

### III. PROJECT DESCRIPTION

This EIR analyzes the potential environmental impacts of the proposed projects authorized and proposed to be funded by Measure DD, a bond measure approved by Oakland voters in November 2002. This chapter includes: background information on Measure DD; the objectives of the proposed Measure DD implementation components; a description of each proposed Measure DD implementation component and its location; the required approvals and entitlements associated with the proposed projects; and the intended uses of the EIR.

To facilitate the discussion and description of the Measure DD Implementation Project, the improvements to be funded by Measure DD have been divided into four groups:

- Lake Merritt and Lake Merritt Channel Improvements (Group 1);
- Oakland Waterfront Trail and Access Improvements (Group 2);
- North and East Oakland Recreational Facilities (Group 3); and
- City-wide Creeks Restoration, Preservation and Acquisition (Group 4).

Figures I-1, I-2, and I-3 show the general location of the groups of proposed Measure DD components.

For the purposes of this EIR, each individual proposed project authorized and proposed for funding by Measure DD is considered a “component” of Measure DD implementation. All components of Measure DD implementation are considered the “project” examined within this EIR.

#### A. MEASURE DD BACKGROUND

In November 2002, Oakland voters passed a \$198,250,000 bond measure entitled *Oakland Trust for Clean Water, Safe Parks* (Measure DD). This bond measure authorizes funding for physical improvements to existing parks; acquisition of land for new parks; development of new parks and recreation facilities; clean water measures; restoration and rehabilitation of recreation buildings; and implementation of creek and waterway protection and restoration activities.

In June 2002, prior to the passage of Measure DD, the City analyzed the measure’s potential environmental effects in an Initial Study that relied upon previous environmental documents prepared by the City. The previous environmental documents included the Oakland General Plan Open Space, Conservation and Recreation (OSCAR) Element Mitigated Negative Declaration, the General Plan Land Use and Transportation Element (LUTE) EIR, the Estuary Policy Plan EIR, and the Coliseum Redevelopment Plan Area EIR. Based on the environmental analysis, the City found that all potentially significant effects would be avoided or mitigated by mitigation measures in previously prepared CEQA documents and thus the City prepared an Addendum to the previous environmental documents.

As more defined proposed project components have been identified since the 2002 Addendum, the City has now decided to prepare this EIR to provide a more comprehensive environmental analysis for the Measure DD Implementation Project. As some project components had already been planned, designed and funded in reliance upon the 2002 Addendum and prior to the City's decision to prepare this EIR, some components of Measure DD have already been constructed or are currently under construction. These components are described and analyzed at a level appropriate to their stage of development when the NOP for the project was issued in December 2006.

As of this writing, there is a pending lawsuit that challenges the granting of three permits for tree removal around Lake Merritt, and another CEQA document, the 2006 Lake Merritt Channel Wetlands and Widening Project EIR. The City has not implemented these approvals during the pendency of the lawsuit.

## **B. PROJECT OBJECTIVES**

As stated in Section 3 of the 2002 ballot measure, the "object and purpose [of Measure DD] is to acquire and construct water quality improvements for and related to Lake Merritt, Lake Merritt Channel, the Estuary and creeks in Oakland; to improve, renovate and construct youth and public recreational facilities including the East Oakland Sports Center, Studio One and Fairyland; to rehabilitate and acquire parks, open space and other recreational safety and maintenance facilities; and to provide safe public access to Lake Merritt, Lake Merritt Channel, and the Estuary." In addition, the City Council Resolution that placed Measure DD on the ballot indicates that the measure's funding is intended to support a number of the objectives laid out in the elements of the City's General Plan, including the OSCAR Element and the Estuary Policy Plan. In consideration of this background information, specific objectives for the four Groups of project components include without limitation:

### **Lake Merritt and Lake Merritt Channel Improvements (Group 1)**

- Create recreational park and open space at Lake Merritt and along the Lake Merritt Channel;
- Connect the isolated southern shoreline of Lake Merritt with surrounding cultural, civic, and urban districts;
- Enhance the connection between Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary;
- Renovate historic buildings and other structures at Lake Merritt;
- Improve bicycle and pedestrian safety and circulation;
- Improve water quality and habitat for fish and wildlife;
- Provide safe public spaces; and
- Support the following objectives for parks and recreation as set forth in the OSCAR Element:
  - Maintain an urban park...system which provides open space for outdoor recreation, psychological and physical well-being, and relief from the urban environment;
  - Protect scenic views and improve visual quality;

- Minimize the adverse effects of urbanization on Oakland's groundwater, creeks, lakes, and near-shore waters;
- Protect the ecology and promote the beneficial uses of Oakland's creeks, lakes, and near-shore waters;
- Reduce the deficiencies in park acreage and recreational facilities in the most equitable, cost-effective way possible; and
- Improve personal safety and reduce crime in Oakland's parks.

### **Oakland Waterfront Trail and Access Improvements (Group 2)**

- Acquire land and construct pathways to complete the San Francisco Bay Trail along the Oakland Estuary;
- Provide additional open space and recreational opportunities along the Oakland waterfront;
- Remediate environmental hazards that exist on the Oakland component of the San Francisco Bay Trail;
- Support the following objectives for the waterfront as set forth in the Estuary Policy Plan:
  - Provide for public activities that are oriented to the water;
  - Create a clear and continuous system of public access along the Estuary shoreline;
  - Develop opportunities for recreational activities that are oriented to the waterfront and serve identified neighborhood needs;
  - Encourage the development of educational and cultural programs and interpretive facilities that enhance understanding of the waterfront environment;
  - Improve and clarify regional access to Oakland's waterfront;
  - Establish a continuous waterfront parkway; a safe promenade for pedestrians, bicycles, and slow-moving automobiles;
  - Improve pedestrian and bicycle circulation; and
- Support the following objectives for the parks, recreation and the waterfront as set forth in the OSCAR Element:
  - Maintain an urban park...system which provides open space for outdoor recreation, psychological and physical well-being, and relief from the urban environment;
  - Develop a system of linear parks and trails which: (a) links existing parks together; (b) provides safe, convenient access to open space from residential areas and employment centers; (c) provides places to hike, bike, and experience Oakland's scenery; and (d) provides a means of moving from one place to another without an automobile; and
  - Increase physical and visual access to the Oakland shoreline and create new opportunities for shoreline recreation.

### **North and East Oakland Recreational Facilities (Group 3)**

- Provide additional recreation facilities in East Oakland;

- Restore Studio One; and
- Support the following objective for recreational facilities as set forth in the OSCAR Element:
  - Maintain park facilities so that their ability to meet recreational needs is optimized and to rehabilitate recreational facilities on a regular basis so that they remain useful, attractive, and safe.

#### **City-wide Creeks Restoration, Preservation and Acquisition (Group 4)**

- Acquire and restore creek habitat;
- Improve water quality within the City of Oakland;
- Restore Oakland's creeks and wetlands to a more natural state in order to enhance the beneficial uses of creeks and wetlands. These beneficial uses include native wildlife habitat creation, cleansing of stormwater runoff, slope stabilization, stormwater conveyance and storage, sediment transport and storage, recreation and educational opportunities and improvement of neighborhoods through community building and aesthetic improvements;
- Support the following objectives for creeks as set forth in the OSCAR Element:
  - Conserve open space along Oakland's creeks, restoring the creeks where feasible and enhancing creek access on public lands;
  - Minimize the adverse effects of urbanization on Oakland's groundwater, creeks, lakes, and near-shore waters;
  - Protect the ecology and promote the beneficial uses of Oakland's creeks, lakes, and near-shore waters; and
- Support the following objectives of the Oakland Creek Protection Ordinance:
  - Safeguard and preserve creeks and riparian corridors in a natural state;
  - Preserve and enhance creekside vegetation and wildlife;
  - Prevent activities that would contribute significantly to flooding, erosion or sedimentation, or that would destroy riparian areas or would inhibit their restoration;
  - Enhance recreational and beneficial uses of Creeks;
  - Control erosion and sedimentation;
  - Protect drainage facilities;
  - Protect the public health and safety, and public and private property; and
  - Protect and enhance the water quality of Oakland's watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the federal Clean Water Act.

