

## V. ALTERNATIVES

The *CEQA Guidelines* require the analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.<sup>1</sup> CEQA states that an EIR should not consider alternatives "whose effect cannot be ascertained and whose implementation is remote and speculative."

The primary purpose of this chapter is to ascertain whether there are alternatives of design, scale, land use, or location that would substantially lessen the project's significant project impacts, even if those alternatives "impede to some degree the attainment of project objectives, or would be more costly."<sup>2</sup> The alternatives considered should be capable of avoiding or substantially lessening one or more of these project impacts. The emphasis of the analysis is on comparison of the anticipated impacts of each alternative to the impacts associated with the proposed project; the discussion includes a determination as to whether or not each alternative would reduce, eliminate, or create new significant impacts.

This section reviews the project objectives and impacts, describes limitations of the scope and location of alternatives imposed by the requirements of Measure DD, describes and analyzes the project alternatives, and identifies the environmentally superior alternative.

### A. PROJECT OBJECTIVES AND IMPACTS

To determine what range of alternatives should be considered, the impacts identified for the proposed project were considered along with the project objectives. The proposed project and the project objectives are described in detail in Chapter III, Project Description. The potential environmental effects of implementing the proposed project are analyzed in Chapter IV, Settings, Impacts and Mitigation Measures. Both the project objectives and impacts are summarized briefly below.

#### 1. 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

---

<sup>1</sup> *CEQA Guidelines*, Section 15126.6.

<sup>2</sup> *CEQA Guidelines*, 2005. Section 15126.6(b).

Measure's funding is intended to support a number of the objectives laid out in elements of the City's General Plan, including the Open Space Conservation and Recreation Element (OSCAR) and the Estuary Policy Plan.

## 2. Project Impacts

Impacts are identified in the following areas as potentially significant for the project, but could be reduced to a less-than-significant level with implementation of recommended mitigation measures:

- Land Use (Group 2);
- Transportation, Circulation and Parking (Group 1);
- Biological Resources (Groups 1, 2 and 4);
- Cultural Resources (Groups 1 and 4);
- Hydrology and Water Quality (Groups 1 – 4); and
- Hazards and Hazardous Materials (Group 1).

Three significant impacts related to traffic (Impacts TRANS-5, TRANS-6, and TRANS-7) in the Lake Merritt and Lake Merritt Channel group (Group 1) are identified as potentially significant and unavoidable as they may not be mitigated to less-than-significant levels. As a result, under the proposed project scenario, these impacts would remain significant and unavoidable. One other impact (NOISE-1) associated with the Group 1 would be reduced to less-than-significant levels by the City's Standard and Uniformly Applied Conditions of Approval but implementation of noise-reducing measures may not be feasible in all cases and, if not, the impact would be significant and unavoidable.

## B. LIMITATIONS TO SCOPE AND LOCATION OF ALTERNATIVES

Measure DD, as approved by Oakland voters in November 2002, provides funding for specific projects and actions to improve water quality and provide recreational opportunities within the City of Oakland (Appendix A). Section 3 of the Measure DD states that, "The improvements, acquisition and construction to be funded by the net proceeds of the bonds shall be limited to those listed in Exhibit A attached to this Ordinance." For example, the project list and funding for the *Lake Merritt Restoration and Water Quality Improvements* includes the following:

- Water Quality (\$14,000,000)
  - Replace 12<sup>th</sup> Street culvert with an arched bridge to increase tidal flow and flushing into Lake Merritt
  - Water quality improvements, including storm water filters, trash barriers, wildlife waste clean-up facilities and aeration fountains
- Recreation and Youth Activities (\$14,500,000)
  - Children's Fairyland improvements, including historic restoration, drainage, amphitheater and play structure improvements
  - Renovate municipal boathouse and restore public use

- Restore and renovate Lakeside Park sailboat house, including boat storage and conversion of parking lot to public shoreline area
- Park Restoration and Access (\$59,750,000)
  - Create park space and beach area along Lake Merritt south shore and redesign 12<sup>th</sup> Street to create safe pedestrian and bicycle access from Lake Merritt to Kaiser Convention Center and Channel Park
  - Improve and renovate maintenance facilities, landscaping, docks, restrooms, furnishings and signage
  - Repair Lake Merritt retaining walls
  - Widen and improve pedestrian and bicycle paths and lanes
  - Reconfigure Bellevue Avenue for better access and parking accommodations
  - Expand Snow Park by reconfiguring Lakeside, Harrison and 20th intersection
  - Reconfigure El Embarcadero roadways for safer pedestrian and traffic access

Measure DD thus puts limitations on the potential and feasible alternatives available for consideration in this CEQA analysis. Funded projects can be modified or removed, but actions or improvements not identified in Exhibit A of Measure DD are not eligible for funding, and thus are not feasible Measure DD actions. Alternative locations for projects are likewise not feasible in most cases because the funded actions are tied to specific sites (e.g., “create park space and beach area along Lake Merritt south shore and redesign 12<sup>th</sup> Street to create safe pedestrian and bicycle access from Lake Merritt to Kaiser Convention Center and Channel Park”). For these reasons the alternatives analysis focuses on reduced or modified projects that meet at least some of the project objectives and conform to the limits placed on projects by Measure DD.

