

5.16 Utilities and Service Systems

This section describes the applicable federal, state, and local laws, ordinances, and regulations concerning utilities and service systems, explains the existing utility providers in the Project area, and evaluates potential Project impacts on utilities by identifying anticipated demand and evaluating its relationship to existing and planned utility services availability. For purposes of this Environmental Impact Report (EIR), utilities include: water, wastewater, and solid waste.

5.16.1 Regulatory Framework

To aid the reader, this section is organized by subject rather than by federal, state, and local regulations as seen in other EIR sections.

Water Supply

Safe Drinking Water Act (SDWA)

The SDWA (Public Law 93–523) regulates the quality of Americans’ drinking water. The law requires actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs, and groundwater wells—and applies to public water systems serving 25 or more people. It authorizes the U.S. Environmental Protection Agency (USEPA) to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants. In addition, it oversees the states, municipalities and water suppliers that implement the standards.

USEPA’S standards are developed as a Maximum Contaminant Level (MCL) for each chemical or microbe. The MCL is the concentration that is not anticipated to produce adverse health effects after a lifetime of exposure, based upon toxicity data and risk assessment principles. USEPA’s goal in setting MCLs is to assure that even small violations for a period of time do not pose significant risk to the public’s health over the long run. National Primary Drinking Water Regulations (NPDWRs, or primary standards) are legally enforceable standards that limit the levels of contaminants in drinking water supplied by public water systems.

Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. The USEPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

In July 2014, implementation of the SDWA was transferred from the California Department of Public Health (DPH) to State Water Resources Control Board, Division of Drinking Water (DDW). DDW also now oversees the operational permitting and regulatory oversight of public water systems. DDW requires public water systems to perform routine monitoring for regulated contaminants that may be present in their drinking water supply. To meet water quality standards and comply with regulations, a water system with a contaminant exceeding an MCL must notify the public and remove the source from service or initiate a process and schedule to install treatment for removing the contaminant. Health violations occur when the contaminant amount exceeds the MCL or when water is not treated properly. In California, compliance is usually

determined at the wellhead or the surface water intake. Monitoring violations involve failure to conduct or to report in a timely fashion the results of required monitoring.

In addition, DDW conducts water source assessments, oversees water recycling projects, permits water treatment devices, certifies water system employees, promotes water system security, and administers grants under the State Revolving Fund and State bonds for water system improvements.

Executive Order B-29-15

Passed on January 17, 2014, Executive Order B-29-15 mandates the SWRCB to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. Water reductions are measured as compared to 2013 levels. Areas with high per capita water usage should achieve proportionally greater reductions than those areas with lower per capita water usage. The EO additionally directs the California Department of Water Resources (DWR) to work with local agencies to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes.

Cobey-Porter Saline Water Conversion Law

The Cobey-Porter Saline Water Conversion Law was passed in 1965. It declares that the State has a “primary interest” in the development of desalination projects which could “eliminate the necessity for additional facilities to transport water over long distances, or supplement the services to be provided by such facilities, and provide a direct and easily managed water supply to assist in meeting the future water requirements of the state.” (Water Code Section 12946). In addition, the Legislature has found that seawater desalination is feasible and “consistent with both state water supply and efficiency policy goals, and joint state-federal environmental and water policy and principles promoted by the Cal-Fed Bay Delta Program.” (Water Code Section 12947(a)). Furthermore, the Law also states that “it is the policy of this state that desalination projects developed by or for public water entities be given the same opportunities for state assistance and funding as other water supply and reliability projects, and that desalination be consistent with all applicable environmental protection policies in the state.” (Water Code Section 12947(b)). The Law also states that “DWR shall provide assistance to persons or entities with state and local desalination facility permit applications seeking to construct desalination facilities for reducing the concentration of dissolved solids in brackish groundwater or seawater in the state.” (Water Code Section 12948.1)

California Water Action Plan

The California Water Action Plan—released by Governor Brown in January 2014—is a roadmap for the first five years, 2014 to 2019, of the state’s journey toward sustainable water management. The California Water Action Plan has been developed to meet three broad objectives: more reliable water supplies, the restoration of important species and habitat, and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection, and environment) that can better withstand inevitable and unforeseen pressures in the coming decades.

California Water Plan

The California Water Plan, last updated in 2013, provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future. The plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The California Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come.

Urban Water Management Plan Act

The Urban Water Management Plan (UWMP) Act was passed in 1983 and codified as California Water Code Sections 10610 through 10657. The Act requires “every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet per year (AFY), to prepare and adopt, in accordance with prescribed requirements, an urban water management plan.” Urban water suppliers must file these plans with the California Department of Water Resources (DWR) every 5 years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by the Memorandum of Understanding Regarding Urban Water Conservation in California and Assembly Bill (AB) 11, the 2005 UWMP Act incorporated water conservation initiatives and a Water Shortage Contingency Plan. The DWR released the 2015 Urban Water Management Plans on July 1, 2016 (DWR 2015).

Water Conservation Act of 2009

Senate Bill X7-7, the Water Conservation Act of 2009 (WCA) creates a framework for future planning and actions by urban (and agricultural) water suppliers to reduce California's water use. The law requires urban water suppliers to reduce statewide per capita water consumption by 20 percent by 2020. Additionally, the state is required to make incremental progress toward this goal by reducing per capita water use by at least 10 percent by December 31, 2015. Each urban retail water supplier was required to develop water use targets and an interim water use target by July 1, 2011. Additionally, each urban retail water supplier was required, by July 2011, to include in their water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

California Administrative Code Title 24

California Administrative Code Title 24 contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. Title 20 addresses public utilities and energy and includes appliance efficiency standards that promote water conservation. In addition, a number of state laws, listed below, require water-efficient plumbing fixtures in structures:

- Title 20, California Administrative Code, Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters.
- Title 20 California Administrative Code Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.
- Title 24, California Administrative Code, Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.
- Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

West Basin Municipal Water District 2015 Urban Water Management Plan

West Basin prepared the *West Basin Municipal Water District 2015 Urban Water Management Plan* in 2015 (2015 UWMP). The 2015 UWMP details how West Basin manages their water supplies and demands under wet and dry year conditions. The 2015 UWMP also demonstrates how West Basin proposes to meet its service area's retail demands over the next 25 years and provide long-term water reliability. According to 2015 UWMP Table 3-5 (Wholesale: Demands for Potable and Raw Water- Projected [AF]), West Basin's service area's total water demands are anticipated to remain relatively stable through Year 2040, which includes plans to reduce per capita water consumption pursuant to WCA requirements (West Basin 2016). Given the absence of surface water resources and water rights to the adjudicated West Coast Groundwater Basin, West Basin included ocean water desalination as a new local potable water supply to offset imported potable water demand in the 2015 UWMP.

