

L. UTILITIES AND INFRASTRUCTURE

This section describes major utilities and infrastructure serving the Measure DD Implementation Project area and evaluates the effects of the proposed project components on utilities and existing infrastructure. Potential impacts to infrastructure and utilities that would result from implementation of the proposed project are identified, and mitigation measures are recommended, as appropriate.

1. Setting

The following infrastructure and utility systems are described and analyzed in this section: water, wastewater, stormwater, solid waste, and energy.

a. Water. The project sites are located in areas served by existing water supplies, treatment facilities, and distribution systems, which are operated and managed by the East Bay Municipal Utility District (EBMUD) as described below.

(1) Water Supply. EBMUD provides potable water to approximately 1.3 million people throughout portions of Alameda and Contra Costa counties, including the City of Oakland. EBMUD obtains approximately 90 percent of its water from the Mokelumne River watershed, and transports it through pipe aqueducts to temporary storage reservoirs in the East Bay hills. EBMUD has water rights and facilities to divert up to a daily maximum of 325 million gallons per day (mgd) from the Mokelumne River.¹ However, this allocation may be constrained by: upstream water use by prior water right holders; downstream water use and other downstream obligations, including protection of public trust resources; drought, or less-than-normal rainfall for more than a year; and emergency outage.

The Mokelumne River can no longer meet EBMUD's projected customer demands during drought periods, even with 25 percent rationing imposed on total customer demand.² Average daily water demand within the EBMUD service area was 224 mgd in 2004.³ This demand is adjusted for conservation and recycled water program savings. Demand is projected to increase to 258 mgd by 2010 and 277 mgd by 2020.⁴

EBMUD is actively involved in securing supplemental water supplies to meet customer demands during drought periods. In dry years, the Freeport Regional Water Project (FRWP) would deliver up to 100 mgd of water from the Sacramento River to EBMUD customers. The FRWP is anticipated to be in-service by 2009. Implementation of this and other water supply projects would reduce the potential for severe water rationing and associated economic losses during drought periods.

(2) Water Treatment Facilities. There are six water treatment plants in the EBMUD water supply and distribution system. Combined, the six plants have a treatment capacity of over 375 mgd.

¹ East Bay Municipal Utility District, 2005. *Draft Urban Water Management Plan 2005*. September.

² Ibid.

³ East Bay Municipal Utility District, 2004. *Annual Report 2004*.

⁴ East Bay Municipal Utility District, 2005. *op. cit.*

The Orinda and the Upper San Leandro Treatment Plants provide water to Oakland.⁵ At the treatment plants, water is subjected to coagulation, filtration, and disinfection prior to being distributed to the public. The Orinda Water Treatment Plant has the largest output of EBMUD's treatment plants with a peak capacity of 200 mgd and is operating at approximately 21 percent capacity. The Upper San Leandro Treatment Plant has a capacity of 45 mgd and is operating at approximately 63 percent capacity.⁶

(3) Water Distribution Systems. Water distribution systems in Oakland are divided into pressures zones covering approximately 200-foot elevation ranges. As a result, water pressure ranges from 40 pounds per square inch (psi) to 130 psi. Water pressure is generally adequate throughout the City but pressure may be reduced in some locations with older water mains if they are not sized based on current standards or have lost capacity due to deterioration. Typically, required pipeline relocations and extensions, in addition to other water distribution infrastructure improvements, are made at the expense of the Project applicant in consultation with EBMUD's New Business Office.

b. Wastewater System. The project sites are located in areas served by existing wastewater treatment facilities and collection systems operated and managed by EBMUD.

(1) Wastewater Treatment Facility. EBMUD provides wastewater services to approximately 642,000 people in Alameda and Contra Costa counties.⁷ Wastewater collected by interceptors in the EBMUD service area Special District No. 1, which includes the City of Oakland, flows to the Main Wastewater Treatment Plant (MWWTP), which is located in Oakland near the eastern entrance of the San Francisco-Oakland Bay Bridge. Additionally, EBMUD has two wet weather wastewater treatment facilities (WWF) in Oakland, the San Antonio Creek WWF and the Oakport WWF.

