

3.13

UTILITIES

3.13.1 Introduction

This section describes the environmental setting for utility systems (water, wastewater, storm drains, solid waste, electricity, and natural gas) within the PMPU area, identifies applicable regulations, and analyzes the potential impacts that could result from implementing the proposed Program. Mitigation measures and the significance of impacts after mitigation also are described.

3.13.2 Environmental Setting

3.13.2.1 Regional Setting

The public utility providers that serve the Port include the LADPW BOS, LADWP, Los Angeles County Department of Public Works, and Southern California Gas Company (SCGC).

3.13.2.2 PMPU Area

3.13.2.2.1 Water Supply

Water service is provided to the PMPU area by LADWP, which is responsible for supplying, treating, and distributing water for domestic, industrial, agricultural, and firefighting purposes within the City of Los Angeles. Water sources utilized by LADWP consist of both local sources, such as wells and recycled water (for non-potable uses), and imported water, including water obtained via the Los Angeles Aqueducts and purchases from the MWD. MWD imports water from the Colorado River via the Colorado River Aqueduct, from northern California via the State Water Project's California Aqueduct, and from various groundwater sources.

The LADWP *Urban Water Management Plan* (UWMP) estimates water demand and supply through a 25-year outlook period (LADWP 2011a). The UWMP assumes future development as prescribed by the *City of Los Angeles General Plan* (City of Los Angeles 2012). Development projects that are consistent with the General Plan's land use designation and planned densities are taken into account in the calculations

1 used to predict water demand for future years. Calculations are also based on
2 assumptions regarding the various supplies of water available and existing and
3 projected levels of water conservation.

4 According to the 2010 UWMP, the average water demand for the LADWP service
5 area from 2005-2010 was 621,458 acre-feet per year (AFY). Total citywide water
6 demand with active water conservation is predicted to be 632,275 acre-feet in 2025
7 and 641,622 acre-feet in 2035. According to the 2010 UWMP, under wet, average,
8 and dry years throughout the 25-year projection period, LADWP's supply portfolio is
9 expected to be reliable, with adequate supplies available to meet projected demands
10 through 2035 (LADWP 2011a).

11 Any development project that meets the criteria for CWC Section 10912(a) will
12 require a water supply assessment from LADPW. For the water supply assessment,
13 LADPW will evaluate the projected increase in water demands and determine if there
14 are sufficient water supplies to serve the project for the next 20 years. The LADPW
15 would base this assessment on their UWMP.

16 In addition, LADWP requires consultation with applicants, by means of a Service
17 Advisory Request, to assess whether the current infrastructure would be able to
18 accommodate the increased water demand based on fire flow requirements. If the
19 Service Advisory Request determines that current infrastructure would not support a
20 project, LADWP requires that additional infrastructure (i.e., water lines) be constructed
21 at the applicant's expense (LADWP 2011b). This consultation is done once all design
22 plans are complete and would typically take place after the CEQA process has
23 concluded. Should any physical improvements be needed, the impacts may need to be
24 assessed in a subsequent CEQA document (i.e., Addendum or Supplemental EIR).

25 **3.13.2.2.2 Wastewater**

26 The BOS provides wastewater treatment and sewer service to the City of Los
27 Angeles, operating wastewater treatment and reclamation facilities that serve most of
28 its incorporated areas and several other cities and unincorporated areas in the Los
29 Angeles Basin and San Fernando Valley. The existing system consists of two
30 treatment plants; two water reclamation plants; a collection system consisting of over
31 6,500 miles of local, trunk, mainline, and major interceptor sewers; five major outfall
32 sewers; and, 48 pumping plants.

33 The TIWRP treats wastewater for the communities of Wilmington, San Pedro, a
34 portion of Harbor City, and the heavily industrialized Terminal Island (LA Sewers
35 2011). The TIWRP provides pretreatment, primary sedimentation, secondary treatment,
36 tertiary treatment (filtration), advanced treatment (microfiltration and reverse osmosis),
37 sludge digestion, and drying. The TIWRP treats all flow received to at least first stage
38 tertiary levels. A portion of the wastewater influent is further treated in advance water
39 treatment facilities for reuse in irrigation and industrial water supplies in the PMPU
40 area. The remaining treated effluent flows to the Outer Harbor at an outfall
41 approximately 3,000 feet offshore via a 60-inch diameter pipeline. The TIWRP is
42 designed to treat 30 million gallons per day (mgd) with the advanced treatment system
43 that produces high quality recycled water at 4.5 mgd. Currently, the plant is processing
44 at approximately 60 percent capacity. The City of Los Angeles projects that by 2020,
45 wastewater flows in the TIWRP service area will grow to 19.9 mgd; therefore,

1 approximately 10 mgd in daily capacity at TIWRP would remain unused and available
2 for future years (LADPW BOS and LADWP 2006).

3 **3.13.2.2.3 Storm Drainage**

4 Storm drains are located throughout the PMPU area and are maintained by LAHD, the
5 City of Los Angeles, and Los Angeles County. Storm drains within the PMPU area
6 have sufficient capacity to accommodate current demands and are designed to
7 accommodate 10-year storm events. As development occurs, upgrades to existing
8 storm drainage systems are made as needed to accommodate stormwater discharge
9 requirements in compliance with the local stormwater ordinances. The local ordinances
10 are prepared in compliance with the Municipal Stormwater NPDES Permit and often
11 implemented through a Standard Urban Stormwater Mitigation Plan (SUSMP). These
12 regulations are described in Section 3.13.3.1, State Regulations, below.

13 **3.13.2.2.4 Solid Waste**

14 Existing development in the PMPU area generates solid waste consisting of
15 nonhazardous materials (e.g., food and beverage containers, paper products, and
16 other miscellaneous personal trash) and hazardous materials (e.g., storage tank
17 residue). All solid waste generated by existing development must comply with
18 federal, state, and local regulations and codes pertaining to nonhazardous and
19 hazardous solid waste disposal.

20 The BOS, in general, and Browning Ferris Industries (a private waste management
21 service) provide solid waste collection and disposal services for the Port. However,
22 private waste haulers, such as Browning Ferris Industries, would vary depending on
23 the individual tenant's choice over time. Currently, nonhazardous solid waste
24 generated at the Port are disposed of at the Sunshine Canyon Landfill or Chiquita
25 Canyon Sanitary Landfill depending on the daily capacities and hours of operation.
26 Los Angeles County Ordinance 7A prohibits solid waste generated in the City of Los
27 Angeles from being handled by or disposed of in facilities and landfills operated by
28 the Los Angeles County Sanitation District (LACSD).

29 Sunshine Canyon City/County Landfill is located at 14747 San Fernando Road in
30 Sylmar, California. Sunshine Canyon is owned by Browning Ferris Industries and has a
31 maximum allotted throughput of 12,100 tons per day, with 5,500 tons per day for city
32 use and 6,600 for county use. Sunshine Canyon has a remaining capacity of 112,300,000
33 cubic yards and an operation cease date of December 31, 2037 (CalRecycle 2011a). The
34 waste types accepted at this facility include construction and demolition debris, green
35 materials, industrial, inert, and mixed municipal (Cal Recycle 2011a).

36 Chiquita Canyon Sanitary Landfill (hereafter referred to as Chiquita Canyon) is
37 located at 29201 Henry Mayo Drive Castaic, California, approximately 63 miles from
38 the PMPU area. This facility is owned and operated by Chiquita Canyon, Inc., and
39 has a maximum permitted throughput of 6,000 tons per day. The remaining capacity
40 was 29,300,000 cubic yards as of November 23, 2006, and has an estimated closure
41 date of 2019. The waste types accepted at this facility include mixed municipal, green
42 materials, construction and demolition debris, industrial and inert (CalRecycle 2010).

1 Two transfer stations serve the Port: the Falcon Refuse Center in the Wilmington
2 Community and the Southeast Resource Recovery Facility in the City of Long Beach.
3 The Falcon Refuse Center is operated by Allied Waste Transfer Services of
4 California and receives an average of 1,850 tons per day. The permitted capacity of
5 this facility is 3,500 tons per day. The center accepts solid waste from construction
6 and demolition activities, as well as industrial and mixed municipal sources
7 (CalRecycle 2011b). The Southeast Resource Recovery Facility is located in the City
8 of Long Beach, west of the Terminal Island Freeway, just north of Ocean Boulevard
9 at 120 Pier S Avenue. The facility is owned by a separate authority created by a joint
10 powers agreement between the Sanitation Districts and the City of Long Beach, but is
11 operated under contract by a private company. The site is not open to the public and
12 only pre-approved and pre-registered licensed waste haulers may use the facility. The
13 facility accepts only nonhazardous municipal solid waste. Currently the maximum
14 daily permitted tonnage is 1,380 tons per day. The average daily tonnage being
15 accepted is 1,290 tons per day (LACSD 2011, 2012). In 2010, the Port disposed of
16 approximately 12,000 tons of waste and diverted 22,000 tons, achieving a diversion
17 rate of approximately 55 percent. The waste reduction and recycling assessments in
18 2009–2010 showed that the tenants audited disposed of approximately 23,000 tons
19 and diverted approximately 56,000 tons, for a diversion rate of approximately
20 70 percent (Garrett 2012, personal communication). Currently, the city has a recycle
21 diversion rate of 65 percent, with a goal of 70 percent by 2013 and a zero waste goal
22 (90 percent or greater diversion) by 2025 (Pereira 2011, personal communication).