El Segundo Urban Water Management Plan

In compliance with the state mandate and in accordance with the best practices of water management, the City prepared the *City of El Segundo 2010 Urban Water Management Plan* (El Segundo UWMP). The plan's goals include: provide a local perspective on current and proposed water conservation programs and efforts, evaluate potential conservation methods, and identify improvements to city programs, as appropriate. According to the El Segundo UWMP, significant growth or increase in water demands are not anticipated in future years, as the city is almost completely built-out. As noted in El Segundo UWMP Table ES-1, which summarizes the city's total past, current, and future water demands, the city's forecast water demand would remain relatively stable through Year 2030, at approximately 17,500 AFY. The El Segundo UWMP concludes that the supply available to the city, as estimated based on groundwater pumping and as provided in the West Basin UWMP and Metropolitan UWMP, meets the total demand, including during multiple dry-year scenarios.

City of El Segundo Municipal Code¹

El Segundo Municipal Code (ESMC) Chapter 11-1, *Water Services*, establishes the rules, regulations, and rates for and governing water service from the city's waterworks system. Project

¹ California Government Code Section 53091(d) states that "Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency." However, construction and operation of the Ocean Water

applicants are responsible for the construction of all water conveyance facilities pursuant to uniform codes, the ESMC, and Public Works engineering standards. In addition, ESMC Subsection 3-7-6, *Water Users Tax*, imposes taxes to every commercial or industrial facility using water delivered through city mains or pipes.

Wastewater

Federal Clean Water Act (33 USC Sections 1251, et seq.)

The Clean Water Act (CWA) forms the national foundation for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, nonpoint-source discharge programs, and wetlands protection. USEPA has delegated the responsibility for administration of portions of the CWA to state and regional agencies. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The city lies within the jurisdiction of the Los Angeles RWQCB (LARWQCB). Additional discussion regarding the CWA is provided in Section 5.9, *Hydrology and Water Quality*.

NPDES Permit No. CA0053813 (Order No. R4-2011-0151)

The Sanitation Districts of Los Angeles County (LACSD) operates the Joint Water Pollution Control Plant (JWPCP), a secondary water treatment facility. JWPCP is part of an integrated network of facilities, known as the Joint Outfall System, which incorporates JWPCP and six upstream water reclamation plants to 1,241 miles of pipeline and a common sewer system. The effluent treated at the JWPCP discharges to the Pacific Ocean, a water of the United States, under NPDES Order R4-2011-0151 regulated by the NPDES Permit No. CA0053813.

Companies that discharge industrial wastewater to the sewerage system are governed by both the LACSD Wastewater Ordinance and Connection Fee Ordinance for the particular District in which the discharge is located. These Ordinances establish the LACSD Industrial Wastewater Discharge Permit, Connection Fee, and Surcharge Programs. The Industrial Wastewater Discharge Permit Program allows for the regulation of industrial wastewater dischargers to protect the public health, environment, and the public sewerage system. The Surcharge Program requires all industrial companies discharging to the LACSD sewerage system to pay their fair share of the wastewater treatment and disposal costs. The Connection Fee Program requires all new sewer system users, as well as existing users that significantly increase the quantity or strength of their wastewater discharge, to pay their fair share of the costs for providing additional conveyance, treatment, and disposal facilities.

Desalination Project would strive to demonstrate compliance with the applicable building ordinances stipulated under the City of El Segundo Municipal Code.

LACSD Wastewater Ordinance

The Wastewater Ordinance requires any business that desires to discharge industrial wastewater to the LACSD sewerage system to first obtain an Industrial Wastewater Discharge Permit. Industrial wastewater is defined as all wastewater from any manufacturing, processing, institutional, commercial, or agricultural operation, or any operation where the wastewater discharged includes significant quantities of waste of non-human origin.

Self-Monitoring Program

As a condition for approval of an Industrial Wastewater Discharge Permit, an applicant may be subject to participation in the LACSD Self-Monitoring Program. This program requires a company to furnish chemical analyses of its industrial wastewater to the LACSD on a regular basis. The type and frequency of tests to be performed are determined on a case-by-case basis, depending upon the quality and quantity of the industrial discharge, and are included as requirements in the permit.

Surcharge Program

The state and federal programs require that industrial companies discharging to publicly owned sewerage systems pay their fair share of wastewater treatment costs. The Wastewater Ordinance provides a method whereby industrial companies calculate, based upon their own measurements, annual wastewater surcharge payments. Surcharge rates are determined for each fiscal year based upon LACSD actual treatment costs.

In general, all industrial companies having a wastewater discharge to the sewerage system of over one million gallons during a fiscal year (July 1 to June 30) must file a LACSD Wastewater Treatment Surcharge Statement. Companies having discharged under one million gallons of wastewater to the sewer during a fiscal year are considered to have discharged an insignificant quantity of wastewater and must file an Exemption Statement.

Connection Fee Program

The Sanitation Connection Fee Program was implemented to provide for future capital expenditures. This program requires all new sewer system users, as well as existing users who expand their wastewater discharge by more than 25 percent, to pay a connection fee to the LACSD based upon the quantity and the strength of their wastewater discharge. This connection fee applies to residential, commercial, and industrial discharges. For new facilities, the connection fee is to be paid prior to the time the facility is actually connected to the sewer or, in the case of expansions for existing facilities, at the time of expansion of the wastewater discharge. The initial fee purchases a baseline capacity entitlement for the permitted industrial connection.

For users obtaining permits at industrial sites within the LACSD service area, the baseline capacity usually has been established by the previous industrial user. Baseline entitlements remain with the site regardless of change of ownership. The only exception occurs when the original owner of the entitlement relocates to another site within the service area and is allowed to apply the capacity entitlement to the new site under the relocation credit provision of the Connection Fee Ordinance. Therefore, a new owner may incur a connection fee for an existing

facility if the baseline capacity entitlement is not sufficient for the new production or has been relocated.

NPDES Permit No. CA0109991 (ORDER R4-2017-0045)

The City of Los Angeles Bureau of Sanitation (LASAN), discharges secondary-treated wastewater from its Hyperion Water Reclamation Plant (Hyperion) to the Pacific Ocean, a water of the United States. LASAN owns and operates the Hyperion, a publicly owned treatment works located at 12000 Vista del Mar Boulevard, Playa del Rey, California, with a design capacity of 450 million gallons per day. The discharge is regulated under waste discharge requirements (WDR) contained in Order R4-2010-0200, which serves as a permit under the NPDES System (No. CA0109991).

Los Angeles Municipal Code Section 64.30, Industrial Wastewater Disposal

The City of Los Angeles, pursuant to Los Angeles Municipal Code (LAMC) Section 64.30 (commonly referred to as the Industrial Waste Control Ordinance), regulates industrial wastewater discharges into the Publicly Owned Treatment Works (POTW). Section 64.30(A)(3) specifies that “This section provides for the regulation of dischargers to the POTW through the issuance of Industrial Wastewater Permits containing specific discharge requirements and through enforcement of general discharge prohibitions; authorizes monitoring and enforcement activities; imposes reporting requirements on specific permittees; and sets fees for the recovery of program costs. This section shall apply to all dischargers within the City of Los Angeles and to all persons outside the City of Los Angeles who discharge to the City’s POTW except as otherwise provided herein, the Director of the Bureau of Sanitation under the jurisdiction of the Board of Public Works shall administer, implement and enforce the provisions of this section.” The City of El Segundo is one of 29 contributing jurisdictions that discharge wastewater into the LASAN’s POTW through a sewage disposal contract. The sewage disposal contract requires that El Segundo ensure compliance with federal, state, and local regulations, including pretreatment regulations.