### **C. PROPOSED MEASURE DD IMPLEMENTATION COMPONENTS**

Descriptions of the proposed components that comprise the four Measure DD implementation groups are provided in this section. The level of detail provided for each group and its proposed components varies based on current conditions surrounding each proposed project component and the level of

available detail. For example, some proposed components in the Lake Merritt and Lake Merritt Channel group and Waterfront Trail group are near or under construction, and as such, a detailed level of design information is available for their analysis and evaluation. In contrast, the proposed components within the North and East Oakland Recreational Facilities and City-wide Creeks groups are at widely varied stages of design. For example, the East Oakland Aquatic, Sports and Recreation Complex, one of the two recreational facilities identified in this group, is not yet fully funded and is still in an early stage of design while the other recreational component, Studio One Art Center, is already being renovated. Likewise, the City-wide Creeks group has proposed components at many levels of planning, design or construction, from completed project components to those that have not yet begun the design process. Table III-1 lists the components of Measure DD and their current stage of development.

As a result of the range in the level of detail currently available for the various proposed project components, the level of detail for the analysis of each component within this EIR also varies. Because fairly detailed information and plans are available for proposed components within the Lake Merritt and Lake Merritt Channel group and the Waterfront Trail group, these groups are evaluated at a project level. Proposed components within the Recreational Facilities and City-wide Creeks groups are analyzed at a program level. For the East Oakland Aquatic, Sports and Recreation Complex, the program-level analysis is appropriate because planning is still at a preliminary stage. For the City-wide Creeks group, acquisition and restoration is proposed to occur on many, small sites throughout Oakland that have not yet been specifically identified. Although each is unique, the types of activities required and their potential impacts would be similar and conducive to the application of performance standards that can be applied programmatically.

The following subsections describe the four Measure DD funded project groups and their associated components. Each proposed component is numbered for ease of reference.

## **1. Lake Merritt and Lake Merritt Channel Improvements (Group 1)**

The major proposed components in the Lake Merritt and Lake Merritt Channel group are (beginning at the southern end of the Lake): the 12<sup>th</sup> Street Improvements (1a); Lake Merritt Channel (1b); Lakeshore Avenue, El Embarcadero, Pergola, and E. 18<sup>th</sup> Street Pier Improvements (1c); Lakeside Drive and Municipal Boathouse (1d); Snow Park/Lakeside-Harrison-20<sup>th</sup> Street Intersection (1e); Bellevue Avenue Redesign, Children's Fairyland, and the Sailboat House (1f). Additional proposed components include water quality improvements for the Lake and improvements of the Lake Merritt retaining walls (1g). The locations of these proposed components are shown in Figure III-1 and described in additional detail below. Given the level of detail known about these proposed components, they are analyzed within the EIR at a project level, as described above and within Chapter I, Introduction.

**a. 12<sup>th</sup> Street Improvements (1a).** Existing 12<sup>th</sup> Street is a 12-lane divided roadway that crosses the Lake Merritt Channel. Water passes under the roadway through a series of unnavigable culverts. Pedestrian and bicycle access between Lake Merritt Park and the Channel is only provided only through a tunnel. As part of the proposed Measure DD improvements, the 12<sup>th</sup> Street culvert at Lake Merritt Channel would be replaced with a 100-foot-wide open channel, spanned by bridges, to allow increased tidal flow into and out of Lake Merritt and greater public access to the Channel.

**Table III-1: Measure DD Proposed Components**

GROUP	STATUS
<b>1. LAKE MERRITT AND LAKE MERRITT CHANNEL</b>	
<b>(1a) 12th Street Improvements</b>	
Replace the 12 <sup>th</sup> Street culvert at Lake Merritt Channel with a bridge to increase tidal flow into and out of Lake Merritt	Design drawings are complete.
Reconfigure 12 <sup>th</sup> Street, create a new 4-acre park, and connect these features to the Lake Merritt Channel	Design drawings are complete.
<b>(1b) Lake Merritt Channel</b>	
Construct a bridge to replace the existing culvert at 10 <sup>th</sup> Street	Design is underway.
Redesign Channel at the Lake Merritt flood control station at 7 <sup>th</sup> Street	Design is underway.
Improve bike, pedestrian access, restore wetlands and make other Channel and shoreline improvements	Design is underway.
<b>(1c) Lakeshore Avenue, El Embarcadero, Pergola, and E. 18<sup>th</sup> Street Pier Improvements</b>	
Consolidate the El Embarcadero roadway to form a "Grand Lake green link"	Design drawings are complete.
Renovate Pergola	Renovation is complete.
Renovate E. 18 <sup>th</sup> Street Pier	Design is complete.
Widen Lake Merritt Park paths and add bike lanes by reconfiguring perimeter streets (Oak Street, Harrison Street, Lakeside Drive and Lakeshore Avenue)	Design drawings are nearly complete.
<b>(1d) Lakeside Drive and Municipal Boathouse</b>	
Widen Lake Merritt Park paths and add bike lanes by reconfiguring perimeter streets (Oak Street, Harrison Street, Lakeside Drive and Lakeshore Avenue)	Design drawings are nearly complete.
Renovate the Municipal Boathouse at 1520 Lakeside Drive and restore public use	Interior demolition and asbestos/lead abatement work is complete. Main renovation construction is underway.
<b>(1e) Snow Park and Lakeside-Harrison-20<sup>th</sup> Street Intersection</b>	
Expand Snow Park and redesign the Lakeside Drive-Harrison Street-20 <sup>th</sup> Street intersection	Concept plan complete. Design work has not yet begun.
Implement system-wide improvements including paths, irrigation, landscaping, furnishing, restrooms and signs	Some improvements are being designed and others are under construction.
<b>(1f) Bellevue Avenue Redesign, Children's Fairyland and the Sailboat House</b>	
Redesign Bellevue Avenue to improve circulation and to accommodate parking moved from the Sailboat House	Concept plan complete. Design work has not yet begun.
Renovate Children's Fairyland	Set renovation work began in April 2005, with the Chapel of Peace already completed. The puppet theater addition is complete. Pavilion and utility infrastructure project is out to bid.
Renovate the Sailboat House and convert some of the adjacent parking lot to parkland	Design work has not yet been started.

Table III-1 *Continued*

GROUP	STATUS
<b>(1g) Water Quality Control Measures and Other Improvements</b>	
Install stormwater filters, floating trash barriers, and aerating fountains, and implement other water quality improvements, including goose management elements	A new aeration fountain at Grand and Harrison is complete. Stormwater filters have been installed at several locations. Other projects are being considered.
Repair or replace Lake Merritt retaining walls	Some improvements have been completed. Others are associated with specific projects, such as renovation of the Municipal Boathouse.
<b>2. OAKLAND WATERFRONT TRAIL AND ACCESS</b>	
Acquire land for conservation and remediation purposes	One acquisition has been completed, others are in negotiation stage
Remediate hazardous materials from contaminated soils	Some remediation is complete (e.g., at Union Point Park). Other sites would be remediated as part of future projects.
Provide continuous public access from Jack London Square to Martin Luther King Jr. Regional Shoreline	Some connecting components are complete. Others are in the design phase or would be designed in the future.
Construct an access/overlook area at 66 <sup>th</sup> Avenue	Design is underway.
Acquire and develop Estuary Park, Meadow Park and a new park in the area of the 9 <sup>th</sup> Avenue Terminal	Oak to 9th developer is scheduled to build parks at Meadow Park and 9 <sup>th</sup> Avenue, and clean up Estuary Park. Estuary Park design is on hold awaiting cleanup.
Complete Union Point Park	Construction is complete.
<b>3. NORTH AND EAST OAKLAND RECREATIONAL FACILITIES</b>	
Construct the East Oakland Sports Complex	Preliminary design is complete.
Renovate and restore Studio One Art Center	Renovation is currently underway.
<b>4. CITY-WIDE CREEKS</b>	
Restore and rehabilitate creeks by creating natural meanders, regrading and stabilizing banks, removing failing structures, and landscaping with native plants	Restoration activities are ongoing.
Acquire creekside properties to facilitate restoration and habitat preservation	Acquisition and preservation activities are ongoing.