23 LAHD's Construction and Maintenance Division recycles asphalt and concrete
24 demolition debris by crushing and stockpiling the crushed material to use on other
25 Port projects. Additionally, LAHD recycles and diverts ferrous metals and inert
26 materials. LAHD's diversion rates vary from year to year largely due to fluctuations
27 in construction project waste, which is heavily recycled. In 2010, LAHD's diversion
28 rate for construction and development was 99.1 percent, or 60,166 tons (Garrett
29 2012, personal communication). The combined waste diversion from Port programs
30 and construction is 96.3 percent. The following programs are implemented by LAHD
31 to assist in waste diversion:

- 32 ■ Duplex Printing and Photocopying;
- 33 ■ Office Paper;
- 34 ■ Wood Waste Diversion Program;
- 35 ■ Cardboard Recycling Program;
- 36 ■ Green Waste Recycling Program;
- 37 ■ Scrap Metal;
- 38 ■ Administrative Office Recycling Program;
- 39 ■ Beverage Container Recycling;
- 40 ■ Toner Cartridge Recycling;
- 41 ■ Fish Sludge Recovery;
- 42 ■ Ferrous Metals Recovery Program;
- 43 ■ Wood Waste Collection Program;

- 1 ■ Inerts Recycling Program;
- 2 ■ Non-Food Donation;
- 3 ■ Motor Oil Recycling Program;
- 4 ■ Office Furniture Source Reduction; and,
- 5 ■ Tire Recycling Program.

6 Hazardous materials generated by tenants are disposed or recycled as appropriate.
7 The only Class I landfill operating in southern California is the Kettleman Hills
8 facility in Kings County. The facility has a maximum permitted capacity of
9 10,700,000 cubic yards with a remaining capacity of 6,000,000 cubic yards. The
10 landfill has maximum allotted throughput of 8,000 tons per day (CalRecycle 2011c).

11 **3.13.2.2.5 Electrical Service**

12 The Port is located within the service area of LADWP, which maintains various
13 generating and distribution substations throughout the greater Los Angeles area.
14 LADWP supplies electricity generated from a mix of renewable energy; hydro, gas-
15 fired, coal-fired, and nuclear generation; and, purchases from other suppliers in the
16 west. The industrial power station closest to the Port has four main 138-kilovolt
17 supply lines, two from the Harbor Generating Station and two from North
18 Wilmington. Several other electrical power cables are distributed throughout the Port
19 area. Overall, LADWP supplies more than 22 million kilowatt (kW) hours of
20 electricity per year to the city's 1.4 million electric customers (LADWP 2011c).
21 LADWP has adequate generation to serve the current customer load. LADWP has
22 produced its *Integrated Resources Plan* (IRP), which anticipates load growth and
23 includes plans for new generating capacity or demand side management programs to
24 meet load requirements for future customers. The effect of the recent recession
25 reduced electricity consumption by approximately 4 percent in 2009 and 2010.
26 However, the growth in annual peak demand over the next 20 years is estimated to be
27 about 1.3 percent, or approximately 100 megawatts (MW) per year. Currently,
28 LADWP has a total generating capacity of about 7,197 MW per day to serve a peak
29 Los Angeles demand of about 6,142 MW (LADWP 2012). Through the IRP and
30 LADWP's current generating capacity, LADWP has adequate generation to serve the
31 current customer load (Holloway 2007, personal communication).

32 **3.13.2.2.6 Natural Gas Service**

33 SCGC provides natural gas to the Port. As a public utility, SCGC is under the
34 jurisdiction of the CPUC and can be affected by actions of federal regulatory agencies.
35 California's natural gas demand, in general, is expected to decrease by -0.25 percent
36 per year from 2012 to 2030. This forecasted decline is due to a combination of annual
37 growth in Natural Gas Vehicles, Enhanced Oil Recovery, and Wholesale markets
38 which is offset by declines in all other market segments: residential; commercial;
39 electric generation; and, industrial markets (California Gas and Electric Utilities 2012).

40 California's existing gas supply is regionally diverse (the southwestern U.S., the
41 Rocky Mountains, and Canada) and includes supplies from on- and offshore sources.
42 Additionally, in 2008 the Energia Costa Azul Liquefied Natural Gas receiving

1 terminal in Baja California became another source of supply for California
2 (California Gas and Electric Utilities 2012).

3 The gas demand projections for southern California are determined in large part by
4 the long-term economic outlook for SCGC's service territory. As of mid-2012,
5 southern California's economy is slowly climbing out of its most severe slump since
6 the 1930s. Demand is expected to be virtually flat for the next 21 years because of
7 modest economic growth, CPUC mandated demand-side management and renewable
8 electricity goals, decline in commercial and industrial demand, continued increased
9 use of non-utility pipeline systems by enhanced oil recovery customers, and savings
10 linked to advanced metering modules. The 2012 California Gas Report estimates the
11 total annual gas supply taken by SCGC to be 2,673 million cubic feet per day
12 (MMcf/day) in 2012, 2,615 MMcf/day in 2015 and 2,619 MMcf/day in 2030. The
13 report predicts the total capacity available to the SCGC to remain constant at
14 3,875 MMcf/day through 2030 (California Gas and Electric Utilities 2012).

15 **3.13.3 Applicable Regulations**

16 The only regulations that apply to utilities are state and local regulations. There are
17 no applicable federal regulations.

18 **3.13.3.1 State Regulations**

19 **3.13.3.1.1 California Urban Water Management Act**

20 The California Urban Water Management Planning Act requires urban water suppliers
21 to initiate planning strategies that make every effort to ensure the appropriate level of
22 reliability in its water service sufficient to meet the needs of its various categories of
23 customers during normal, dry, and multiple dry-water years. This act also requires
24 water suppliers to develop water management plans every 5 years.

25 **3.13.3.1.2 Senate Bill 610 Water Supply Assessment**

26 SB 610 was enacted in January 1, 2002. The statute requires the city or county which
27 determines that a "project" is subject to CEQA to identify any public water system
28 that may supply water for a project and request a water supply assessment from the
29 public water system. Any proposed appealable/fill project under the PMPU that
30 meets the criteria for CWC Section 10912(a) will require a water supply assessment
31 from LADPW to evaluate the projected increase in water demands and determine if
32 there are sufficient water supplies to serve the project for the next 20 years. The
33 LADPW would base this assessment on their UWMP. Per the CWC section 10912
34 (a), a "project" means any of the following:

- 35 ■ A proposed residential development of more than 500 dwelling units;
- 36 ■ A proposed shopping center or business establishment employing more than
37 1,000 persons or having more than 500,000 square feet of floor space;
- 38 ■ A proposed commercial office building employing more than 1,000 persons or
39 having more than 250,000 square feet of floor space;

- 1 ■ A proposed hotel or motel, or both, having more than 500 rooms;
- 2 ■ A proposed industrial, manufacturing, or processing plant, or industrial park
- 3 planned to house more than 1,000 persons, occupying more than 40 acres of land,
- 4 or having more than 650,000 square feet of floor area;
- 5 ■ A mixed-use project that includes one or more of the projects specified in this
- 6 subdivision; and/or,
- 7 ■ A project that would demand an amount of water equivalent to, or greater than,
- 8 the amount of water required by a 500 dwelling unit project (127,650 gallons per
- 9 day [gpd]).

10 **3.13.3.1.3 California Solid Waste Reuse and Recycling Access**

11 **Act**

12 The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327
13 [PRC Chapter 18 Section 42900]) required each jurisdiction to adopt an ordinance by
14 September 1, 1994, requiring any “development project” for which an application for
15 a building permit is submitted to provide an adequate storage area for collection and
16 removal of recyclable materials. AB 1327 regulations govern the transfer, receipt,
17 storage, and loading of recyclable materials at the Port.