## C. PROJECT ALTERNATIVES SUMMARY

Brief summaries of the alternatives considered but not evaluated and alternatives for Groups 1 through 4 are provided below. This section also includes an analysis of the alternatives for Groups 3 and 4, which are addressed at the program level in this EIR. Detailed descriptions of the alternatives for Groups 1 and 2 and an analysis of their potential impacts as compared to the proposed project are presented in Sections V.D through V.F below.

### 1. Alternatives Considered but not Evaluated

**Lake Merritt and Lake Merritt Channel (Group 1).** Closure of the El Embarcadero couplet was considered during the project design process, but eliminated from further consideration because of the significant impacts it would have on traffic. This alternative would have completely removed the El Embarcadero couplet between Lake Merritt and the Lakeview Branch Library, which would have created a larger public space and reduced potential noise and air quality impacts to library users. However, this alternative would have created substantially greater traffic circulation impacts at nearby intersections, particularly at the intersections of Lakeshore and Lake Park Avenues and at Lakeshore Avenue and MacArthur Boulevard. In addition, the project as designed was determined to have effects on noise and air quality that are less-than-significant, so the alternative would not have

addressed any significant impacts. The results of the traffic study for this alternative are provided in Appendix E.

**a. 12<sup>th</sup> Street Lid Park Alternative.** A “lid park” alternative for the 12<sup>th</sup> Street roadway reconstruction was studied as part of the Lake Merritt Master Plan process.<sup>3</sup> The lid park alternative envisioned a landscaped deck extending above a covered roadway from the Kaiser Convention Center parking lot to the Lake Merritt shoreline. The lid structure would have been planted as a park with walkways, lawn and trees and would have provided unimpeded pedestrian access to the Lake edge from the Kaiser Convention Center. Stairs would provide access down to the shore. In order for the structure to meet elevations critical to pedestrians, the roadway would have been lowered and shifted away from the water. The alternative was identified as undesirable by community members and the design team due to several factors including: no direct estuary pedestrian connections were possible; tidal flow was not improved from the current conditions; the structure would not enhance shoreline access; and the cost to build the structure was not justified by the benefits.

**b. Lake Merritt Channel. Four alternatives were studied in the Feasibility Study and Greenbelt Plan for the Lake Merritt Channel.**<sup>4</sup> All of the alternatives in the feasibility study contained at least some elements that have been included in the project. Each, for example, proposed to replace the culverts under 12<sup>th</sup> Street with a new bridge. On the other hand, several components were considered but not carried forward. Two alternatives in the feasibility study considered leaving the 7<sup>th</sup> Street flood control structure where it is while making minor improvements to the pedestrian tunnels on either side of the structure, and two considered relocating the flood control structure to the mouth of the Channel at Lake Merritt. The relocation component proposed placing the tide gates under the new pedestrian bridge at the Channel mouth and constructing a pump station on the shore of Lake Merritt. Leaving the structure as is would not provide the desired navigation access in the Channel while relocating the structure would have created more impacts near the Lake’s shoreline (e.g., placement of the flood control structure and pump station in a more publicly visible location) than the option ultimately selected for the project.

In addition to the alternatives considered in the *Feasibility Study and Greenbelt Plan for the Lake Merritt Channel* the City also evaluated moving the pump station from its current location at 7<sup>th</sup> Street downstream to an area south of I-880. Relocation of the pump station was considered with and without the construction of a new bridge at 7<sup>th</sup> Street. These alternatives were not carried forward because modeling of tidal flows showed that the removal of the pump station at 7<sup>th</sup> Street would provide only negligible benefits to tidal flow compared with putting in a bypass channel. In addition, relocation and construction of a new pump station (either at 12<sup>th</sup> Street or near I-880) would have higher costs.

**c. Waterfront Trail (Group 2).** Various alternatives for crossing beneath the bridges spanning the Oakland Tidal Canal were considered during the design process. Alternatives considered include floating piers, fixed piers, underpasses, bridge staircases, and widened catwalks. All but fixed piers were eliminated due to accessibility, environmental, permitting and/or cost criteria. Alternatives for crossing some industrial properties were also examined (for example, going under versus over the conveyor at the Hanson Aggregates site). Because the eliminated alternatives would not reduce or

<sup>3</sup> City of Oakland, 2002. *Lake Merritt Park Master Plan*. July.

<sup>4</sup> URS, 2002. *Feasibility Study Report, Feasibility Study and Greenbelt Plan for the Lake Merritt Channel*, June 24.

avoid any significant impacts that would be created by the proposed project to a greater degree than the alternatives presented below, these alternatives were not evaluated in the EIR. A summary and evaluation of the Waterfront Trail alternatives are presented in the *Oakland Waterfront Trail Phase I Memorandum*.<sup>5</sup>

**d. Recreational Facilities (Group 3).** Other potential sites for the new sports complex in East Oakland were considered early in the siting process but rejected. A site on San Leandro Street near the Coliseum BART station was considered but was rejected because it would have required relocating businesses and the soil on the site was found to be contaminated. Another site was considered on the west side of I-880 but was judged to be too far from the residential neighborhood and potential facility users.

**e. City-Wide Creeks (Group 4).** No specific alternatives were considered for this group.

## 2. Group 1 Alternatives

Alternatives for Group 1 include the **No Project Alternative** and the **Maintain Roadway Circulation Alternative**.