Redesign of 12<sup>th</sup> Street between Oak Street and 3<sup>rd</sup> Avenue is proposed for this component. The 12<sup>th</sup> Street roadway in the area, including two earthquake-damaged overpasses, would be demolished and replaced with a 6-lane, tree-lined boulevard with signalized intersections, crosswalks, and a landscaped median. This action would also create approximately 4 acres of new parkland at the southern end of Lake Merritt would remove the pedestrian tunnels, provide safe and continuous access along the perimeter of the Lake, and improve the access to the Kaiser Convention Center and Laney College. Once the existing 12<sup>th</sup> Street roadway structure is demolished, typical construction activities would include clearing, grading, excavating, pile driving (in areas near the Channel), concrete placement, paving and replanting of landscaping with various pieces of construction equipment and by hand labor.

As part of this project component, the parking lot for the Kaiser Convention Center is proposed to be demolished and reconstructed. Bus stops would be located along 12<sup>th</sup> Street. The redesign of 12<sup>th</sup> Street would also create the following new intersections: 13<sup>th</sup> Street/14<sup>th</sup> Street; 11<sup>th</sup>-12<sup>th</sup> Street/14<sup>th</sup> Street; 12<sup>th</sup> Street/Kaiser Convention Center; 12<sup>th</sup> Street with East (E.) 12<sup>th</sup> Street; and Lakeshore Avenue/1<sup>st</sup> Avenue. The current intersection of Lakeshore Avenue and 12<sup>th</sup> Street would be closed to form a Lakeshore Avenue cul-de-sac with through traffic on Lakeshore Avenue diverted onto 1<sup>st</sup> Avenue. The demolition of E. 12<sup>th</sup> Street would create a City-owned, remnant parcel at the southeast corner of 1<sup>st</sup> Avenue and E. 12<sup>th</sup> Street. Figure III-2 shows a conceptual plan of the street realignment.

Implementation of these and other proposed traffic changes around Lake Merritt would transform the streets from high-speed commuter routes into calmer, scenic boulevards. Bicycle and pedestrian safety would be greatly improved, and the park itself would be significantly expanded. This component is closely linked to the proposed improvements to the Lake Merritt Channel, with the two components allowing for improved connectivity between Lake Merritt, the Oakland Estuary and San Francisco Bay for both the flow of water and recreational users.

The City is proposing to renovate existing plantings and irrigation around the 12<sup>th</sup> Street component site. This includes removing approximately 157 existing trees from the median strip along 12<sup>th</sup> Street, the Kaiser Convention Center parking lot and some areas along the banks of the Lake Merritt Channel and replanting these areas with approximately 321 new trees and other landscaping. The final numbers of trees removed or planted may differ slightly from these counts. Some trees would be removed because they are in conflict with the new construction, are diseased, have severe structural defects or are fast-growing, short-lived trees reaching the end of their life expectancy. Figure III-3 shows the area where trees are proposed to be removed as part of this project component. As part of the project design process the City hired a certified arborist to evaluate the trees proposed for removal around Lake Merritt and the Lake Merritt Channel. The arborist recommended preserving four trees in this area by redesigning the project or by relocating some of the trees. The City has incorporated these recommendations into the project. The arborist's report is provided in Appendix I.







Design drawings for the proposed 12<sup>th</sup> Street project component have been prepared. Construction is proposed to begin in 2008 and take approximately two years to complete. Under the proposed plan, construction would be staged in a way that would maintain traffic, pedestrian, and bicycle connections between the east and west sides of Lake Merritt along the Frickstad Viaduct until the new roadway is complete adjacent to the Kaiser Convention Center. Once the new roadway is complete traffic, pedestrian, and bicycle connections would be transferred to the new roadway and the viaduct would be demolished. The City is also considering a construction phasing option that would shorten the construction period. This option would reroute traffic, pedestrians and bicycles to 10<sup>th</sup> Street and other streets, and close the 12<sup>th</sup> Street corridor completely during construction. As part of this option the City would temporarily prohibit parking along 10<sup>th</sup> Street in order to increase the number of travel lanes from one to two in each direction. Some intersections would also be signalized in order to improve traffic flow.

**b. Lake Merritt Channel (1b).** The Lake Merritt Channel is a narrow waterway that connects Lake Merritt with the Oakland Estuary and San Francisco Bay. The Measure DD Implementation Project components proposed along the channel are intended to improve water flow, provide small boat passage, enhance bicycle and pedestrian access, restore wetlands, and make other channel and shoreline improvements.

The existing 10<sup>th</sup> Street crossing of the Lake Merritt Channel consists of a box culvert covered by approximately 8 feet of earth fill that forms the roadway embankment. The culvert, which is unnavigable, consists of eight cells, each of which is 6 feet wide and 6 feet high.

The existing 7<sup>th</sup> Street crossing consists of a pump station covered by approximately 5 feet of earth fill that forms the roadway embankment. The existing 7<sup>th</sup> Street Pump Station is located within the 7<sup>th</sup> Street Bridge structure and is used primarily to prevent flooding during significant storm events by pumping water from the Lake to the Channel. Four 225 cubic feet per second capacity pumps are located within the pump station, which is operated by the Alameda County Flood Control and Water Conservation District (ACFCWCD). According to the ACFCWCD, the flood control pumps are utilized approximately 1 percent of the time. During the remainder of the year, tidal flow is conveyed by gravity through the two 12-foot by 17-foot box culverts that make up the pump station suction and discharge channels.<sup>1</sup>

As part of the Measure DD Implementation Project, the City proposes to widen the Channel, streambed, stream banks and upland areas between Lake Merritt and the Estuary by removing the 10<sup>th</sup> Street culvert and 12<sup>th</sup> Street culvert (discussed above) and grading the Channel's banks, thus creating additional areas of open water and tidal marsh as shown in Figure III-4. The bottom of the channel at 12<sup>th</sup> Street would be lowered. Shoreline improvements (e.g., pedestrian pathways) would be similar to the designs proposed for the 12<sup>th</sup> Street project component. The existing pedestrian bridge below 10<sup>th</sup> Street would be refurbished or replaced. The City is proposing to remove some existing trees (approximately 58) along the channel as shown in Figure III-5. Invasive exotic plants, such as *Spartina*, would be removed if present along the shoreline and new intertidal and upland plantings consisting of native plants such as pickleweed (lower marsh areas), marsh gumplant, and salt grass (upper marsh areas and transitional zones characterized by native grasses), and shrubs and trees would be planted to restore the natural ecosystem of the Channel. Control measures for *Spartina*

<sup>1</sup> URS, 2004. *Technical Memorandum, City of Oakland, Lake Merritt Channel, Pump Station Alternatives*. June 26.

would include those approved by the San Francisco Estuary Invasive Spartina Project. The City also is proposing to install biofiltration basins to improve water quality. Typical construction activities would include clearing, grading, excavating, pile driving, and replanting of landscaping using various pieces of construction equipment and by hand labor.

This reconfiguration would include the continuation of pathways established as part of the 12<sup>th</sup> Street and 10<sup>th</sup> Street project components, the improvement of pedestrian tunnels under 7<sup>th</sup> Street, and the installation of a new traffic signal and crosswalk across 7<sup>th</sup> Street. The 7<sup>th</sup> Street project component proposes the creation of a bypass channel to improve recreational access, as well as to allow large fish to once again enter the upper Lake Merritt Channel and Lake Merritt.

Designs for the 7<sup>th</sup> Street project component, the 10<sup>th</sup> Street Bridge, and related channel and park improvements have been completed to the conceptual stage. A conceptual plan of the improvements is shown in Figure III-4.

**c. Lakeshore Avenue, El Embarcadero, Pergola, and E. 18<sup>th</sup> Street Pier Improvements (1c).**

A number of improvements are proposed along the portion of Lakeshore Avenue that extends along the eastern edge of the Lake from El Embarcadero and the Pergola to 12<sup>th</sup> Street including the reconfiguration of Lakeshore Avenue. Lakeshore Avenue is a four-lane street that runs along the eastern shore of Lake Merritt and is approximately 1 mile in length. Changes to Lakeshore Avenue, between MacArthur Boulevard and E. 18<sup>th</sup> Street, as shown in Figure III-1, are included as a Measure DD component. Two variants for Lakeshore Avenue are being evaluated and are described below.

**(1) Lakeshore Avenue Variant A.** As part of Variant A, Lakeshore Avenue would be narrowed from four lanes to two lanes for vehicle traffic and would include five-foot-wide Class 2 bike lanes. The new curb on the Lake Merritt side of Lakeshore Avenue would be constructed approximately 12 feet east of the existing curb location. The number of on-street parking spaces would remain approximately the same as currently exists. Figure III-6 is a conceptual plan which shows the proposed Lakeshore Avenue and El Embarcadero improvements. Typical construction activities would include removal of part of the existing roadway, clearing, grading, excavating, concrete placement, paving and replanting of landscaping using various pieces of construction equipment and by hand labor.