The MWWTP provides both primary and secondary treatment of wastewater. Primary treatment involves the removal of floating materials, oils and greases, sand and silt, and organic solids sufficiently heavy to settle in water. Secondary treatment involves the removal of suspended organic and chemical impurities. The MWWTP has a primary treatment capacity of 320 mgd and a secondary treatment capacity of 168 mgd. Storage basins provide plant capacity for a short-term hydraulic peak of 415 mgd. The average annual daily flow into the MWWTP is approximately 80 mgd, representing 48 percent of the plant's secondary treatment capacity.⁸ Treated effluent is disinfected, dechlorinated, and discharged through a deep-water outfall one mile off the East Bay shoreline into San Francisco Bay.

In addition, EBMUD has been recycling water at its main wastewater treatment facility since the early 1970s. Recycled water is suitable for land uses that do not require potable water sources, such as

⁵ East Bay Municipal Utility District, 2005. *2005 Water Quality Report*. Website: www.ebmud.com/-/water & environment/water_quality/annual_report/ebmud_wqr_2005.pdf.

⁶ East Bay Municipal Utility District, 2006. *Daily Water Supply Report*. Website: www.ebmud.com/-/water & environment/water_quality/water_treatment_plants/. February 27.

⁷ East Bay Municipal Utility District, 2005. op. cit.

⁸ East Bay Municipal Utility District, 2005. Wastewater Treatment. <http://www.ebmud.com/wastewater/treatment/>. August 23.

golf courses, some agricultural areas, and industrial uses. EBMUD provided more than 8 mgd of recycled water to customers in 2004 and has a goal to recycle 14 mgd by 2020.⁹ Incentives used by EBMUD to encourage customers to utilize recycled water include rate discounts on recycled water and low-interest loans used to retrofit buildings so that they can accommodate recycled water.

In January 2002, the City adopted a dual plumbing ordinance, which requires new development to use recycled water provided by EBMUD, and to install a dual plumbing system if recycled water is anticipated to be available. The multi-phased East Bayshore Recycled Water Project will supply up to 2.5 mgd of recycled water to portions of Alameda, Albany, Berkeley, Emeryville, and Oakland. Recycled water use is not planned in the Grand Avenue-Lakeside Park area, although it is available in the 12th Street shoreline park area.

(2) Wastewater Collection System. EBMUD wastewater interceptors consist of 29 miles of reinforced concrete pipes ranging from 1 to 9 feet in diameter. The City owns and maintains the sewer collection system within Oakland, including the project areas. Most of the City's wastewater collection system is 50 years old and some of the existing infrastructure is as old as 100 years.

The City of Oakland's infiltration/inflow correction program consists of a 25-year capital improvement program to rehabilitate the existing system in cost-effective areas and add capacity where needed. This program anticipates a 20 percent growth rate throughout Oakland. Mitigation fees are assessed to all new development or redevelopment in sub-basins that have a growth rate greater than 20 percent. This fee represents the development's pro-rata share of the improvements identified by the 25-year plan in anticipation of the greater-than-20 percent development.

c. Stormwater. The Alameda County Flood Control District was created in 1949 by the State Legislature to provide flood control services to Alameda County. The District's flood control infrastructure includes hundreds of miles of pipelines, channels, creeks, erosion control measures and pump stations. The City of Oakland is within Zone 12, which also includes the City of Emeryville, and is the largest of the District's zones. Zone 12 has approximately 50 miles of closed conduit, approximately 10 miles of earthen and concrete channels, as well as the existing natural waterways, which move stormwater to the San Francisco Bay.¹⁰ Four pump stations lift stormwater to the Bay (Lake Merritt, Ettie, McKillop, and Temescal).

