

## 4.9 UTILITIES

### 4.9.1 Introduction

This section describes the public utility providers currently serving the planning area and evaluates the potential impacts to solid waste, wastewater, water, and telecommunications services within the City of Long Beach (City) as a result of implementation of the General Plan Land Use and Urban Design Elements Project (proposed project). This section is based on multiple data sources, including the Conservation Element (1973) of the City's General Plan and the proposed General Plan Land Use and Urban Design Elements (March 2018) (provided in Appendix H), as well as coordination with potentially affected utility providers. Specific references are identified within the subsection for each respective issue. This section addresses the following utility service systems (service providers are noted in parenthesis):

- Solid Waste (Los Angeles County Sanitation Districts [LACSD])
- Wastewater (LACSD)
- Water (Long Beach Water Department [LBWD])
- Telecommunications (Cable TV and Telephone Service Providers)

### 4.9.2 CEQA Baseline

At the time the Notice of Preparation (NOP) was published (in May 2015), the Southern California Association of Governments (SCAG) had not yet approved the Final 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Therefore, socioeconomic data for the baseline year of 2012 and growth projections for the City for year 2040 were utilized in the 2016 Draft EIR when evaluating impacts with respect to utilities. Since the release of the Draft 2016 EIR, SCAG approved the Final 2016 RTP/SCS, which included minor updates to 2012 baseline socioeconomic data and 2040 growth projections for the City. Additionally, the Final 2016 RTP/SCS updated the baseline year for socioeconomic data for the County of Los Angeles (County) from 2012 to 2015 and made minor updates to 2040 growth projections for the County.<sup>1</sup> Therefore, the inclusion of socioeconomic data from years 2012 and 2015 for the City and County, respectively, is appropriate because the Final 2016 RTP/SCS has been formally adopted by SCAG. There is substantial evidence to support that the use of SCAG RTP/SCS data as the baseline for impacts with respect to utilities is appropriate because it is consistent with regional growth forecasts for the City, the County, and the SCAG region.

### 4.9.3 Methodology

In order to evaluate the environmental impacts associated with the anticipated General Plan build out scenario (2040), citywide solid waste, wastewater, and water demands were modeled based on generation rates obtained from applicable service providers. These generation rates were applied to both the existing (2018) land uses and the 2040 PlaceTypes proposed as part of the project. The net difference between the 2040 demand for utilities was then compared with the existing demand to

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<sup>1</sup> Please refer to Section 4.6, Population and Housing, for tables and further discussion related to existing and projected socioeconomic growth in both the City and County through year 2040.

generate the project-related increase in demand for solid waste, wastewater treatment, and water facilities. This increase was then compared with the projected capacity of applicable service providers to continue to service existing and new development in the City through year 2040.

The utility demands associated with implementation of new development envisioned under the proposed project are representative of a “worst-case” scenario. The bulk of projected new housing units through 2040 is anticipated to alleviate overcrowding of existing housing units in the City with current Long Beach residents. Therefore, utility usage projections used throughout this EIR section are conservative since they do not consider the large number of existing residents that will be served by new housing units that are already existing utility consumers. Additionally, new residential units are impacted by several factors that would result in decreased water usage and wastewater generation. For example, the California Green Building Standards Code (CALGreen Code) requires specific sustainability features that would reduce water consumption and wastewater generation, including the installation of water-conserving plumbing fixtures and fittings, compliance with the California Department of Water Resources’ (DWR) Model Water Efficient Landscape Ordinance (MWELo), installation of “smart” weather-based irrigation controllers, and utilization of bubblers or low-flow sprinklers for non-turf areas. Further, new residential units anticipated with the anticipated General Plan build out scenario (2040) would be comprised mostly of multi-family residential units, which use less water as compared to single-family units due to the presence of less landscaped area per household. Lastly, the City’s proposed Climate Action and Adaptation Plan (CAAP) will focus on addressing greenhouse gas (GHG) emissions reductions, but will also function to reduce utility draw as a result of specific control measures related to conservation. Overall, the analysis contained in this section is conservative due to the factors stated above.

#### **4.9.4 Existing Environmental Setting**

##### **4.9.4.1 Solid Waste**

Solid waste collection services are provided by the City’s Environmental Services Bureau; however, the City is also a member of the LACSD. Based on available disposal reporting data from the California Department of Resources Recycling and Recovery (CalRecycle; formerly known as the California Integrated Waste Management Board [CIWMB]) website,<sup>1</sup> it was estimated that the annual tonnage of solid waste generated by all sources in the City in 2017 was 302,541 tons per year (or 605,082,000 pounds per year).

A majority of the City’s solid waste is sent to the Southeast Resource Recovery Facility (SERRF), a publicly owned solid waste management facility located at 120 Pier S Avenue in Long Beach. This facility is owned by the SERRF Joint Powers Authority (JPA) and is operated by Covanta Long Beach Renewable Energy Corporation. The SERRF is a refuse-to-energy transformation facility that reduces the volume of solid waste it receives by approximately 80 percent using mass burn technology. Residential and commercial solid waste is combusted in high temperature boilers to produce steam, which in turn is used to run the turbine generator to produce electrical energy. The SERRF produces 36 megawatts (MW) of electricity daily from processing approximately 1,290 tons (2,580,000

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<sup>1</sup> California Department of Resources Recycling and Recovery (CalRecycle). California Solid Waste Statistics. Website: <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting> (accessed October 3, 2018).

pounds) of municipal solid waste. Electricity produced on site is used to power the facility, and the remaining electricity is sold to Southern California Edison (SCE) for distribution to its customers.<sup>1</sup>

The SERRF receives the greatest tonnage of solid waste of all disposal sites located within the City. Solid waste from the existing uses in the City is collected and trucked to the SERRF where it is processed. The SERRF performs “front-end” and “back-end” recycling by recovering items such as white goods (i.e., large appliances) prior to incineration and collection of metals removed from the boilers after incineration. Each month, an average of 825 tons (1,878,338 pounds) of metal are recycled rather than sent to a landfill. The Solid Waste Facility Permit for the SERRF identifies that the design capacity of this facility is 2,240 tons per day (4,480,000 pounds).<sup>2</sup> As described above, the SERRF currently processes approximately 1,290 tons per day (2,580,000 pounds). In 2016, approximately 196,930 tons (434,156,333 pounds), or 47 percent,<sup>3</sup> of solid waste disposed of at the SERRF originated from Long Beach residents and businesses.

