SECTION 3.16
Utilities and Service Systems

3.16.1 Introduction

This section evaluates whether implementation of the proposed program has the potential to result in adverse impacts to utilities and service systems. Utilities and service systems include water supply and distribution systems, wastewater (sewage) conveyance and treatment, and solid waste collection and disposal. This analysis is based on review of the existing infrastructure and levels of service, the relevant regulatory requirements, a discussion of the methodology and thresholds used to determine whether the proposed program would result in significant impacts, and identifies any improvements necessary to accommodate the proposed program. This section identifies the potential for both program-level and cumulative environmental impacts, as well as feasible mitigation measures that could reduce or avoid the identified impacts. Impacts to hydrology (e.g., flooding), storm drainage systems, and water quality can be found in Section 3.8, *Hydrology and Water Quality*.

Information sources for the analysis presented in this section include reference documents regarding water use (City of Long Beach 2016; LBWD 2016; City of Seal Beach 2018a), wastewater (LACSD 2017a; LBWD 2016, City of Seal Beach 2018b), stormwater (City of Long Beach 2008), and solid waste (CalRecycle 2008, 2009, 2014; County of Los Angeles 2016; County of Orange 2017a, 2017b; LACSD 2017a, 2017b, 2017c, 2017d, 2017e). All information sources used are included as citations within the text; sources are listed in Section 3.16.7, *References*, below.

3.16.2 Environmental Setting

3.16.2.1 Water Supply

City of Seal Beach

The City of Seal Beach provides water to a population of 25,561 throughout its service area. The City of Seal Beach receives its water from two main sources: (1) the Orange County Groundwater basin, which is managed by the Orange County Water District (OCWD) and (2) imported water from the Municipal Water District of Orange County (MWDOC). Groundwater is pumped from four active wells located throughout the City of Seal Beach, and imported water is treated at the Diemer Filtration Plant and delivered to the City of Seal Beach via imported water connections. The City of Seal Beach's Water Division of the Department of Public Works maintains 66 miles of pipeline, four active groundwater wells, an active service connection with Metropolitan Water District of Southern California (MWD), emergency interconnections with other utilities, two

reservoirs with a total storage capacity of 7 million gallons (MG), two booster stations that constantly maintain water at approximately 60 pounds per square inch (psi), four disinfection sites, approximately 680 hydrants and approximately 5,500 service connections.

The City of Seal Beach's existing and projected water supply for 2020 through 2040 is quantified in **Table 3.16-1**, *Seal Beach Existing and Projected Water Supplies (in acre-feet)*. The volumes show the City of Seal Beach's projected annual groundwater extraction rights. The City of Seal Beach's 2015 Urban Water Management Plan anticipates purchasing additional rights to extract water from the Orange County Groundwater basin (i.e., increasing its allowable pumping allocation), over the next 25 years, if and when cost-effective opportunities to do so become available (City of Seal Beach 2018a).

TABLE 3.16-1
SEAL BEACH EXISTING AND PROJECTED WATER SUPPLIES (IN ACRE-FEET)

Water Supply	2015	2020	2025	2030	2035	2040
Groundwater	2,734	2,442	2,621	2.639	2,638	2,642
Imported	787	1,046	1,123	1,131	1,131	1,132
Total	**3,521**	**3,488**	**3,744**	**3,770**	**3,769**	**3,774**

SOURCE: City of Seal Beach 2018a.

The City of Seal Beach projects that water supplies would be sufficient to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions (City of Seal Beach 2018a). Historical precedent has consistently shown that water demands decrease in dry years due to voluntary and mandatory water use restrictions and a general increase in public awareness of the need for water conservation; however, future water demand projections take a conservative approach to planning, by assuming that water demand will remain steady rather than decrease during dry years. The projected City of Seal Beach water supply and demand are compared in **Table 3.16-2**, *Seal Beach Existing and Projected Water Supplies, Demand, and Surplus (in acre-feet)*, which quantifies the projected water supply surplus through 2040. Seal Beach water supplies are projected to meet demand through 2040 even in future dry years, as in recent droughts (City of Seal Beach 2018a).

TABLE 3.16-2
SEAL BEACH EXISTING AND PROJECTED WATER SUPPLIES, DEMAND, AND SURPLUS (IN ACRE-FEET)

	2020	2025	2030	2035	2040
Total Supplies	3,488	3,744	3,770	3,769	3,774
Total Demands	3,488	3,744	3,770	3,769	3,774
Surplus	**0**	**0**	**0**	**0**	**0**

SOURCE: City of Seal Beach 2018a.

City of Long Beach

The Long Beach Water Department (LBWD) provides water service to the City of Long Beach (LBWD 2016). The LBWD service area is located in the southwest corner of the County of Los Angeles, and essentially overlays the boundaries of the City of Long Beach. LBWD owns, operates, and maintains 29 active groundwater wells, 907 miles of water mains, 6,501 fire hydrants, and 750 miles of sanitary sewer lines.

LBWD primarily relies on groundwater extracted locally to meet customer water demands. LBWD then purchases imported water from the Metropolitan Water District of Southern California (MWD) to make up the difference between demand and groundwater supplies. LBWD also provides recycled water to an increasing number of customers to replace the use of potable water for watering landscaping at golf courses, parks, and medians on City of Long Beach-owned property.

The LBWD existing and projected water supply for 2015 through 2040 is quantified in **Table 3.16-3**, *Long Beach Existing and Projected Water Supplies (in acre-feet)*. The volumes show the projected LBWD annual groundwater extraction rights. LBWD anticipates purchasing additional rights to extract water from the Orange County Groundwater basin (i.e., increasing its allowable pumping allocation), over the next 25 years, if and when cost-effective opportunities to do so become available.

TABLE 3.16-3
LONG BEACH EXISTING AND PROJECTED WATER SUPPLIES (IN ACRE-FEET)

Water Supply	2015	2020	2025	2030	2035	2040
Groundwater	32,693	33,001	33,501	34,001	34,501	35,001
Imported	35,100	35,100	35,100	35,100	35,100	35,100
Recycled	9,190	9,190	9,190	9,190	9,190	9,190
Total	**76,983**	**77,291**	**77,791**	**78,291**	**78,791**	**79,291**

SOURCE: LBWD, 2016.

LBWD projects that water supplies would be sufficient to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions (LBWD 2016). Historical precedent has consistently shown that water demands decrease in dry years due to voluntary and mandatory water use restrictions and a general increase in public awareness of the need for water conservation; however, future water demand projections take a conservative approach to planning, by assuming that water demand will remain steady rather than decrease during dry years. The projected LBWD water supply and demand are compared in **Table 3.16-4**, *Long Beach Existing and Projected Water Supplies, Demand, and Surplus (in acre-feet)*, which quantifies the projected water supply surplus through 2040. LBWD water supplies are projected to exceed demand through 2040 even in future dry years, as in recent droughts (LBWD 2016).

TABLE 3.16-4
LONG BEACH EXISTING AND PROJECTED WATER SUPPLIES, DEMAND, AND SURPLUS (IN ACRE-FEET)

	2020	2025	2030	2035	2040
Total Supplies	77,291	77,791	78,291	78,791	79,291
Total Demands	63,643	63,410	63,454	63,609	64,137
Surplus	**13,648**	**14,381**	**14,837**	**15,182**	**15,154**

SOURCE: LBWD, 2016.