Recent Flood Control District projects include: modifying Lake Merritt Pump Station for increased channel flow and ease of maintenance; repairs to Glen Echo Creek (Line B); \$7.8 million upgrades to Trestle Glen Creek (line D) and Line D-1 in the Lake Merritt area; restoration of Sausal Creek, Peralta Creek and Arrojo Viejo Creek; realignment of Lions Creek (Line J); repair of pump 4 at Ettie Street Pump Station; coordinating restoration designs for Peralta Creek (Line F). Fiscal Year 2006 projects planned for Zone 12 include: Pump 3 rehabilitation at the Ettie Street Pump Station; restoration and gate reconstruction on Lion Creek (Line J); and rehabilitation of Lake Merritt Pump Station.

⁹ East Bay Municipal Utility District, 2005. op. cit.

¹⁰ Alameda County Flood Control and Water Conservation District, 2005. *Report to the Community, Fiscal Year 2005*.

The City of Oakland's storm drainage system consists of more than 300 miles of storm drainpipes and 15,000 structures (mostly inlets, manholes, and catch basins). The storm drain system is a network of disjointed private and public drainage ways. City-owned drainage systems are improved drainage facilities located within easements and rights-of-way.¹¹ Existing stormwater drainage systems serve the project areas.

d. Solid Waste. Solid waste and yard trimmings within the City of Oakland are collected by Waste Management of Alameda County. These materials are taken to the Davis Street Transfer Center in San Leandro. The Transfer Center, which has a maximum allowable capacity of 5,600 tons of waste per day, received an average of 3,028 tons per day in 2003.¹² The facility can process up to 320 tons per day of concrete, asphalt, dirt, bricks, wood, and metal. After undergoing processing, waste from the Transfer Station is delivered to the Altamount Landfill in eastern Alameda County. The landfill comprises approximately 2,170 acres (480 acres of permitted landfill area) and has a permitted maximum daily disposal of 11,150 tons per day and an average input of 7,505 tons per day. The landfill is projected to have sufficient capacity to operate until at least 2031 and potential to operate through 2071, depending on waste flows and waste reduction measures.¹³

In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), which requires the diversion of waste materials from landfills in order to preserve the decreasing capacity of landfills. Cities and counties in California were required to divert 25 percent of solid waste by 1995, and 50 percent of solid waste by the year 2000. The City of Oakland met this requirement by diverting 50 percent or greater of its waste from 2000 through 2004.^{14,15} AB 939 further requires every city and county to prepare two documents demonstrating how the mandated rates of diversion will be achieved. The *Source Reduction and Recycling Element* describes the chief source of the jurisdiction's waste, the existing diversion programs, and current rates of waste diversion and new or expanded diversion programs. The *Household Hazardous Waste Element* describes each jurisdiction's responsibility in ensuring that household hazardous wastes are not mixed with non-hazardous solid wastes and subsequently deposited at a landfill. Oakland's *Source Reduction and Recycling Element* and its *Household Hazardous Waste Element* were approved in 1995 by the California Integrated Waste Management Board.¹⁶

The City provides curbside recycling within the City, including the project sites. Curbside recycling includes the following materials: glass, aluminum and tin, motor oil, cardboard, magazines and newsprint, and plastic. Recyclable materials are delivered to the Davis Street Transfer Center where they are processed.

¹¹ City of Oakland, 2004. *Public Works Agency Standards, Storm Drainage Design Guidelines*, November.

¹² Alameda County Waste Management Authority, 2003. *Alameda County Integrated Waste Management Plan*. February 26.

¹³ Ibid.

¹⁴ California Integrated Waste Management Board, 2005. *Jurisdiction Profile for City of Oakland, Waste Stream Information Profiles*. www.ciwmb.ca.gov/profiles/.

¹⁵ Data not available online for subsequent years.

¹⁶ California Integrated Waste Management Board, 2005. op. cit.