- The **No Project Alternative** assumes no implementation of Measure DD-funded activities beyond the components that have already been completed.
- The **Maintain Roadway Circulation Alternative** would eliminate or modify some of the proposed changes to the roadways around Lake Merritt in order to reduce impacts to traffic the significant and unavoidable impacts identified in the EIR. This alternative is specific to Group 1. To maintain travel lanes for traffic and transit flows on the streets near Lake Merritt the alternative would not include bike lanes (or as a variant, would include bike lanes but eliminate some curbside parking) along Lakeshore Avenue and Lakeside Drive. This alternative would keep El Embarcadero in its current configuration and maintain current travel patterns along the northeast end of Lake Merritt. The alternative would use the alignment of 12<sup>th</sup> Street as proposed in the 2002 *Lake Merritt Master Plan* with added travel and turning lanes and fewer at-grade crossings for pedestrians in order to maintain traffic and transit flows along 12<sup>th</sup> Street.

Additional details for each Group 1 alternative are provided, and the alternative's potential impacts are discussed in Sections V.D and V.E below.

## 3. Group 2 Alternatives

Alternatives for Group 2 include the **No Project Alternative** and the **Waterfront Trail Surface Street Connection Alternative**.

- The **No Project Alternative** assumes no implementation of Measure DD-funded activities beyond the components that have already been completed.
- The **Waterfront Trail Surface Street Connection Alternative** assumes that the Waterfront Trail would not include boardwalks under the existing bridges, but would connect the Waterfront Trail using surface streets. In addition, other as yet incomplete portions of the trail would be

---

<sup>5</sup> Moffatt & Nichol Engineers, 2005. *Oakland Waterfront Trail Phase I Memorandum*, January. A copy is available at City offices.

routed onto streets rather than constructing new trails along the waterfront. This alternative would reduce impacts associated with hazardous waste, cultural resources and hydrology because fewer intrusive activities would be required to construct the project. It would also avoid a significant land use impact, for which implementation of the recommended mitigation is contingent upon concurrence by the property owner and cannot be guaranteed by the City. This alternative is also proposed, in part, because it is uncertain whether the U.S. Coast Guard or other agencies that may have jurisdiction over the Tidal Canal will issue a permit to construct the boardwalks that would continue the trail beneath bridges and because it is uncertain whether some property owners will allow easements to accommodate the trail. The U.S. Coast Guard may have jurisdiction over the part of the Tidal Canal under bridges, but not the remainder of the canal, which is under the jurisdiction of other agencies, such as the U.S. Army Corps of Engineers.

Additional details for each Group 2 alternative are provided, and the alternative's potential impacts are discussed in Sections V.D and V.F below.

#### 4. Group 3 Alternatives

Alternatives for Group 3 include the **No Project Alternative**, a **Reduced Alternative**, and a **Relocation Alternative**.

- The **No Project Alternative** assumes no implementation of Measure DD-funded activities beyond the components that have already been completed. The renovation of the Studio One Arts Center would be completed but the East Oakland Sports Complex would not be constructed.
- The **Reduced Alternative** assumes that the East Oakland Sports Complex would be built at Ira Jinkins Park/Recreation Center but reduced in scale.
- The **Relocation Alternative** assumes that the East Oakland Sports Complex would be built at another location in East Oakland.

Group 3 contains two components, Construction of the East Oakland Sports Complex and Renovation of the Studio One Arts Center. Because the renovation of the Studio One Arts Center is already underway and nearing completion an alternative to this project component is not feasible. An alternative for the East Oakland Sports Complex could include a change in the scale or design of the project or construction of the project at an alternative site.

The East Oakland Sports Complex has been designed at the conceptual level but funds are inadequate to build the facility as proposed. Thus, the City has recently begun developing a reduced scale alternative for the East Oakland Sports Complex. The reduced scale alternative proposes fewer recreational buildings that would be constructed in phases. The first phase would build 22,000 square feet of facilities including an indoor swimming pool, fitness center, and teen room/lobby. An 80 car parking lot is also proposed for the first phase. Future phases would include the addition of an outdoor 25-meter competition swimming pool, two gymnasiums, which would add 25,500 square feet of indoor recreational space, construction of new playing fields, and demolition of the existing recreation center. Based on the analysis in the EIR, the only impacts identified for this component are general impacts to cultural and biological resources and from hazardous materials/waste. These impacts are also likely to occur as a result of a project of reduced scale, as well. The impacts include, for example, the potential to encounter previously undocumented archaeological resources or human remains or to disturb nesting native bird species. Reducing the project in size, reduces the probability

that these impacts would occur but they would remain potential impacts that would require the same mitigation measures as those recommended for the project. These impacts would be reduced to less-than-significant levels by the mitigation measures recommended in the EIR.

The project could, as an alternative, be constructed at a different site. However, other potential sites for the facility in East Oakland would likely have at least some of the same potential impacts as those identified for the Ira Jinkins Park/Recreation Center site, although the probability of occurrence may differ based on historical site use (cultural impacts) or the amount and quality of vegetation present on site for nesting native birds (biological impacts). Other potential sites in East Oakland were considered early in the siting process, but not evaluated further for the reasons stated in Section V.B.1 above. Moving the project to another site might change the probability of a specific impact, but the impacts would require the same mitigation measures as recommended for the project.

The No Project Alternative would avoid the potential impacts associated with the project or the other alternatives, but would not provide all of the recreational benefits associated with the project. The objectives of Group 3 would be partly met because the North Oakland recreational component of the group would be funded and completed. Because \$10,000,000 of Measure DD funding is specific for the East Oakland Sports Complex, if this project component were not built, the funding could not be used for other activities or projects.