18 **3.13.3.1.4 California Integrated Waste Management Act**

19 The State of California requires that all jurisdictions achieve compliance with AB
20 939 (PRC Sections 40000 *et seq.*) that addresses source reduction, recycling and
21 composting, and environmentally safe landfilling activities. AB 939 required counties
22 and cities to divert 50 percent of all solid waste from landfills by 2000. AB 939
23 further requires each city to conduct a Solid Waste Generation Study and to annually
24 prepare a Source Reduction and Recycling Element to describe how it will reach its
25 goals. The City of Los Angeles met and exceeded the year 2000 goals; in 2011, the
26 city’s diversion rate was 65 percent (Pereira 2011, personal communication).

27 **3.13.3.1.5 California Building Code CCR Title 24, Part 6**

28 Title 24, Part 6 of the CBC describes California’s energy efficiency standards for
29 residential and nonresidential buildings. These standards were established in 1978 in
30 response to a legislative mandate to reduce California’s energy consumption and
31 have been updated periodically to include new energy efficiency technologies and
32 methods. Title 24 requires building according to energy efficient standards for all
33 new construction, including new buildings, additions, alterations, and, in
34 nonresidential buildings, repairs.

35 **3.13.3.1.6 Standard Urban Stormwater Mitigation Plan**

36 On December 13, 2001, the Los Angeles RWQCB issued a Municipal Storm Water
37 NPDES Permit (CAS004001) that requires new development and redevelopment
38 projects to incorporate stormwater mitigation measures (Los Angeles RWQCB 2001).
39 This permit was amended on April 14, 2011. In compliance with the permit, permittees
40 have implemented a stormwater quality management program with the ultimate goals

1 of accomplishing the requirements of the permit and reducing the amount of pollutants
2 in stormwater and urban runoff. The stormwater quality management program is
3 broken up into six separate programs, one of which is the Development Planning
4 Program. A SUSMP is one specific requirement of the Development Planning
5 Program. It is generally required to reduce the quantity and improve the quality of
6 rainfall runoff that leaves a site. Developers are encouraged to begin work on
7 complying with these mandatory regulations by consulting with the Los Angeles
8 RWQCB Watershed Protection Division in the design phase of their projects.

9 **3.13.3.2 Local Regulations**

10 **3.13.3.2.1 LADWP Urban Water Management Plan**

11 Consistent with the California Urban Water Management Planning Act, LADWP has
12 prepared an UWMP to describe how water resources are used and to present
13 strategies that will be used to meet the city's current and future water needs. To meet
14 the objectives of this act, the LADWP's UWMP focuses primarily on water supply
15 reliability and water use efficiency measures. LADWP most recently completed its
16 5-year update in 2010. LADWP expects it will be able meet this demand with a
17 combination of existing supplies, planned supplies, and MWD purchases (existing
18 and planned) (LADWP 2011a).

19 **3.13.3.2.2 City of Los Angeles Water Supply Action Plan**

20 This plan provides the guidelines for creating sustainable sources of water for the future
21 of Los Angeles to reduce dependence on imported supplies. The plan defines the City of
22 Los Angeles policy to meet all new demand for water due to projected population
23 growth through a combination of water conservation and water recycling. Half of the all
24 new demand will be filled by a six-fold increase in recycled water supplies and the other
25 half met through ramped up conservation efforts (LADPW 2008).

26 **3.13.3.2.3 City of Los Angeles Water Efficiency Requirements 27 for New Developments and Renovations of Existing 28 Buildings (Ordinance 180822)**

29 This ordinance became effective December 1, 2009. The purpose of this ordinance is
30 to impose water efficiency requirements for the construction of new buildings and the
31 installation of new plumbing fixtures in existing building. The objectives of this
32 ordinance are to minimize the effect of any water shortages and adopt provisions that
33 will reduce the consumption of water over an extended period of time. The ordinance
34 requires high efficiency toilets and urinals and low-flow faucets and showerheads.

35 **3.13.3.2.4 City of Los Angeles Low Impact Development 36 Ordinance (Ordinance 181899)**

37 The city's Low Impact Development (LID) Ordinance became effective in November
38 2011 and amends the existing SUSMP requirements (which have been in effect since
39 2002) by incorporating LID practices and principles. This ordinance requires all
40 development /redevelopment to capture and manage 100 percent of the first 0.75-inch

1 storm event onsite. This may be achieved by implementing onsite infiltration, capture
2 and use, and bio-filtration/bio-treatment BMPs to the maximum extent feasible. The
3 concept of LID is consistent with the recommendations and strategies identified in
4 the IRP (LADPW BOS and LADWP 2006), *Water Quality Compliance Master Plan*
5 (LADPW 2009), all of the city's watershed specific total maximum daily load
6 (TMDL) implementation plans, the LADWP's *Water Supply Action Plan* (LADPW
7 2008), and the *Los Angeles River Revitalization Plan* (LADPW 2007). The ordinance
8 includes offsite mitigation as a potential alternative to achieve compliance. LID
9 requirements became effective on May 12, 2012.

10 **3.13.3.2.5 City of Los Angeles Emergency Water Conservation** 11 **Plan (Ordinance No. 181288)**

12 This ordinance was adopted in August 2010 and amended Chapter XII, Article I of
13 the LAMC to clarify prohibited uses and modify certain water conservation
14 requirements of the *City of Los Angeles Emergency Water Conservation Plan* (City
15 of Los Angeles 2010). The purpose of the ordinance is to minimize the effect of a
16 shortage of water on the customers of the City of Los Angeles and to adopt
17 provisions that will significantly reduce the consumption of water over an extended
18 period of time. The revised Water Conservation Ordinance contains five water
19 conservation "phases," which correspond to severity of water shortage, with each
20 increase in phase requiring more stringent conservation measures. Phase II is
21 currently in effect. Water conservation phases define outdoor watering restrictions as
22 appropriate, including sprinkler use restrictions and other prohibited water uses.

23 **3.13.3.2.6 Wastewater Facilities Plan/Integrated Resources Plan**

24 The federal CWA (refer to Section 3.14, Water Quality, Sediments, and
25 Oceanography) requires publicly owned sewage treatment facilities to prepare and
26 periodically update wastewater facilities plan. The City of Los Angeles prepared its
27 first wastewater facilities plan in 1982 and updated it in 1991. In 2006 the city
28 adopted the IRP, which incorporates a future vision of water, wastewater, and runoff
29 management. The basic goal of the plan is to integrate water supply, water
30 conservation, water recycling, and runoff management issues through a regional
31 watershed approach.

32 **3.13.3.2.7 Industrial Waste Control Ordinance**

33 The BOS Industrial Waste Management Division was established to protect the local
34 receiving waters by regulating industrial wastewater discharge to the city's sewer
35 system and by administering and enforcing the Industrial Waste Control Ordinance
36 (LAMC Section 64.30) as well as USEPA pretreatment regulations.

37 Industrial facilities and certain commercial facilities which plan to discharge
38 industrial wastewater to the city's sewage collection and treatment system are
39 required to first obtain an industrial wastewater permit. Permits are issued when a
40 determination has been made by the Board of Public Works for the City of Los
41 Angeles that the wastewater to be discharged will not violate any provisions of the
42 ordinance, the Board's Rules and Regulations, the water quality objectives for

1 receiving waters established by the Los Angeles RWQCB, or an applicable federal or
2 state statutes, rules or regulations.

3 **3.13.3.2.8 City of Los Angeles Solid Waste Plans**

4 The *City of Los Angeles Solid Waste Management Policy Plan* is a long-term
5 planning document adopted by the City Council in November 1994 containing goals,
6 objectives, and policies for solid waste management for the city. It specifies city-
7 wide diversion goals and disposal capacity needs. The mandate was enacted to
8 encourage reduction, recycling, and reuse of solid waste generated in the state to
9 preserve landfill capacity, conserve water, energy, and other natural resources, and to
10 protect the state’s environment (LADPW BOS and LADWP 2006).

11 The City of Los Angeles has initiated the *Recovering Energy, Natural Resources, and*
12 *Economic Benefit from Waste for Los Angeles Plan* (RENEW LA Plan) as a guide for
13 solid waste and resource management in the future. The RENEW LA Plan is a
14 comprehensive plan for the recovery and beneficial use of materials currently being
15 disposed of in landfills. The key goal of the RENEW LA Plan is creation of a new
16 system of resource management based on the concept of “zero waste.” The goal of zero
17 waste as defined in the Plan is to reduce, reuse, recycle, or convert the resources now
18 going to disposal to achieve an overall diversion level of 90 percent or more by 2025
19 and to leave for disposal only a small amount of inert residual material (City of Los
20 Angeles 2005). The Plan not only puts forth the vision of where the City of Los Angeles
21 wants to be in 2025 but also provides guidelines for achieving that goal. The blueprint
22 highlights milestones, facility development, and key actions to be accomplished during
23 four 5-year time periods: 2005 to 2010; 2010 to 2015; 2015 to 2020; and, 2020 to 2025.