Oakland Municipal Code Chapter 15.34 requires building permit applications for new construction, demolition, or alterations and additions (with a valuation of \$50,000 or greater) to be accompanied by an approved Waste Reduction and Recycling Plan (WRRP). The WRRP is required to document the ways that the applicant will reduce the quantity of construction and demolition debris disposed at landfills by 50 percent or more. The City does not approve building permits for projects until the WRRP is approved.

e. Energy. The Pacific Gas & Electric Company (PG&E) provides electricity and natural gas service to the City of Oakland, including the Measure DD Implementation Project component sites. Most of Oakland's electrical power is delivered via 12-kilovolt (kV) transmission lines from PG&E Substation L. Substation L receives 155 kV and distributes power to upper downtown Oakland and West Oakland. Local electric and gas distribution lines are located within the project sites. PG&E charges connection and user fees for all new development in addition to sliding rates for electrical and natural gas service based on use. These services are currently available at the project sites.

Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, details requirements to achieve minimum energy efficiency standards of the State of California. The standards apply to new construction of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating and lighting. Compliance with these standards is verified and enforced through the local building permit process.

f. City of Oakland's Standard and Uniformly Applied Conditions of Approval. The City of Oakland's Standard and Uniformly Applied Conditions of Approval that would apply to the proposed project are listed below. Implementation of these Conditions of Approval would ensure that a project's potential utilities and infrastructure impacts would be reduced.

Condition 26: Waste Reduction and Recycling. The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

Prior to issuance of demolition, grading, or building permit

Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.

Ongoing

The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

Condition 77: Storm Water and Sewer. Confirmation of the capacity of the City's surrounding storm water and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees

to improve sanitary sewer infrastructure if required by the City. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

2. Impacts and Mitigation Measures

This section discusses potential impacts to infrastructure and utility systems that could result from implementation of Measure DD. The section begins with the criteria of significance, which establish the thresholds used to determine whether an impact is significant. The latter part of this section presents the impacts associated with the proposed projects and identifies mitigation measures, if appropriate. Stormwater and storm drain-related impacts are discussed in Section IV.H, Hydrology and Water Quality.

a. Criteria of Significance. The Measure DD Implementation Project would have a significant impact on the City's infrastructure and utility systems if it would:

- 1) Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects;
- 2) Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board;
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects;
- 4) Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects;
- 5) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects;
- 6) Violate applicable federal, State, and local statutes and regulations related to solid waste;
- 7) Violate applicable federal, State and local statutes and regulations relating to energy standards; or
- 8) Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

The level of impact to utilities and infrastructure is discussed in the following section and summarized in Table IV.L-1.

Table IV.L-1: Summary of Potential Impacts – Utilities and Infrastructure

Would the Project:	Project Group ^a			
	Group 1 Lake Merritt	Group 2 Waterfront Trail	Group 3 Recreational Facilities	Group 4 City-wide Creeks
1) Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	○	○	○	==
2) Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board?	○	==	○	==
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	○	==	○	==
4) Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	==	==	○	==
5) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	○	○	○	○
6) Violate applicable federal, State, and local statutes and regulations related to solid waste?	○	○	○	○
7) Violate applicable federal, State and local statutes and regulations relating to energy standards?	○	==	○	==
8) Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	○	==	○	==

^a The Lake Merritt and Waterfront Trail groups are analyzed at the project level. The Recreational Facilities and City-wide Creeks groups are analyzed at the program level. The level of impact and the proposed mitigation measure, if any, are identified as follows:

== No impact

○ Less-than-Significant or Less-than-Significant with standard Conditions of Approval

● Reduced to Less-than-Significant after recommended mitigation

● Significant

NA Not Applicable

UTL-1, etc. identifies the mitigation measure, if any, that addresses the impact and reduces it to a level that is less than significant.

Source: LSA Associates, 2007

b. Impacts and Mitigation Measures Applicable to all Project Components. The potential utilities and infrastructure impacts that could result from implementation of Measure DD would be essentially the same for each of the four project groups, as described below.