According to Section 64.30(C)(1), *Industrial Wastewater Permit – Application*, no person shall discharge industrial wastewater to the POTW without permission as provided in an Industrial Wastewater Permit. The permit shall not be issued until determination has been made by the Board of Public Works that the wastewater to be discharged shall not violate any provisions of the LAMC, the Board’s Rules and Regulations, the water quality objectives for receiving waters established by the California Water Quality Control Board, Los Angeles Region, or any applicable federal or state statutes, rules, or regulations.

City of El Segundo Municipal Code

ESMC Title 12, *Public Sewer Facilities*, is intended to:

- Protect the public health, safety, and welfare by providing for beneficial public use of the city sewer system through regulation of sewer construction, sewer use, and industrial wastewater discharges.
- Prevent any discharge which may reasonably interfere with the operation of the system.
- Provide for equitable distribution of the sewer system costs.

- Provide procedures for complying with requirements placed on the city by state and federal laws.
- Provide funds for the operation and maintenance of the city sewer system by imposing a service charge upon the users of these facilities.

Pursuant to ESMC Section 12-3-1, *Permits Required*, no person shall connect to or tap a public sewer of the city or maintain a connection or tap to such sewer without obtaining a permit from the Public Works Director.

ESMC Section 12-3-3, *Excessive Discharge of Sewage*, states that no permit shall be issued to connect to or tap a public sewer unless said sewer has sufficient sewage capacity to receive the intended discharge. The Public Works Director may require the discharger to restrict the discharge until sufficient capacity is available, or to construct a public sewer to provide sufficient capacity. The Public Works Director may refuse service to persons locating facilities in areas where their proposed quantity or quality of sewage or industrial wastewater is unacceptable to the available treatment facility.

ESMC Section 12-3-5, *Fees*, states that no permit to connect to or tap a public sewer shall be issued unless the prescribed sewer connection fees have been paid to the City.

ESMC Chapter 12-4 addresses industrial waste and disposal. According to ESMC Section 12-4-1, “No person shall discharge any industrial waste into any City sewer or storm drain without first obtaining an Industrial Waste Permit from the Public Works Director in the case of discharge to the sewer, and from the California Regional Water Quality Control Board in the case of discharge to the storm drain.”

According to ESMC Section 12-4-3, conditions may be imposed, including but not limited to pretreatment of wastewater before discharge, restriction of peak flow discharges or of discharge of certain substances, limitation of discharge to certain hours, and payment of additional charges to defray increased costs to the City created by the discharge.

The fees established in ESMC Chapter 12-4 are applicable to all sewer connections within the city and all sewer connections to the city’s system, whether within or outside of the city—except that those portions of the city within the Los Angeles County South Bay Sanitation District or Los Angeles County Sanitation District No. 5, shall not be subject to any of the fees set forth in the foregoing sections where a fee for similar service is imposed by the Los Angeles County South Bay Sanitation District or Los Angeles County Sanitation District No. 5.

City of Manhattan Beach Municipal Code

City of Manhattan Beach Municipal Code (MBMC) Chapter 5.36, *Sewers, Sewage Disposal—City Sewage System*, addresses MB sewers, sewage disposal, and the city’s sewage system. MBMC Section 5.36.030, *Permits*, specifies that it is unlawful for any person to construct, install, place, change, alter, remove, or repair or to commence, cause, or permit any of the same to be done, any public sewer or public sewer connection in the city without first paying the required

fees, making the required deposit, and obtaining the necessary written permit from the building inspector so to do.

Stormwater

NPDES Permit No. CAS004001 (Order No. R4-2012-0175)

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer (drain) systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The Los Angeles County Flood Control District, the County of Los Angeles, and the City of El Segundo along with 83 other incorporated cities therein (Permittees) discharge pollutants from their MS4s. Stormwater and non-stormwater (e.g., urban runoff) enter and are conveyed through the MS4 and discharged to Los Angeles Region surface water bodies. These discharges are regulated under countywide waste discharge requirements contained in Order No. R4-2012-0175 (NPDES Permit No. CAS004001, *Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Discharges Originating from the City of Long Beach MS4*), which was adopted November 8, 2012. The MS4 Permit Order provides the revised waste discharge requirements for MS4 discharges within the Los Angeles County watersheds, which includes the city of El Segundo. The MS4 Permit Order became effective December 28, 2012.

Solid Waste

Solid Waste Disposal Act (Title 42, United States Code, Sections 6901, et seq.)

The 1965 Solid Waste Disposal Act (Title 42, United States Code Sections 6901 et seq.) was amended and revised by the Resource Conservation and Recovery Act (RCRA) of 1976 and sets forth requirements for the management of solid wastes, landfill, underground storage tanks, and medical wastes. The RCRA addresses hazardous waste disposal protocols (RCRA Subtitle C), as well as design and operational protocols for solid waste landfills (RCRA Subtitle D). Ten regional offices are responsible for implementing the RCRA, and the proposed Project would be located under RCRA Region 9 jurisdiction.

Title 40, Code of Federal Regulations, Subchapter I – Solid Wastes

Title 40 of the Code of Federal Regulations was established by the USEPA to implement the requirements of the RCRA, described previously. Regulations under Title 40 include solid waste disposal facility classification criteria, hazardous waste identification measures, and management and disposal practices for used oil and other common wastes. Title 40 also includes standards applicable to facilities generating hazardous wastes.

Solid Waste Management and Resource Recovery Act of 1972

The Solid Waste Management and Resource Recovery Act of 1972 is the legislation that addresses solid waste. The California Integrated Waste Management Board (CIWMB), which was created by this act, was given broad authority related to solid waste handling, disposal, and reclamation. Under this act, the CIWMB initially: (1) created a state-solid waste management and resource recovery policy; (2) developed minimum standards for solid waste handling and

disposal; and (3) approved county Solid Waste Management Plans. The CIWMB was responsible for enforcing the legal provisions dealing with solid waste management and disposal for protecting the environment and public health and safety.