24 Building on the RENEW LA Plan, the City of Los Angeles is developing the Solid
25 Waste IRP, which will serve as the 20-year master plan for city solid waste and
26 recycling programs. This plan will outline city objectives to provide sustainability,
27 resource conservation, source reduction, recycling, renewable energy, maximum
28 material recovery, and public health and environmental protection for solid waste
29 management planning through 2025 — leading Los Angeles toward being a “zero
30 waste” city. Achieving zero waste will require radical changes in three areas: product
31 creation (manufacturing and packaging); product use (use of sustainable and recyclable
32 products); and product disposal (resource recovery or landfilling). This plan will seek
33 input from stakeholders and will result in the development and implementation of a 20-
34 year master plan for the city’s solid waste and recycling programs.

35 **3.13.3.2.9 Port of Los Angeles Sustainability Assessment and** 36 **Plan Formation**

37 In June 2008, the Port published the *Sustainability Assessment and Plan Formation* in
38 response to the Mayoral-initialized Executive Directive No. 10, “Sustainable Practices
39 in the City of Los Angeles,” adopted in June 2007. “This directive sets forth his vision
40 to transform Los Angeles into the most sustainable large city in the country and
41 includes goals in the areas of energy and water, procurement, contracting, waste
42 diversion, non-toxic product selection, air quality, training, and public outreach”
43 (LAHD 2008). The *2011 Annual Sustainability Report* includes scorecards that provide
44 a qualitative measure of the progress the Port has made to address the Port’s material

1 issues related to sustainability and implementation of the various sustainability related
2 programs and policies. As indicated by the scorecards, the Port is leading the industry
3 in many aspects of sustainability, including health risk reduction, habitat protection,
4 and open space and urban greening, and green growth (Port 2011). A more
5 comprehensive approach to Port sustainability planning is currently underway.

6 **3.13.3.2.10 Green Building Policy**

7 On August 27, 2008, the Board approved the LAHD *Green Building Policy*, which
8 includes guidelines on implementation of LEED certification and standards for new and
9 existing building construction and/or renovation. The LEED Green Building Rating
10 System is voluntary, consensus-based, and market-driven, and is based on existing,
11 proven technology that evaluates environmental performance in five categories:

- 12 ■ Sustainable site planning;
- 13 ■ Improving energy efficiency;
- 14 ■ Conserving materials and resources;
- 15 ■ Embracing indoor environmental quality; and,
- 16 ■ Safeguarding water.

17 Points are earned for goals accomplished in each category, and the certification level
18 for a building is determined by the total number of points (100 base points). There
19 are four LEED certification levels: Certified (40–49 points), Silver (50–59 points),
20 Gold (60–79 points), and Platinum (80–100 points).

21 The city has adopted the policy that all new city buildings of 7,500 square feet or
22 more should be designed, whenever possible, to meet the LEED Certified level.
23 LAHD has taken this policy farther, and under the jurisdiction of the LAHD, all
24 construction must meet the following:

- 25 ■ New construction (i.e., office buildings) 7,500 square feet or greater, without
26 compromising functionality, will be designed to a minimum level of LEED NC
27 Gold;
- 28 ■ New construction (i.e., marine utilitarian buildings such as equipment
29 maintenance), without compromising functionality, will be designed to a
30 minimum level of LEED NC Silver;
- 31 ■ Existing buildings of 7,500 square feet or greater will be inventoried as evaluated
32 for their applicability to the LEED Existing Building Standards. Priority for
33 certification will be determined by building operation and maintenance
34 procedures;
- 35 ■ All other buildings will be designed or constructed to meet the highest achievable
36 LEED standard to the extent feasible for the building's purpose;
- 37 ■ All Port buildings will include solar power to the maximum extent feasible, as
38 well as incorporation of the best available technology for energy and water
39 efficiency; and,
- 40 ■ A sustainability staff has been created to continuously evaluate and advance
41 LAHD's sustainability practices, as well as develop green guidelines and
42 sustainable strategies.

3.13.4 Impacts and Mitigation Measures

3.13.4.1 Methodology

Assessment of the proposed Program’s impacts on utilities (water, wastewater, solid waste) and energy providers (electricity and natural gas) varies depending on the utility but generally includes a comparison of the projected demand against existing and anticipated resource supplies and/or conveyance and storage capacities.

Assessments of the potential for the proposed appealable/fill projects to impact utilities assume, based on regulatory controls, that a Public Services Relocation Plan would be developed in coordination with the service providers and submitted to city regulatory departments for review and approval.

3.13.4.1.1 Water Supply

Water supply or conveyance impacts are typically evaluated by estimating water consumption factors associated with a proposed project site land use (Table 3.13-1).

Water consumption factors are based on 111 percent of the wastewater generation factors established by the City of Los Angeles (*L.A. CEQA Thresholds Guide 2006:M.1-4*).

Table 3.13-1. Predicted Water Demand for the Proposed Program

Planning Area	PMPU Land Use Designation	General Land Use	Area ^a (square feet)	Water Consumption Rate ^b (gpd/1000 square feet)	Water Demand (mgd)	Water Demand (AFY)
Planning Area 2	Container	Warehouse	1,446,192	22	0.03	36
	Break Bulk	Warehouse	-87,120	22	0.00	-2
	Liquid Bulk	Warehouse	17,424	22	0.00	0
	Dry Bulk	Warehouse	-152,460	22	0.00	-4
	Institutional	Office	-209,088	167	-0.03	-39
	Industrial	Industrial	-8,712	89	0.00	-1
	Visitor Serving Comm	Office	52,272	167	0.01	10
Planning Area 2 Subtotal					0.00	0
Planning Area 3	Container	Warehouse	11,138,292	22	0.25	277
	Liquid Bulk	Warehouse	-723,096	22	-0.02	-18
	Commerical Fishing	Industrial	-87,120	89	-0.01	-9
	Dry Bulk	Warehouse	-1,158,696	22	-0.03	-29
	Maritime Support	Industrial	2,783,484	89	0.25	277
Planning Area 3 Subtotal					0.44	499
Planning Area 4	Break Bulk	Industrial	-771,012	22	-0.02	-19
	Liquid Bulk	Industrial	-43,560	22	0.00	-1
	Commercial Fishing	Office	1,655,280	89	0.15	165
	Maritime Support	Industrial	1,006,236	89	0.09	100
	Institutional	Office	-78,408	150	-0.01	-13
Planning Area 4 Subtotal					0.21	231
Total					0.65	730

Notes:

- a. Areas are based on the change (net increase or loss) of acreage resulting from the PMPU. Areas are also based on the overall land use category of the land to be developed or converted, not individual buildings. Development of the project sites will include parking areas as well as others that have minimal water demands. These estimates are conservative and may overestimate the projected increase in water demands.
 - b. Sewer Generation Rates from City of Los Angeles 2006 – Appendix M multiplied by 111 percent.
- Acronyms: *gpd*- gallons per day; *mgd* – millions of gallons per day; *AFY* – acre-feet per year

In accordance with LAHD's commitment to reduce and conserve the amount of water used in the PMPU area, the proposed appealable/fill projects would install water-efficient plumbing fixtures and would use recycled water provided by the LADWP if the service is available at the project site.

3.13.4.1.2 Wastewater

Assessment of impacts on wastewater treatment systems generally include the comparison of the project-related, land-use-based wastewater flow generation to the existing and projected capacity of the TIWRP, which is 30 mgd. Wastewater generation is a function of water use and is typically equal to or slightly less than water use. The impact analysis projects the wastewater generation amounts that would contribute to existing wastewater flow and use the available TIWRP capacity (Table 3.13-2).