The City is proposing to install improved pathways on the west side of Lakeshore Avenue. They would consist of a continuous, 10-foot-wide, decorative concrete, multi-use trail with a parallel 3.5-foot-wide decomposed granite jogging trail. A new 6-foot-wide planting strip next to the new curb location would buffer the multi-use trail from the roadway. The shoreline trail would be constructed with polymer-hardened decomposed granite in order to provide a firm and stable surface to comply with the Americans with Disabilities Act (ADA). Park landscaping would be renovated with some trees removed. The City is currently finalizing the Lakeshore Avenue design.

New seating areas are proposed for development throughout the park. Pedestrian improvements would include reducing the crossing distance on Lakeshore Avenue by 12 feet, installing bulb-outs at the Cleveland Cascade, adding highly visible crosswalk pavement marking at mid-block crossings at the Lakeview Library and Cleveland Cascade, and creating pedestrian refuge islands at El Embarcadero, Boden Way, Brooklyn Avenue, and Wesley Avenue. ADA-compliant curb ramps would be







installed at all intersections and a ramp would be installed at the Pergola to provide wheelchair access.

**(2) Lakeshore Avenue Variant B.** Lakeshore Avenue Variant B proposes to re-stripe the street to create one travel lane in each direction, a Class 2 bike lane in each direction, a continuous left-turn lane down Lakeshore Avenue, and parking lanes along both curbs. A planting strip, including street trees, would be included along the park border. A multi-use path would be installed between the planting strip and the park landscaped area. As with Variant A, park landscaping would be renovated and the removal of some trees is proposed. The surface of the lakeside path would be resurfaced with stabilized decomposed granite and would be widened at the narrow spots. The pedestrian crossing at Cleveland Cascade would be improved and mid-street pedestrian islands would be included at intersections as appropriate. Typical construction activities would include paving, grading, path resurfacing and replanting of landscaping.

**(3) Cleveland Cascade.** The Cleveland Cascade is a series of staircases located on the east side of Lakeshore Avenue, south of the Lakeshore Avenue/Boden Way intersection. This stairway provides pedestrian passage between Lakeshore Avenue and Merritt Avenue. This area is proposed to be renovated with improved landscaping, removal of approximately six trees, repaired concrete work, lighting, and new handrails. Restoration of the water feature is also planned.

**(4) El Embarcadero.** At El Embarcadero, the southern-most traffic couplet is proposed to be closed to vehicle traffic and would be reconstructed to accommodate the multi-use trail and a new formal plaza area just north of the Pergola. The northerly traffic couplet of El Embarcadero would be widened by two feet toward the Lakeview Branch Library to safely accommodate two-way traffic. The northerly traffic couplet would be configured with two eastbound lanes and one westbound lane. A new traffic signal would be installed at Lakeshore Avenue. Typical construction activities would include clearing, grading, excavating, concrete placement, paving and replanting of landscaping using various pieces of construction equipment and by hand labor.

**(5) Pergola and Colonnade.** The Lake Merritt Pergola and Colonnade (Pergola) are located off of Lakeshore Avenue on the northern part of Lake Merritt, as shown in Figure III-1. Improvements to the Pergola include structural work, waterproofing, re-roofing, and painting. These improvements were completed in December 2006. As such, they are part of the existing setting with respect to this EIR's analysis.

**(6) E. 18<sup>th</sup> Street Pier.** The E. 18<sup>th</sup> Street Pier is located on Lake Merritt at the intersection of Lakeshore Avenue and E. 18<sup>th</sup> Street. The steps from the pier to Lake Merritt are currently in disrepair and are fenced off to prevent public access to the water. As part of Measure DD implementation, the pier is proposed to be renovated to incorporate part of its original design and restored as an overlook point on Lake Merritt. Construction activities would include concrete work and pile driving.

**(7) Landscaping Improvements.** Approximately 9 acres of existing planting and irrigation are proposed to be renovated along Lakeshore Avenue. This renovation would include removing approximately 24 existing trees and planting approximately 135 new trees. The final numbers of trees removed or planted may differ slightly from these counts. As part of the project design process the City hired a certified arborist to evaluate the trees proposed for removal around Lakeshore Avenue. The arborist recommended preserving one tree in this area by relocating it. The City has incorporated

this recommendation into the project. The arborist's report is provided in Appendix I. The trees would be removed because they are diseased, have severe structural defects, are crowding buildings, conflict with the new construction or are fast-growing, short-lived trees reaching the end of their life expectancy. Landscaped areas with shrubs and ground cover would replace the existing lawn in narrower parts of the park corridor. This substitution would reduce maintenance and water use and reduce the attractiveness of the area to Canada geese. Hardscape development, including benches and patios, would be added at creek nodes and areas where small peninsulas jut out into the Lake. Figure III-7 shows a proposed landscaping plan, which indicates where trees would be removed and new trees would be planted.

**d. Lakeside Drive and Municipal Boathouse (1d).** Improvements to Lakeside Drive and the Municipal Boathouse along the western edge of the Lake are proposed as part of Measure DD implementation.

**(1) Lakeside Drive.** Lakeside Drive is a four-lane road along the west side of Lake Merritt. Lakeside Drive is proposed to be restriped from four lanes to two lanes for vehicle traffic and would include a five-foot-wide Class 2 bike lane from 14<sup>th</sup> Street to Grand Avenue. Oak Street would transition from four lanes to two between 13<sup>th</sup> and 14<sup>th</sup> Streets. A multi-use path, similar to that created on Lakeshore Avenue, would be created on the east side of Lakeside Drive. The pathway would be a continuous, 10- to 15-foot-wide decorative concrete multi-use trail with a 3.5-foot-wide decomposed granite jogging trail installed along the east side of the sidewalk on Lakeside Drive. A grand stairway leading from Lakeside Drive to the Municipal Boathouse would be constructed as part of the proposed project component. New seating areas would be developed along the multi-use trail. Pedestrian improvements include bulb-outs on Lakeside Drive at the mid-block crossing in front of the Scottish Rite Center and at 17<sup>th</sup> Street. Curb ramps that comply with the ADA would be installed as required.

**(2) Municipal Boathouse.** The Municipal Boathouse (Boathouse) is located on the western shore of Lake Merritt at 1520 Lakeside Drive, as shown in Figure III-1. The Boathouse is a two story mission-style structure with stucco on the exterior of the building and a tile roof. The Boathouse includes a dock. It would be converted from an office facility and would undergo major improvements including seismic retrofitting. The upper levels of the renovated Boathouse would provide space for a restaurant, a café and a meeting room. On the lower levels, boating facilities would be upgraded to meet current use requirements. Interior demolition and asbestos/lead paint abatement work for the Boathouse has been completed. The Boathouse is currently vacant, and exterior renovations and repair began in September 2006. A conceptual plan of the Boathouse and the park improvements is shown in Figure III-8.

Existing parking facilities at the Boathouse are proposed to be relocated and consolidated into a 28-space parking lot in the existing lawn area north of the Boathouse. The number of on-street parking spaces on Lakeside Drive would be increased by constructing a median and moving the curb. Drainage from the site north of the Boathouse, including the new parking lot and related driveways, would be channeled into a bio-swale in order to reduce contaminants in stormwater that drains into the Lake. The existing restroom building located adjacent to the Boathouse would be removed and a new restroom building would be constructed further south as part of the 12<sup>th</sup> Street project. Typical construction activities would include clearing, grading, excavating, pile driving, concrete placement, paving and replanting of landscaping using various pieces of construction equipment and by hand labor.





Approximately 4 acres of existing planting and irrigation are proposed to be renovated along Lakeside Drive and around the Boathouse. This renovation would include removing approximately 20 existing trees and planting approximately 65 new trees. The final numbers of trees removed or planted may differ slightly from these counts. The trees would be removed because they are in conflict with the new construction, are diseased, have severe structural defects or are fast-growing, short-lived trees that have reached the end of their life expectancy. Figure III-9 shows the proposed landscape plan, which indicates where trees would be removed and new trees would be planted.