In 2013, the Puente Hills Landfill closed after 56 years of operation. As such, solid waste that is generated in the City of Long Beach but is not sent to the SERRF (i.e., would damage or threaten to damage combustion units or otherwise adversely affect maintenance of the SERRF, present a substantial endangerment to the health or safety of the public or SERRF employees, cause any permit requirement or condition to be violated, or exceed the materials-handling capacity of the combustion feed system<sup>4</sup>) is taken to landfills in Orange, San Bernardino, and Riverside Counties.<sup>5</sup> According to LACSD, since the closure of the Puente Hills Landfill, residents and commercial haulers are encouraged to use other nearby LACSD’s facilities for disposal and recycling. Alternative disposal options include two ramped-up Material Recovery Facilities (MRF) run by LACSD: the Downey Area Recycling and Transfer Facility (DART) in Downey, and the Puente Hills MRF, situated at the base of the Puente Hills Landfill. Additionally, the Mesquite Regional Landfill, completed in 2011 and owned and operated by LACSD, is permitted to receive up to 20,000 tons (434,156,333 pounds) of municipal solid waste per day, with a total capacity of 600 million tons of municipal waste.<sup>6</sup> LACSD has taken the lead role in implementing the Waste-by-Rail system, a remote disposal program for Los Angeles County. The Waste-by-Rail system will provide long-term disposal capacity to replace local landfills as they reach capacity and close. The starting point of the Waste-by-Rail system will be MRFs or transfer stations located throughout Los Angeles County. Residual waste from the MRFs or

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<sup>1</sup> Los Angeles County Sanitation Districts (LACSD), Southeast Resource Recovery Facility (SERRF) Brochure. Website: <http://lacsd.org/solidwaste/swfacilities/rtefac/serrf/brochure.asp> (accessed October 4, 2018).

<sup>2</sup> CalRecycle. Solid Waste Information System (SWIS) Facility Detail. Southeast Resource Recovery Facility. Solid Waste Facility Permit, Permit No. 19-AK-0083. Website: <https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AK-0083> (accessed October 04, 2018).

<sup>3</sup> County of Los Angeles. 2016. Countywide Integrated Waste Management Plan, 2016 Annual Report, Figure 18: Southeast Resource Recovery Facility.

<sup>4</sup> Long Beach Gas and Oil. Acceptable Waste. Website: <http://www.longbeach.gov/lbgo/about-us/serff/acceptable-waste/> (accessed July 10, 2018).

<sup>5</sup> Los Angeles Daily News. *Puente Hills Landfill Will Close Forever Thursday*. Website: <http://www.dailynews.com/environment-and-nature/20131031/puente-hills-landfill-will-close-forever-thursday> (accessed December 22, 2015).

<sup>6</sup> LACSD. Solid Waste & Landfills. Waste-By-Rail. Website: <http://www.lacsd.org/solidwaste/wbr/default.asp> (accessed July 10, 2018).

transfer stations will be transported via rail to remote landfills for disposal. Through the available MRFs run by LACSD, the use of active landfills in Orange, San Bernardino, and Riverside Counties (refer to Table 4.9.A, below), and plans for future implementation of the Waste-by-Rail system, Los Angeles County is currently able to meet existing and projected landfill needs.

**Table 4.9.A: Capacity of Landfills Serving the City of Long Beach (2018)**

Landfill and Location	Remaining Capacity	Maximum Permitted Throughput (tons/day)	Estimated Closing Date
Azusa Land Reclamation Co. Landfill (Azusa, CA)	51,512,201 cubic yards	8,000	01/01/2045
Burbank Landfill Site No. 3 (Burbank, CA)	5,933,365 cubic yards	240	01/01/2053
Calabasas Landfill (Agoura, CA)	14,500,000 cubic yards	3,500	01/01/2029
Chiquita Canyon Sanitary Landfill (Castaic, CA)	8,617,126 cubic yards	6,000	11/24/2019
Lancaster Landfill and Recycling Center (Lancaster, CA)	14,514,648 cubic yards	5,100	03/01/2044
Pebble Beach (Avalon) Disposal Site (Avalon, CA)	65,520 cubic yards	49	01/01/2020
San Clemente Island Landfill (San Clemente Island, CA)	209,816 cubic yards	10	01/01/2032
Savage Canyon Landfill (Whittier, CA)	9,510,833 cubic yards	3,350	12/31/2055
Scholl Canyon Landfill (Los Angeles County, CA)	9,900,000 cubic yards	3,400	04/01/2030
Southeast Resource Recovery Facility (Long Beach, CA)	2,240 tons/day (permitted capacity)	2,240	N/A
Sunshine Canyon City/County Landfill (Los Angeles County, CA)	96,800,000 cubic yards	12,100	12/31/2037

Source: California Department of Resources Recycling and Recovery (CalRecycle). Solid Waste Information System (SWIS) Facility/Site Listing. Website: <http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx> (accessed October 11, 2018).  
 N/A = not available

#### 4.9.4.2 Wastewater

The LBWD is responsible for operating and maintaining approximately 765 miles of sanitary sewer lines in the City. Through these sanitary sewer lines, the LBWD delivers over 40 million gallons per day (mgd) of wastewater to LACSD facilities located in the region. LACSD’s service area encompasses approximately 824 square miles and includes 78 cities and unincorporated areas within Los Angeles County. Within the LACSD service area, there are approximately 9,500 miles of local collector and/or lateral sewer lines that are owned and operated by the cities and the County that are tributary to the LACSD wastewater collection system. LACSD owns, operates, and maintains approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants.<sup>1</sup> The majority of the wastewater generated in the City is delivered to the Joint Water Pollution Control Plant

<sup>1</sup> LACSD. About the Sanitation Districts. Website: <http://www.lacsd.org/aboutus/default.asp> (accessed July 10, 2018).