## 5. Group 4 Alternatives

Alternatives for Group 4 include the No Project Alternative and a Reduced Alternative.

- The **No Project Alternative** assumes no implementation of Measure DD-funded activities beyond the components that have already been completed.
- The **Reduced Alternative** assumes that the habitat at some creek sites would not be restored and/or some sites would not be acquired.

Group 4 is an aggregation of small creek restoration, acquisition and preservation projects that would receive Measure DD funds. Measure DD allocates \$5,500,000 to restoration projects and \$4,500,000 to acquiring restorable habitat, creek segments with rainbow trout or other wildlife populations, and property with aesthetic and water quality protection value. If not for the link to Measure DD funds, many of these projects, which include removing non-native vegetation, stabilizing creek banks and replanting with natives, would meet the requirements for a Categorical Exemption under Section 15333, Small Habitat Restoration Projects (Class 33) of the *CEQA Guidelines*. The purpose of the Measure DD-funded creek projects is consistent with the Class 33 category, which exempts projects “[not exceeding] five acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife.”

By design and to achieve the desired project benefits, the Group 4 project components must occur near creeks and therefore some restoration and acquisition activities have the potential to disturb special-status plants and animals that may already be present at the sites or to encounter and disturb previously undocumented archaeological resources or human remains. Reducing the number of potential creek restoration or acquisition sites within Group 4 would reduce the potential impacts in proportion to the reduction in the number of sites, but not necessarily eliminate the impacts. A reduction in the number of sites achieved by randomly eliminating projects might reduce the possibility of impacts, but the remaining sites would be subject to the same potential impacts and

require the same mitigation measures as recommended for the project. Alternatively, sites with the highest probability of impact could be eliminated, such as those which are known to support some native vegetation and wildlife habitat or where surveys indicate that special-status species are present. While this focused approach would avoid short-term impacts at the eliminated sites, the long-term beneficial effects of the creek restoration projects would also be lost. In addition, if sites were eliminated from the acquisition list, the long-term benefit derived from the City's protection of these sites would be lost. Because Group 4 funding is specifically earmarked for restoration or acquisition, any funds not spent because the project is reduced in scale could not be used for other activities or projects.

#### **D. NO PROJECT ALTERNATIVE (GROUPS 1 AND 2)**

Section 15126(d)(4) of the *CEQA Guidelines* states: "The no project analysis shall discuss existing conditions, as well as what could be reasonably expected to occur in the foreseeable future if the project was not approved..." The following discussion describes and analyzes the No Project Alternative for Groups 1 and 2. The No Project Alternative for Groups 3 and 4 were discussed and analyzed in Section V.B above.

Under the No Project Alternative, the components of Measure DD that are not already complete or under construction would generally not be constructed or implemented. Table V-1 lists the Measure DD components in Groups 1 and 2 that have been completed or are in progress, and those that would not be completed under this alternative.

For Group 1, the No Project alternative would include completion of the Pergola, Children's Fairyland, and Municipal Boathouse renovations. However, paths, landscape improvements and additional patron parking (for the Boathouse) that would provide improved access to the facilities would generally not be constructed. The land around Lake Merritt would continue to be used as park land. Landscape maintenance, including the removal and replacement old or diseased trees, would continue as needed. The tree replacement process would generally maintain the current appearance of the park, but no substantial increase in landscaped area or number of trees is likely to occur because there would be no net increase in parkland as would occur if the project were constructed as proposed. The creation of bike lanes by restriping Lakeside Drive and Lakeshore Avenue might occur as part of other projects, but associated landscaping and pedestrian path improvements would not be constructed.

For Group 2, the No Project alternative would include Union Point Park, for which the remediation and construction is already complete, and some segments of the trail that would be completed when the shoreline property or adjoining property is developed. The existing trail system would be maintained. Bicyclists and pedestrians would continue to use the existing trail and transfer to side streets when there is a trail gap.

##### **1. Project Objectives**

Because the project components that have already been implemented or that are under construction would be completed, this alternative would meet some project objectives. However, several objectives would not be met. These include creation of recreational park and open space at Lake Merritt and along the Lake Merritt Channel; connection of the southern shoreline of Lake Merritt with

surrounding cultural, civic, and urban districts; enhancement of the connection between Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary; improvement of bicycle and pedestrian safety and circulation; and support for several of the objectives of OSCAR and the Estuary Policy Plan. The following objectives would be partly realized:

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

- Improve water quality and habitat for fish and wildlife; and
- Renovate historic buildings and other structures at Lake Merritt.