**e. Snow Park and Lakeside-Harrison-20<sup>th</sup> Street Intersection (1e).** Snow Park and the Lakeside-Harrison-20<sup>th</sup> Street intersection are located on the west side of Lake Merritt, north and west of the Municipal Boathouse. This proposed project component would reconfigure the street system in the vicinity of Snow Park. Lakeside Drive would be narrowed from four travel lanes to two between 14<sup>th</sup> and 17<sup>th</sup> Streets and between 19<sup>th</sup> and 20<sup>th</sup> Streets. Between Lakeside Drive and Harrison Street, 20<sup>th</sup> Street would be removed and converted to parkland. The intersection of Harrison Street and Lakeside Drive would be reconfigured to form a perpendicular “T” intersection. Typical construction activities would include clearing, grading, excavating, concrete placement, tree removal, paving and replanting of landscaping using various pieces of construction equipment and by hand labor.

From the new intersection of Harrison Street and Lakeside Drive to Grand Avenue, Harrison Street would be reduced to three lanes in the southbound direction, which would allow the construction of a new southbound bicycle lane between Grand Avenue and Lakeside Drive. Other proposed bicycle lane improvements would include a new northbound bicycle lane from 17<sup>th</sup> to 19<sup>th</sup> Streets; new bicycle lanes in each direction from 19<sup>th</sup> Street to 20<sup>th</sup> Street; and a new multi-use path on the lake side of Lakeside Drive and Harrison Street.

Additional proposed details for the project component would become available as engineering design progresses. The design process would include construction staging and management plans, transit accommodations, a demolition plan, a detour plan for both automobiles and pedestrians, a dust abatement plan, a construction noise plan, an erosion control plan and other engineering requirements in compliance with the City’s standard conditions and practices.

**f. Bellevue Avenue Redesign, Children’s Fairyland and the Sailboat House (1f).** A number of proposed improvements are at the north end of Lake Merritt including the redesign of Bellevue Avenue and the renovation of Children’s Fairyland and Sailboat House.

**(1) Bellevue Avenue.** Bellevue Avenue is a two-lane one-way road that follows along a portion of the northern part of Lake Merritt. Portions of this road are proposed to be widened by approximately 11 feet to accommodate diagonal parking that is being relocated from the Sailboat House parking lot. Widening may require removal of some existing trees. Lighting and landscaping would be improved and sidewalk bulb-outs at intersections would be incorporated to improve pedestrian crossings. A parallel pedestrian path would be provided and the Grand Avenue intersection with Bellevue Avenue would be narrowed to one lane to improve pedestrian conditions. Fire hydrant improvements are proposed throughout Children’s Fairyland, Bellevue Avenue, and the Sailboat House areas.

**(2) Children’s Fairyland.** Children’s Fairyland is located on the northern portion of Lake Merritt, near the intersection of West Grand Avenue and Bellevue Avenue, as shown in Figure III-1.

Proposed renovation would include the implementation of a facility master plan for Children's Fairyland, which includes the construction of a new pavilion for theatre presentations and special events, renovation of the puppet theatre, improvements to the Grand Avenue entry, refurbishment of sets, and repair of site drainage system. Some of the proposed alterations have already been completed.

**(3) Sailboat House.** The Sailboat House is located off of Bellevue Avenue on the northern shore of Lake Merritt. It accommodates recreational programs, boat storage, meeting rooms and other public uses. The Sailboat House is a two-story, wood structure with several associated boat ramps and docks. The facility's parking lot is located northeast of the Sailboat House and several small outbuildings are located between the Sailboat House and Bellevue Avenue. The building was extensively remodeled in the 1950's, which masked the original mission-style architecture (similar to the Municipal Boathouse) and created a larger, enclosed second story on the structure. Measure DD funds would be used to renovate the Sailboat House. The extent of the Sailboat House renovations is uncertain at this time, but could range from repainting and minor upgrades of the existing structure to renovation of the structure to reveal its historic character. Improvements would be made to the seawall, shoreline, and landscaping, and the parking lot would be reduced in size and reconfigured.

**g. Water Quality Control Measures and Other Improvements (1g).** Water quality improvement is one goal of Measure DD. Water quality control measures, as well as other improvements proposed for Lake Merritt and Lake Merritt Channel as part of Measure DD, are described below.

**(1) Water Quality Control Measures.** Water quality improvement is an important goal of Measure DD. Section 303(d) of the federal Clean Water Act (CWA) requires States to identify waters that do not meet prescribed water quality standards. Lake Merritt is a 303(d) listed impaired water body due to trash and organic enrichment and low levels of dissolved oxygen. Activities under the Lake Merritt Water Quality Program that could be funded under Measure DD include:

- **Cessation of bird feeding at Lake Merritt** – Install signage to prohibit bird-feeding at Lake Merritt, in part to discourage Canada geese from congregating excessively at the Lake. The droppings generated by Canada geese partly contribute to the nutrient load in the Lake.
- **Circulators** – Install circulators, which bring water from the bottom of the water column to the surface. This movement of water continually oxygenates the water column.
- **Bubbler and Air Diffusers** – The bubbler technology being considered for Lake Merritt would consist of approximately 150 diffusers distributed in a grid pattern throughout Lake Merritt. The diffusers would be spaced approximately 100 feet on-center along eight hose lines. These diffusers would emit a constant stream of air from the lake bottom, boiling up to the surface to create vertical mixing of the lake water. Eight compressors, requiring 2 kilowatts of energy each, would be located along the shoreline. Each compressor would be turned on and off as needed.
- **Aeration Fountains** – Install fountains. Spray from the fountains absorbs oxygen that is released when the droplets strike the surface.
- **Restorer Technology** – Install restorer technology, which uses artificial and living substrates to create a floating island of ecological activity for enhanced filtration.



- **Biofiltration Techniques** – Install biofiltration basins, infiltration ponds, swales and/or constructed wetlands to promote nutrient cycling and removal, reduce suspended and total dissolved solids, and promote the production of oxygen. These landscape features can also enhance wildlife habitat.
- **Stormwater separators on City stormdrains** – Install separators, which are flow-through devices placed within stormdrain systems with a separation unit to remove sediments and/or trash. At the tidally influenced Lake Merritt, tide flaps are being considered at the end of culverts. Tide flaps allow storm water runoff into the Lake, but prevent tidal flows from entering into the City’s drainage system.
- **Drain inlet inserts** - These are used to capture sediments, litter and organic debris. Drain inlet inserts generally take the form of either: baskets, boxes, fabrics, media filters, and screens.
- **Netting Trash Trap** – Install nets, which are placed at stormwater outfalls and channels, to capture trash and organic materials prior to entering a water body.
- **Booms** – Install floating booms in association with stormwater outfalls and channels, to capture trash and organic materials after entering water body.

(2) **Other Lake Merritt Improvements.** Many retaining walls surrounding Lake Merritt are cracking or are in poor condition including those at the Sailboat House, Municipal Boathouse and E. 18<sup>th</sup> Street overlook pier. With Measure DD funding, improvements to these walls may include reconstructing or strengthening foundations, providing shoring to brace the retaining walls, installing drainage measures around the walls to prevent erosion, or restoring wall surfaces. Temporary cofferdams and dewatering may be required in some locations to provide access to the retaining walls. Some reconstruction and restoration of the retaining walls has been completed. Additional work would be implemented as part of specific project components, such as the proposed renovation of the Municipal Boathouse.

## 2. Oakland Waterfront Trail and Access Improvements (Group 2)

The Oakland Waterfront Trail is part of the San Francisco Bay Trail, a planned 400-mile network of bicycle and hiking trails that will form a continuous ring around the Bay. Measure DD implementation is intended to help close the gaps in a 6.6-mile portion of the trail between Jack London Square and 66<sup>th</sup> Avenue. Measure DD funds are allocated for property acquisition, environmental cleanup, and trail and park construction along the waterfront. A sufficient level of detail is known about these proposed components, enabling a project level analysis of these components within the EIR, as described in Chapter I, Introduction.