(JWPCP) of LACSD (located at 24501 S. Figueroa Street in the City of Carson) with the remaining portion delivered to the Long Beach Water Reclamation Plant (WRP) of LACSD (located at 7400 East Willow Street in Long Beach).

The JWPCP provides both primary and secondary treatment of wastewater. Solids collected in both primary treatment and secondary treatment are processed in anaerobic digestion tanks where bacteria breaks down organic material and produces methane gas. After digestion, the solids are dewatered and hauled off site to composting, land application, and landfill disposal. Methane gas generated in the anaerobic digestion process is used to produce power and a digester heating steam within an on-site total energy facility that utilizes gas turbines and waste-heat recovery steam generators that are used to run the facility. The plant serves a population of approximately 3.5 million people throughout the County. Prior to discharge, the treated wastewater is disinfected with sodium hypochlorite and sent to the Pacific Ocean through a network of outfalls extending 1.5 miles off the Palos Verdes Peninsula to a depth of 200 feet (ft). Currently, the JWPCP treats approximately 300 mgd and has a total permitted design capacity of 400 mgd.

The Long Beach WRP provides primary, secondary, and tertiary treatment and serves a population of approximately 250,000. Tertiary treatment produces high-quality recycled water as the process includes the removal of nutrients such as phosphorus and nitrogen and nearly all suspended and organic matter from wastewater. Approximately 6 mgd of recycled water produced at the Long Beach WRP is used at over 60 sites. Re-uses include landscape irrigation of schools, golf courses, parks, and greenbelts by the City of Long Beach, repressurization of oil-bearing strata off the coast of Long Beach, and the replenishment of the Central Basin groundwater supply from water processed at the Leo J. Vander Lans Advanced Water Treatment Facility. The remainder is discharged into Coyote Creek. The Long Beach WRP treats an average of approximately 13 mgd and has a total permitted capacity of 25 mgd.<sup>1</sup>

#### 4.9.4.3 Water Service

The LBWD owns, operates, and maintains 29 active groundwater wells, 907 miles of water mains, and 6,501 fire hydrants. The LBWD's entire infrastructure is used to provide water service to approximately 90,000 active customer accounts within an approximate 50-square-mile service area in the City.<sup>2</sup>

The LBWD receives approximately 50 percent of its domestic water supply from existing groundwater supplies within the Central Basin<sup>3</sup> and approximately 50 percent from imported water purchased from the Metropolitan Water District of Southern California (MWD).

<sup>1</sup> Adriana Raza, Sanitation Districts of Los Angeles (LACSD). Telephone conversation on October 18, 2018.

<sup>2</sup> Long Beach Water Department (LBWD). 2018. Budget Summary Fiscal Year 2019, Website: [http://www.lbwater.org/sites/default/files/file\\_attach/FY%2019%20Budget%20Summary\\_Reduced.pdf](http://www.lbwater.org/sites/default/files/file_attach/FY%2019%20Budget%20Summary_Reduced.pdf) (accessed October 5, 2018).

<sup>3</sup> The Central Subbasin occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin and is commonly referred to as the "Central Basin."

**Groundwater.** LBWD has the rights to pump 32,692 acre-feet per year (af/yr) of groundwater from the Central Basin Aquifer. The Central Basin was adjudicated by the Los Angeles County Superior Court in the early 1960s to allocate annual pumping rights due to serious over-drafting in the mid-1900s. However, because annual pumping rights allocated in the Central Basin Judgment exceed the natural yield of the basin, the Judgment also charges the Water Replenishment District of Southern California (WRD) with the responsibility of replenishing the basin. Parties extracting water from the basin pay an assessment to WRD on a per acre-foot (af) extracted basis and the revenue generated is used by WRD to replenish and protect the basin. These replenishment efforts coupled with strict extraction limitations make groundwater extraction from the Central Basin a very reliable source of water for the City even during multiple consecutive dry year conditions.<sup>1</sup>

**Imported Water.** The LBWD purchases imported water from MWD as one of its member agencies. The MWD has documented, in its *2015 Regional Urban Water Management Plan* (MWD 2015 Regional UWMP), adopted in June 2016, that its supplies will be sufficient to meet demands in multiple dry years. The LBWD's water demand is projected to drop below the 100 gallons per capita per day threshold at which the current MWD allocation plan guarantees a full water allocation. Furthermore, the Metropolitan Water District Act, a State law, entitles LBWD to a "preferential right" of MWD supplies in an amount that is greater than the projected need of the LBWD for those supplies. As such, LBWD's access to MWD supplies is considered to be reliable for the next 24 years.<sup>2</sup>

**Recycled Water.** The LBWD has been providing recycled water since the 1980s in an effort to replace the use of potable water in the City.<sup>3</sup> Recycled water is produced at the Long Beach WRP, which is operated by the LACSD. Recycled water provided by the LBWD is primarily used by public and private irrigation customers (e.g., parks, schools, golf courses, cemeteries, and garden nurseries) and a consortium of oil companies (e.g., Texaco, Humble Oil, Union Oil, Mobil Oil, and Shell Oil companies; also referred to as THUMS), which use the recycled water for oil- extracting processes. According to the UWMP, recycled water supplies are considered to be reliable for at least the next 22 years.<sup>4</sup>

**Conservation.** The LBWD maintains and implements several water conservation programs such as the turf replacement program, the residential and commercial rebate programs for water-saving devices, the water rate structure, the system loss program, and public education and outreach programs to keep customers informed. Although water conservation is not always thought of as water supply, water conservation directly offsets the need to develop new water supplies. These conservation programs have resulted in a 35-percent reduction in per capita water use since the 1980s.