3.16.2.2 Wastewater

City of Seal Beach

Portions of the program area that are within the jurisdiction of the City of Seal Beach would discharge all wastewater into the local sewer main and conveyed for treatment at the Orange County Sanitation Districts (OCSDs) reclamation plants. The City of Seal Beach relies on OCSD for collection and treatment at their plants located in the cities of Huntington Beach and Fountain Valley.

OCSD's Plant No. 1 in Fountain Valley has a capacity of 320 million gallons per day (mgd) and Plant No. 2 in Huntington Beach has a capacity of 312 mgd. OCSD's Plant No. 1 in Fountain Valley received an average daily flow of wastewater of 114 mgd in 2018 and OCSD's Plant No. 2 in Huntington Beach received an average daily flow of wastewater of 74 mgd in 2018 (OCSD 2018). The City of Seal Beach's 2015 Urban Water Management Plan states that the City produced approximately 2,289 acre-feet of wastewater, collected by OCSD's plants No. 1 and No. 2, in 2015 (City of Seal Beach 2018).

The Seal Beach Public Works Division provides wastewater collection service to approximately 5,000 customers in the northeast and south west portions of the City and Sunset Aquatic Park, including the program area. The existing wastewater systems consists of approximately 181,00 feet of gravity sewers, 780 man holes, and six existing sewer pump stations.

As discussed in the Sewer Master Plan 2018, hydraulic analysis was conducted for the gravity sewer system. Based on the hydraulic modeling results, there were no pipe capacity deficiencies identified.

The closest pump station to the program area is the Adolfo Lopez pump station. As discussed in the Sewer Master Plan 2018, existing flow to this pump station is 15 gallons per minute (gpm), 36 gpm, and 49 gpm on an average dry, peak dry, and peak wet weather conditions (City of Seal Beach 2018b). Hydraulic modeling provided in the Sewer Master Plan 2018 revealed that this pump station could accept an ultimate peak dry weather flow of 87 gpm and peak wet weather flow of 120 gpm. The Adolfo Lopez pump station has a firm capacity of 200 gpm, which is double than the ultimate peak dry weather flow (City of Seal Beach, 2018b). In addition, as discussed therein, it was determined that this station would provide many years of reliable

service, with proper maintenance.[1] The mechanical and electrical equipment were determined to reach the end of their useful lives around 2025. Improvements would be made that that time to replace pumps, replace discharge equipment, and construction site improvements.

City of Long Beach

Portions of the program area that are within the jurisdiction of the City of Long Beach would utilize the sewer services from LBWD. LBWD is responsible for operating and maintaining the sanitary sewer lines in the City of Long Beach. Through these sanitary sewer lines, the LBWD delivers wastewater to two of the Los Angeles County Sanitation District (LACSD) facilities (LACSD 2017a). The LACSD currently provides wastewater services for the program area, including the current practice of accepting produced water from oil extraction on the program area.[2] LACSD is a public agency created under state law to manage wastewater and solid waste on a regional scale and consists of 24 independent special districts serving approximately 5.5 million people in Los Angeles County, including the City of Long Beach.

The LBWD delivers over 40 mgd of wastewater to LACSD facilities. A portion of the wastewater is delivered to the LACSD Joint Water Pollution Control Plant (JWPCP) in Carson and the remainder of the wastewater is delivered to the Long Beach Water Reclamation Plant (LBWRP) (LBWD 2016). The JWPCP treats approximately 260 mgd and has a total permitted design capacity of 400 mgd (LACSD 2017f). The LBWRP treatment capacity is approximately 25 mgd (LBWD 2016; LACSD 2017g). The LBWRP is expected to reach full capacity sometime during the next 25 years (at least by 2040) and LACSD is not expected to increase the capacity because there is no open space at the site to accommodate an expansion; however, the influent streams to LACSD facilities are interconnected such that influent can be diverted from one LACSD facility to another.

3.16.2.3 Stormwater Drainage

City of Seal Beach

Within the City of Seal Beach, regularly scheduled street cleaning, annual inspections, as well as catch basins assist in reducing potential impacts of stormwater runoff. In addition, the City requires water quality management plans for all projects located under the City's jurisdiction. Much of Seal Beach's run-off drains into the Naval Weapons Base with the remainder split between the Pacific Ocean, Coyote Creek, and the San Gabriel River (City of Seal Beach, 2019).

As described in Chapter 2, *Project Description*, stormwater originating from the developed portions of the program area in the City of Seal Beach would drain into the existing curb-and-gutter system to the storm drains operated by the City. Stormwater from portions of the program area in Seal Beach that are not paved would infiltrate into the subsurface. For additional

[1] As discussed in the Sewer Master Plan 2018, the City of Seal Beach is currently evaluating whether the Adolfo Lopez pump station sewershed as the capacity to accept wastewater flow from nearby oil and gas operations. The Sewer Master Plan 2018 recommends that the Adolfo Lopez pump station sewershed is monitored closely as conditions change to ensure that sufficient capacity remains available in the sewershed (City of Seal Beach 2018b).

[2] Over 95 percent of the fluid pumped from the Synergy Oil Field site and City Property site oil wells is saline water.

information regarding stormwater drainage for the program area, please see Section 3.8, *Hydrology and Water Quality*, of this PEIR.

City of Long Beach

Within the City of Long Beach, there are approximately 383 miles of active stormwater carriers, including pipes, open channels, ditches, culverts, connector pipes, and drains (City of Long Beach 2008). In addition, the City of Long Beach owns 3,872 catch basins and 23 pump stations, all of which are cleaned repeatedly throughout the year.

As described in Chapter 2, *Project Description*, stormwater originating from the developed portions of the program area in the City of Long Beach would drain into the existing curb-and-gutter system to the storm drains operated by the City. Stormwater from portions of the program area in Long Beach that are not paved would infiltrate into the subsurface. For additional information regarding stormwater drainage for the program area, please see Section 3.8, *Hydrology and Water Quality*, of this PEIR.

3.16.2.4 Solid Waste Services

City of Seal Beach

The City of Seal Beach is not included in an Integrated Waste Management Plan. Consolidated Disposal Services, LLC (Republic Services) provides exclusive waste and recycling collection services for residential and commercial uses in the City of Seal Beach. Republic Services currently operates three landfills in the Los Angeles/Orange County area in Long Beach, Gardena, and Anaheim. Republic Services also has recycling operations at their Anaheim facility, as well as at their BFI Falcon transfer station in Wilmington. Republic Services landfills currently have sufficient capacity to serve the City of Seal Beach now and into the future (Republic Services, 2019).

City of Long Beach

The City of Long Beach is included in the most recent *County of Los Angeles, Countywide Integrated Waste Management Plan, 2017 Annual Report*, and disposed 498,239 tons of solid waste in 2017 (County of Los Angeles 2019). A majority of the City of Long Beach's solid waste is sent to the Southeast Resource Recovery Facility (SERRF), a transfer facility located in Long Beach about 8 miles from the program area. In 2017, approximately 196,840 tons, or 56 percent of the solid waste generated by Long Beach residents and businesses were sent to the SERRF for processing.

Materials that can be recycled are segregated out of the waste stream, combustible materials are burned to generate electricity, and solid waste that cannot be processed at the SERRF is taken to landfills. The landfills that are closer to the program area, as well as the SERRF, include the Olinda Alpha Landfill, Frank R. Bowerman, the El Sobrante Landfill, Azusa Land Reclamation, and the Waste Management Simi Landfill. The distances from the program area, maximum permitted daily capacities, remaining available capacities, and expected closure dates are listed in **Table 3.16-5**, *Landfills in the Program Region*. Hazardous waste (Class I waste) is not accepted by SERRF or the listed landfills and would be sent to the Kettleman Landfill, as discussed in Section 3.7, *Hazards and Hazardous Materials*.