Table 3.13-2. Predicted Wastewater Generation

<i>Planning Area</i>	<i>PMPU Land Use Designation</i>	<i>General Land Use</i>	<i>Area^a (square feet)</i>	<i>Sewer Generation Factor^b (gpd/1000 square feet)</i>	<i>Wastewater Generation (mgd)</i>
Planning Area 2	Container	Warehouse	1,446,192	20	0.03
	Break Bulk	Warehouse	-87,120	20	0.00
	Liquid Bulk	Warehouse	17,424	20	0.00
	Dry Bulk	Warehouse	-152,460	20	0.00
	Institutional	Office	-209,088	150	-0.03
	Industrial	Industrial	-8,712	80	0.00
Planning Area 2 Subtotal					0.00
Planning Area 3	Container	Warehouse	11,138,292	20	0.22
	Liquid Bulk	Warehouse	-723,096	20	-0.01
	Commerical Fishing	Industrial	-87,120	80	-0.01
	Dry Bulk	Warehouse	-1,158,696	20	-0.02
	Maritime Support	Industrial	2,783,484	80	0.22
Planning Area 3 Subtotal					0.40
Planning Area 4	Break Bulk	Industrial	-771,012	20	-0.02
	Liquid Bulk	Industrial	-43,560	20	0.00
	Commerical Fishing	Office	1,655,280	80	0.13
	Maritime Support	Industrial	1,006,236	80	0.08
	Institutional	Office	-78,408	150	-0.01
Planning Area 4 Subtotal					0.18
Total					0.59
<i>Notes:</i>					
a. Areas are based on the change (net increase or loss) of acreage resulting from the PMPU. Areas are also based on the overall land use category of the land to be developed or converted, not individual buildings. Development of the project sites will include parking areas as well as other non-wastewater generation land uses. By using the overall land use category, these estimates may overestimate the projected increase in wastewater generation.					
b. City of Los Angeles 2006 – Appendix M.					
Acronyms: <i>gpd</i> - gallons per day; <i>mgd</i> – millions of gallons per day					

3.13.4.1.3 Storm Drainage Facilities

Assessment of impacts on storm drainage facilities generally include comparison of the project-related stormwater generation to the existing and projected capacity of the existing stormwater facilities.

3.13.4.1.4 Solid Waste

Impacts related to solid waste are evaluated by estimating the project-related, land-use-based solid waste generation compared to the capacity of the landfills serving the PMPU area. Quantification of solid waste generation for the proposed appealable/fill projects is based on per acre solid waste generation rates estimated by the Port from existing terminal uses (Table 3.13-3).

Table 3.13-3. Predicted Solid Waste Generation

	<i>Planning Area 2</i>	<i>Planning Area 3</i>	<i>Planning Area 4</i>	<i>Total</i>
Net Development (acres)	24.3	274.4	40.6	339.30
Generation Factor*	0.372	0.372	0.372	0.372
Total Solid Waste (tons/year)	9.0	102.1	15.1	126.2
Total Solid Waste (tons/day)	0.025	0.280	0.041	0.346
Chiquita Canyon Landfill Permitted Throughput (tons/day)	6,000	6,000	6,000	6,000
Chiquita Canyon Landfill Permitted Throughput (Percent)	0.0004	0.0047	0.0007	0.0058
Sunshine Canyon Permitted Throughput (tons/day)	5,500	5,500	5,500	5,500
Sunshine Canyon Landfill Permitted Throughput (percent)	0.0005	0.0051	0.0008	0.0063

*Source:** Solid waste generation for terminals provided by LAHD.

3.13.4.1.5 Energy

Appendix F of the CEQA Guidelines states that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

The determination of impacts on electricity and natural gas supplies depends on an estimation of demand generated for the proposed appealable/fill project uses compared to availability and capacity of existing supplies and the conveyance infrastructure. For terminal land use (container, liquid bulk, dry bulk, etc.) the energy consumption depends, in part, on the number of vessel loads and crane lifts that use the facility.

3.13.4.2 Thresholds of Significance

The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) is the basis for the following significance criteria and for evaluating the significance of impacts on

1 utilities resulting from the proposed Program. Groundwater and soils impacts would
2 be significant under the following conditions:

3 **UT-1:** The proposed Program would result in a substantial increase in
4 wastewater flows that would exceed the wastewater treatment
5 requirements of the Los Angeles RWQCB or the capacity of existing
6 treatment facilities;

7 **UT-2:** The proposed Program would result in a substantial increase in water
8 demand that would exceed the water supplies available from existing
9 entitlements and resources, and new or expanded facilities or
10 entitlements would be required;

11 **UT-3:** The proposed Program would generate substantial surface runoff that
12 would exceed the capacity of existing municipal storm drain systems;

13 **UT-4:** The proposed Program would result in an increase in solid waste
14 generation due to project operations that would exceed the capacity of
15 existing solid waste handling and disposal facilities; and,

16 **UT-5:** The proposed Program would require new, offsite energy supply and
17 distribution infrastructure, or capacity-enhancing alterations to existing
18 facilities that are not anticipated by adopted plans or programs.

19 **3.13.4.3 Impacts and Mitigation**

20 **Impact UT-1: The proposed Program would not result in a**
21 **substantial increase in wastewater flows that would exceed the**
22 **wastewater treatment requirements of the Los Angeles RWQCB**
23 **or the capacity of existing treatment facilities.**

24 **Planning Area 2**

25 *Construction*

26 Construction of the proposed appealable/fill projects in Planning Area 2 (i.e., Berths
27 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China
28 Shipping Fill) could involve upgrading plumbing at existing facilities and could
29 require modifying existing wastewater systems and constructing new infrastructure to
30 connect to new buildings. These activities would require temporary shutdown of the
31 plumbing within the affected buildings as upgrades are implemented. During this
32 time, use of the plumbing fixtures would not be possible. However, portable
33 temporary facilities would be available for construction workers. Waste from such
34 facilities would be hauled away and disposed of in accordance with Los Angeles
35 RWCQB regulations. Construction of the proposed appealable/fill projects and land
36 use changes would not result in increased wastewater flows that would exceed
37 existing capacity.

Operations

Proposed appealable/fill projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill) and associated land use changes in Planning Area 2 would result in no net change in wastewater generation (Table 3.13-2). Wastewater generated from the proposed appealable/fill project sites would be conveyed to and treated at the TIWRP. Operation of the proposed appealable/fill projects and land use changes would not result in increased wastewater flows that would exceed existing capacity.

Planning Area 3

Construction

Construction of the Berth 300 Development Project and/or related to land use changes could involve upgrading plumbing at existing facilities and could require modifying existing wastewater systems and constructing new infrastructure to connect to new buildings. These activities would require temporary shutdown of the plumbing within the affected buildings as upgrades are implemented. During this time, use of the plumbing fixtures would not be possible. However, portable temporary facilities would be available for construction workers. Waste from such facilities would be hauled away and disposed of in accordance with Los Angeles RWCQB regulations. Construction of the proposed appealable/fill projects and land use changes would not result in increased wastewater flows that would exceed existing capacity.

Operations

The Berth 300 Development Project and land use changes in Planning Area 3 would result in an estimated increase in wastewater generation of up to 0.40 mgd (Table 3.13-2). This project and future development associated with the proposed land use changes would be required to tie into existing sewer lines, which could require capacity expansion. LAHD would coordinate with the BOS to obtain any necessary permits for the proposed appealable/fill projects and land use changes. Wastewater generated from the Berth 300 Development Project site would be conveyed to and treated at the TIWRP. Operation of the proposed appealable/fill project and land use changes would not result in increased wastewater flows that would exceed existing capacity.

Planning Area 4

Construction

Construction for the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina projects could involve upgrading plumbing to the existing facilities and could require modifying existing wastewater systems and constructing new infrastructure to connect to new buildings. These activities would require temporary shutdown of the plumbing within the affected buildings as upgrades are implemented. During this time, use of the plumbing fixtures would not be possible. However, portable temporary facilities would be available for construction workers. Waste from such facilities would be hauled away and disposed of in accordance with

1 Los Angeles RWCQB regulations. Construction of the proposed appealable/fill
2 projects and land use changes would not result in increased wastewater flows that
3 would exceed existing capacity.

4 *Operations*

5 The Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson
6 Marina projects and land use changes in Planning Area 4 would result in an estimated
7 increase in wastewater generation of 0.18 mgd (Table 3.13-2). These projects and
8 future development associated with the proposed land use changes would be required
9 to tie into existing sewer lines, which could require capacity expansion. LAHD
10 would coordinate with the BOS to obtain any necessary permits for the proposed
11 appealable/fill projects and land use changes. Wastewater generated from the
12 proposed appealable/fill project sites would be conveyed to and treated at the
13 TIWRP. Operation of the proposed appealable/fill projects and land use changes
14 would not result in increased wastewater flows that would exceed existing capacity.

15 **Impact Determination**

16 *Construction*

17 Although construction of the proposed appealable/fill projects could require
18 modifying existing wastewater systems and/or constructing new infrastructure,
19 portable temporary facilities would be available for construction workers. Waste
20 from such facilities would be hauled away and disposed of in accordance with Los
21 Angeles RWCQB regulations. Construction of the proposed appealable/fill projects
22 and land use changes would not result in increased wastewater flows that would
23 exceed existing capacity. Therefore, impacts would be less than significant.