(1) Exceed water supplies available to serve the project. Some Measure DD Implementation Project components would incrementally increase demand for water supply. A small increase in water consumption could result from irrigation of new parkland and new park facilities (replacement of existing irrigation in many areas would not create additional demand). The East Oakland Sports Complex, an approximately 150,000-square foot addition (including a 50-meter pool and activity pool) to the existing Ira Jenkins Park/Recreation Center with a maximum occupancy of 4,870 persons, has the largest potential water demand of the proposed projects. The East Oakland Sports Complex addition could result in additional demand of 0.08 mgd.¹⁷

The Municipal Boathouse renovation (including a restaurant, café, and meeting room) might cause a small increase in water usage over the previous use of the site as office space. Renovations of existing facilities, such as the Studio One Art Center, Children's Fairyland and the Sailboat House are not expected to increase use of existing water services, nor would restoration and acquisition activities associated with the City-wide Creeks group. While completion of the Waterfront Trail may increase visitors to waterfront parks this usage would not create a significant demand for water supply services. The incremental increase in water use would not exceed water supplies available to serve the project from existing entitlements.

In compliance with the City of Oakland's dual plumbing ordinance, new development projects would install a dual plumbing system if recycled water will be available from EBMUD. Recycled water will be available in the 12th Street and the Lake Merritt Channel area by mid 2007.¹⁸ For project components in this area, the City would coordinate with EBMUD regarding the installation of separate plumbing systems for recycled water use in landscape irrigation.

The adequacy of existing water mains to accommodate increased demand generated by the East Oakland Sports Complex would be assessed at the time funding is allocated to the project. If line improvements are required due to the age and condition of the existing lines, upgrades would be made during the project construction period and would not be anticipated to result in significant environmental impacts. Additionally, minimum fire flow requirements (for the purpose of fighting fires) would be assessed at the time of project funding. Typically, fire flow requirements are 2,500 gpm for residential uses, and 3,500 gpm for commercial uses.

The proposed Lake Merritt and Lake Merritt Channel, Waterfront Trail, and Recreational Facilities groups would have a less-than-significant impact on water supplies and water facilities. The City-wide Creeks group would have no impact on water supplies.

(2) Exceed wastewater treatment requirements. None of the project components would generate wastewater that would cause wastewater treatment requirements to be exceeded.

¹⁷ Prasifka, David, 1994. *Water Supply Planning*. Table 1-6, Summary of Commercial and Institutional Water use.

¹⁸ Kirkpatrick, William, 2006. Comments on the Notice of Preparation of a Draft Environmental Impact Report for Measure DD Projects. Written communication to Elois Thornton, Community and Economic Development Agency, Oakland. December 29.

(3) Exceed wastewater treatment capacity. Most components of the Measure DD Implementation Project, such as park improvements, creek restorations and completion of trail gaps, would not generate wastewater. The project component with the most intensive production of wastewater would be the East Oakland Sports Complex which may generate 0.064 mgd. A small amount of additional demand would be generated by the Municipal Boathouse renovation, which would convert former office space to a restaurant, café, and meeting room. These project components would be located in areas served by existing sewer pipelines and would not require the construction of new wastewater lines.

Wastewater generated by the Measure DD Implementation Project components represents less than 0.1 percent of the MWWTP's secondary treatment capacity. This wastewater would be accommodated by the MWWTP, which is currently operating at 48 percent of its secondary treatment capacity. The increase in wastewater generated by these projects is not substantial in the context of the entire volume of wastewater processed by EBMUD's Main Wastewater Treatment Plant. EBMUD has sufficient capacity to treat wastewater flows from the projects during dry weather¹⁹ and would not require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

The proposed Lake Merritt and Lake Merritt Channel and the Recreational Facilities groups would have a less-than-significant impact on wastewater treatment capacity and facilities. The Waterfront Trail and the City-wide Creeks group would have no impact on wastewater.