TABLE 3.16-5
LANDFILLS IN THE PROGRAM REGION

Landfill	Address	Distance from Program Area	Maximum Permitted Daily Tons	Average Remaining Capacity (tons)	Expected Closure Date
Olinda Alpha Landfill	1942 Valencia Ave., Brea, CA	19.4 miles	8,000	51,300,000	2030
Frank R. Bowerman	11002 Bee Canyon Access Rd., Irvine, CA	24.6 miles	11,500	307,500,000	2053
El Sobrante Landfill	10910 Dawson Canyon Rd., Corona, CA	36 miles	16,000	145,530,000	2045
Waste Management Simi Landfill	2801 North Madera Rd., Simi Valley, CA	68 miles	8,750	306,250	2052
Azusa Land Reclamation	1211 West Gladstone, Azusa, CA	33 miles	6,000	120,000	2037
Totals			**50,250**	**504,756,250**	

SOURCES: CalRecycle, 2008, 2009, 2014; County of Orange, 2017a, 2017b; Waste Management, 2017.

3.16.3 Regulatory Framework

3.16.3.1 Federal

Resource Conservation and Recovery Act (42 USC 6901 et seq.)/ Toxic Substances Control Act (15 USC 2605)/Hazardous and Solid Waste Act

The combination of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Toxic Substances Control Act of 1976 authorized the USEPA to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste and non-hazardous waste, and underground storage tanks. Solid waste consists of solids, liquids and gases, including garbage, also known as municipal solid waste (e.g., milk cartons and coffee grounds); refuse (e.g., metal scrap, wall board, and empty containers); sludges from waste treatment plants, water supply treatment plants, or pollution control facilities (e.g., scrubber slags); industrial wastes (e.g., manufacturing process wastewaters and non-wastewater sludges and solids); and other discarded materials, including solid, semisolid, liquid, or contained gaseous materials resulting from industrial, commercial, mining, agricultural, and community activities (e.g., boiler slag). Currently, all 50 states and territories have been granted authority to implement RCRA. State RCRA programs must be at least as stringent as the federal requirements, but states can adopt more stringent requirements as well. California has implemented additional requirements, as discussed further below.

The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. Contractors would be required to comply with state regulations including the Hazardous Materials Release Response Plans and Inventory Act, Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, License to Transport Hazardous Materials, and Hazardous Materials Storage

and Handling, which would make the proposed action consistent with the Toxic Substances Control Act.

3.16.3.2 State

Senate Bill 610 (Water Code Sections 10910 et seq.)

Senate Bill (SB) 610 requires the preparation of a water supply assessment for certain types of projects. As discussed in Section 3.8.3, Regulatory Framework, in Section 3.8, *Hydrology and Water Quality*, the proposed program does not include development of any of the specified categories, nor does the proposed program generate a water demand equal to or greater than the demand generated by a 500-dwelling-unit project (i.e., approximately 125 acre-feet per year). Therefore, a water supply assessment is not required for the proposed program.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) requires the creation of a Groundwater Sustainability Agency that would develop and implement a Groundwater Sustainability Plan that would manage and use groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. Relative to Utilities and Public Services, preventing undesirable results would include a significant and unreasonable depletion of water supply. SGMA is noted but discussed in Section 3.8.3, *Regulatory Framework*, in Section 3.8, *Hydrology and Water Quality*.

Statewide Water Reductions (Executive Orders B-29-15, B-36-15, and B-37-16)

These state executive orders were implemented by Governor Brown in response to the drought. The required actions are focused on reducing potable water use, reducing waste, and improving water supplies provided by water supply agencies. The orders direct urban water suppliers (e.g., the LBWD) to develop new water use targets. Actions for the proposed program that would be consistent with these orders would include storing and recycling hydrostatic testing water to reduce overall potable water use and injecting produced water back into the production zones to prevent subsidence that could adversely affect aquifers that could supply usable groundwater.

California Integrated Waste Management Act of 1989 and Assembly Bill 341

The California Integrated Waste Management Board (CIWMB) oversees, manages, and tracks waste generated in California. The authority and responsibilities of the CIWMB were promulgated in Assembly Bill (AB) 939 and SB 1322, which were signed into law as the California Integrated Waste Management Act of 1989 (Public Resources Code [PRC], Division 30). The California Integrated Waste Management Act, as modified by subsequent legislation, mandated all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC Section 41780). In January 2010, the CIWMB changed its name to the California Department of Resources, Recycling, and Recovery (CalRecycle).

AB 341, which amends the Integrated Waste Management Act of 1989 and was adopted by the California legislature in October 2011, directs CalRecycle to adopt a state policy that actively seeks to achieve a goal of diverting 75 percent of solid waste from landfills by 2020. The new legislation focuses largely on commercial waste generators, as this sector was identified as the most in need of improved waste management. AB 341 does not alter the 50 percent diversion mandate; rather, it is a "legislative declaration of policy" to guide CalRecycle's administration of the California Integrated Waste Management Act.

A jurisdiction's diversion rate is the percentage of total generated waste it diverts from disposal through source reduction, reuse, and recycling programs. The state determines compliance with the 50 percent diversion mandate through a complex formula. Use of the formula requires cities and counties to conduct empirical studies to establish a base-year waste generation rate against which future diversion is measured. The diversion rate in subsequent years is determined through deduction instead of direct measurement. Rather than counting the amount of material recycled and composted, the city or county tracks the amount of material disposed of at landfills and then subtracts that amount from the base-year amount; the difference is assumed to be diverted (PRC Section 41780.2).

3.16.3.3 Regional

Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Act of 1989 (AB 939) requires that the responsibility for solid waste management be shared between state and local governments. The state has directed the County to prepare and implement a local integrated waste management plan in accordance with AB 939. The Los Angeles County Integrated Waste Management Plan Executive Summary presents the County-wide goals and objectives for integrated solid waste management and describes the County's system of governmental solid waste management infrastructure and the current system of solid waste management in the cities and unincorporated areas of the County. This document also summarizes the types of programs planned for individual jurisdictions and describes countywide programs that could be consolidated.

The Los Angeles County Integrated Waste Management Plan, *2017 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, describes the County's approach to dealing with a broad range of solid waste issues, including processing capacity; markets for recovered materials; waste reduction mandates; waste disposed at Class I (i.e., hazardous waste–only landfills) and Class II (i.e., landfills that accept specified hazardous waste and non-hazardous wastes) disposal facilities; allocation of "orphan" waste (waste that comes from an unknown origin); the accuracy of the state Disposal Reporting System (DRS); and the CIWMB enforcement policy. This document also includes the Los Angeles County Integrated Waste Management strategies to maintain adequate solid waste disposal capacity through 2032. The proposed program would be subject to the Los Angeles County Integrated Waste Management Plan (County of Los Angeles 2019).