24 *Operations*

25 Operation of the proposed appealable/fill projects and land use changes associated
26 with the proposed Program would result in combined estimated increases in
27 wastewater generation of 0.59 mgd (Table 3.13-2). In comparison, TIWRP currently
28 has approximately 10 mgd of additional capacity to accommodate increases in
29 wastewater from operation of the proposed appealable/fill projects and land use
30 changes. Therefore, impacts would be less than significant.

31 Further, as part of project designs, LAHD would evaluate the capacity of the existing
32 and proposed conveyance system at individual project sites and assess the adequacy
33 of existing and proposed conveyance systems.

34 **Mitigation Measures**

35 No mitigation is required.

36 **Residual Impacts**

37 Residual impacts would be less than significant.

1 **Impact UT-2: The proposed Program would not result in a**
2 **substantial increase in water demand that would exceed the water**
3 **supplies available from existing entitlements and resources, and**
4 **new or expanded facilities or entitlements would not be required.**

5 **Planning Area 2**

6 *Construction*

7 Construction of the proposed appealable/fill projects (i.e., Berths 187-189 Liquid
8 Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill) and
9 land use changes in Planning Area 2 would use water for various purposes, such as
10 dust suppression, mixing and pouring concrete, and other construction-related
11 activities. Typically, the majority of water use during construction is associated with
12 dust suppression during grading or trenching, which is generally performed by water
13 trucks. Water usage during construction would be temporary and insubstantial and
14 would not exceed the existing supply.

15 *Operations*

16 Proposed appealable/fill projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang
17 Ming Terminal Redevelopment, and China Shipping Fill) and associated land use
18 changes in Planning Area 2 would result in no net change in water use (Table
19 3.13-1). All proposed appealable/fill projects and land use changes would be
20 designed in accordance with LAHD's Green Building Policy, the City of Los
21 Angeles Green LA Action Plan, and LAMC, ensuring implementation of
22 water/energy efficiency designs and material reuse. Operation of the proposed
23 appealable/fill projects and land use changes would not result in increased water
24 demand that would exceed the existing supply.

25 **Planning Area 3**

26 *Construction*

27 Construction of the Berth 300 Development Project and land use changes would use
28 water for various purposes, such as dust suppression, mixing and pouring concrete,
29 and other construction-related activities. Typically, the majority of water required
30 during construction is supplied by water trucks. Water usage during construction
31 would be temporary and insubstantial and would not exceed the existing supply.

32 *Operations*

33 Operation of the Berth 300 Development Project and land use changes in Planning
34 Area 3 would result in an estimated increase in water use of up to 499 AFY (Table
35 3.13-1). All proposed appealable/fill projects and land use changes would be
36 designed in accordance with LAHD's Green Building Policy, the City of Los
37 Angeles Green LA Action Plan, and LAMC, ensuring implementation of
38 water/energy efficiency designs and material reuse. Operation of the proposed
39 appealable/fill project and land use changes would not result in increased water
40 demand that would exceed the existing supply.

1 **Planning Area 4**

2 *Construction*

3 Construction for the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and
4 Al Larson Marina projects and land use changes would use water for various
5 purposes, such as dust suppression, mixing and pouring concrete, and other
6 construction-related activities. Typically, the majority of water required during
7 construction is supplied by water trucks. Water usage during construction would be
8 temporary and insubstantial and would not exceed the existing supply.

9 *Operations*

10 Operation of the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al
11 Larson Marina projects and proposed Program land use changes in Planning Area 4
12 would result in an estimated increase in water use of up to 231 AFY (Table 3.13-1).
13 All proposed appealable/fill projects and land use changes would be designed in
14 accordance with LAHD's Green Building Policy, the City of Los Angeles Green LA
15 Action Plan, and LAMC, ensuring implementation of water/energy efficiency designs
16 and material reuse. Operation of the proposed appealable/fill projects and land use
17 changes would not result in increased water demand that would exceed the existing
18 supply.

19 **Impact Determination**

20 *Construction*

21 Because construction activities associated with the proposed appealable/fill projects
22 would not generate substantial water demands, impacts would be less than
23 significant.

24 A project that meets any of the criteria in CWC Section 10912 (a) (Section 3.13.3.1,
25 State Regulations), would require a water supply assessment from the LADWP.
26 LADWP would determine whether the appealable/fill project is included in future
27 growth and water projections in the LADWP UWMP, and whether there are
28 sufficient water supplies to serve the project for the next 20 years. LAHD and/or the
29 project applicant would coordinate with the LADWP if a water supply assessment is
30 required.

31 *Operations*

32 Based on preliminary estimates of water demands (Table 3.13-1), operation of the
33 proposed appealable/fill projects and land use changes would result in an overall
34 increase in water use of 730 AFY (Table 3.13-1). These are preliminary estimates
35 using land-use-based water consumption factors and do not include savings from
36 water efficiency requirements required by City of Los Angeles. All proposed
37 appealable/fill projects and land use changes would be designed in accordance with
38 LAHD's Green Building Policy, the City of Los Angeles Green LA Action Plan, and
39 LAMC, ensuring implementation of water/energy efficiency designs and material
40 reuse. Based on recent water supply assessments completed by the LADWP for
41 LAHD (LAHD and USACE 2011), increases in water demand associated with Port

1 development are incorporated into the LADWP UWMP water demand forecast.
2 According to the 2010 UWMP, under wet, average, and dry years throughout the 25-
3 year projection period, LADWP's supply portfolio is expected to be reliable, with
4 adequate supplies available to meet demands. Therefore, impacts would be less than
5 significant.

6 **Mitigation Measures**

7 No mitigation is required.

8 **Residual Impacts**

9 Residual impacts would be less than significant.

10 **Impact UT-3: The proposed Program would not generate**
11 **substantial surface runoff that would exceed the capacity of**
12 **existing municipal storm drain systems.**

13 **Planning Area 2**

14 *Construction*

15 Stormwater runoff associated with the construction of the proposed appealable/fill
16 projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal
17 Redevelopment, and China Shipping Fill) and land use changes would be managed in
18 accordance with the project's construction SWPPP, prepared in compliance with
19 CWA NPDES, to avoid flooding and uncontrolled runoff requirements (refer to
20 Section 3.14, Water Quality, Sediments, and Oceanography for additional details).
21 Stormwater runoff volumes from these sites are not expected to exceed the capacity
22 of storm drain systems.

23 *Operations*

24 Storm drains within the PMPU area have sufficient capacity to accommodate current
25 demands and are designed to accommodate 10-year storm events. Storm drain
26 improvements may be required on a project specific basis. The proposed
27 appealable/fill projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang Ming
28 Terminal Redevelopment, and China Shipping Fill) in Planning Area 2 would include
29 any required installation and expansion of stormwater drainage facilities necessary to
30 accommodate stormwater runoff.

31 Land use changes in Planning Area 2 related to the existing liquid bulk facility at
32 Berths 118-120 (Kinder Morgan), relocating the Vopak liquid bulk facility from
33 Berths 187-189 to Berths 191-194, and converting vacant land to liquid bulk uses on
34 Mormon Island, an optional land use site, could result in minor changes in
35 stormwater runoff volumes due to differences in site permeability. However, these
36 differences would not be substantial and would not exceed the capacity of the
37 existing storm drain systems.

38 The proposed appealable/fill projects would implement LID and LEED requirements
39 that include design features for reducing impervious cover and increasing infiltration

1 (e.g., through porous paving or other permeable surface), increasing
2 evapotranspiration (e.g., by increased use of vegetation), and capturing, treating, and
3 re-using stormwater runoff (e.g., through the use of bioswales, retention basins, and
4 cisterns). Facilities would be constructed in accordance with the requirements of the
5 Municipal Storm Water NPDES Permit (NPDES Permit No. CAS004001), SUSMP
6 regulations, and LAMC requirements (e.g., LID), which specify similar design and
7 operational measures to reduce runoff. These measures would reduce runoff from the
8 proposed appealable/fill project areas compared to baseline conditions.

9 **Planning Area 3**

10 *Construction*

11 Stormwater runoff associated with the construction of the Berth 300 Development
12 Project and land use changes in Planning Area 3 would be managed in accordance
13 with the project's construction SWPPP, prepared in compliance with CWA NPDES,
14 to avoid flooding and uncontrolled runoff requirements. Stormwater runoff volumes
15 from this site are not expected to exceed the capacity of storm drain systems.

16 *Operations*

17 Storm drains within the PMPU area have sufficient capacity to accommodate current
18 demands and are designed to accommodate 10-year storm events. Storm drain
19 improvements may be required on a project specific basis. The Berth 300
20 Development Project in Planning Area 3 would include any required installation and
21 expansion of stormwater drainage facilities necessary to accommodate stormwater
22 runoff.