**Table V-1: No Project Alternative (Groups 1 and 2): Components Completed or In Progress and Components Unbuilt**

<p><b>Lake Merritt and Lake Merritt Channel (Group 1)</b></p> <p><b>Components Completed or In-Progress</b></p> <ul style="list-style-type: none"> <li>• Pergola Renovation (complete)</li> <li>• Installation of a Fire Protection Main (complete)</li> <li>• Water Quality Improvements, including storm drain filters at Bellevue/Staten, 27<sup>th</sup>/Valdez, and 22<sup>nd</sup>/Valley; pilot air diffuser project; new aeration fountain; Pergola fountain (complete)</li> <li>• Children’s Fairyland Renovations (in-progress)</li> <li>• Municipal Boathouse Renovation (in-progress)</li> </ul> <p><b>Unbuilt Components</b></p> <ul style="list-style-type: none"> <li>• 12<sup>th</sup> Street Improvements</li> <li>• Lake Merritt Channel</li> <li>• Lakeshore Avenue, El Embarcadero, and E. 18<sup>th</sup> Street Pier Improvements</li> <li>• Lakeside Drive</li> <li>• Snow Park and Lakeside-Harrison-20<sup>th</sup> Street Intersection</li> <li>• Bellevue Avenue Redesign</li> <li>• Sailboat House</li> <li>• All water quality improvements except those noted above</li> </ul>
<p><b>Oakland Waterfront Trail (Group 2)</b></p> <p><b>Components Completed</b></p> <ul style="list-style-type: none"> <li>• Union Point Park</li> <li>• Park Street Triangle traffic study</li> </ul> <p><b>Unbuilt Components</b></p> <ul style="list-style-type: none"> <li>• Estuary Park</li> <li>• 10<sup>th</sup> Avenue Marina</li> <li>• Brooklyn Basin</li> <li>• Brooklyn Basin to Embarcadero Cove</li> <li>• Livingston Pier</li> <li>• Cryer Site</li> <li>• ConAgra to Park Street Bridge</li> <li>• Bridge boardwalks at Park Street, Fruitvale Avenue and High Street</li> <li>• Derby Avenue to Lancaster Street (Oakland Museum Women’s Board warehouse)</li> <li>• Alameda Avenue south of Fruitvale Avenue</li> <li>• US Audio/Capture Technologies and friendly Transportation Trail Connection</li> <li>• Gallagher &amp; Burk/Hanson Aggregate Trail Connection</li> <li>• 66<sup>th</sup> Avenue Gateway</li> </ul>

## **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; and
- Remediate environmental hazards that exist on the Oakland component of the San Francisco Bay Trail.

The Group 1 objectives would be partly fulfilled because, as noted in Table V-1, some water quality improvements have been made (e.g., installation of storm drain filters and placement of new aeration fountains in the Lake) and some historic structures have been renovated. Group 2 objectives would be partly fulfilled because the clean-up and creation of Union Point Park provides additional open space and recreational opportunities and the park contains a segment of the Waterfront Trail. However, these components represent only a small number of the potential components that address the project objectives.

Under the No Project scenario, most of the benefits of the project would not be realized. In addition to the objectives for Group 1 that would not be met at all. Contamination at two sites along the Waterfront Trail (i.e., the Brooklyn Basin and Cryer Site) would not be cleaned up as part of Measure DD and funding would need to be acquired from other sources. Most gaps in the Waterfront Trail would remain, which would necessitate that bicyclists and pedestrians periodically shift their route between the existing Waterfront Trail segments and nearby streets as currently occurs.

## **2. No Project Alternative Impacts**

The No Project Alternative would avoid the impacts associated with the proposed project. For both Groups 1 and 2, because there would be no further construction activities, there would be no impacts from ground-disturbing activities, such as the potential to encounter hazardous waste or groundwater wells, or from disturbance of previously undocumented archaeological resources or human remains. Likewise, short-term construction impacts associated with air quality and biological resources would be avoided. For Group 1, no transportation effects (traffic delays or reductions in LOS) associated with reducing the number of travel lanes, reconfiguring intersections or redesigning 12<sup>th</sup> Street would occur. For Group 2, if the trail were not completed, the potential land use conflict created by extending the trail across the Hanson Aggregate property would be avoided.

## **3. Alternative Summary**

The No Project Alternative would avoid the construction and operational impacts associated with the proposed project, but would not meet a substantial number of the objectives for the project or would meet some of them only in part (due to the few already-completed components).

## **E. MAINTAIN ROADWAY CIRCULATION ALTERNATIVE (GROUP 1)**

The Maintain Roadway Circulation Alternative assumes that the Measure DD components associated with the Waterfront Trail, the Recreational Facilities, and the City-Wide Creeks Groups would be implemented. In this scenario, the number of travel lanes on Lakeshore Avenue and Lakeside Drive would be maintained by eliminating the proposed Class II bike lanes (or as a variant, adding the bike

lanes but removing some curbside parking). In addition, 12<sup>th</sup> Street would be constructed to follow the alignment proposed in the Lake Merritt Master Plan but would be modified to include additional lanes and a reduced number of pedestrian at-grade crossings combined with pedestrian bridges or underpasses that would span the new boulevard and provide access between the civic facilities south of the roadway (e.g., Oakland Museum and Kaiser Convention Center) and Lake Merritt.

## 1. Project Objectives

This alternative would meet most project objectives, but to a lesser degree or less effectively than the proposed project. All objectives for the Waterfront Trail, the Recreational Facilities, and the City-Wide Creeks Groups would be met. The alternative would make improvements along the Lake Merritt Channel to enhance the Lake's connection to the Oakland Estuary. At Lake Merritt, the alternative alignment of 12<sup>th</sup> Street would create some new park land along the south shore of the Lake, but fewer acres of new park land would be created by the alternative than by the proposed project.