Orange County Construction and Demolition (C&D) Debris Reuse and Recycling Program

Orange County requires the preparation of a C&D Program Application Packet and Final Compliance Report for various construction and demolition projects. The C&D program's goal is to ensure a minimum of 65 percent diversion of construction building materials and demolition debris from landfills. Projects can achieve diversion through reuse, recycling, and/or composting of construction and demolition materials at County-approved facilities or use of a County Franchised Waste Hauler. Information provided in the Application and Compliance Report includes hauler identification and anticipated material wastes type and quantity (County of Orange, 2019c).

3.16.3.4 Local

Orange County Drainage Area Management Plan (DAMP) and Orange County MS4 Permit

The City of Seal Beach is covered under the Seal Beach MS4 Permit: Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges from the City; Order No. R8-2009-0030 NPDES No. CAS618030, as amended by Order No. R8-2010-0062. The Seal Beach MS4 is noted and discussed in Section 3.5.3, *Regulatory Framework*, in Section 3.5, *Geology, Soils, and Paleontological Resources*.

Los Angeles County Sanitation District

As briefly described above the LACSD provides wastewater treatment services for the program area. LACSD is a public agency created under state law to manage wastewater and solid waste on a regional scale and consists of 24 independent special districts serving approximately 5.5 million people in Los Angeles County, including the City of Long Beach.

Capital improvements to the LACSD water reclamation plants are funded by connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSD's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system. Estimated wastewater generation factors used in determining connection fees in LACSD's member districts are set forth in the Connection Fee Ordinance for each respective district available on LACSD's website. Most of the City of Long Beach, including the program area, is in District 3 of the LACSD (LACSD 2017a).

Long Beach Water Department 2015 Urban Water Management Plan

Urban Water Management Plans (UWMP) are comprehensive planning documents that project water supplies and water demands 25 years into the future. These plans also describe efforts to promote the efficient use and management of limited water resources. The current version for the City is the 2015 UWMP. The projected public water supply available to the proposed program is based on the 2015 UWMP, as analyzed below in Impact UTL-2.

Long Beach Water Department 2016 Water Conservation and Water Supply Shortage Plan

The Water Conservation and Water Supply Shortage Plan for the LBWD is described in Resolution WD-1354, adopted June 2, 2016. This plan has the objectives of preventing water supply shortages through water management programs such as conjunctive use, water conservation, water education, and the use of reclaimed water. The plan prohibits excessive use, loss through leaks and breaks, landscape irrigation between 4 p.m. and 9 a.m. or during rainfall, or allowing unreasonable runoff or waste. The control of runoff and limits on irrigation would apply to the proposed program. The plan also describes emergency procedures in the event of a water supply shortage, which could limit the use of water for the proposed program.

Long Beach MS4 Permit

The City of Long Beach is covered under the Long Beach MS4 Permit: Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges from the City; Order No. R4-2014-0024. The Long Beach MS4 is noted and discussed in Section 3.5.3, *Regulatory Framework*, in Section 3.5, *Geology, Soils, and Paleontological Resources*.

Adopted Southeast Area Development and Improvement Plan

The Southeast Area Development and Improvement Plan (SEADIP) was a planning document for the Long Beach portions of the program area, including re-designating land uses for the program area (City of Long Beach 2016). The provisions relevant to utilities and service systems are provided below.

> **Provision 3.** Prior to issuance of a building permit, all infrastructure, including street improvements, fire hydrants, water lines, storm drains, and sanitary sewers shall be construction on a block basis in accordance with the approved plans. Such improvements, including engineering plans, shall be financed by subdivider(s) or by an assessment district or both.
>
> **Provision 15.** All utility lines shall be placed underground and utility easements shall be provided as required unless waived by the Commission on the advice of the Director of Public Works.
>
> **Provision 16.** Developers shall construct, in accordance with plans approved by the Director of Public Works, all necessary sanitary sewers to connect with existing public sewers, and shall provide easements to permit continued maintenance of these sewers by the City were the City accepts responsibility for such maintenance.
>
> **Provision 19.** Developers shall make provision for the continued private maintenance of all common areas that are not to be dedicated and accepted by the City, and of all ways not to be dedicated and accepted by the City, including maintenance of street lighting, walks, curbs, storm drainage, water lines, fire hydrants, and street trees. Such provisions shall be perpetuated by their inclusion in the covenants, conditions, and restrictions of the property owners.

Proposed Southeast Area Specific Plan 2060

However, the City unanimously approved the SEASP 2060, a new specific plan with conventional zoning on a few select parcels, which replaced the previously adopted SEADIP. The portions relevant to utilities and service systems are provided below.

Chapter 8, Infrastructure, Section 8.1.2, Storm Drains

Any new projects in the SEASP area will comply with the MS4 Permit for the City and include stormwater LID Best Management Practices (BMPs). Application of LID BMPs would ensure any increases in runoff from proposed land use changes will be sustainably managed and that the 85th percentile, 24-hour storm event would be treated through a variety of LID features. The 85th percentile storm event is measured by rainfall depth; for example, if the 85th percentile storm event equals 0.5 inch, then 85 percent of all rainfall events would be equal to 0.5 inch or less of precipitation.

As required by the MS4 permit, the use of LID features shall be consistent with the prescribed hierarchy of treatment provided in the permit: infiltration, evapotranspiration, harvest/reuse, and biotreatment. For areas of the site where LID features are not feasible or that do not meet the feasibility criteria, treatment control BMPs with biotreatment enhancement design features must be used.

Typical water quality BMPs for new development in mixed-use areas include stormwater planters (raised or at grade), cisterns and reuse distribution systems (primarily for landscaping), proprietary detention/biotreatment flow-through systems, and subterranean infiltration systems. Since increased density is anticipated in mixed-use areas, the majority of the proposed features should be located within the landscaping along the perimeter of the proposed program, adjacent to the buildings, or in some cases, within the buildings themselves.

3.16.4 Significance Thresholds and Methodology

3.16.4.1 Significance Thresholds

For the purposes of this Program Environmental Impact Report (PEIR) and consistency with Appendix G of the *CEQA Guidelines*, the proposed program would have a significant impact on utilities and service systems if it would:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.16.4.2 Methodology

The analysis related to wastewater treatment requirements identifies the types of wastewater that are anticipated to be generated by implementation of the proposed program and regulations related to wastewater. The analysis of sewer infrastructure capacity focuses on the changes in the nature and volume, if any, of wastewater and wastewater treatment from the proposed program over the 20+ planning period.

The analysis of water supply is focused on the change in levels of water use from implementation of the proposed program. The primary resources used for this analysis include information from the City of Seal Beach and City of Long Beach's 2015 UWMP. The projected increase in water demand over the 20-year planning period of the proposed program is compared to future available supplies. The demand generated by the proposed program compared to water supplies available determines whether an impact from implementation of proposed program would occur.

The analysis of the proposed program's impact on stormwater drainage facilities identifies the general increase or decrease in stormwater runoff that is anticipated to occur from implementation of the proposed program, and identifies the existing drainage infrastructure that serves the program area.

The analysis of the proposed program's impact on landfill facilities identifies solid waste that is anticipated to be generated during both construction and operation of the proposed program. The analysis identifies the anticipated amount of non-hazardous construction debris and operational solid waste that would be generated from implementation of the proposed program and the amount that would be disposed of in landfills after compliance with recycling/diversion requirements. The results (i.e., solid waste after recycling/diversion) are compared with the available capacity of the landfill serving the program areas to assess the significance of the proposed program's solid waste generation during construction and during operation. The analysis of the proposed program's impact related to solid waste regulations identifies the non-hazardous solid waste that is anticipated to be generated during both construction and operation of the proposed program, and how the proposed program would implement the regulations related to disposal of that solid waste. Hazardous waste is analyzed in Section 3.7, *Hazards and Hazardous Materials*; however, the capacity of the nearest landfill permitted to accept hazardous waste is analyzed herein.