California Integrated Waste Management Act (AB 939)

In 1989, the Legislature adopted the California Integrated Waste Management Act of 1989 (AB 939) to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 establishes a waste management hierarchy as follows:

- Source Reduction
- Recycling
- Composting
- Transformation
- Disposal

The law also requires that each county prepare a new Integrated Waste Management Plan and each city prepare a Source Reduction and Recycling Element (SRRE) by July 1, 1991. The SRRE is required to identify how each jurisdiction will meet the mandatory state waste diversion goal of 50 percent by the year 2000. AB 939 mandated that California’s 450 jurisdictions (i.e., cities, counties, and regional waste management compacts) implement waste management programs aimed at a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. If the 50 percent goal was not met by the end of 2000, the jurisdiction was required to submit a petition for a goal extension to CalRecycle. Senate Bill 2202 made a number of changes to the municipal solid waste diversion requirements under AB 939. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000. Title 14 of the California Code of Regulations, Division 7, Section 17200, et seq., *California Integrated Waste Management Board*, includes additional regulations to further implement standards for solid waste management.

Solid Waste: Diversion Rule (AB 341)

Under commercial recycling law (Chapter 476, Statutes of 2011), AB 341, directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning October 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB 341 declared a policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020.

California State Assembly Bill 341

With the passage of AB 341, the governor and the legislature established a policy goal for the State that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the

year 2020. Since the passage of AB 939 in 1989, State diversion rates are now equivalent to 65 percent. The statewide recycling rate is 50 percent, and the beverage container recycling rate is 80 percent. The State provided strategies to achieve its new 75 percent goal, including moving organics out of the landfill and expanding recycling/ manufacturing infrastructure.

Per Capita Disposal Measurement System Act of 2008

In 2008, Senate Bill 1016 (SB 1016), Wiggins, Chapter 343, Statutes of 2008 was passed in 2008 and introduced a per capita disposal measurement system to measure the 50 percent diversion requirement using a disposal measurement equivalent. The bill repealed the board's 2-year process, requiring instead that the board make a finding whether each jurisdiction was in compliance with the Act's diversion requirements for calendar year 2006 and to determine compliance for the 2007 calendar year, and each year after, based on the jurisdiction's change in its per capita disposal rate. The board is required to review a jurisdiction's compliance with those diversion requirements in accordance with a specified schedule, which is conditioned upon the board finding that the jurisdiction is in compliance with those requirements or has implemented its SRRE and household hazardous waste element. The bill requires the board to issue an order of compliance if the board finds that the jurisdiction has failed to make a good faith effort to implement its SRRE or its household hazardous waste element, pursuant to a specified procedure.

The per capita disposal rate is a jurisdiction-specific index, which is used as one of several "factors" in determining a jurisdiction's compliance with the intent of AB 939, and allows CalRecycle and jurisdictions to set their primary focus on successful implementation of diversion programs. Meeting the disposal rate targets is not necessarily an indication of compliance. CalRecycle reports that El Segundo's Disposal Rate Targets for Reporting Year 2014 were 44.2 pounds per day (PPD) per resident and 15.1 PPD per employee.

City of El Segundo General Plan

In June 1991, the city adopted its SRRE for the El Segundo General Plan in accordance with AB 939. The City's Solid Waste Recycling Services Division is responsible for implementing and monitoring the city's Source Reduction and Recycling Program. For the 2011 reporting year, El Segundo implemented a total of 32 diversion programs. For 2011, the most recent reporting year, El Segundo's calculated Disposal Rates were 12.9 PPD per resident, and 3.4 per employee, which were less than their Disposal Rate Targets. Therefore, based on preliminary data, the city is currently achieving AB 939 diversion requirements.

5.16.2 Environmental Setting

Water

Water Supplies

The Project site is located entirely within the jurisdiction of the West Basin. According to the 2015 UWMP, West Basin's current water supply portfolio is composed of: 57 percent imported water, 9 percent non-potable recycled water, 16 percent conserved supply, and, less than 1 percent desalinated brackish groundwater, which is used solely by CalWater as they are the

groundwater right holder. One of the objectives of the proposed Project is to introduce a new potable water supply source into West Basin's water supply portfolio.

Imported Water

West Basin purchases imported water from the Metropolitan Water District of Southern California (MWD) and wholesales the imported water to cities and private companies in southwest Los Angeles County, including the City of El Segundo. MWD supplies water from the Colorado River and Sacramento-San Joaquin Delta in Northern California via the State Water Project (SWP). Before delivery, MWD treats the imported SWP water at its filtration plants to standards set by the State of California. MWD delivers water to West Basin's service area after it has been treated in the Joseph Jensen Filtration Plant (located in Granada Hills) or the F.E. Weymouth Filtration Plant (located in La Verne).

Groundwater

Groundwater is extracted by groundwater rights holders (West Basin does not hold any groundwater rights) from the West Coast Groundwater Basin (Basin), which underlies much of the West Basin service area, including El Segundo. Because the Basin is adjudicated (i.e., the amount extracted each year has been determined by a court decision), the rights to the amount of groundwater extracted each year remain virtually the same. Total adjudicated pumping rights in the Basin remain at approximately 64,468 AFY (32,994 AFY was pumped in 2015). The local groundwater supplies are not only restricted due to Basin adjudication, but also more limited due to seawater intrusion and other localized areas of groundwater contamination.

Recycled Water

West Basin is a wholesale provider of potable and recycled water supplying several Los Angeles County unincorporated communities and cities, including the City of El Segundo. The City of El Segundo, in turn, serves recycled water to 17 sites within its jurisdiction.

Water Facilities

Most of West Basin's service area is served from the existing MWD West Basin (WB) and West Coast (WC) Feeders through several different turnouts. Both feeders are fed by the existing MWD Sepulveda Feeder, which is aligned along Van Ness Avenue. Water is provided to El Segundo via the WC Feeder pipeline, a 61-inch pipeline aligned along El Segundo Boulevard, and at two local connections: WB-03 and WB-28. The WB-03 connection is located at the Manhattan Beach Boulevard/Redondo Avenue intersection, approximately 2.5 miles southeast of the proposed ocean water desalination facility site. The WB-28 connection is located at the northwesterly corner of the El Segundo Boulevard/Nash Street intersection, about 2.4 miles northeast of the Project site.

Wastewater

The Project site is located within the jurisdictional boundaries of District 5 of LACSD. The LACSD own and operate 11 wastewater treatment plants, which handle over 500 million gallons per day (MGD) of wastewater. Additionally, the LACSD operate and maintain over 1,400 miles of trunk sewers and 50 pumping plants for conveyance of wastewater (LACSD 2016).

Currently, wastewater generated at ESGS enters the LACSD's sewer network via the 45th Street connection to the City of Manhattan Beach Sanitary Sewer System (CEC 2002). The wastewater is treated at the LACSD Joint Water Pollution Control Plant (JWPCP), located at 24501 South Figueroa Street in the city of Carson. Before discharge into the Pacific Ocean through a network of outfalls, the treated wastewater is disinfected with hypochlorite. These outfalls extend 2 miles off the Palos Verdes Peninsula to a depth of 200 feet. The JWPCP must comply with its current NPDES permit, which regulates its discharges. Specifically, the LARWQCB adopted the WDRs and NPDES Permit – Joint Outfall System, Joint Water Pollution Control Plant (NPDES Permit No. CA0053813, Order No. R4-2011-0151), which became effective October 1, 2011.