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<sup>1</sup> Long Beach Water Department (LBWD). 2016. *Long Beach Water 2015 Urban Water Management Plan*. Adopted June 2, 2016.

<sup>2</sup> Ibid.

<sup>3</sup> LBWD and Water Replenishment District of Southern California. *Final Recycled Water Master Plan*. November 2010.

<sup>4</sup> A new stormwater capture and filtration facility (Long Beach Municipal Urban Storm Water Treatment [LB MUST]) was recently approved by the City and may expand the availability of recycled water in the future. The exact timing and amounts are not known at this time, and therefore, are not included in this analysis.

Existing water supply and water supply projections for the City through year 2040 are shown in Table 4.9.B. As illustrated in this table, the major sources of water for the LBWD include imported water purchased from the MWD, groundwater pumped and treated by the LBWD, and recycled water produced at the Long Beach WRP.

**Table 4.9.B: Water Supplies – Current and Projected (af/yr)**

Water Purchased From	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 Water	9,190	9,190	9,190	9,190	9,190	9,190
<b>Total</b>	<b>76,983</b>	<b>77,291</b>	<b>77,791</b>	<b>78,291</b>	<b>78,791</b>	<b>79,291</b>

Source: Long Beach Water Department (LBWD). 2016. *2015 Urban Water Management Plan*, Table 12: Existing and Projected Water Supplies (in acre-feet).

af/yr = acre-feet per year

#### 4.9.4.4 Storm Drain

The City currently has an intricate storm drainage system, which consists of streets and gutters, catch basins, and underground pipes, ditches, streams and creeks, pump stations, and channels/ rivers. This system carries stormwater and runoff away from impermeable surfaces in the City to designated drainage areas, including the Los Angeles and San Gabriel Rivers. In order to ensure proper function of the City’s storm drain system, the City performs bi-annual maintenance work on the system, in addition to emergency repair work on an as-needed basis.

#### 4.9.4.5 Telecommunications

While there are a number of cable and telephone service providers available to residents in the planning area, the primary service providers in the planning area are Spectrum, AT&T U-Verse, and Frontier. Together, these three service providers hold a franchise issued by the State’s Public Utilities Commission to provide services to residents in the City.<sup>1</sup>

In addition, the City owns approximately 60 miles of fiber optic cable in the City. This fiber optic network connects the Long Beach Airport, the Fire Headquarters, and Police Field Support within the planning area. The City intends on expanding the capacity of existing facilities and adding more fiber optic facilities to address the growing demand for faster cable speeds, greater bandwidths, more reliable data transmission, and to accommodate more flexibility for the future.

### 4.9.5 Regulatory Setting

#### 4.9.5.1 Federal Policies and Regulations

**Federal Water Pollution Control Act.** The Federal Water Pollution Control Act requires discharges (from point and non-point sources) into navigable water to meet stringent National Pollutant Discharge Elimination System (NPDES) permit standards. The U.S. Environmental Protection Agency

<sup>1</sup> City of Long Beach. Cable Television and Telephone Service. Website: <http://www.longbeach.gov/ti/telecommunications> (accessed January 21, 2019).

(EPA) has published regulations establishing requirements for application of stormwater permits for specified categories of industries, municipalities, and certain construction activities. The regulations require that discharges of stormwater from construction activity of 1.0 acre or more must be regulated and covered by an NPDES permit. When a construction area exceeds 1.0 acre in size, the applicant must develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to control non-point pollution.

**Federal Aviation Administration (FAA) Notification.** Notification to the FAA is required for the construction of any tower or the alteration of an antenna structure that is registered with the Commission's Antenna Structure Registration (ASR) system. Generally, towers that meet certain height and location requirements (e.g., are more than 200 ft above ground level and/or are located within proximity of an airport) require notice with the FAA and ASR system and must register with the FCC. A final determination of "no hazard" is required from the FAA prior to any construction or alteration of facilities.

**Federal Communications Commission (FCC) Antenna Structure Registration.** Applicants proposing to construct or alter antenna structures must register such facilities with the FCC in compliance with Part 17 of the FCC's Rules. An ASR registration must not occur until an applicant has first secured a "no hazard" determination from the FAA. If the FCC accepts the application, a registration is issued, which typically includes the FAA's "no hazard" marking and/or lighting specifications and which assigns the antenna an ASR number. Once an antenna is registered, the owner is responsible for compliance with applicable FAA and FCC regulations. No changes to the specifications in the ASR system are permitted without prior authorization from both the FAA and FCC. Once the antenna structure is constructed or altered, the owner must file a Notice of Completion of Construction or Alteration with the FAA and a form with the FCC notifying both agencies that the construction has been completed.

#### 4.9.5.2 State Policies and Regulations

**Assembly Bill 939: Solid Waste Reduction.** The California Integrated Waste Management (CIWM) Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of the hierarchy (reduce, reuse, recycle, environmentally sound landfilling, and transformation) as the desired approach to solid waste management. AB 939 mandated local jurisdictions to meet waste diversion goals of 25 percent by 1995 and 50 percent by 2000, and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under CIWMB regulatory oversight. Since the adoption of AB 939, landfill capacity has increased. Regional capacity problems still exist, but capacity is no longer considered the statewide crisis it once was. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health and safety and the

environment from the operation of landfills and solid waste facilities.<sup>1</sup> The City offers recycling programs for both commercial and residential uses.