(4) Require or result in construction of new stormwater drainage facilities. Components of the Lake Merritt and Lake Merritt Channel and City-wide Creek groups would not cause a net increase in the area of impervious surfaces and thus would not require the construction of new stormwater drainage facilities to handle increased stormwater flows. Some project components, such as the 12th Street Reconstruction, would reconfigure the existing stormwater drains as part of the project but would reduce overall stormwater flows to the stormdrain system due to the reduced size of the streets and other impervious materials in the area. The Waterfront Trail components are located in areas that are already developed and the creation of new trails in these areas would not substantially increase stormwater flows. In addition, because the trail is adjacent to the Oakland Inner Harbor Channel, most stormwater leaves the area as sheetflow. The renovation of Studio One Art Center would not increase the impervious surface area at the facility. The East Oakland Sports Complex would create some new impervious surfaces but would use treatment techniques to detain and treat stormwater on site as required by NPDES (see Section IV.H, Hydrology and Water Quality).

Implementation of the proposed project components would not require the construction of new storm drain facilities or the expansion of existing facilities. The proposed Recreational Facilities group would have a less-than-significant impact on stormwater drainage facilities. The Lake Merritt and Lake Merritt Channel, Waterfront Trail, and the City-wide Creeks groups would have no impact on stormwater.

(5) Be served by a landfill with insufficient permitted capacity. Measure DD Implementation Project components would not generate significant amounts of solid waste. The

¹⁹ Ibid.

additional solid waste generated from the use of existing parks and facilities and the construction of new facilities, such as the East Oakland Sports Complex and the Waterfront Trail, and the renovation of existing facilities, such as Children's Fairyland theatre pavilion and Studio One Art Center, would not be substantial.

The proposed Lake Merritt and Lake Merritt Channel, Waterfront Trail, Recreational Facilities, and the City-wide Creeks groups would not require the construction or expansion of landfill facilities; therefore, the proposed project would have a less-than-significant impact on solid waste facilities.

(6) Violate applicable regulations related to solid waste. Construction activities associated with the project components, including the removal of existing hardscape along restored creeks, removal of culverts including the 10th and 12th Street culverts, and redesign of surface parking areas, would be subject to City of Oakland requirements for waste reduction and recycling. Compliance with Oakland Municipal Code Chapter 15.34 requiring implementation of a Recycling and Waste Reduction Plan for construction and demolition activities would reduce the amount of waste generated during the construction phase of the projects. As part of construction, contaminated soils may be removed from properties in need of remediation along the waterfront. Such soils would be disposed of in an approved landfill facility. This issue is discussed in Section IV.J., Hazards and Hazardous Materials.

The proposed Lake Merritt and Lake Merritt Channel, Waterfront Trail, Recreational Facilities, and the City-wide Creeks groups would not violate applicable federal, State, and local statutes and regulations; therefore, the proposed project would have a less-than-significant impact on solid waste facilities.

(7) Violate applicable regulations relating to energy standards. Measure DD Implementation Project components would be subject to Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings and would not violate applicable regulations related to energy standards.

The proposed Lake Merritt and Lake Merritt Channel and Recreational Facilities would have a less-than-significant impact on energy. The Waterfront Trail and the City-wide Creeks groups would have no impact on energy.

(8) Result in a determination by the energy provider which serves the project that it does not have adequate capacity. Measure DD Implementation Project components that would require electrical and natural gas services are located in areas already served by PG&E. Connecting new construction to existing lines would involve relatively minor improvements. Energy consumption would be primarily associated with the new East Oakland Sports Complex facilities, existing and renovated buildings including the Children's Fairyland, Studio One, Boathouse, Sailboat House, and trail lighting (existing and proposed). The project components would not require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

The proposed Lake Merritt and Lake Merritt Channel, Waterfront Trail, and Recreational Facilities would have a less-than-significant impact on energy. The City-wide Creeks groups would have no impact on energy.

c. Impacts and Mitigation Measures Unique to Specific Project Components. There are no component-specific impacts associated with utilities and infrastructure.