Properties along the waterfront designated for parkland development are proposed to be acquired and remediated, as needed, with Measure DD funding. The sites would be remediated before the proposed trail facilities would be constructed. Cleanup plans would be developed for each site where sampling results show that soil or groundwater is contaminated above risk-based clean-up standards. Prior to implementation of cleanup, the plans would be reviewed by the agency with regulatory oversight of the cleanup, such as the San Francisco Bay Region, Regional Water Quality Control Board (Water Board). As part of the Water Board’s review process the draft cleanup plans are circulated to interested persons, who are provided an opportunity for comment on these documents. Such plans would specify measures to be taken to remediate the site and to protect workers, the public and the

environment during remediation. Contamination may be excavated and disposed of at an approved landfill facility, capped in place or otherwise remediated, as appropriate. If residual contamination is left in place a risk management plan would be prepared in accordance with the requirements of the overseeing regulatory agency. A remediation plan has been prepared and approved for the Cryer Site, which is one of the contaminated sites along the Waterfront Trail.

**a. General Trail Characteristics.** Most of the 6.6 miles of trail would be paved with asphalt or concrete, with minimal grading so as to minimize disturbance of the ground surface. At some locations, invasive exotic plants, such as *Spartina*, would be removed if present along the shoreline. Control measures for *Spartina* would include those approved by the San Francisco Estuary Invasive Spartina Project. Some portions of the existing Bay Trail between Jack London Square and 66<sup>th</sup> Avenue may be repaired to fix broken pavement, lighting, or signage. The trail would vary from a minimum 12-foot-wide combined use trail where space is constrained to a pair of bike and pedestrian trails separated by a landscaped median, with a total width of up to 40 feet. At points of interest, additional landscaping would be planted. Various types of decorative and informational wayfinding signage would be installed along the trail.

**b. Site-Specific Improvements.** Specific improvements proposed as part of Measure DD for the Waterfront Trail are described below. The locations of these project components are shown in Figure III-10a and III-10b.

**(1) Estuary Park.** Estuary Park is an existing 7-acre park located on the northern bank of the Lake Merritt Channel where the channel merges into the Oakland Estuary. This park includes boat ramps, an existing play field, hardscape with a seating area, and the Jack London Aquatic Center building. As part of the Oak to Ninth Avenue Project (approved by Oakland City Council in 2006), changes were proposed to the Estuary Park and the adjoining Cash and Carry Warehouse site. These changes include re-vegetation of the 3.5-acre lawn/play field, shoreline protection, and improvements to the Bay Trail. Demolition and/or development of the Cash and Carry Warehouse site are the obligation of the Oak to Ninth Avenue Project as well. Measure DD-funded actions would include trail improvements, park landscaping renovations, minor improvements on the Port's trail from Alice Street to Estuary Park, provision of access along the water's edge, and redesign of parking.

**(2) 10<sup>th</sup> Avenue Marina.** The Bay Trail already exists at this location. Proposed work would consist of minor upgrades to the trail width, paving and incorporation of sign and trail markers.

**(3) Brooklyn Basin.** The Brooklyn Basin property is located on the waterfront adjacent to the Oakland Estuary, and is bound by the Brooklyn Basin waterway to the southwest, Embarcadero Way to the northeast, a boat retail facility to the northwest, and a hotel to the southeast. This site is one of the few vacant sites along the waterfront, and provides a visual connection to the water from the freeway and adjacent neighborhoods.

The site is owned by the Port of Oakland (Port). Lead contaminated soil has been identified on the site. Currently the Port is negotiating with a developer for the site. BCDC would require the developer to construct the trail on the property. If negotiations are unsuccessful, the City would repair or replace the failing seawall, remediate the soil, and install the Waterfront Trail and landscaping.





(4) **Brooklyn Basin to Embarcadero Cove.** There is an existing segment of the Bay Trail between Brooklyn Basin and Embarcadero Cove. Signage and trail markers would be incorporated into this portion of the trail. A better connection would be made at the Harbor Master's Office, and the pathway improved through the Embarcadero Cove complex.

(5) **Livingston Pier.** Livingston Pier is located at the terminus of Livingston Street, north of the bridge to the Coast Guard Island. The pier is currently leased by the Port to Vortex Diving through 2011 and is not currently open to the public.

A very short section of the Bay Trail would run across the entry to the pier. Long-term plans for the pier could include the use of the structure on the pier for recreational/retail uses with the trail wrapping around the perimeter of the pier. Standard signage and lighting would be incorporated.

(6) **Cryer Site.** The Cryer Site is located at the corner of Embarcadero and Dennison Street, and borders the Estuary to the west. The site is composed of two separate properties: the Cryer Boat Yard Property (approximately 1.0 acres), and the Steam Valve property (0.6 acres). For purposes of this EIR, both parcels together will be considered the Cryer Site. All structures on the Cryer Boat Yard Property have been demolished; the Steam Valve property has one large building on the northern portion of the site.

Soil investigations concluded that the site contains soil contaminated with metallic slag. Sediment sampling below the low tide line showed contamination with hydrocarbons and heavy metals. A Final Corrective Action Plan (CAP) was prepared and submitted to the Water Board in March 2007. The Final CAP proposes excavating approximately 3,250 cubic in-place yards of slag and contaminated soil and capping the site with clean soil and/or concrete design elements where some slag materials may remain on-site to prevent exposure. Excavated materials would be transported off site for disposal at a permitted facility. The Final CAP has been approved by the Water Board.

Proposed improvements to the Cryer Site are considered a second phase to the Union Point Park. Possible improvements for this property could include a connection to the Waterfront Trail, a park area, parking, beach restoration, pier replacement, and potentially converting the building for community use.

(7) **Union Point Park.** The Union Point Park is a 9-acre park located at 2311 Embarcadero East between Dennison and Kennedy Streets. The park includes picnic and barbeque facilities, a children's play structure, parking area, restrooms, water fountains, an expansive lawn, and a connection to the Bay Trail. The construction of Union Point Park was completed in 2005.

(8) **Union Point Park to Park Street Bridge.** A trail easement would be acquired from the property owners and a trail constructed along the shoreline.

(9) **Bridges at Park Street, Fruitvale Avenue and High Street.** Four bridge crossings have been proposed to continue the Bay Trail along the Oakland Estuary: the Park Street Bridge, the Fruitvale Avenue Bridge, Fruitvale Avenue Railroad Bridge, and the High Street Bridge. The preferred plan for these bridge crossings is for the trail to pass under the bridges on pile-supported, elevated pathways. This would allow trail users to pass the existing bridges without grade-level auto traffic conflicts. The proposed trail would cross under the bridge abutments and over water. The

existing bridge fender system would be demolished and replaced with a new one. Pile driving would likely occur during construction.

Trail sections at bridge crossings would be 12-foot-wide solid decking supported by concrete piers set in pairs approximately 30 feet on center. Columns would be 18 inches square drilled or driven to a depth of up to 30 feet on land and 24 inches square embedded up to 40 feet below the mudline where the path occurs over water. Sections under bridges would be covered with a protective roof to prevent injury to trail users from objects falling from the bridge or bridge deck. The transition from the shore side trail to the bridges would be above grade trails. The approximate total length of these trail sections would be 1,400 feet. To the extent feasible, the over water sections would not extend beyond the existing pierhead line or into tideland area. Only the elevated trail sections leading to the bridges may extend over tideland area.

**(10) Park Street Triangle.** The Park Street triangle is currently occupied by a 7-11 and Nikko's Family Restaurant. This site is a gateway to the waterfront for travelers along 23<sup>rd</sup> Avenue and Park Street Bridge. Measure DD funded a traffic study of potential street realignments and Bay Trail construction at this location. Any further work would be funded by other sources and undergo a separate CEQA process.

**(11) Derby Avenue to Lancaster Street.** Derby Avenue and Lancaster Street are the only streets between the Park Street Bridge and the Fruitvale Bridge that terminate at the waterfront. The terminus of these streets at the waterfront would include pocket parks, providing observation areas along the waterfront. A trail would connect the parks and run behind the Oakland Museum Women's Board warehouse. The two parks would include landscaping, special paving, seating, and a terraced slope down to the water's edge.

The trail would be constructed along one block between Derby Avenue and Lancaster Street for 400 feet. Approximately 160 feet would consist of engineered trail on top of an existing sheet pile wall. The remaining 240 feet would be a pile-supported trail cantilevered over an existing rock slope, which would remain in place. Pile driving would be required to install the new trail.

Phase II soil testing is complete, and no serious contamination was found. An easement agreement has been reached with the Oakland Museum Women's Board for the trail between the two parks.