The *Final Staff Assessment Combined Parts A&B - El Segundo Power Facility Modification Amendment to the El Segundo Energy Center* estimates that the existing volume of sanitary wastewater generated at the ESGS (the proposed location for the ocean water desalination facility) is 750 gallons per day (gpd). This is conveyed to LACSD's JWPCP via the 45th Street sewer connection. Another sanitary sewer network is located El Segundo that is connected to City of Los Angeles Bureau of Sanitation's (LASAN's) Hyperion located at 12000 Vista Del Mar, Playa Del Rey, California (EEC Environmental 2014). The nearest connection point is located to the northeast of the El Segundo Generating Station (ESGS) at El Segundo Boulevard conveys sanitary sewage. According to the *City of Los Angeles Sewer System Management Plan for the Hyperion Sanitary Sewer System* (City of Los Angeles Bureau of Sanitation 2017), the Hyperion System includes 6,117 miles of gravity sewer and 24 miles of force main. The system currently generates an average wastewater flow rate of nearly 225 MGD.

Stormwater

The proposed Project site (ESGS North and ESGS South Sites) have existing developed facilities for the collection, treatment, and discharge of stormwater runoff. All stormwater from the ESGS site is collected in yard drains that route stormwater to an oil/water separator prior to discharge into the Pacific Ocean via Outfall 002 (CEC 2015). A storm drain outlet is located at the ESGS's southwest corner and within the property line; a bio-swale area² is located on the ESGS South Site to retain and clean surface water. A landscaped berm is present along the ESGS South Site southern boundary, adjacent to 45th Street. Existing city main storm drain systems serving the ESGS site have adequate capacity; no reports of flooding incidents or significant drainage concerns have recently been reported in the vicinity of the ESGS site.

Solid Waste

The following facilities are Class III disposal facilities that could service the Project site and the non-hazardous construction and operation solid wastes generated at the Project Site:

Frank Bowerman Sanitary Landfill

The Frank R. Bowerman landfill is a Class III landfill located in Irvine, California. The landfill has a remaining capacity of 205 million cubic yards (CY) through the year 2053. The daily tonnage limit at the landfill is 11,500 tons per day (CalRecycle 2017a).

² A bio-swale is a vegetated ditch that functions to collect, filter, and infiltrate stormwater.

El Sobrante Landfill

The El Sobrante Landfill is a Class III landfill located in Corona, California. The landfill is permitted to accept up to 16,054 tons per day, and has a remaining permitted capacity of 209 million CY (CalRecycle 2017b).

Simi Valley Landfill

The Simi Valley Landfill is located northwest of the city of Simi Valley, California. The landfill is a fully permitted non-hazardous municipal solid waste landfill and recycling facility. The landfill is permitted to accept 9,250 tons per day and has a remaining permitted capacity of 90 million CY (CalRecycle 2017c).

There are several other regional landfill facilities available that could also accept solid waste from the Project site.

5.16.3 Significance Thresholds and Criteria

The California Environmental Quality Act Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to utilities and service systems. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section.

Accordingly, the Project would have a significant adverse environmental impact if it would:

- Exceed wastewater treatment requirements of the applicable RWQCB (refer to Impact UTIL 5.16-1).
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (refer to Impact UTIL 5.16-2).
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (refer to Impact UTIL 5.16-3).
- Have insufficient water supplies available to serve the Project from existing entitlements and resources or require new or expanded water supply resources or entitlements (refer to Impact UTIL 5.16-4).
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity, including treatment and/or outfall capacity, to accommodate the Project's projected demand in addition to the provider's existing commitments (refer to Impact UTIL 5.16-5).
- Be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs (refer to Impact UTIL 5.16-6).
- Be out of compliance with federal, state, and local statutes and regulations related to solid waste (refer to Impact UTIL 5.16-7).

Potentially Significant Impacts

The environmental factors determined to be potentially affected by the Project, identified in the Notice of Preparation (see Appendix 1A), are analyzed below. Feasible mitigation measures are recommended, where warranted, to avoid or minimize the Project's significant adverse impacts.

5.16.4 Impacts and Mitigation Measures

Exceed Wastewater Treatment Requirements

Impact UTIL 5.16-1: Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-1** summarizes the impact significance conclusions. Refer to Section 5.9, *Hydrology and Water Quality* and Section 5.11, *Marine Biological Resources* for detailed discussions concerning brine discharge to the ocean.

TABLE 5.16-1
SUMMARY OF IMPACT UTIL 5.16-1 EXCEED WASTEWATER TREATMENT REQUIREMENTS

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-1: Impacts on wastewater treatment requirements.			
Local Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS

NOTES:

LTS = Less than Significant, no mitigation proposed

Local Project

Construction-Related Impacts

All Project Components

During construction of the Local Project, a minimal amount of wastewater would be generated by construction workers and collected by portable toilet facilities. All waste generated in portable toilets would be collected by a permitted portable toilet waste hauler and appropriately disposed of at one of the Los Angeles County identified liquid waste disposal stations that have been appropriately permitted by the RWQCB.

Construction-related dewatering discharges at the ESGS sites would subject to compliance with a temporary dewatering permit issued by RWQCB. As discussed in Section 5.9 *Hydrology and Water Quality*, onsite treatment of dewatering discharges may be required depending on the groundwater quality. Dewatered water would be discharged either through the nearest storm drain or sanitary sewer in compliance with discharge permit limitations. Construction activities would result in less than significant impacts to wastewater treatment facilities.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Operational Impacts

All Project Components

Operation of the Local Project would generate wastewater from two sources: typical domestic, human-related wastewater; and spent clean-in-place (CIP) waste flow. The only component that would generate operational waste is the ocean water desalination facility; no permanent waste streams would be generated by the ocean intake/discharge or distribution system.

The Local Project would employ approximately 20 people in a new 60,000 square foot office/administration building at the ESGS site. On average, using standard factors for land use loading (LACSD 2018), the administration building would generate up to 4,000 GPD from domestic (office) sources.

Spent CIP solutions would be captured in onsite holding tanks and would be neutralized on a batch basis and then pumped at a low rate to one of the sanitary sewer system options. CIP Local Project operations would produce approximately 500,000 gallons per year of spent CIP solution. It is expected that CIP operations would be staggered throughout the year, and would result in a maximum of 20,000 GPD on a few days during the year (for both Local and Regional Projects).