As stated in Chapter 1, *Introduction*, on March 8, 2019, the Los Cerritos Wetlands Authority sent a Notice of Preparation to responsible, trustee, and federal agencies, as well as to organizations, and individuals potentially interested in the proposed program to identify the relevant environmental issues that should be addressed in the PEIR. No issues related to utilities were identified.

3.16.5 Program Impacts and Mitigation Measures

Impact UTL-1: The proposed program would result in a significant impact if the proposed program would require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Water Infrastructure—Construction and Operation

The proposed program would be constructed and implemented in three phases over a 20-year period. In the South Area, the existing road (1st Street) through the marsh would be raised on a berm to move it out of the restored marsh floodplain in the near-term. The City of Seal Beach is planning to reline the existing water line within the road, which could be done at any time. In the long-term, 1st Street would be removed to allow for restoration of the berm and the water line would be relocated off site. However, the design and installation of the new water line would be required to meet applicable City standards. Construction impacts associated with the installation would primarily involve trenching in order to place the water distribution lines below grade and reconnect existing domestic and fire water services for the affected surrounding properties. Prior to ground disturbance, contractors would coordinate with OCWD and LBWD to identify the locations and depth of all lines and send notices in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. As discussed in Section 3.14, *Transportation*, in accordance with Mitigation Measure TRA-1, the proposed program would implement a Construction Management Plan to reduce temporary pedestrian and traffic impacts during construction, including construction of water distribution lines and connections to the public main.

Additional water infrastructure needed for the Seal Beach Visitor Center and irrigation would likely come from existing domestic water mains surrounding the program boundary that are maintained by the cities of Seal Beach and Long Beach. As previously discussed in Section 3.16.2, *Environmental Setting*, above, water for the proposed program would be provided by the OCWD and LBWD. As described in Chapter 2, *Project Description*, of this PEIR, the existing domestic water mains surrounding the program boundary, which are owned by the cities of Seal Beach and Long Beach, are relatively large for irrigation use and available for new water meter services. Construction impacts would be limited to the one to two days required for each meter and lateral installation. In addition to water meters installed by utility providers, existing fire hydrants can provide domestic water service to the program area. A temporary utility company provided meter would be attached onto one of the hydrant outlets for access to potable water. If the hydrants are on the side of the street opposite the program boundary, either a temporary pipeline crossing of the street or filling of water trucks at the meter and transfer by vehicle would be required. For operation of the proposed program, as the design of the visitor center is unknown at this time, the proposed program would implement Mitigation Measure UTL-1, which would require obtaining a will serve letter prior to operation of the visitor center to verify that surrounding water mains surrounding the program boundary have capacity to provide service to the visitor center. No other new infrastructure or modifications to utilities are proposed for the proposed program.

While the proposed program does include relocation of a water line in the South Area and new line connections, they would not result in any physical environmental effects beyond those identified in this PEIR. Therefore, with implementation of existing regulations and Mitigation Measure TRA-1, impacts would be reduced to a less than significant level.

Mitigation Measure

Mitigation Measure TRA-1, as provided in Section 3.14, *Transportation*.

> **Mitigation Measure UTL-1: Water Will Serve Letter.** Prior to issuance of a certificate of occupancy of the visitor center, a will serve letter will be obtained to verify that the water mains surrounding the program boundary have the capacity to serve the visitor center.

Significance after Mitigation

Less than Significant with Mitigation.

Wastewater Infrastructure—Construction and Operation

All wastewater generated during construction, including water from washing down trucks, equipment, and concrete construction pads, would be stored on site within temporary storage tanks. These tanks would store all wastewater and would be periodically hauled off site by vacuum trucks. Construction workers would use portable sanitary units during construction activities for the proposed program. Wastewater generated during construction of the proposed program would be minimal and would not require the construction of new wastewater treatment facilities. After settling out the solids, the waste water would be sent to the OCSD and LACSD treatment facilities for treatment and disposal. Because construction of new or expanded facilities is not required to accommodate the construction of the proposed program, there would be no construction impacts associated with the provision of these facilities to serve the proposed program.

Sanitary wastewater generated by the Seal Beach Visitor Center would be met using existing sewer lines. Because of the comparatively large reduction in wastewater generated from oil production, there would be no requirement for the construction of new or expanded wastewater treatment facilities to serve the proposed program. In addition, the existing sewer lines are sized to accommodate the volume of wastewater produced from the proposed program. Furthermore, as discussed above in Section 3.16.2, *Environmental Setting*, above, and in the Sewer Master Plan 2018 for the City of Seal Beach, there were no sewer pipe capacity deficiencies identified and sufficient capacity was determined at the Adolfo Lopez pump station, the closest pump station to the program area. Furthermore, as the design of the visitor center is unknown at this time, the proposed program would implement Mitigation Measure UTL-2, which would require obtaining a sewer capacity study prior to operation of the visitor center to verify that sewer lines surrounding the program boundary have capacity to provide service to the visitor center. Because construction of new or expanded facilities is not required to accommodate the proposed program and the overall volume of wastewater would decrease, there would be no operational impacts associated with the provision of these facilities to serve the proposed program.

Mitigation Measure

Mitigation Measure UTL-2: Sewer Capacity Study. Prior to issuance of a certificate of occupancy of the visitor center, a sewer capacity study will be performed to verify that the sewer lines surrounding the program boundary have the capacity to serve the visitor center.

Significance after Mitigation

Less than Significant with Mitigation.

Stormwater Infrastructure—Construction and Operation

As described in Chapter 2, *Project Description*, of this PEIR, improving connection of wetlands to tidal flows to allow for habitat restoration would require changes to existing flood risk and stormwater management elements, and construction of new flood risk and stormwater management elements. The proposed program would include modifications to Los Angeles County Drainage Area project structures within the program area by modifying the existing levee along the San Gabriel River, constructing new flood risk management structures (e.g., earthen levees and berms, or flood walls), restoring the wetland floodplain, constructing new water-control structures that allow for increased tidal connections, and constructing new stormwater management features (e.g., bioswales).

Specifically, the proposed program would construct new stormwater basin or bioswales in the South Area to function as a water quality treatment measure for the stormwater runoff from the new Seal Beach Visitor Center and associated parking. In the Central Area, the construction of the proposed levees would eliminate the storage volume for the excess overflow drainage from the roads. Replacement stormwater storage volume would be provided by creating low areas (e.g., basins or swales) between the roads and the proposed levee or flood wall. These storage basins or bioswales would be sized to accommodate the local area drainage. These basins would also function as water quality treatment measures for a portion of the runoff from the existing paved areas. In the North Area, storage for the overflow of stormwater draining from the roads would be reduced with the construction of the proposed berm or flood wall. Room for stormwater storage between the road and berm or flood wall would be provided by creating low areas (basins or swales) between the roads and the proposed levee. These storage basins or bioswales would be sized to accommodate the local area drainage. These basins would also function as water quality treatment measures for a portion of the runoff from the existing paved areas. No change to the flood risk or stormwater management is anticipated for the Isthmus Area. During operations, maintenance of bioswales is expected to be limited to non-native vegetation removal. Non-native plant removal would include work with hand tools such as shovels, rakes, hatchets, wheelbarrows, and small trucks for hauling of equipment and spoils. It is expected that these efforts would occur once a year for the lifespan of the proposed program.