**California Integrated Waste Management Act of 1989.** The CIWM Act of 1989 (California Public Resource Code [PRC] Division 30), enacted through AB 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of waste by 2000 (PRC Section 41780). The State determines compliance with this mandate to divert 50 percent of generated waste (which includes both disposed and diverted waste) through a complex formula. This formula requires cities and counties to conduct empirical studies to establish a base-year waste generation rate against which future diversion is measured. The actual determination of the diversion rate in subsequent years is arrived at through deduction, not direct measurement; instead of counting the amount of material recycled and composted, the city or county tracks the amount of material disposed at landfills, then subtracts the disposed amount from the base-year amount. The difference is assumed to be diverted (PRC 41780.2).

**Assembly Bill 75.** AB 75, passed in 1999, and the State Agency Model Integrated Waste Management Act (Chapter 764, Statutes of 1999, Strom-Martin) took effect on January 1, 2000. This bill added new provisions to the PRC, mandating that State agencies develop and implement an Integrated Waste Management Plan (IWMP) that outlines the steps to be taken to achieve the required waste diversion goals.

Current statutes require all State agencies and large facilities to divert at least 50 percent of their solid waste from disposal facilities on and after January 1, 2004. The law also requires that each State agency and large facility submit an annual report to CalRecycle summarizing its yearly progress in implementing waste diversion programs; it also mandated that community service districts providing solid waste services report disposal and diversion information to the city, county, or regional agency in whose jurisdiction they are located. In addition to the waste diversion goals, all State agencies are required to buy recycled materials from 12 different categories ranging from paper and plastic to paint, solvents, and lubricating oils.

**Senate Bill 1016.** The Per Capita Disposal Measurement System Act (Senate Bill [SB] 1016) changed the way State agencies and local governments measure their progress toward meeting the statutory waste diversion mandates. State agencies and large State facilities now use per capita disposal as an indicator of their compliance with the 50 percent waste diversion requirement. Compliance is also determined by diversion program implementation.

**Senate Bill 1374.** SB 1374 requires that the annual report submitted to CalRecycle include a summary of the progress made in the diversion of construction and demolition waste materials. In addition, SB 1374 requires CalRecycle to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CalRecycle's model by default. However,

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<sup>1</sup> CalRecycle. AB 939 in the New Millennium. Website: <http://www.calrecycle.ca.gov/Archive/21stCentury/Events/FutureMar99/issues1.htm> (accessed July 11, 2015).

adoption of such an ordinance may be considered by CalRecycle when determining whether to impose a fine on a jurisdiction that has failed to implement its Source Reduction and Recycling Element (SRRE).

**Assembly Bill 341.** AB 341, enacted in 2011, changed the due date of the State agency waste management annual report to May 1 beginning in 2012. The bill makes a legislative declaration that is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020.

**Water Conservation in Landscaping Act.** To ensure adequate supplies are available for future uses, and to promote the conservation and efficient use of water, local agencies are required to adopt a water-efficient landscape ordinance. When such an ordinance has not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary must be adopted. In the absence of such, an ordinance drafted by the State of California applies within the affected jurisdiction. The City of Long Beach implements water-efficient landscaping standards set forth by the State Model Water Efficient Landscape Ordinance (MWELO), (Chapter 21.42.035 of the City's Municipal Code), which establishes water conservation requirements for all projects that require a Site Plan Review; new residential, commercial, industrial, institutional and public agency landscape projects with an aggregate landscape area equal to or greater than 500 square feet (sf) requiring a landscape plumbing permit; rehabilitated residential, commercial, industrial, institutional, and public agency landscape projects with an aggregate landscape area equal to or greater than 2,000 sf requiring a landscape plumbing permit; cemeteries; existing landscapes; and public facilities and public rights-of-way.<sup>1</sup>

**Water Recycling in Landscaping Act.** The Water Recycling in Landscaping Act requires that a water producer capable of providing recycled water that meets certain conditions notify local agencies eligible to receive the recycled water. It also requires that necessary infrastructure be provided to support the delivery of recycled water.

**State Water Code Sections 13550–13556.** These sections of the State Water Code specify that local, regional, or State agencies shall not use water from any source for non-potable uses if suitable recycled water is available as provided in Section 13550 of the State Water Code.

**State Water Resources Control Board.** Operation of the JWPCP and the Long Beach WRP are subject to regulations set forth by the California Department of Health Services (DHS) and the State Water Resources Control Board (SWRCB). NPDES permits are required for operators of municipal separate storm sewer systems (MS4s), construction projects, and industrial facilities who discharge to surface waters within the City.

**Urban Water Management Planning Act.** The Urban Water Management Planning Act (UWMPA) of 1983 requires preparation of a strategy that plans for water supply and assesses the reliability of water sources over a 20-year period in 5-year increments; identifies and quantifies adequate water

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<sup>1</sup> City of Long Beach Municipal Code, *Section 21.42.03*. City of Long Beach, codified through Ordinance No. ORD-18-0021, enacted August 14, 2018 (Supp. No. 21, Update 2).

supplies for existing and future demands under normal, single-dry, and multiple-dry years; and implements conservation controls to ensure the efficient use of urban water supplies. Requirements set forth in the UWMPA apply to every urban water supplier with 3,000 customers or more or that provides over 3,000 af/yr of water to ensure reliability in water service in order to meet the needs of customers during normal, dry, and multiple-dry years.