23 Land use changes in Planning Area 3, including those related to converting Berth
24 301, an optional land use site, to a liquid bulk uses, converting the existing Exxon
25 Mobil liquid bulk facility to container storage, and converting Berths 206-209 and
26 210-211 to mixed use, could result in minor changes in stormwater runoff volumes
27 due to differences in site permeability. However, these differences would not be
28 substantial and would not exceed the capacity of the existing storm drain systems.

29 The Berth 300 Development Project would implement LID and LEED requirements
30 that include design features for reducing impervious cover and increasing infiltration
31 (e.g., through porous paving or other permeable surface), increasing
32 evapotranspiration (e.g., by increased use of vegetation), and capturing, treating, and
33 re-using stormwater runoff (e.g., through the use of bioswales, retention basins, and
34 cisterns). Facilities would be constructed in accordance with the requirements of the
35 Municipal Storm Water NPDES Permit (NPDES Permit No. CAS004001), SUSMP
36 regulations, and LAMC requirements (e.g., LID), which specify similar design and
37 operational measures to reduce runoff. These measures would reduce runoff from the
38 proposed appealable/fill project areas compared to baseline conditions.

1 **Planning Area 4**

2 *Construction*

3 Stormwater runoff associated with the construction of the Tri Marine Expansion, 338
4 Cannery Street Adaptive Reuse, and Al Larson Marina projects and land use changes
5 would be managed in accordance with the project's construction SWPPP, prepared in
6 compliance with CWA NPDES, to avoid flooding and uncontrolled runoff
7 requirements. Stormwater runoff volumes from these sites are not expected to exceed
8 the capacity of storm drain systems.

9 *Operations*

10 Storm drains within the PMPU area have sufficient capacity to accommodate current
11 demands and are designed to accommodate 10-year storm events. Storm drain
12 improvements may be required on a project specific basis. The Tri Marine
13 Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina projects in
14 Planning Area 4 would include any required installation and expansion of stormwater
15 drainage facilities necessary to accommodate stormwater runoff.

16 Land use changes in Planning Area 4 could result in minor changes in stormwater
17 runoff volumes due to differences in site permeability. However, these differences
18 would not be substantial and would not exceed the capacity of the existing storm
19 drain systems.

20 The Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson
21 Marina projects would implement LID and LEED requirements that include design
22 features for reducing impervious cover and increasing infiltration (e.g., through
23 porous paving or other permeable surface), increasing evapotranspiration (e.g., by
24 increased use of vegetation), and capturing, treating, and re-using stormwater runoff
25 (e.g., through the use of bioswales, retention basins, and cisterns). Facilities would be
26 constructed in accordance with the requirements of the Municipal Storm Water
27 NPDES Permit (NPDES Permit No. CAS004001), SUSMP regulations, and LAMC
28 requirements (e.g., LID), which specify similar design and operational measures to
29 reduce runoff. These measures would reduce runoff from the proposed appealable/fill
30 project areas compared to baseline conditions.

31 **Impact Determination**

32 *Construction and Operations*

33 Construction and operation of the proposed appealable/fill projects would be subject
34 to controls that would minimize the likelihood of substantial surface runoff that could
35 exceed the capacity of existing municipal storm drain systems. Accordingly, impacts
36 would be less than significant.

37 **Mitigation Measures**

38 No mitigation is required.

Residual Impacts

Residual impacts would be less than significant.

Impact UT-4: The proposed Program would not result in an increase in solid waste generation due to project operations that would exceed the capacity of existing solid waste handling and disposal facilities.

Planning Area 2

Construction

Construction and demolition activities associated with the Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill projects and land use changes would generate debris, including asphalt, concrete, building materials, and solids. In 2010, the LAHD achieved a 99 percent diversion rate for construction debris through its construction recycling program (Garrett 2012, personal communication). Assuming similar diversion rates would be achieved for the proposed appealable/fill projects, the quantity of debris from construction and demolition that would require solid waste disposal would be relatively small and would not exceed the capacity of existing solid waste handling and disposal facilities. Recycling construction materials generally occurs where economically feasible. Implementation of the Port's Green Building Policy and waste diversion strategies would reduce increases in solid waste generation during construction and demolition activities.

In the event that unidentified hazardous materials are encountered during construction of the proposed appealable/fill projects, LAHD would consider feasible recycling options. However, if recycling is not an option, disposal of hazardous materials at a Class I landfill would be in accordance with facility and hazardous material requirements. Several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal.

Operations

Operation of the Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill projects and land use changes are estimated to increase the generation of solid waste by 0.025 tons/day (Table 3.12-3). To ensure adequate long-term solid waste management, the proposed appealable/fill projects would be required to comply with policies and standards set forth in the city's solid waste plans, including the city's Solid Waste IRP that is currently under preparation. The city is pursuing Zero-Waste solutions in the city, which could result in substantial reductions in solid waste disposal volumes, thereby preserving the capacity of existing landfills over an extended time period. Operation of the proposed appealable/fill projects and land use changes would also be required to comply with applicable waste diversion requirements, as well as all existing hazardous waste laws and regulations.

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Planning Area 3

Construction

Construction and demolition activities associated with the Berth 300 Development Project and land use changes would generate debris including asphalt, concrete, building materials, and solids. In 2010, the LAHD achieved a 99 percent diversion rate for construction debris through its construction recycling program. Assuming similar diversion rates would be achieved for the proposed appealable/fill project, the quantity of debris from construction and demolition that would require solid waste disposal would be relatively small and would not exceed the capacity of existing solid waste handling and disposal facilities.

In the event that unidentified hazardous materials are encountered during construction of the proposed appealable/fill projects, LAHD would consider feasible recycling options. However, if recycling is not an option, disposal of hazardous materials at a Class I landfill would be in accordance with facility and hazardous material requirements.

Operations

The Berth 300 Development Project and land use changes in Planning Area 3 are estimated to increase the generation of solid waste by 0.28 tons/day (Table 3.13-3). To ensure adequate long-term solid waste management, the proposed appealable/fill projects would be required to comply with policies and standards set forth in the city's solid waste plans, including the city's Solid Waste IRP that is currently under preparation. The city is pursuing Zero-Waste solutions in the city, which could result in substantial reductions in solid waste disposal volumes, thereby preserving the capacity of existing landfills over an extended time period. Operation of the proposed appealable/fill project would also be required to comply with applicable waste diversion requirements, as well as all existing hazardous waste laws and regulations.

Planning Area 4

Construction

Construction and demolition activities associated with the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina projects and land use changes would generate debris including asphalt, concrete, building materials, and solids. In 2010, the LAHD achieved a 99 percent diversion rate for construction debris through its construction recycling program. Assuming similar diversion rates would be achieved for the proposed appealable/fill projects, the quantity of debris from construction and demolition that would require solid waste disposal would be relatively small and would not exceed the capacity of existing solid waste handling and disposal facilities.

In the event that unidentified hazardous materials are encountered during construction of the proposed appealable/fill projects, LAHD would consider feasible recycling options. However, if recycling is not an option, disposal of hazardous materials at a Class I landfill would be in accordance with facility and hazardous material requirements.

1 **Operations**

2 Operation of the proposed Tri Marine Expansion, 338 Cannery Street Adaptive
3 Reuse, and Al Larson Marina projects and land use changes in Planning Area 4 are
4 estimated to increase the generation of solid waste by 0.041 tons/day (Table 3.13-3).
5 To ensure adequate long-term solid waste management, the proposed appealable/fill
6 projects would be required to comply with policies and standards set forth in the
7 city's solid waste plans, including the city's Solid Waste IRP that is currently under
8 preparation. The city is pursuing Zero-Waste solutions in the city, which could result
9 in substantial reductions in solid waste disposal volumes, thereby preserving the
10 capacity of existing landfills over an extended time period. Operation of the proposed
11 appealable/fill projects would also be required to comply with applicable waste
12 diversion requirements, as well as all existing hazardous waste laws and regulations.

13 **Impact Determination**

14 **Construction and Operations**

15 The construction and operation of the proposed appealable/fill projects and land use
16 changes would result in an overall increase in solid waste generation of 0.346 tons
17 per day (Table 3.13-3). This would represent 0.0063 percent of the permitted
18 throughput at the Sunshine Canyon landfill and 0.0058 of the permitted throughput of
19 the Chiquita Canyon Landfill. However, compliance with the city's *Solid Waste*
20 *Integrated Resources Plan* and solid waste diversion requirements would ensure that
21 impacts from solid waste disposal would be less than significant.

22 **Mitigation Measures**

23 No mitigation is required.

24 However, the following measures could be implemented, as applicable, as
25 amendments to the city's existing solid waste plans to mitigate site-specific impacts
26 associated with the proposed appealable/fill projects and land use changes.