The construction of the on-site stormwater drainage facilities would be designed in accordance with all applicable stormwater requirements and permits and would revise the United States. Army Corps of Engineers' OMRR&R Manual to reflect changes made to the existing Los

Angeles County Drainage Area project structures and facilities within the program area. The proposed program would also implement BMPs as defined by a Stormwater Management Plan, such as stormwater basins. Compliance with applicable regulatory requirements and implementation of BMPs would ensure impacts related to the need to construct or expand stormwater drainage facilities would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Electric Infrastructure—Construction and Operation

Infrastructure and utility modifications include relocation of electric lines. As part of the proposed program, the existing road (1st Street) through the marsh would be raised on a berm to move it out of the restored marsh floodplain within the South Area in the short-term. The utility poles supporting the electric lines along the road would likely need to be improved (e.g., relocated, heightened) as part of the raising of the road. Preferably the electric lines could be replaced underground. In the long-term, 1st Street would be removed to allow for restoration of the berm. The electric lines would be relocated off site. Additional electrical infrastructure needed for the Seal Beach Visitor Center would likely would tie into existing off-site facilities surrounding the program boundary.

In addition, electrical lines are located along the Central LCWA site and Central Bryant site. As part of the proposed program, an earthen levee would be constructed within the Central LCWA site and Central Bryant site during the interim to protect the Long Beach City Property site, and a perimeter levee would be constructed along 2nd Street within the Central Bryant site. As part of this effort, utility poles supporting the electric lines, similar to those existing along 1st Street, would likely need to be improved (e.g., relocated, heightened) as part of the proposed program's efforts to construction the interim and perimeter levees. Preferably the electric lines could be replaced underground.

During construction, installation of the new electrical infrastructure would create a temporary environmental disturbance. Program design features and mitigation measures identified throughout this PEIR where appropriate to further reduce impacts associated with proposed program construction activities would be in place for these installation activities. In addition, the electrical electric lines would be placed underground for the duration of operation and maintenance. As such, construction and operation of the proposed program is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new electric power facilities or expansion of existing facilities, which could cause significant environmental effects the impact would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Natural Gas—Construction and Operation

As discussed in Section 3.6, *Greenhouse Gas Emissions and Energy*, of this PEIR, no natural gas consumption would be required during construction of the proposed program. However, construction of the visitor center would involve installation of new natural gas connections to serve the visitor center, creating a temporary environmental disturbance. Since the area surrounding the visitor center is located in an area already served by existing natural gas infrastructure, it is anticipated that extensive off-site infrastructure improvements would not be needed to serve the program area. Program design features and mitigation measures identified throughout this PEIR where appropriate to further reduce impacts associated with proposed program construction activities would be in place for these installation activities.

Natural gas would be required for operation of the visitor center. As discussed in Section 3.6, *Greenhouse Gas Emissions and Energy*, of this PEIR, the proposed program was estimated to generate 0.02 million British thermal units (kBtu), which is 0.000002 percent of SoCalGas' Natural Gas Sales in 2017. As such, operation of the proposed program would use a minimal amount of energy, not increase the need for new energy infrastructure, and not cause a wasteful, inefficient, and unnecessary consumption of energy.

Based on the above, construction and operation of the proposed program is not anticipated to adversely affect the natural gas infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new natural gas facilities or expansion of existing facilities, which could cause significant environmental effects the impact would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Telecommunication Infrastructure—Construction and Operation

No existing major telecommunication facilities are located on site. Construction activities typically do not involve the construction of telecommunication facilities. During construction, wireless telecommunication systems may be used for internet and telephone systems. Uses on the proposed program that may require telecommunication infrastructure include the visitor centers

proposed on the South Area and North Area. However, as telecommunication providers already deliver their services to a large number of homes in in the vicinity of the program area, it is anticipated that existing telecommunications facilities would be sufficient to support the proposed program's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated during construction or operation. Therefore, the proposed program would not require or result in the relocation or construction of new or expanded telecommunication facilities. Impacts would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Impact UTL-2: The proposed program would result in a significant impact if the proposed program would not have sufficient water supplies available to serve the proposed program and reasonably foreseeable future development during normal, dry and multiple dry years.

Construction

The proposed program would have typical water uses during construction. The construction of the Seal Beach Visitor Center would require water for mixing with cement. In addition, relatively minor amounts of water would be used as necessary for the cleaning of equipment and dust suppression. The proposed program's long term objectives include phasing out the oil wells and associated oil production infrastructure on the Hellman Retained site, which would require water for mixing with bentonite clay and cement to plug the wells in the South Area. Overall, water usage during construction would be minimal.

As previously discussed in Section 3.16.2, *Environmental Setting*, the OCWD and LBWD have sufficient water supplies to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions. Given the proposed program's minimal water usage and phasing, the proposed program is expected to have sufficient water supply available during construction. Therefore, impacts would be less than significant.

Operation

During operations, drinking water and other potable water use would be nominal at the Seal Beach Visitor Center in the South Area. Water would also be required for restoration and irrigation to ensure vegetation is established. Water sources for restoration and irrigation would include the public water system. Given the proposed program's minimal water usage, the proposed program is expected to have sufficient water supply available during operation. Mitigation Measure UTL-1 would be require obtaining a will serve letter prior to operation of the visitor center to verify that surrounding water mains surrounding the program boundary have capacity to provide service to the visitor center. Therefore, impacts would be less than significant.

Mitigation Measure

Mitigation Measure UTL-1.

Significance after Mitigation

Less than Significant with Mitigation

Impact UTL-3: The proposed program would result in a significant impact if the proposed program would result in a determination by the wastewater treatment provider which serves or may serve the proposed program that it has adequate capacity to serve the proposed program's projected demand in addition to the provider's existing commitments.

Construction

All wastewater generated during construction, including water from washing down trucks, equipment, and concrete construction pads, would be stored on site within temporary storage tanks. These tanks would store all wastewater and would be periodically hauled off site by vacuum trucks. Construction workers would use portable sanitary units during construction activities for the proposed program. Wastewater generated during construction of the proposed program would be minimal and would not require the construction of new wastewater treatment facilities. After settling out the solids, the wastewater would be sent to the OCSD and LACSD treatment facilities for treatment and disposal. All wastewater generated in portable toilets would be collected by a permitted portable toilet waste hauler and appropriately disposed of at one of the County identified liquid waste disposal stations. Because construction of new or expanded facilities is not required to accommodate the construction of the proposed program, there would be no construction impacts associated with the provision of these facilities to serve the proposed program.

Operation

Operation of the proposed Seal Beach Visitor Center has the potential to result in a nominal increase of the amount of sanitary wastewater generated. Sanitary wastewater generated by the visitor center would be treated at the existing OCSD treatment facilities. Waste discharge requirements (WDRs) for the proposed program are based on all applicable federal and state regulations, policies, and guidance. Wastewater generated from on-site employees and recreational visitor to the Seal Beach Visitor Center would be nominal compared to the 632 mgd capacity of the combined treatment facilities and no new or expanded facilities would be needed. Although the volume of wastewater would nominally increase, the nature of wastewater disposed to the sanitary sewer system would remain unchanged and would, therefore, still be acceptable under the existing site discharge requirements. The proposed program would continue to be served by existing sewer systems located within public streets and rights-of-way and the OCSD treatment facilities. As noted under Impact UTL-1, above, no sewer pipe capacity deficiencies were identified within the City of Seal Beach's Sewer Master Plan 2018 and sufficient capacity was determined at the Adolfo Lopez pump station, the closest pump station to the program area. Furthermore, as the design of the visitor center is unknown at this time, the proposed program would implement Mitigation Measure UTL-2, which would require obtaining a sewer capacity study prior to operation of the visitor center to verify that sewer lines surrounding the program

boundary have capacity to provide service to the visitor center. Therefore, the impact of the additional wastewater from the Seal Beach Visitor Center would be less than significant.