**(12) Alameda Avenue South of Fruitvale Avenue.** This proposed segment of the trail extends southeast of the Fruitvale Bridge along Alameda Avenue. It would include the installation of 800 feet of standard concrete trail along with landscaping, signage, and trail markers. The existing traffic lanes would be narrowed and Class II bike lanes added in each direction.

The Phase II environmental testing is complete, and no serious contamination was found.

**(13) US Audio/Capture Technologies and Friendly Transportation Trail Connection.** As part of the Measure DD Implementation Project, construction of the Waterfront Trail is proposed across these properties. The trail would be partially pier-supported, which would require pile driving to construct. An easement for access to the trail across these properties is currently being sought.

**(14) Gallagher & Burk/Hanson Aggregate Trail Connection.** The proposed segment of the trail adjacent to the Gallagher & Burk asphalt plant would be a concrete pier supported walkway. As the Hanson Aggregate facility uses water access for delivery of materials, the trail would be designed to allow materials to be transferred from barges to the site while allowing for shoreline trail access. This would include the construction of a steel canopy over a portion of the trail. Property easements are being sought for this segment of the trail. An interim route may include a connection to Tidewater Avenue.

**(15) 66<sup>th</sup> Avenue Gateway.** Sixty-Sixth Avenue would serve as a major gateway to the waterfront and provide a visible connection between neighborhoods and the waterfront. Decorative columns may be installed along 66<sup>th</sup> Avenue to announce the entry way. A boardwalk would extend from the gateway area and existing trail to an overlook near the shoreline, with terraced fill stepping down from the trail to the shoreline, providing a site for public art sculptures. Native landscaping would be installed. The existing parking area across Oakport Street may be upgraded and expanded. Construction would not extend into existing marsh habitat. A fenced buffer of upland habitat at least 20 feet wide would be set up between marsh habitat and any nearby construction areas. This proposed project component has been designed and the City is currently requesting bids to construct it. Mitigation measures included in this environmental document has been incorporated into the bid documents.

### **3. North and East Oakland Recreational Facilities (Group 3)**

The two proposed components within this group are the renovation of the historic Studio One Art Center, located in North Oakland and the construction of an East Oakland Aquatic, Sports and Recreation Complex (East Oakland Sports Complex). A description of these facilities is presented below, and the locations of these facilities are shown in Figure I-2. Given the uncertainty regarding the design, construction, and other details regarding the East Oakland Sports Complex, this proposed component is evaluated at a program level.

**a. Studio One Art Center.** Studio One is a 22,000-square-foot art and culture center located at 365 45<sup>th</sup> Street. The building requires extensive seismic reinforcement, new heating, ventilating, lighting, and plumbing systems, plus interior and exterior finish work. Renovation is intended to improve accessibility and functionality and provide maximum flexibility and public safety, while preserving the Studio One's non-institutional atmosphere and historic façade.

Much of the reconstruction work for Studio One has been completed, including the asbestos and lead paint abatement. Work on the building is expected to be completed in summer 2007.

**b. East Oakland Aquatic, Sports and Recreation Complex.** The East Oakland Sports Complex site is located in East Oakland at the Ira Jinkins Park at Edes and Jones Avenues. The proposed project component would include a 150,000 square foot addition to and expansion of the existing Ira Jinkins Park/Recreation Center. The facility would likely include a 25-meter pool, activity pool, gymnasium, fitness center, meeting rooms and community space, and bowling alley. Grading and excavation for foundations and removal of some ornamental trees would be required to construct the new facilities. Measure DD funds have been allocated toward this project component, but additional funding must be secured before the project component can move forward. It is likely that this component would be constructed in phases as additional funding is secured.

#### 4. City-wide Creeks Restoration, Preservation and Acquisition (Group 4)

Oakland's watershed has fifteen main creeks with over thirty tributaries that comprise over 40 miles of open creeks. As part of Measure DD funded activities, the City would restore, preserve and/or acquire various targeted creek sites as shown in Figure I-3. The intent of the restoration is to improve water quality, hydrology and wildlife habitat to prevent floods, improve public accessibility and increase community stewardship. Specific activities may include creek bank stabilization, riparian habitat restoration, hydrology restoration, public education displays, erosion control, and introduction of native wildlife. Creeks specifically called out in Measure DD are Sausal Creek, Lion Creek, Palo Seco Creek, Cinderella Creek, Arroyo Viejo Creek, Shepherd Creek, Glen Echo Creek, Temescal Creek, Coliseum Slough, Horse Shoe Creek, San Leandro Creek, Peralta Creek, and Courtland Creek. All work would be accomplished in accordance with the City's "Creek Protection, Stormwater Management and Discharge Control Ordinance." The CEQA analysis for these proposed components of Measure DD implementation is at a program level as final selection of specific sites has not occurred.

**a. Creek Restoration Activities.** The proposed Measure DD funded creek restoration activities are intended to improve water quality and to enhance habitat for avian, fish, invertebrate, and insect populations through the creation of native plant communities, improved aquatic environments, and increased diversity of landscape types. Restoration would incorporate existing resources at creek sites to the extent feasible and would preserve and protect special-status species, if present. Existing habitat and vegetation to be preserved, including special-status plant species, would be identified by conducting site surveys before or during the design phase. The creeks on which restoration is contemplated include: Sausal Creek, Lion Creek, Palo Seco Creek, Cinderella Creek, Arroyo Viejo Creek, Shepherd Creek, Glen Echo Creek, Temescal Creek, Horse Shoe Creek, San Leandro Creek, Peralta Creek, Courtland Creek, and Coliseum Slough.

Restoration activities under Measure DD could include the following:

- Demolition of existing hardscape
- Demolition and construction of water diversion structures to and from bypass channels
- Realignment of existing utilities
- Grading, clearing and grubbing of existing landscaped areas
- Tree pruning and removal
- Control and removal of undesirable plant species
- Creek bed grading
- Creek realignment
- Removal of underground culverts and re-establishment of open creek channel
- Culvert/concrete channel alternations, repair and replacement
- Toe stabilization utilizing biotechnical engineering techniques and hard engineering solutions including but not limited to rip rap, boulder placement, root wads, gabions, and reinforced walls
- Slope stabilization utilizing biotechnical engineering techniques and hard engineering solutions including but not limited to brush layering, brush mattresses, fascines, crib walls, retaining walls, live stakes and plantings

- In-stream improvements including but not limited to riffles, check dams, pools, fish ladders, weirs, and dikes
- Planting and irrigation
- Access improvements including but not limited to pathways, bridges, stairs, boardwalks, ramps, overlooks, benches, tables, and fences
- Educational elements including but not limited to signage, outdoor seating areas, scopes, interpretive art, kiosks, and viewing platforms
- Reduction of vehicular and/or pedestrian access to some project areas
- Restoration to more stable hydrology
- Volunteer weed abatement, native planting propagation and plantings

**b. Creek Property Preservation and Acquisition.** The proposed Measure DD funded creek preservation and acquisition activities would enable the City and its partners to protect ecologically valuable lands in and around Oakland's waterways. Preservation of creek areas would improve water quality, create new open spaces and recreational opportunities, and protect special wildlife habitats and unique natural resources.

The principle tools that could be implemented with Measure DD funding include the following:

- City partnership with the private sector to protect creek property within proposed development plans,
- Conservation easements either obtained through purchase or donation, and
- Acquisition of Fee Simple Title either through purchase or donation.

**c. Specific Creek Improvements.** Specific creek restoration/acquisition activities that have been proposed under Measure DD are outlined in Table III-2.

## **D. DISCRETIONARY ACTIONS**

The Measure DD Implementation Project would require discretionary actions that include but are not limited to: Design Review and Conditional Use Permits; Tree Removal Permits; Subdivision; Grading Permits; Land Acquisition & Condemnation; Creek Permits; and Encroachment Permits.

## **E. USE OF THIS EIR**

A number of permits and approvals, including discretionary actions listed above, would be required for the project. As lead agency for Measure DD implementation, the City of Oakland would be responsible for the majority of the approvals required for implementation of the project. Other agencies may have some authority related to the project and its approvals. A non-exclusive list of the required permits and approvals that may be required by the City and other agencies is provided in Table III-3. This EIR is intended to be used for all discretionary approvals required by the City and other agencies in connection with the project. This includes funding decisions on grants, etc., which are not included on this list.