27 **Recycling of Construction Materials.** Demolition and/or excess construction
28 materials shall be separated onsite for reuse/recycling or proper disposal. During
29 grading and construction, separate bins for recycling of construction materials shall
30 be provided onsite.

31 **Materials with Recycled Content.** Materials with recycled content shall be used in
32 Project construction where feasible. Chippers onsite during construction shall be used
33 to further reduce excess wood for landscaping cover.

34 **Residual Impacts**

35 Residual impacts would be less than significant.

1 **Impact UT-5: The proposed Program would not require new,**
2 **offsite energy supply and distribution infrastructure, or capacity-**
3 **enhancing alterations to existing facilities that are not anticipated**
4 **by adopted plans or programs.**

5 **Planning Area 2**

6 *Construction*

7 Energy (diesel fuel and electricity) would be used during construction of the
8 proposed appealable/fill projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang
9 Ming Terminal Redevelopment, and China Shipping Fill). Energy expenditures
10 during construction activities would be short-term, occurring periodically during
11 project-specific construction phases. Construction of the proposed appealable/fill
12 projects would not result in substantial waste or inefficient use of energy because
13 construction would be competitively bid, which would facilitate efficiency in all
14 construction stages. Current LAHD bid specifications include provisions to reduce
15 energy consumption, such as staging work during non-peak hours when appropriate.

16 *Operations*

17 The proposed appealable/fill projects and land use changes would incorporate
18 energy-efficient designs that are mandated by current building codes and LAHD
19 policies (e.g., LEED, LAHD's Green Building Policy, the City of Los Angeles Green
20 LA Action Plan, and LAMC). Furthermore, LAHD's goal is for the Port to be the
21 most energy efficient port. To accomplish this goal, LAHD has committed to design
22 any new building over 7,500 square feet with a minimum LEED Gold or Silver
23 certification, depending on the type of building. As such, energy efficiency standards
24 would be incorporated into the design of various buildings to decrease energy
25 demands. Additionally, the proposed appealable/fill projects would incorporate
26 energy conservation measures in compliance with CBC Title 24 that require energy
27 efficiency standards for new construction, including requirements for new buildings,
28 additions, alterations, and repairs to nonresidential buildings.

29 The Port is required by the CARB to have 80 percent of all vessel calls on AMP by
30 2020. The AMP system provides power to hoteled ships in lieu of electricity
31 generated by auxiliary diesel motors. The average annual electrical consumption per
32 ship is 46,000 kWh. Each of the proposed appealable/fill projects (i.e., Berths 187-
33 189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China
34 Shipping Fill) would be required to AMP ships. However, based on the LADWP
35 Power IRP, electricity resources and reserves at LADWP would provide adequate
36 electricity for all its customers, including the Port, through the current Power IRP
37 planning horizon of 2040 (LADWP 2010).

38 **Planning Area 3**

39 *Construction*

40 Energy would be used during construction of the Berth 300 Development Project.
41 Energy expenditures during construction activities would be short-term, occurring
42 periodically during project-specific construction phases. Construction of this

1 proposed appealable/fill project would not result in substantial waste or inefficient
2 use of energy because construction would be competitively bid, which would
3 facilitate efficiency in all construction stages. Current LAHD bid specifications
4 include provisions to reduce energy consumption, such as staging work during non-
5 peak hours when appropriate.

6 *Operations*

7 The proposed appealable/fill project and land use changes would incorporate energy-
8 efficient designs that are mandated by current building codes and LAHD policies
9 (e.g., LEED, LAHD's Green Building Policy, the City of Los Angeles Green LA
10 Action Plan, and LAMC). LAHD policies, such as LEED, aim to make construction
11 and development projects more energy efficient. To accomplish this goal, LAHD has
12 committed to design any new building over 7,500 square feet with a minimum LEED
13 Gold or Silver certification, depending on the type of building. As such, energy
14 efficiency standards would be incorporated into the design of various buildings to
15 decrease energy demands. Additionally, the Berth 300 Development Project would
16 incorporate energy conservation measures in compliance with CBC Title 24 that
17 require energy efficiency standards for new construction, including requirements for
18 new buildings, additions, alterations, and repairs to nonresidential buildings.

19 The Berth 300 Development Project would be required to AMP ships. While AMP is
20 more efficient and reduces air emissions, it would increase future electricity demands
21 at the Port.

22 **Planning Area 4**

23 *Construction*

24 Energy used during construction of the Tri Marine Expansion, 338 Cannery Street
25 Adaptive Reuse, and Al Larson Marina projects would be short-term, occurring
26 periodically during project-specific construction phases. Construction of these
27 projects would not result in substantial waste or inefficient use of energy because
28 construction would be competitively bid, which would facilitate efficiency in all
29 construction stages. Current LAHD bid specifications include provisions to reduce
30 energy consumption, such as staging work during non-peak hours when appropriate.

31 *Operations*

32 The proposed appealable/fill project and land use changes would incorporate energy-
33 efficient designs that are mandated by current building codes and LAHD policies
34 (e.g., LEED, LAHD's Green Building Policy, the City of Los Angeles Green LA
35 Action Plan, and LAMC). LAHD policies, such as LEED, aim to make construction
36 and development projects more energy efficient. To accomplish this goal, LAHD has
37 committed to design any new building over 7,500 square feet with a minimum LEED
38 Gold or Silver certification, depending on the type of building. As such, energy
39 efficiency standards would be incorporated into the design of various buildings to
40 decrease energy demands. Additionally, the proposed appealable/fill projects would
41 incorporate energy conservation measures in compliance with CBC Title 24 that
42 requires energy efficiency standards for new construction, including requirements for
43 new buildings, additions, alterations, and repairs to nonresidential buildings.

Impact Determination

Construction and Operations

Construction and operation of the proposed appealable/fill projects under the PMPU would implement energy efficient design standards, as required by state law, combined with the Port’s Green Building Policy that would minimize energy consumption. Compliance with CARB requirements to AMP vessels would result in an increase in electricity consumption by the proposed appealable/fill projects. However, based on the LADWP Power IRP, electricity resources and reserves at LADWP would provide adequate electricity for all its customers, including the Port, through the current Power IRP planning horizon of 2040 (LADWP 2010). Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Residual impacts would be less than significant.

3.13.5 Summary Impact Determination

Table 3.13-4 summarizes the impact determinations of the proposed Program related to utilities. Identified potential impacts are based on federal, state, and City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table describes the impact, notes the impact determination, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in the table.

Table 3.13-4. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities Associated with the Proposed Program

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
<i>Construction</i>			
UT-1: Construction of the proposed Program would not result in a substantial increase in wastewater flows that would exceed the wastewater treatment requirements of the Los Angeles RWQCB or the capacity of existing treatment facilities.	Less than significant	No mitigation is required	Less than significant
UT-2: Construction of the proposed Program would not result in a substantial increase in water demand that would exceed the water supplies available from existing entitlements and resources, and new or expanded facilities or entitlements would be required.	Less than significant	No mitigation is required	Less than significant

Table 3.13-4. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities Associated with the Proposed Program

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
UT-3: Construction of the proposed Program would not generate substantial surface runoff that would exceed the capacity of existing municipal storm drain systems.	Less than significant	No mitigation is required	Less than significant
UT-4: Construction of the proposed Program would not result in an increase in solid waste generation due to project operations that would exceed the capacity of existing solid waste handling and disposal facilities.	Less than significant	No mitigation is required	Less than significant
UT-5: Construction of the proposed Program would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	Less than significant	No mitigation is required	Less than significant
<i>Operations</i>			
UT-1: Operation of the proposed Program would not result in a substantial increase in wastewater flows that would exceed the wastewater treatment requirements of the Los Angeles RWQCB or the capacity of existing treatment facilities.	Less than significant	No mitigation is required	Less than significant
UT-2: Operation of the proposed Program would not result in a substantial increase in water demand that would exceed the water supplies available from existing entitlements and resources, and new or expanded facilities or entitlements would be required.	Less than significant	No mitigation is required	Less than significant
UT-3: Operation of the proposed Program would not generate substantial surface runoff that would exceed the capacity of existing municipal storm drain systems.	Less than significant	No mitigation is required	Less than significant
UT-4: Operation of the proposed Program would not result in an increase in solid waste generation due to project operations that would exceed the capacity of existing solid waste handling and disposal facilities.	Less than significant	No mitigation is required	Less than significant
UT-5: Operation of the proposed Program would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	Less than significant	No mitigation is required	Less than significant

1 **3.13.6 Significant Unavoidable Impacts**

2 No significant unavoidable impacts to utilities would occur as a result of
3 implementation of the proposed Program.