The acres of new park land created on the south shore of Lake Merritt would be reduced by half—from approximately 3.3 acres to 1.6 acres. No new parkland would be created in the area south of 12<sup>th</sup> Street, which would be retained as a parking lot for the Kaiser Convention Center. The 1.6 acres of new park land would be created between 12<sup>th</sup> Street and the south shoreline of Lake Merritt, rather than distributed as 2.5 acres between the 12<sup>th</sup> Street and the Lake and 0.8 acres between 12<sup>th</sup> Street and the Kaiser Convention Center, as proposed by the project.

The project objective to improve bicycle circulation around the Lake would not be met because bike lanes would not be added along Lakeshore Avenue or Lakeside Drive (although in the variant, bike lanes would be added while some curbside parking would be eliminated). The alternative also would not improve the connection between Lake Merritt and the surrounding cultural, civic and urban districts to the degree that the project would. Use of underpasses and a bridge to span 12<sup>th</sup> Street and connect the Lake with the surrounding area would create an environment that is less pedestrian-friendly and potentially less secure than the at-grade street crossings proposed for the project.

## 2. Maintain Roadway Circulation Alternative Impacts

The Maintain Roadway Circulation Alternative would have a lesser effect on mass transit and traffic as compared to the proposed project. Traffic and circulation impacts caused by the Group 1 project components were significant and unavoidable impacts identified in the EIR. These impacts would be reduced by eliminating several at-grade pedestrian crossings and by widening 12<sup>th</sup> Street so that it could include additional travel lanes and turn lanes. To reduce potential transit and traffic delays, some at-grade pedestrian connections between the north and south sides of 12<sup>th</sup> Street would be replaced by underpasses and a bridge. The existing underpass of 12<sup>th</sup> Street from the Kaiser Convention Center parking lot to Lake Merritt would be retained and modified to provide one of the links. The at-grade pedestrian crossing at the southeast corner of the Kaiser Convention Center parking lot would be replaced by a path connecting the parking lot to the path running along the north bank of the Lake Merritt Channel. Pedestrians could then use the path along the Channel to reach the park and Lake Merritt by crossing under the new 12<sup>th</sup> Street bridge. A pedestrian bridge would span 12<sup>th</sup> Street from the southeast corner of the Oakland Museum to the new park along the south shoreline of Lake Merritt. This design was identified during the Lake Merritt Master Plan planning

process as undesirable by community participants but is analyzed here as an approach to reducing traffic and circulation impacts.

The alignment of 12<sup>th</sup> Street as proposed in the Lake Merritt Master Plan would create an intersection at 12<sup>th</sup> Street and 14<sup>th</sup> Street (where traffic emerges from the 11<sup>th</sup> Street tunnel) with difficult sight lines and complicated traffic flow. The sight lines and traffic flow would be improved by relocating the roadway northward and redesigning the intersection to be similar to that of the proposed project, which would create a “T” intersection. This variant would slightly reduce the amount of park land created between 12<sup>th</sup> Street and the Lake and create a small piece of park land between 12<sup>th</sup> Street and the Oakland Museum.

The alternative would reduce the number of trees that would be removed to allow the reconstruction and realignment of 12<sup>th</sup> Street. In this scenario, the Kaiser Convention Center parking lot would not be reconfigured and therefore the trees located in this area would be preserved. Approximately 59 trees would be preserved, including 12 protected trees (all flowering cherries), in and around the parking area. Trees along the median of the existing 12<sup>th</sup> Street alignment would still require removal in order to accommodate the new roadway and modified grade of the park land.

Because 12<sup>th</sup> Street would be closer to Lake Merritt, this alternative would require the construction of a retaining wall along both the north and south sides of the street to accommodate the needed increase in elevation as the street approaches the Lake Merritt Channel from the west. The wall would create a visual barrier between the park and the area north of the street. The proposed project would require a retaining wall of shorter length and lower height, which would be less imposing visually.

Short-term construction impacts associated with air quality, the potential to encounter hazardous waste or groundwater wells, and from disturbance of previously undocumented archaeological resources or human remains would be similar to those associated with the proposed project and would require the same recommended mitigation measures to reduce the potential impacts to a less-than-significant level.

### **3. Alternative Summary**

The Maintain Roadway Circulation Alternative would meet most of the objectives of the project and would reduce transit delays and traffic impacts. Although not a significant impact, this alternative would remove fewer trees at the south end of Lake Merritt because the 12<sup>th</sup> Street alignment would not encroach onto the Kaiser Convention Center parking lot. However, fewer acres of new park land would be created along the south shore of Lake Merritt and the connectivity between the south shore of Lake Merritt and the surrounding cultural, civic, and urban districts would not be improved. Pedestrian connections would include underpasses (like those presently in place) and a bridge to connect the south shore of the Lake with the surrounding urban area, which would be less pedestrian-friendly and less secure than at-grade street crossings. Bicycle circulation would not be improved.

## **F. WATERFRONT TRAIL SURFACE STREET CONNECTION ALTERNATIVE (GROUP 2)**

The Waterfront Trail Surface Street Connection Alternative assumes that the Measure DD components associated with the Lake Merritt Channel, the Recreational Facilities, and the City-Wide

Creeks Groups would be implemented. In this scenario, the Waterfront Trail would not include boardwalks under the existing bridges, but would continue the Waterfront Trail at bridge crossings by routing the trail onto surface streets. Other, as yet incomplete portions of the trail (at operating industrial facilities and sites with soil contamination, for example), would also be routed onto streets rather than constructing new trails along the waterfront.