**Governor's Drought Declaration.** On January 17, 2014, Governor Brown proclaimed a State of Emergency asking Californians to reduce water use by 20 percent and directing State officials to take all necessary actions to make water available. Additional key measures in the proclamation include the following: directing water suppliers to implement water shortage contingency plans, ordering the SWRCB to consider petitions for consolidation of places of use for the State Water Project and Central Valley Project in an effort to streamline water transfers and exchanges between water users, directing the DWR and the SWRCB to accelerate funding for projects that would have broken ground in 2014 and would enhance water supplies, ordering the SWRCB to notify water rights holders across the State that they may be directed to cease or reduce water diversions based on water shortages, and requiring the SWRCB to consider modifying requirements for releases of water from reservoirs or diversion limitations to conserve water in reservoirs and improve water quality.

Following the Governor's drought declaration, the DWR announced on January 31, 2014, that if current dry conditions persist, customers would receive no deliveries from the State Water Project. Deliveries to agricultural districts with long-standing water districts were determined to be at a risk for a potential 50 percent reduction.

On April 25, 2014, the Governor issued an executive order to accelerate actions intended to reduce harmful effects of the drought and called on Californians to redouble their efforts to conserve water. On July 15, 2014, the SWRCB approved an emergency regulation requiring water conservation for outdoor water use. Subsequently, on December 22, 2014, Governor Brown issued Executive Order (EO) B-28-14, which extends the operation of the provisions outlined in the April 2014 Executive Order.

In addition, on April 1, 2014, the Governor issued EO B-29-15, which ordered the SWRCB to impose restrictions to achieve a 25 percent reduction in potable urban water usage through the end of February 2016, directed the DWR to lead a statewide initiative to replace 50 million sf of lawns and turf with drought-tolerant landscapes, and directed the California Energy Commission (CEC) to implement a statewide rebate program for the replacement of inefficient household devices.

The LBWD has been found compliant with the EO and SWRCB rules, exceeding the required reduction in water usage.

Following unprecedented water savings and plentiful winter rain and snow, Governor Brown lifted the drought emergency declaration in April 2017 via EO B-40-17, which lifted the drought emergency in all counties except for Fresno, Kings, Tulare, and Tuolumne, but maintained water reporting requirements and prohibitions on wasteful practices (e.g., watering during or after rainfall, hosing off sidewalks, and irrigating ornamental turf on public street medians).

**Senate Bill 610.** Enacted in 2001 (effective January 1, 2002), SB 610 Water Supply Assessment (WSA) added Section 21151.9 to the California PRC requiring that any proposed “project,” as defined in Section 10912 of the State Water Code, comply with Water Code Section 10910, et seq. Commonly referred to as a “SB 610 Water Supply Assessment,” Water Code Section 10910 et seq. outlines the necessary information and analysis that must be included in an Environmental Impact Report (EIR) to ensure that a proposed land development has sufficient water supply to meet existing and planned water demands over a 20-year projection.

The standard for the certainty and reliability of water supplies sufficient to meet the demands of the proposed development is more exacting than that required for the UWMP. Ultimately, because the SB 610 WSA is a source document for an EIR prepared for a proposed project pursuant to the California Environmental Quality Act (CEQA), it must provide substantial evidence showing that sufficient water will be available to meet water demands for the water purveyor’s existing and planned land uses over a 20-year planning horizon.

The initial question in conducting an SB 610 WSA is whether there is a “project” that is subject to the SB 610 WSA process. According to the SB 610 WSA requirements, a “project” is defined as any of the following:

- Residential development of more than 500 dwelling units;
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 sf of floor space;
- Commercial office building employing more than 1,000 persons or having more than 250,000 sf of floor space;
- Hotel or motel, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area;
- Mixed-use project that includes one or more of the projects specified above; or
- Project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

If a public water system has fewer than 5,000 service connections, then “project” means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system’s existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system’s existing service connections.

The proposed project is a planning/policy action and does not constitute a “project” under SB 610 requirements. As such, the project does not require preparation of a WSA. However, future projects

facilitated by approval of the proposed LUE would be subject to the SB 610 WSA requirements and may be required to prepare WSAs (refer to Section 4.9.8, Project Impacts, later in this section for further discussion).

**Senate Bill 7.** SB X7-7 was enacted in 2009, authorizing the DWR to prepare a plan implementing urban water conservation requirements. SB X7-7, otherwise referred to as the 20x2020 Water Conservation Plan, requires urban water suppliers to adopt a water conservation target of 20 percent reduction in urban capita water use by year 2020 compared to a 2005 baseline. SB X7-7 also requires agricultural water providers to prepare water management plans, measure water deliveries, and implement water efficiency measures.

**Assembly Bill 2788.** Under AB 2788, a wireless telecommunications collocation facility (i.e., the placement or installation of wireless facilities, including antennas and related equipment, or adjacent to a wireless collocation facility) is subject to a city or county discretionary permit and is obligated to comply with specific criteria. A collocation facility is a permitted use not subject to a discretionary permit. AB 2788 would permit the use of a small cell without a discretionary permit or aesthetic review in all zoning districts, and would instead only be subject to a building or administrative permit, as applicable. In addition, AB 2788 requires that a city or county cannot require an escrow deposit for the removal of a wireless telecommunications facility or any component thereof, unreasonably limit the duration of any permit for a wireless telecommunications facility, or require that all wireless telecommunications facilities be limited to sites owned by parties within the jurisdiction of the city or county. Moreover AB 2788 establishes specific timeframes by which a city or county must review a permit and/or renew a permit for wireless telecommunications facilities.

**California Public Utilities Commission Decision 18-04-007.** On April 27, 2018, the California Public Utilities Commission (CPUC) issued Decision 18-04-007, which amended the Right-of-Way rules to provide competitive local exchange carriers with expanded access to public utility infrastructure for the purpose of installing antennas and wireless telecommunications equipment. Specifically, the CPUC mandated that the use of rights-of-way areas shall be limited to those *necessary or useful* for the provision of telecommunication services, thereby requiring a nexus between the installation and the provision of a telecommunication service.