Mitigation Measure

Mitigation Measure UTL-2.

Significance after Mitigation

Less than Significant with Mitigation

Impact UTL-4: The proposed program would result in a significant impact if the proposed program would generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Construction

The proposed program's construction activities would generate solid waste primarily from excavated soil that would be exported from the program area. As described in Chapter 2, *Project Description*, of this PEIR, there are three options for off-site soil export and disposal:

1. Export via trucks with disposal at local landfills, the most likely of which could include Scholl Canyon Landfill in the City of Glendale, Frank R Bowerman Landfill in Irvine, and/or Olinda Alpha Landfill in Brea;
2. Export via barge to the Port of Long Beach or Port of Los Angeles, transfer to trucks for upland disposal at local landfills; or
3. Export via barge to an off-shore disposal location, potentially including the Los Angeles ocean disposal site off the coast from San Pedro (LA-2) or the Newport Bay ocean disposal site off the coast from Newport Beach (LA-3), each of which is managed by the United States Environmental Protection Agency (USEPA).

The proposed program would also demolish existing pipelines on the Central LCWA site. The pipelines would be removed in compliance with applicable standards required by the California Geologic Energy Management Division (formerly California Department of Conservation Department of Oil, Gas, and Geothermal Resources) and Department of Toxic Substances Control (DTSC). The solid waste from pipeline removal would include metals, concrete, asphalt, wood, cardboard, glass, plastics, soil, and other materials. The metals portion of the solid waste would consist of sections of pipelines, cut-up pieces of storage tanks, and other metallic waste. The majority of the metals waste would be recycled at local metals recyclers. Some other solid waste may also be recycled such as asphalt, concrete, and the boxes and crates used in the shipment of materials, depending on the nature of the material. For example, asphalt plants would be unlikely to accept asphalt mixed with soil. Consequently, it is anticipated that some of the listed demolition and construction waste may not be acceptable for recycling.

As discussed above, the five landfills that can serve the proposed program have a combined remaining capacity of 504,756,250 tons and a combined daily maximum acceptance rate of

50,250 tons. These five landfills are projected to remain open until about 2030, 2053, 2045, 2052, and 2037, respectively. Based on the available capacity, these landfills would have the capacity to accept all of the solid waste. Therefore, construction and demolition activities of the proposed program would not result in the need to expand the existing landfill facilities or construct a new landfill facility. Contaminated soil would be segregated and disposed of at the Kettleman Landfill, which is permitted to accept hazardous waste. The Kettleman Landfill is in the process of expanding its hazardous waste unit capacity by an additional 4.9 million cubic yards, which is anticipated to provide an additional 8 to 9 years based on the typical rate of hazardous waste disposal (DTSC 2014). As a result, construction activities would result in less-than-significant impacts related to landfill facilities.

Operation

Operation and maintenance of the proposed program would result in minimal trash generation, mainly personal waste generated by employees and visitor at the Seal Beach Visitor Center. The visitor center would recycle waste such as pallets, cardboard and paper boxes, paper, plastics, scrap steel, scrap aluminum, and scrap wire. Other office-type trash and rubbish would be collected in waste bins and disposed of by Seal Beach waste haulers. Therefore, solid waste is expected to be negligible.

As discussed above, the five landfills have 504,756,250 tons and a combined daily maximum acceptance rate of 50,250 tons, therefore the amount of trash generated by the proposed program would not adversely impact the capacity of these landfills. The proposed program would not result in the need to expand the existing landfill facilities or construct a new landfill facility. As a result, operational activities would result in less-than-significant impacts related to landfill facilities.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Impact UTL-5: The proposed program would <u>not</u> result in a significant impact if the proposed program would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Construction

As previously discussed, the proposed program would generate solid waste. A majority of this solid waste would consist of non-hazardous materials that would be acceptable at the five previously discussed landfills under the waste acceptance criteria in their current operating permits. There are two sources of solid waste that may require disposal as a hazardous waste at a disposal facility permitted to accept hazardous waste. Any contaminated soil would be segregated and disposed of at the Kettleman Landfill, which is permitted to accept hazardous waste.

As discussed in Section 3.7, *Hazards and Hazardous Materials*, metal pipelines that have carried crude oil for extended periods of time have the potential to retain naturally occurring radioactive materials. All pipeline segments would be tested for radioactivity once demolished. Those that exceed action levels would be segregated from other materials for handling, disposed as low-level radioactive waste, and hauled to a facility designed to accept these wastes, likely the landfill in McKittrick, California.

For all remaining solid waste, the proposed program would comply with all City and County construction and demolition requirements during construction of the proposed facilities as described above in Section 3.16.3, *Regulatory Framework*, above. All non-hazardous solid waste would be hauled off site by truck to one or more of the previously listed solid waste landfills. As previously discussed, the three landfills that can serve the proposed program have the daily and total available capacity to accept the solid waste that would be generated from operation of the proposed program. The proposed program would comply with all federal, State, and local statues related to solid waste disposal. Therefore, the proposed program would result in less-than-significant construction solid waste impacts.

Operation

Republic Services provides franchised waste and recycling collection services for residential and commercial uses in the City of Seal Beach. During operations, any recyclable materials would be segregated and sent to recycling facilities permitted to recycle the materials. Materials that cannot be recycled would be sent to disposal facilities licensed to accept the solid waste. Therefore, the proposed program impacts related to potential noncompliance with solid waste statutes and regulations would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.6 Cumulative Impacts

The cumulative projects are listed in Table 3-1, *List of Cumulative Projects*, and the locations shown on Figure 3-1, *Approximate Locations of Cumulative Projects*. The cumulative projects within the vicinity of the proposed program would consist of residential, commercial, redevelopment projects, and infrastructure project such as road repaving and other improvements.

3.16.6.1 New or Expanded Facilities

Water

Cumulative water infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. The cumulative system evaluated

includes the City of Seal Beach and LBWD infrastructure systems that are serving the program area and adjacent land uses in the City of Seal Beach and City of Long Beach.

Cumulative projects in the program area could result in the need for new or upgraded water infrastructure. The construction activities associated with new or upgraded water facilities, if needed in by future cumulative projects, could result in significant environmental impacts. Those facilities, if required by other cumulative projects, would be analyzed at such time discretionary approvals for those projects are considered. As described above, Mitigation Measure UTL-1 would be require obtaining a will serve letter prior to operation of the visitor center to verify that surrounding water mains surrounding the program boundary have capacity to provide service to the visitor center. Cumulative projects would similarly obtain will serve letters, as needed. Given the proposed program's minimal water usage, the proposed program is expected to have sufficient water supply available during operation of the proposed program and would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with water infrastructure.