## 1. Project Objectives

This alternative would meet most project objectives, but to a lesser degree than the proposed project. All objectives for the Lake Merritt and Lake Merritt Channel, the Recreational Facilities, and the City-Wide Creeks Groups would be met. The alternative would complete the missing segments of the San Francisco Bay Trail along the Oakland Estuary, albeit with segments that would not be constructed on the waterfront but rather on nearby streets. Because the trail would avoid contaminated properties, hazardous waste impacts associated with these properties would not occur but the properties would also not be remediated, one of the objectives of this project group. The alternative would support some of the objectives of OSCAR and the Estuary Policy Plan by completing a linear trail along the waterfront; however because the segments would be completed away from the shoreline in some cases, the alternative would not create as much physical and visual access to the Oakland shoreline as the proposed project.

## 2. Waterfront Trail Surface Street Connection Alternative Impacts

The Waterfront Trail Surface Street Connection Alternative would reduce or avoid impacts associated with hazardous waste, cultural resources and hydrology, because fewer intrusive activities would be required to construct the project. It would also avoid the land use significant impact, for which implementation of the recommended mitigation is contingent upon concurrence by the property owner and cannot be guaranteed by the City. However, the alternative would have significant impacts on traffic and would reduce bicycle safety because cyclists would share facilities with automobiles and other vehicles rather than having access to a dedicated trail or path. The following discussion describes the impacts of the alternative that would require the trail extension to cross existing roadways. Table V-2 presents the existing and cumulative traffic volumes and growth percentages at the three bridge crossing locations.

**a. Park Street.** The Park Street location has the highest daily traffic with over 44,000 vehicles during existing conditions and over 52,000 vehicles during cumulative conditions. Due to the high volume of traffic and the lack of traffic controls and traffic gaps, the existing design (an unsignalized and uncontrolled pedestrian crosswalk) does not foster safe crossing.

No feasible mitigation was identified to provide an at-grade crossing of the approach to the Park Street Bridge. A concept that would provide an at-grade crossing at the foot of the bridge would require a signalized pedestrian crosswalk approximately 100 feet north of the bridge where the bridge approach matches the surrounding topography. A pedestrian crossing at this location would be

**Table V-2: Existing & Cumulative Daily Traffic Volumes at Bridge Crossing Locations**

Year	Direction	Bridges			
		Park St	Fruitvale Ave		High St
			South Leg <sup>a</sup>	North Leg	
Existing	NB	23,364	14,760	6,913	10,751
	SB	20,855	18,269	8,253	10,658
	Bidirectional	44,219	26,790	15,166	21,409
Year 2025	NB	27,389	17,130	8,413	14,101
	SB	24,835	20,734	9,778	13,883
	Bidirectional	52,224	31,625	18,191	27,984
Growth	NB	17.23%	16.06%	21.70%	31.16%
	SB	19.08%	13.49%	18.48%	30.26%
	Bidirectional	18.10%	18.05%	19.95%	30.71%

Source: Dowling Associates, 2007

<sup>a</sup> Existing counts not available, existing data were derived from Fruitvale Avenue north leg data

approximately 70 feet in length across the Park Street Bridge approach. A variation on this concept would be to provide the street crossing closer to the bridge. A closer crossing would require the trail to be ramped up to the elevation of the bridge.

It is unlikely that there would be enough bicycle and pedestrian traffic to satisfy the pedestrian warrant for a traffic signal for either concept that would provide a pedestrian signal north of the bridge. The *Manual on Uniform Traffic Control Devices*, 3rd ed.<sup>6</sup> (MUTCD) published by the Federal Highway Administration requires an average pedestrian volume of 100 crossings or more per hour during a four-hour period or a volume of 190 or more during the peak hour. If a pedestrian signal were installed, it would have to have preemption that could be activated by the bridge operator to clear motor vehicle traffic when waterborne traffic approaches the bridge. Waterborne traffic has priority of service over bicyclists, pedestrians and autos. This concept is not considered feasible because the pedestrian signal warrant is not likely to be satisfied.

A roadway crossing at Glascock Street was proposed in the *Oakland Waterfront Trail Bay Trail Feasibility & Design Guidelines* (EDAW, October 2003) and was further defined in the *Park Street Triangle Traffic Study* (Dowling, 2006).<sup>7,8</sup> The Glascock Street crossing would provide a signal at a street intersection but would require closure of 23<sup>rd</sup> Avenue. The trail crossing would need to be at the north side of the Glascock Street/29<sup>th</sup> Avenue intersection to avoid an angular crossing of the rail spur that crosses 29<sup>th</sup> Avenue. This crossing would be approximately 320 feet north of the bridge. There is currently no funding source identified to implement this design option.

Ford Street is currently signalized at its intersection with 23<sup>rd</sup> Avenue, approximately 500 feet north of the bridge. That location is too far from the trail to be used by most users, who would likely take a more direct route and cross at an uncontrolled location.

<sup>6</sup> EDAW, 2003. *Manual on Uniform Traffic Control Devices*, 3rd Ed. October.<sup>7</sup> Federal Highway Administration. *Oakland Waterfront Trail Bay Trail Feasibility & Design Guidelines*.<sup>8</sup> Dowling and Associates, 2006. *Park Street Triangle Traffic Study*.

None of the available options to crossing the trail under the bridge appears to be feasible.