As mentioned previously, the project may connect to either the Manhattan Beach sewer system or the El Segundo sewer system, depending on sewer line capacities. If wastewater is conveyed through Manhattan Beach local sewer and LACSD, the Project could tie into one of two existing LACSD-owned wastewater connection points within the ESGS' vicinity: MH 30 190, which has a capacity of 0.6 MGD; and MH 30 189, which has a capacity of 0.5 MGD. It is anticipated that at least one of these connections could accommodate the Local Project's maximum wastewater generation of 0.02 MGD. Connecting to the Hyperion sewer in El Segundo would require a relatively short extension of wastewater trunk line from the current trunk line terminus to the ESGS site, within existing City streets and the ESGS property. Alternatively, the Local Project could tie into the existing City of Manhattan Beach local sewer line located within 45th Street and then to LACSD's El Porto trunk sewer located within The Strand. The small volume would be accommodated by the existing treatment plant currently serving millions of people in Los Angeles County and would not increase the need for municipal wastewater treatment substantially from existing conditions. Impacts would be less than significant.

Both discharge options would need to comply with applicable local and State water quality regulations and meet the conditions of the existing NPDES permits issued by the RWQCB: for Hyperion NPDES Permit No. CA0109991 (Order No. R4-2010-0200) and for the JWPCP NPDES Permit No. CA0053813 (Order No. R4-2011-0151). Impacts would be less than significant. Regardless of the sewer connection location, industrial waste discharges from the treatment plant would be subject to an Industrial Wastewater Discharge Permit. No additional

treatment facilities would be needed to accommodate the waste streams. Impacts would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related Impacts

All Project Components

Similar to the Local Project, the Regional Project may require some dewatering and portable wastewater generation during construction. Construction dewatering would be subject to RWCQB NPDES permit requirements. Impacts would be less than significant.

Regional Project Significance Determination:

Less than Significant Impact.

Operational Impacts

All Project Components

The Regional Project would increase employment by four additional employees and would not substantially increase wastewater generation above the Local Project levels described above. No new water or wastewater treatment facilities would be required to accommodate the Project. Impacts would be less than significant.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Water or Wastewater Treatment Facilities

Impact UTIL 5.16-2: Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-2** summarizes the impact significance conclusions.

**TABLE 5.16-2
 SUMMARY OF IMPACT UTIL 5.16-2 WATER OR WASTEWATER TREATMENT FACILITIES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-1: Impacts on wastewater treatment facilities.			
Local Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
NOTES: LTS = Less than Significant, no mitigation proposed			

Local Project

Construction-Related and Operational Impacts

All Project Components

As described in Section 3, implementation of the Local Project would result in construction and operation of water treatment facilities that would treat ocean water for use within West Basin’s service area. The potential impacts of constructing and operating such treatment facilities are evaluated throughout this Draft PEIR. The Local Project would not otherwise increase the need for water or wastewater treatment substantially from existing conditions. The Local Project would employ approximately 20 people. Sewage generated from the Project would be conveyed to the existing sanitary sewers in Manhattan Beach and conveyed to the JWPCP in Carson or in El Segundo and then conveyed to Hyperion. The small volume would be accommodated easily by the existing system currently serving millions of people in Los Angeles County or the City of Los Angeles. Impacts would be less than significant.

Industrial waste discharges from the treatment plant would be subject to an Industrial Wastewater Discharge Permit. Industrial wastewater generated at the treatment facility would be conveyed to either the City of Los Angeles or LACSD sewerage systems, and would be required to obtain an Industrial Wastewater Discharge Permit to comply with the facilities’ Wastewater Ordinances. No additional treatment facilities would be needed to accommodate the waste streams. Impacts would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related and Operational Impacts

All Project Components

Implementation of the Regional Project would expand upon the Local Project treatment facilities to treat a total 60 MGD ocean water for use within West Basin’s service area. The potential impacts of constructing and operating such treatment facilities are evaluated throughout this Draft EIR. The Regional Project would not otherwise increase the need for water or wastewater treatment substantially from existing conditions. Construction dewatering and industrial discharges would need to comply with the temporary dewatering permit issued by RWQCB. During operational phase, industrial discharges into the sewer system would be subject to Industrial Wastewater Discharge Permit requirements. The Regional Project would increase employment by four additional employees and would not substantially increase wastewater generation from the Local Project. No new water or wastewater treatment facilities would be required to accommodate the Regional Project. Impacts would be less than significant.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Stormwater Drainage Facilities

Impact UTIL 5.16-3: Would the Project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-3** summarizes the impact significance conclusions.

**TABLE 5.16-3
SUMMARY OF IMPACT UTIL 5.16-3 STORMWATER DRAINAGE FACILITIES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-3: Impacts on stormwater drainage facilities.			
Local Project			
Construction	LTS	NI	LTS
Operation	LTS	NI	LTS
Regional Project			
Construction	LTS	NI	LTS
Operation	LTS	NI	LTS

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

Local Project

Construction-Related and Operational Impacts

All Project Components

Construction of the Local Project would not involve a substantial increase in runoff that would lead to a requirement for expanding storm water drainage facilities. Conveyance facility construction would occur in public ROWs and would include existing onsite drainage. As discussed in Section 5.9, *Hydrology and Water Quality*, facilities at the ocean water desalination facility for collection, treatment, and discharge of stormwater runoff exist within the ESGS boundaries. A storm drain outlet is located at the ESGS's southwest corner and a detention area is located on the ESGS South Site. All ESGS stormwater is collected in yard drains that route stormwater to an oil/water separator prior to discharge into the Pacific Ocean via Outfall 002 (CEC 2015). As concluded in Section 5.9, *Hydrology and Water Quality*, it is anticipated that construction and operation of the ocean water desalination facility would be adequately served through existing ESGS stormwater drainage facilities. The storm drain outlet located at the ESGS' southwest corner and within the property line may require minor modifications. In accordance with the NPDES Municipal Stormwater Permit for MS4s, the Local Project would be required to implement post-construction stormwater BMPs that may include the use of pervious surfaces (i.e. concrete or pavement), bio-swales, vegetated buffers and/or retention ponds. Compliance with post-construction MS4 permit stormwater requirements would ensure that on-site drainage patterns do not substantially increase the amount, rate, or quality of runoff from the ESGS site, as compared to existing conditions. Construction and operation of the intake and discharge facilities would have no impact on stormwater discharge facilities. The desalinated water conveyance facilities would be installed underground and would not alter the runoff patterns or stormwater collection facilities. Impacts would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related and Operational Impacts

All Project Components

Similar to the Local Project, construction of the Regional Project would not involve a substantial increase in runoff that would lead to a requirement for expanding storm water drainage facilities. Conveyance facility construction would occur in public ROWs and would include existing onsite drainage. Similar to the Local Project, the Regional Project would be designed to comply with MS4 stormwater detention requirements. The on-site collection and detention system would ensure that off-site stormwater collection system would adequately accommodate stormwater runoff.

Mitigation Measures:

None Required.

Regional Project Significance Determination:
Less than Significant Impact.

Water Supplies

Impact UTIL 5.16-4: Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-4** summarizes the impact significance conclusions.