Wastewater

Cumulative wastewater infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. As previously discussed, the proposed program would reduce the volume of wastewater sent to the sewer system due to the large reduction in wastewater generated from oil production. In addition, as the design of the visitor center is unknown at this time, the proposed program would implement Mitigation Measure UTL-2, which would require obtaining a sewer capacity study prior to operation of the visitor center to verify that sewer lines surrounding the program boundary have capacity to provide service to the visitor center. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts during construction or operation of the proposed program associated with wastewater infrastructure.

Storm Water Drainage

The geographic scope for cumulative impacts on stormwater drainage includes the existing stormwater infrastructure that serves the program area, which is based on the regional drainage area. These facilities include pipelines and culverts that are owned and maintained by the Los Angeles County Flood Control District. Because the cumulative area is urban, developed, and is generally covered with impervious surfaces, development of cumulative projects would not result in a substantial increase in impervious surfaces in the area or substantially increase stormwater and runoff flows through the stormwater drainage system. In accordance with state and regional MS4, LID, and County SUSMP regulations, projects are required to maintain pre-project hydrology, such that no net increase of off-site stormwater flows would occur. State and the County MS4 Permit conditions require a hydrology/drainage study for projects over 1 acre to demonstrate that all runoff would be appropriately conveyed and not leave the program area at rates exceeding pre-project conditions, prior to receipt of necessary permits. As a result, increases of runoff from cumulative projects that could cumulatively combine to impact stormwater drainage capacity would be less than cumulatively significant.

Areas surrounding the program area are generally covered with impervious surfaces and development of cumulative projects would not substantially increase the amount of impervious surfaces and runoff, such that existing storm drains would be overwhelmed because all development projects would be required to comply with the same SUSMP, LID, and RWQCB permit requirements to retain the difference between the volume pre- and post-construction runoff volume. In addition, implementation of the proposed program would include modification the existing levee along the San Gabriel River, construction of new flood risk management structures (e.g., earthen levees and berms, or flood walls), restoration the wetland floodplain, construction of new water-control structures that allow for increased tidal connections, and construction of new stormwater management features (e.g., bioswales). The drainage facilities would help to capture, retain, and utilize some surface water runoff, which would reduce the amount of surface runoff in the storm drains. Overall, with implementation of new BMPs and compliance with applicable regulatory requirements, the proposed program's contribution to cumulative impacts during construction and operation of the proposed program related to stormwater drainage capacity would be less than cumulatively considerable.

Electric Power

Cumulative electricity infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. As previously discussed, while additional electrical infrastructure is needed for the proposed program, it would likely tie into existing off-site facilities surrounding the program boundary. Construction and operation of the proposed program is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new electric power facilities or expansion of existing facilities. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with electric power infrastructure.

Natural Gas

Cumulative natural gas infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. As previously discussed, while additional natural gas infrastructure is needed for the proposed program, it would likely connect into existing off-site facilities surrounding the program boundary. Construction and operation of the proposed program is not anticipated to adversely affect the natural gas infrastructure serving the surrounding uses or utility system capacity and would not result in the construction of new natural gas facilities or expansion of existing facilities. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with natural gas infrastructure.

Telecommunication

Expansion of telecommunication infrastructure, including internet and telephone services, is typically at the discretion of the service providers and would occur as needed. It is expected that the telecommunication service providers would expand off-site telecommunications systems, if necessary, to meet demand increases within their service area. Projects may require the installation of new underground telecommunication lines to serve the project. Installation of new

telecommunications infrastructure for the cumulative projects are anticipated to be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. Installation would be short term in duration and would cease to occur when installation is complete. Therefore, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts during construction and operation of the proposed program associated with telecommunication infrastructure.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.6.2 Water Supply

Cumulative water supply impacts are considered on a purveyor service area basis and are associated with the adequacy of the primary sources of water.

As previously discussed in Section 3.16.2, *Environmental Setting*, the City of Seal Beach, as provided in the City of Seal Beach's 2015 Urban Water Management Plan, and the LBWD, as provided in the LBWD's 2015 Urban Water Management Plan, expect water supplies would be sufficient to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions. Given the proposed program's minimal water usage and phasing during construction and minimal water usage and recycle water usage during operation, the proposed program is expected to have sufficient water supply available during construction and operation.

Every water purveyor provides projections for water supply and demand through 2040 that includes imported water and recycled water sources. By using SCAG growth projections, each water supply agency within the program area should adequately be able to monitor supplies and plan accordingly. As a result, cumulative development would result in less-than-significant cumulative impacts to water supply.

Because the proposed program as well as cumulative projects would result in less-than-significant impacts, the implementation of the proposed program would not result in cumulatively considerable impacts to water supply.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.6.3 Wastewater Treatment Capacity

Cumulative wastewater treatment capacity impacts are considered on a system-wide basis and are associated with the operation of the wastewater disposal at the OCSD, for the portion of the proposed program within the City of Seal Beach, and LACSD, for the portion of the proposed program within the City of Long Beach. As previously discussed, wastewater generated during construction of the proposed program would be minimal and would not require the construction of new wastewater treatment facilities. Cumulative developments within the urban and developed areas of the City of Seal Beach and City of Long Beach that are served by the OCSD and LACSD would consist of residential, commercial, redevelopment projects, and infrastructure project such as road repaving and other improvements. Similar to the proposed program, cumulative projects would similarly implement discharge requirements (WDRs) based on all applicable State and federal regulations, policies, and guidance. Therefore, the proposed program would continue to be served by existing sewer systems located within public streets and rights-of-way and the OCSD and LACSD treatment facilities, and these facilities would have adequate capacity to serve the proposed program, existing commitments, and cumulative projects. Thus, the proposed program would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with wastewater treatment capacity.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.6.4 Landfill Capacity

The geographic scope of cumulative analysis for landfill capacity is the service area for the Olinda Alpha Landfill, Frank R. Bowerman Landfill, El Sobrante Landfill, Waste Management Simi Landfill, Azusa Land Reclamation, and Kettleman Landfill, which serve the program area. The projections of future landfill capacities are based on the projected waste stream going to these landfills. These five landfills are projected to remain open until about 2030 to up to 2053. The lifespan of these landfills includes the existing and projected solid waste that is anticipated from the growth in the County. As a result, impacts from future growth on landfill capacity would be less than cumulatively significant. Although the proposed program would contribute solid waste to the landfills, the increase would not substantially impact the permitted capacity of the landfills. Therefore, the increase in solid waste from operation of the proposed program in combination with planned growth within the County would not require construction of a new landfill or expansion of the existing landfill to meet capacity needs. As a result, the proposed program's contribution to cumulative impacts on the capacities of the landfill facilities would be less than cumulatively considerable.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.6.5 Solid Waste Regulations

The geographic scope of cumulative analysis for compliance related to solid waste regulations is the service area for the landfills that serve the Los Angeles County and Orange County region. Disposal of solid waste generated by cumulative development would be subject to the requirements set forth in AB 939, AB 341, and the policies within the Los Angeles County Integrated Waste Management Plan and Orange County Construction and Demolition (C&D) Debris Reuse and Recycling Program. Therefore, cumulative development would comply with all solid waste statutes and regulations, and cumulative development would result in no impacts.

Because disposal of solid waste generated by the proposed program would comply with all solid waste statutes and regulations, the proposed program would not contribute impacts related to conflicts with solid waste regulations. Therefore, the proposed program would not contribute to cumulative impacts associated with compliance with solid waste statutes and regulations.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.16.7 References

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