**b. Fruitvale Avenue.** The foot of the Fruitvale Avenue Bridge coincides with a signalized intersection at Alameda Avenue. A significant amount of traffic travels westbound on Alameda Avenue turns left at Fruitvale Avenue onto the bridge or turns right from the bridge onto Alameda Avenue. For this reason, the traffic volumes crossing the north leg and the south leg of the intersection are significantly different as shown in Table V-2. Currently, crosswalks are provided only on the north and east legs of the intersection. This configuration would provide an indirect crossing for trail users, requiring them to walk north and cross two roadways in order to return to the trail.

Trail users would also need to cross the rail bridge, which is at a lower elevation than the automobile bridge. There is currently no pedestrian crossing facility at this bridge. While current use of the railroad tracks is rare, crossings could create potential hazards.

Providing at-grade crossings of both Fruitvale Avenue and the existing rail track at the north side of the north side of the Fruitvale Avenue/Alameda Avenue intersection would provide an alternative to crossing Fruitvale Avenue under the bridges. Flashing light signals, automatic gates, or other appropriate warning devices would be installed to warn trail users of approaching trains and to prevent them from entering the crossing as required by PUC.

**c. High Street.** A discontinuous portion of the trail has already been built on the west side of High Street indicating where the trail would meet the roadway at the Oakland end of the High Street Bridge. There is no marked crossing or traffic control to facilitate crossing at the location. Although the existing traffic volume is comparatively low, this roadway is expected to see the highest growth over the next two decades. Rather than walking 200 feet north to the uncontrolled marked crosswalk, trail users would most likely take a direct route and cross mid-block at the trail. Such mid-block crossings, without proper warning to motorists, may create a traffic hazard.

It is uncertain if a feasible mitigation measure is available for an at-grade trail crossing of High Street. An at-grade crossing at Tidewater Avenue, approximately 200 feet north of the bridge, may not be used unless the designated trail deviates from the waterfront and passes along Tidewater Avenue. Even if this is the case, a traffic signal is not likely to be warranted at this intersection. A flashing warning device could be provided although it would not provide positive control for a trail crossing.

### **3. Alternative Summary**

The Waterfront Trail Surface Street Connection Alternative would meet most objectives of the project but would create less physical and visual access to the Oakland shoreline than the proposed project. The alternative would reduce or avoid impacts associated with hazardous waste, cultural resources and hydrology. However, it would have significant impacts on traffic and would reduce bicycle safety because cyclists would share facilities with automobiles and other vehicles rather than having access to a dedicated trail or path adjacent to the shoreline.

## **G. ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA requires the identification of the environmentally superior alternative in an EIR. For the Measure DD Implementation Project the environmentally superior alternative is the proposed project.

While the No Project alternative would avoid the significant impacts that would result from the proposed project or the other alternatives, the No Project alternative would provide few of the proposed project's environmental benefits. When considered collectively, the effects of the project provide a net benefit and an environmentally superior alternative as compared to the No Project alternative or the other alternatives considered in this analysis. Under the No Project alternative some of the environmental benefits of the proposed project that would not be realized include increased parkland on the southern shore of Lake Merritt, greater public access to the shore of Lake Merritt and to the Oakland Estuary, improved water flow through the Lake Merritt Channel, additional recreational facilities along the Waterfront and in East Oakland, and improved water quality and wildlife habitat within Oakland's watersheds through the restoration or preservation of creekside habitat.

Implementation of the Measure DD project is consistent with the vision laid out in the City's Lake Merritt Park Master Plan, Bicycle Master Plan, and Pedestrian Master Plan; ABAG's Bay Trail Plan; BCDC's San Francisco Bay Plan; and with the policies and goals of the Estuary Policy Plan and OSCAR Element. Implementing the Measure DD project components would create new recreational opportunities, create and preserve open space, and improve water quality within the City of Oakland. The No Project alternative fails to achieve most of the project's objectives, except for those objectives associated with components already completed or under construction. The other alternatives as compared to the proposed project are discussed by project group in the following paragraphs.

For Group 1, the Maintain Roadway Circulation alternative would reduce traffic impacts, which were the significant and unavoidable impacts identified in the EIR for Group 1. However, as is the case with the No Project alternative, many benefits of the proposed project would be reduced or would not be realized. Fewer acres of new park land (approximately half of the acreage of the proposed project) would be created along the south shore of Lake Merritt and the connectivity between the south shore of Lake Merritt and the surrounding cultural, civic, and urban districts would not be improved. The completed project would be less pedestrian-friendly and less secure. Bicycle circulation would not be improved.

For Group 2, the Waterfront Trail Surface Street Connection alternative would reduce or avoid impacts associated with hazardous waste, cultural resources, hydrology and a potentially incompatible land use on industrial property—all of which can be mitigated to a less-than-significant level (although the last is contingent upon concurrence by the property owner and cannot be guaranteed by the City). However, it would have significant impacts on traffic and would reduce bicycle safety. Thus, implementation of this alternative would lead to a complex mix of impacts that would be slightly greater and/or less than the proposed project, depending on the topic. This alternative would provide less access to the Oakland Estuary and a less desirable recreational opportunity.

For Groups 3 and 4, the Reduced Alternatives would have fewer impacts but reducing the scale of these groups likewise reduces their potential benefits—fewer recreational opportunities in East Oakland in the case of Group 3 and fewer preserved and/or restored creeks in the case of Group 4.