**TABLE 5.16-4
SUMMARY OF IMPACT UTIL 5.16-4 WATER SUPPLIES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-4: Impacts on water supplies.			
Local Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS

NOTES:

LTS = Less than Significant, no mitigation proposed

Local Project

Construction-Related and Operational Impacts

All Project Components

As indicated in Section 3, one of the Project Objectives is to increase the local water supply and reduce imported water use through the production of between 20 MGD (Local Project) to 60 MGD (Regional Project) of potable water. West Basin’s ultimate goal with ocean water desalination is to further enhance water supply reliability for service area customers by adding a new locally produced, drought-proof potable water source to the West Basin water supply portfolio.

Local Project ocean water desalination facility construction would require moderate quantities of water that could be supplied by the City of El Segundo (a West Basin retailer agency). Tertiary treated recycled water is currently supplied to the ESGS, and could potentially be used for the concrete mixing, dust control, hydrostatic testing, soils compaction, and landscaping applications necessary for Local Project ocean water desalination facility construction. As there are sufficient water supplies available to serve the Local Project ocean water desalination facility construction, and no new or expanded entitlements are required, no impact would occur.

Local Project ocean water desalination facility operation would require a total staff of approximately 20 full-time personnel, with the facility being fully staffed 8 hours per day, 5 days per week, and partially staffed at other times. This does not represent a substantial increase in the number of permanent workers within the Project area. Additionally, water supplies to service the new 60,000 square foot administration facility at the ESGS would be provided from existing resources and entitlements. As a result, impacts would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related and Operational Impacts

All Project Components

Similar to the Local Project, the Regional Project would not require substantial volumes of water during construction or operation requiring new or expanded water entitlements. No impact would occur.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Adequate Wastewater Treatment Capacity

Impact UTIL 5.16-5: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity, including treatment and/or outfall capacity, to accommodate the Project's projected demand in addition to the provider's existing commitments?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-5** summarizes the impact significance conclusions.

**TABLE 5.16-5
SUMMARY OF IMPACT UTIL 5.16-5 WASTEWATER TREATMENT CAPACITY**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-5: Impacts on wastewater treatment capacity.			
Local Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS

NOTES:

LTS = Less than Significant, no mitigation proposed

Local Project

Construction-Related Impacts

All Project Components

As discussed above, construction of the Local Project would result in a minimal amount of wastewater generated by construction workers and collected by portable toilet facilities. All waste generated in portable toilets would be collected by a permitted portable toilet waste that have been appropriately permitted by the RWQCB.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Operational Impacts

All Project Components

The Local Project would not increase the need for permanent wastewater treatment substantially from existing conditions. The Local Project would involve construction and operation of a 60,000 administrative building that would employ approximately 20 people. As explained above, sewage generated from the Project would be conveyed to the existing sanitary sewers in Manhattan Beach and conveyed to the JWPCP in Carson. The small volume would be accommodated easily by the existing system currently serving millions of people in Los Angeles County. Impacts would be less than significant.

Industrial waste discharges from the treatment plant would be subject to an Industrial Wastewater Discharge Permit. Industrial wastewater generated at the treatment facility would be conveyed to either the city of Los Angeles or LACSD sewerage systems, and would be required to obtain an Industrial Wastewater Discharge Permit to comply with the facilities' Wastewater Ordinances.

No additional treatment facilities would be needed to accommodate the waste streams. Impacts would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related Impacts

All Project Components

Similar to the Local Project, the Regional Project may require some dewatering and portable wastewater generation during construction. Construction dewatering and industrial discharges to the sanitary sewer system would be subject to RWCQB NPDES permit requirements. No additional treatment facilities would be needed to accommodate the wastewater. Impacts would be less than significant.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Operational Impacts

All Project Components

The Regional Project would increase employment by four additional employees and would not substantially increase wastewater generation above the Local Project levels described above. No new water or wastewater treatment facilities would be required to accommodate the Project. Impacts would be less than significant.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Exceed Landfill Capacity

Impact 5.16-6: Would the Project be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs?

The following analysis evaluates potential impacts associated with constructing and operating primary elements of the Project, including coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-6** summarizes the impact significance conclusions.

Section 5.9, *Hydrology and Water Quality*, addresses potential impacts of offshore sediment disposal.

**TABLE 5.16-6
SUMMARY OF IMPACT UTIL 5.16-6**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-6: Impacts on landfill capacity.			
Local Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTS	LTS	LTS
Operation	LTS	LTS	LTS
NOTES: LTS = Less than Significant, no mitigation proposed			

Local Project

Construction-Related Impacts

All Project Components

Solid waste generated under the proposed Project that cannot be recycled or diverted would be disposed of at local landfills. Three potential Class III disposal facilities could accept non-hazardous solid wastes generated during Project construction and operation activities, including:

- Frank Bowerman Sanitary Landfill (Irvine, CA)
- El Sobrante Landfill (Corona, CA)
- Simi Valley Landfill (Simi Valley, CA)

The abovementioned landfills have a combined estimated remaining capacity of 504,000,000 million CY and a current maximum permitted throughput of 11,500, 16,054, and 9,250 tons/day, respectively. Even assuming that all of the Project’s construction and operational related waste is disposed of at these local landfills, waste generated under the proposed Project would not meet or exceed the permitted capacity of these facilities. Further, the Project would be required to demonstrate compliance with AB 939, which requires all California cities to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” AB 939 requires that at least 50 percent of waste produced be recycled, reduced, or composted. Construction and operation of the Ocean Water Desalination Project would also be subject to the City of El Segundo Source Reduction and Recycling Program. Compliance with AB 939, along with the City’s El Segundo Source Reduction and Recycling Program, would ensure the Project’s potential impacts to landfill capacity, under both the Local and Regional Projects, would be less than significant.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Operational Impacts

All Project Components

Local Project ocean water desalination facility operations would annually produce up to 1,460 CY (approximately 0.05 to 0.2 CY per million gallons of water produced) of solid waste associated with the desalination process. The “cake” solids removed from the filtration backwash during the waste washwater treatment process would be comprised of naturally occurring organic and inorganic constituents of seawater as well as very low doses of chemicals (mainly coagulant) used in the desalination process. The dewatered solids would be collected and hauled for disposal or beneficial reuse where possible, but would not be deposited in a local landfill.

The microfiltration and reverse osmosis (RO) membranes used at the ocean water desalination facility would have a lifetime of approximately 6 years, after which membrane performance would decrease to such levels that replacement would be necessary. Accordingly, every 6 years, West Basin would dispose of approximately 5,000 40-inch-long, 8-inch-diameter RO membranes, representing an additional 200 CY of solid waste to be hauled for offsite disposal.

Given the capacity available in the three landfills identified, it is assumed that one or a combination of these three landfills could accommodate the 1,460 CY of solid waste generated during the waste washwater treatment process and accommodate the intermittent 200 CY of solid waste associated with RO membrane replacement activities. As such, it is assumed that operational activities associated with the ocean water desalination facility would not exceed landfill capacity. A less than significant impact would occur.