**Table III-2: Proposed Creek Restoration and Preservation Components**

Creek Area	Activity
Arroyo Viejo Creek Restoration at Knowland Park	Remove non-native vegetation, implement bank stabilization, restore native habitat, and install outdoor "classroom" patios with interpretative signage on watershed ecology
Sausal Creek Restoration, Dimond Park	Remove failing concrete spillway, repair eroding banks, create new trout habitat, possible daylighting a portion of creek in Dimond Park, and possible tree removals
Shepherd Creek at Shepherd Canyon Park	Stabilize creek banks, install bioengineering to address erosion, install berms to prevent flooding to field, create expanded wetland and native plant area, and expand footbridge
Claremont Creek Garber Park	Restore creek banks, revegetate with riparian plants, and create public access and recreational opportunities
Lion Creek at Lion Crossings Park	Create new creek/tidal channel with native riparian and wetland habitat areas
Peralta Creek, Butters Canyon	Develop and implement revegetation/restoration plan for lots previously acquired by Butters Land Trust and additional lots purchased and/or preserved via conservation easements by the City of Oakland
Glen Echo Creek at Oak Glen Park	Revegetation, bank stabilization, and increase flood detention capacity
Courtland Creek, Courtland Creek Park (between Brookdale and Fairfax Avenues)	Remove non-native vegetation, open up view of the creek, restore native plants, and implement bank stabilization
Temescal Creek Restoration at North Oakland Sports Field (SE of Hwy 13/24 interchange)	Riparian restoration at the City owned North Oakland Sports Field to enhance habitat function and educational opportunities
Horseshoe Creek Restoration/Leona Open Space (Between Redwood Rd. and Merritt College)	Remove a long concrete channel and implement restoration measures and trail improvements
Palo Seco Daylighting at Joaquin Miller Park	Daylight (remove from underground culvert) 1,000 feet of streambed, restore riparian habitat, retain existing picnic areas and provide bridges to link picnic areas to existing trails
Peralta Creek, Peralta Hacienda Park	Improve habitat and water quality along Peralta Creek in Peralta Hacienda Park, remove non-native plants and re-vegetate with riparian native plants
Coliseum Slough Restoration (between San Leandro Blvd and the Bay at the Oakland Coliseum)	Enhance habitat function, trail access to the Bay Trail, recreational facilities, and trash/debris removal at the mouth of Lion and Arroyo Viejo Creeks
Lion Creek at McCrea Memorial Park (casting ponds)	Restore channel and native habitat, improve connection between the park and the creek
Sausal Creek Restoration, Hawthorne School	Daylight creek to enhance water quality, restore native riparian vegetation, create a new creek open space behind Hawthorne School, and connect to Sanborn Park
Sausal Creek, 27 <sup>th</sup> Street at Barry Place	Revegetate creek banks and install improvements to create a new public park
Sausal Creek, Beaconsfield Open Space	Daylight creek from deteriorating culvert, restore habitat, and address severe erosion
San Leandro Creek at Sobrante Park	Restore creek by removing concrete channel and layback the north creek bank to provide flow capacity, revegetate north bank and connect creek to Park and Washington Middle School through landscaping design
Seminary Creek at Rainbow Recreation Center	Remove concrete channel and restore creek meander and riparian vegetation
Glen Echo Creek Restoration at Mosswood Park	Daylight approximately 600 feet of creek and restore to natural condition
Lion Creek at Coliseum Gardens	Construct a creek and wetland adjacent to the existing concrete flood control channel in order to restore habitat

Source: City of Oakland, Public Works Agency, 2007.

**Table III-3: Required Permits and Approvals <sup>a</sup>**

<b>Lead Agency</b>	<b>Permit/Approval</b>
City of Oakland	<ul style="list-style-type: none"> <li>• Design Review</li> <li>• Subdivision Maps</li> <li>• Conditional Use Permit</li> <li>• Tree Removal Permits</li> <li>• Grading Permits</li> <li>• Encroachment Permits</li> <li>• Building Permits</li> <li>• Creek Protection Permit</li> </ul>
<b>Responsible Agencies</b>	
Oakland Fire Services Agency	<ul style="list-style-type: none"> <li>• Oversight/approval of site remediation, Site Management Plans, including: Health and Safety Plans, Soil and Groundwater Management Plans, and Hazardous Waste Disposal and Transportation Plans</li> </ul>
Alameda County Flood Control District	<ul style="list-style-type: none"> <li>• Planning approval; approval of modifications to the 7<sup>th</sup> Street pump station</li> </ul>
Alameda County Department of Environmental Health	<ul style="list-style-type: none"> <li>• Oversight/approval of site remediation, Site Management Plans including: Health and Safety Plans, Soil and Groundwater Management Plans, and Hazardous Waste Disposal and Transportation Plans</li> </ul>
Alameda Countywide Clean Water Program	<ul style="list-style-type: none"> <li>• National Pollutant Discharge Elimination System (NPDES) permit</li> <li>• Hydromodification Plan (HMP) for components that are greater than one-acre, not exempt by definition, not serviced by hardened enclosed stormwater conduits, and not in the proposed mapped exempt area (tidally influenced/depositional coastal area)</li> </ul>
Bay Area Air Quality Management District	<ul style="list-style-type: none"> <li>• Demolition permit for asbestos abatement</li> </ul>
Regional Water Quality Control Board	<ul style="list-style-type: none"> <li>• Section 401 Water Quality Certification (Clean Water Act) and/or Waste Discharge Requirements (Porter-Cologne Water Quality Control Act) for impacts to waters of the State</li> <li>• Oversight/Approval of site remediation, Site Management Plans including: Health and Safety Plans, Soil and Groundwater Management Plans, and Hazardous Waste Disposal and Transportation Plans</li> </ul>
San Francisco Bay Conservation and Development Commission	<ul style="list-style-type: none"> <li>• Regionwide, Administrative, or Major Permit (Waterfront Trail construction will likely require a Major Permit); nearly all work, including grading, on the land within 100 feet of the Bay shoreline requires a permit as does filling or dredging in the Bay</li> </ul>
Port of Oakland	<ul style="list-style-type: none"> <li>• The Port has approval authority and would issue an encroachment permit for that portion of trail that is within port jurisdiction boundary; on lands with leases to the City the trail would be constructed in accordance with the terms of the lease for the site (or the lease would be amended)</li> </ul>
California Department of Transportation	<ul style="list-style-type: none"> <li>• Encroachment permit for construction in Caltrans right-of-way</li> </ul>
California Department of Fish and Game	<ul style="list-style-type: none"> <li>• Streambed alteration permit in accordance with Section 1601 of the California Fish and Game Code</li> </ul>

Table III-3 *Continued*

Lead Agency	Permit/Approval
California Public Utilities Commission	<ul style="list-style-type: none"> <li>Approval for construction of or changes to railroad at-grade crossings</li> </ul>
Department of Toxic Substance Control	<ul style="list-style-type: none"> <li>Oversight/approval of site remediation, Site Management Plans including: Health and Safety Plans, Soil and Groundwater Management Plans, and Hazardous Waste Disposal and Transportation Plans</li> </ul>
State Lands Commission	<ul style="list-style-type: none"> <li>Leases or permits for construction or dredging on State lands including navigable rivers, natural lakes, and bays</li> </ul>
US Coast Guard	<ul style="list-style-type: none"> <li>The US Coast Guard may issue “bridge permits” for the area directly beneath bridges; the Coast Guard is also one of the agencies that comments on Army Corps Sec. 10 permits</li> </ul>
US Army Corps of Engineers	<ul style="list-style-type: none"> <li>Clean Water Act Section 404/Section 10 permits (Section 10 applies to Waterfront Trail only) for impacts to waters of the United States</li> <li>Jurisdictional Waters Determinations &amp; Permit for Authorization for Impacts to Waters of the US</li> </ul>
US Fish and Wildlife Service	<ul style="list-style-type: none"> <li>Consultation with Corps re: potential impacts to federally listed species as part of Section 404 permitting process (if required)</li> </ul>
National Marine Fisheries Service	<ul style="list-style-type: none"> <li>Consultation with Corps re: potential impacts to Essential Fish Habitat (EFH) and federally listed anadromous fish (e.g., steelhead) as part of Section 404/Section 10 permitting process</li> </ul>

Source: LSA Associates, Inc, 2007.

<sup>a</sup> Does not include funding/grant decisions, which also will rely upon this EIR.