce impacts to *less than significant levels*. With respect to short-term noise impacts, staff recommends that the Conservancy find that the specific long-term environmental and public access benefits will far outweigh the short-term adverse impacts caused by construction activities and adopt the Statement of Overriding Considerations, attached as Exhibit 9 (14 Cal. Code Regs. 15093).

Upon approval of the project, staff will file a CEQA Notice of Determination, including a Statement of Overriding Considerations.