#### **Local Policies and Regulations.**

***Municipal NPDES Permit.*** The City of Long Beach is subject to the *Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges from the City of Long Beach* (Permit No. R4-2014-0024, National Pollutant Discharge Elimination System (NPDES) No. CAS004003) (MS4 Permit), which was approved February 6, 2014, and became effective on March 28, 2014. This MS4 Permit supersedes Order No. 99-060 issued in 1999. To implement the requirements of the 1999 MS4 Permit, the City developed the Long Beach Storm Water Management Program (LBSWMP), a comprehensive program of practices and activities aimed at reducing or eliminating stormwater pollutants from new development to the maximum extent practicable. On September 8, 2016, the Long Beach MS4 Permit was amended to incorporate

modifications consistent with the revised Los Angeles River Watershed Total Maximum Daily Load (TMDL), and the amendments became effective upon adoption on November 23, 2016.

The MS4 Permit requires that the City develop a Watershed Management Program (WMP) to implement the requirements of the MS4 Permit on a watershed scale that will include customized strategies, control measures, and best management practices (BMPs). WMPs shall be developed using the Los Angeles Regional Water Quality Control Board (RWQCB) Watershed Management Areas (WMAs). The City can elect to collaborate with other MS4 permittees on the development of an Enhanced Watershed Management Program (EWMP) that will evaluate the multiple benefits of regional projects and implement regional control measures and BMPs. The WMP or EWMP will include an evaluation of existing water quality conditions, identify water quality priorities within each WMA, select watershed control measures, and incorporate compliance schedules. The draft WMPs were required to be submitted to the Los Angeles RWQCB by June 28, 2015. Since January 2015, the following four WMPs have been approved and are currently being implemented: Long Beach Nearshore, Los Cerritos Channel Watershed, Lower Los Angeles River Watershed, and Lower San Gabriel River.<sup>1</sup>

Currently, the MS4 permit requires that the project designer and/or contractor of all new development and redevelopment projects that fall under specific “priority” project categories must develop a Standard Urban Stormwater Mitigation Plan (SUSMP). Certain categories of development are considered “priority” because the Los Angeles RWQCB determined that they have the greatest potential to degrade water quality. The three categories of “priority” projects include the following: (1) 10 or more home subdivisions; (2) 100,000 sf or larger commercial developments; and (3) projects located adjacent to or directly discharging to environmentally sensitive areas. Because the project is a planning/policy action, future development projects facilitated by approval of the proposed project would be evaluated based on these three criteria.

**City of Long Beach Municipal Code.** According to Section 18.67.070 (Compliance with the WMP) of the City’s Municipal Code, any demolition project of “any valuation” shall submit documentation that it has met diversion requirements. Specifically, the City requires 60 percent of the waste tonnage of construction or demolition debris to be recycled, reused, or diverted from landfills or disposal sites.

Chapter 18.76, Water Submeters, of the City’s Municipal Code, establishes the City’s intent to conserve water to ensure sufficient water resources are available to current and future City residents. Specifically, this chapter of the City’s Municipal Code encourages water conservation in multi-family residential and mixed-use buildings by requiring the installation of water submeters at individual units to assist building owners in allocating water costs per unit, thereby incentivizing residents to conserve water.

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<sup>1</sup> State of California Water Boards. 2018. Los Angeles Regional Water Quality Control Board, Storm Water-Municipal Permits (last updated September 17, 2018). Website: [http://www.waterboards.ca.gov/losangeles/water\\_issues/programs/stormwater/municipal/](http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/) (accessed July 11, 2018).

**Long Beach Water Department, Urban Water Management Plan.** In accordance with the Urban Water Management Plan Act, the LBWD has prepared its *Long Beach Water 2015 Urban Water Management Plan (2015 UWMP)* (adopted in 2016), which anticipates that the LBWD's water supply will increase by 7 percent from 2015 to 2040 to meet projected water demands. Projected sources of water from 2015 to 2040 are anticipated to include a combination of groundwater obtained via annual extraction rights, imported water from MWD, and recycled water.

**Long Beach Water Department, Board Resolution WD-1353.** On June 2, 2016, the Long Beach Board of Water Commissioners declared a Stage 1 Water Supply Shortage. The adoption of the Stage 1 Supply Shortage means that one additional outdoor watering day is permitted during the hot and dry summer months compared to the previous Stage 2 Supply Shortage designation. Landscape watering in the City is allowed on Tuesdays, Thursdays, and Saturdays from April 1 through September 30. From October 1 through March 31, watering is allowed on Tuesdays and Saturdays due to cooler temperatures and increased rainfall.

**City of Long Beach General Plan Conservation Element.** Public utilities goals are included in the Conservation Element (adopted in 1973) of the City's General Plan. The following goals are applicable to the proposed project:

**Water Resource Management Goal 1:** To assure adequate quantity and quality of water to meet the present and future domestic, agricultural, and industrial needs of the City.

**Water Resource Management Goal 5:** To maintain, upgrade, and improve water systems and facilities serving Long Beach.

**City of Long Beach General Plan Mobility Element.** In October 2013, the City approved the General Plan Mobility Element. The Mobility Element seeks to guide development and improvements to the existing circulation system. Together with the existing circulation system, the Mobility Element considers the mobility of critical resources (e.g., water, energy, and communications). The following goals and policies related to utilities and services systems in the City's Mobility Element are applicable to the proposed project.

**Strategy No. 19:** Promote well-maintained water, wastewater, and stormwater infrastructure systems that serve the demands of existing and future residents and businesses while mitigating environmental impacts.