Operation of the desalinated water conveyance components would not generate excess soils or solid waste. As such, no impact would occur. Please see Section 5.9, *Hydrology and Water Quality*, for an analysis of offshore sediment disposal associated with the Local Project screened ocean intake, concentrate discharge facilities.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related and Operational Impacts

All Project Components

Similar to the Local Project, the Regional Project would not generate substantial amounts of waste during construction or operation exceeding disposal capacity of local landfills. As

described above, based on the Frank Bowerman Sanitary Landfill, El Sobrante Landfill, and Simi Valley Landfill’s combined remaining capacities and existing permitted daily capacities, these landfills could adequately serve the solid waste disposal needs related to construction of the proposed Local Project and, as such, expansion to the Regional Project ocean water desalination facility would not exceed the landfill’s existing capacity. A less than significant impact would occur.

Please see Section 5.9, *Hydrology and Water Quality*, for an analysis of offshore sediment disposal associated with the Local Project screened ocean intake, concentrate discharge facilities.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Solid Waste

Impact 5.16-7: Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

The following analysis evaluates potential impacts associated with construction and operating each of the three primary elements of the Project, including off-shore, coastal, and inland Project components for both the Local and Regional Projects. **Table 5.16-7** summarizes the impact significance conclusions.

**TABLE 5.16-7
SUMMARY OF IMPACT UTIL 5.16-7**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact UTIL 5.16-7: Impacts on solid waste.			
Local Project			
Construction	LTSM	LTSM	LTSM
Operation	LTSM	LTSM	LTSM
Regional Project			
Construction	LTSM	LTSM	LTSM
Operation	LTSM	LTSM	LTSM

NOTES:

LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related and Operational Impacts

All Project Components

Construction and operation of the Project would be required to demonstrate compliance with federal, state, and local statutes and regulations related to solid waste. Construction and

operational refuse and trash would be removed from the sites and disposed of in an approved manner, consistent with applicable federal, state, and local statutes and regulations regarding solid waste, and oils or chemicals would be hauled to a disposal facility authorized to accept such materials.

Construction and operation of the Local Project would also be required to demonstrate compliance with the 50 percent diversion of solid waste requirement pursuant to AB 939. In addition, the Project would be required to comply with the City's SRRE for diverting solid waste. Compliance with AB 939, along with the City's SRRE, would ensure Project compliance with the statutes and regulations in place relative to solid waste disposal.

To further demonstrate compliance with existing solid waste statutes and regulations, **Mitigation Measure UTIL-1** would be implemented requiring West Basin to prepare a Waste Management Plan for all waste generated during construction and operation of the Project. Compliance with Mitigation Measure UTIL-1, along with the various statutes and regulations pertaining to solid waste disposal, would ensure the Project's construction- and operation-related impacts would be less than significant.

Mitigation Measures:

Implement Mitigation Measure UTIL-1.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Regional Project

Construction-Related and Operational Impacts

All Project Components

Similar to the Local Project, the Regional Project would be subject to waste management and minimization regulations. Implementation of Mitigation Measure UTIL-1 would assist in documenting compliance with waste management regulations. With implementation of mitigation, impacts of the Regional Project would be less than significant.

Mitigation Measures:

Implement Mitigation Measure UTIL-1.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Mitigation Measures:

The following mitigation measures apply to both the Local and Regional Projects, unless otherwise noted.

UTIL-1: Prior to the start of both site mobilization and Project operation, West Basin shall prepare a Waste Management Plan covering all wastes generated during construction and operation of the Ocean Water Desalination Project. At a minimum, the Waste Management Plan shall also contain the following:

- A description of all waste streams, including projections of frequency, amounts generated, and hazard classifications.
- Methods of managing each waste, including storage, treatment methods and companies contracted with for treatment services, waste testing methods to ensure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.

5.16.5 Cumulative Impacts

To aid the reader, the following cumulative impacts discussion is organized by environmental issue area. As discussed in detail above, all Project impacts are mitigated to less than significant levels, and the Project's contribution toward cumulative impacts is not considered to be cumulatively considerable.

Exceed Wastewater Treatment Requirements

Construction and operation activities related to the Project are not anticipated to exceed wastewater treatment requirements of the LARWQCB through compliance with relevant regulations. Sources of on-site wastewater at the ocean water desalination facility would consist of domestic wastewater from the administrative building and CIP waste flow, which would, as applicable, meet discharge requirements for the existing sanitary sewer system. All cumulative development would be subject to review by the affected jurisdictions for their potential to conflict with applicable regulations pertaining to wastewater treatment and to degrade water quality. The applicable cumulative projects include development of hotels, residential, and office buildings. For the reasons above, cumulative impacts, including impacts of the Project, to the potential for exceedance of RWQCB wastewater treatment requirements would be less than significant.

Stormwater Drainage Facilities

The Project would comply with the existing regulations pertaining to stormwater drainage, and would not necessitate the construction of new stormwater drainage facilities or the expansion of existing facilities and storm drains, and would thus not have the potential to result in a considerable contribution to cumulative impacts. Future cumulative development would also be required to comply with regulations reducing stormwater runoff compared to existing conditions. All such development projects would be required to evaluate potential effects on existing facilities to ensure the adequacy of affected systems to accommodate development being proposed. Therefore, cumulative impacts would be less than significant.

Water Supplies

The proposed Project would result in a minimal increase in demand on water supplies with implementation of the 20 MGD Local Project or the 60 MGD Regional Project. The Project would replace a portion of imported water supplies. As a result, the Project's impacts to water supplies would not represent a considerable contribution to cumulative impacts.

Inadequate Wastewater Treatment Capacity

Implementation of the Project would minimally increase wastewater generation that would be accommodated through the City of Los Angeles sewer system connected to Hyperion or City of Manhattan Beach Municipal Sanitary System connected to JWPCP. With the implementation of the extensive conservation effort throughout the service areas of Hyperion and JWPCP, both plants currently handle wastewater flow below their designed capacities. Hence, the Project would not result in the need for new or expanded wastewater treatment facilities. The Project's contribution to a cumulative impact on wastewater capacity would not be considerable.

Solid Waste

The solid waste generated from construction and operation of the Ocean Water Desalination Project would increase demands for local landfills. Implementation of Mitigation Measure UTIL-1 would reduce the potential impact. Compliance with regulations covering waste minimization for the region would ensure that the Project's contribution to a cumulative impact on solid waste would not be considerable. Future cumulative development would be required to demonstrate compliance with El Segundo's SRRE (or the SRRE of any other applicable jurisdiction), which would reduce the amount of solid waste disposed of at local landfills. Compliance with each jurisdiction's SRRE would aid in meeting disposal rate targets and exceeding the 50 percent diversion requirement stipulated under AB 939. For these reasons, the cumulative impacts to landfill capacity would not be cumulatively considerable.

5.16.6 Significant Unavoidable Impacts

No significant unavoidable impacts to utilities and service systems would occur with adherence to regulations and the abovementioned mitigation measures.

5.16.7 Sources Cited

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