- **MOR Policy 19-1:** Plan for and provide appropriate levels and types of infrastructure based on the desired character of each neighborhood or district.
- **MOR Policy 19-2:** Ensure that development is appropriate and in scale with current and planned infrastructure capabilities.

- **MOR Policy 19-3:** Promote water-efficient fixtures and appliances to reduce water demand.
- **MOR Policy 19-4:** Expand the use of water recycling and graywater systems to treat and recycle wastewater and to further reduce water demand related to irrigation of landscaped areas.

**Sustainable City Action Plan.** The City adopted the *Sustainable City Action Plan* on February 2, 2010, with the purpose of moving the City towards becoming a more sustainable City. Sustainability is defined in this plan as maximizing individual benefits and minimizing negative environmental impacts to ensure the long-term health of the environment for the enjoyment and use of current and future generations. The Sustainable City Action Plan includes initiatives, goals, and actions that are meant to guide City decision-makers in striving to achieve a sustainable City. The following initiatives and actions are applicable to the proposed project.

**Sustainability Goal 4:** Facilitate the development of at least 2 megawatts of solar energy on City facilities by 2020.

**Sustainability Goal 7:** Facilitate the development of at least 8 megawatts of solar energy within the community (private rooftops) by 2020.

**Green Economy and Lifestyle Initiative 1.** Establish Long Beach as the leading California city for green business and green job growth.

Green Economy and Lifestyle Action 8. Implement a City green business program that incorporate goals and strategies for waste reduction, energy efficiency, water conservation, green purchasing, etc.

**Green Economy and Lifestyle Initiative 2.** Promote individual action that encourages active and green lifestyles, which supports a green economy.

Green Economy and Lifestyle Action 1. Update the City's green purchasing policy and the Sustainable Office Supply program to include additional requirements, green-only choices and automatic substitution to purchase materials with high postconsumer content that reduce quantity and toxicity of any generated waste.

Urban Nature Action 7. Incorporate sustainable principles and practices into golf course, marina, beach, park and playground/field design, and maintenance (grasscycling, reclaimed water irrigation, water conservation, recycling/waste management, and integrated pest management).

**Urban Nature Initiative 2.** Promote biodiversity citywide by encouraging the wide-scale use of native or edible landscapes.

Urban Nature Action 3. Ensure all open space and greening projects incorporate native/drought tolerant plants and use low-water strategies.

**Waste Reduction Initiative 1.** Increase diversion by reducing waste and increasing recycling and reuse.

Waste Reduction Action 1. Implement the Multi-Family Recycling Ordinance and continue to structure waste hauler contracts to offer economic incentives for recycling and disincentives for excess waste.

Waste Reduction Action 2. Establish commercial recycling guidelines intended to increase the recycling rate of the commercial sector, keeping waste out of the waste stream.

Waste Reduction Action 3. Establish an Environmental Depot facility that will recycle electronic waste and dispose of hazardous waste.

Waste Reduction Action 4. Establish a publicly accessible compost/mulch facility in the City and create beneficial uses for City greenwaste within City limits (grasscycling, mulching, etc).

Waste Reduction Action 5. Develop commercial sector food-waste recovery programs and expand edible food redistribution programs.

Waste Reduction Action 6. Create comprehensive publicly accessible recycling infrastructure at all City facilities and locations and require businesses to have recycling pick-up and public recycling on site.

Waste Reduction Action 7. Encourage residential composting and expand the City's residential composting program.

Waste Reduction Action 8. Aggressively implement measures to decrease beach debris and expand beach recycling programs.

Waste Reduction Action 9. Investigate emerging conversion technologies as part of long-term waste management strategies.

Waste Reduction Action 10. Establish City purchasing guidelines that require the purchase of reusable and/or recycled products and require City operations to participate in take-back programs where available.

Waste Reduction Action 11. Implement an electronic record keeping/processing system for City operations to decrease the use of paper.

**Waste Reduction Initiative 2.** Increase awareness and promote the concepts of reduce, reuse, and recycle.

Waste Reduction Action 1. Create a public education campaign to reduce litter and waste by promoting the use of all types of reusable products instead of disposable products (reusable grocery bags, water bottles, etc.) and refusal of single-use items.

Waste Reduction Action 2. Continue public education efforts through continued support of Litter Free Long Beach and other educational programs that promote reduction of waste and litter.

Waste Reduction Action 3. Continue educating schoolchildren to recycle and reduce litter by continuing the Traveling Recycling Education Center (TREC) and Lunch with a Lizard programs.

Waste Reduction Action 4. Develop an environmental recycling awareness program to be implemented in targeted industries (hospitality, medical, restaurants, etc.).

Waste Reduction Action 5. Publicize and encourage free-cycling programs.

Waste Reduction Action 6. Promote sustainable landscaping practices and composting.

Waste Reduction Action 7. Encourage residential composting and expand the City's residential composting program.

Waste Reduction Action 8. Promote the use of post-consumer content products, thereby reducing demand for virgin materials.

Waste Reduction Action 9. Promote take-back programs that allow customers to return packaging or used products to manufacturer for proper disposal.

Waste Reduction Action 10. Promote the proper disposal of special wastes such as Household Hazardous Wastes and electronic waste.

**Waste Reduction Initiative 3.** Utilize recyclable materials as a raw materials source for industrial development to enhance the recycled-materials market in the City.

Waste Reduction Action 1. Continue existing operations of the Long Beach Recycling Market Development Zone<sup>1</sup> (RMDZ) to foster economic development and job opportunities.

Waste Reduction Action 2. Expand RMDZ boundaries.

Waste Reduction Action 3. Promote RMDZ products in the local marketplace.

Waste Reduction Action 4. Offer incentives such as free press for businesses that participate in the "Litter Free Zone" program.

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<sup>1</sup> As defined in the City's *Sustainable City Action Plan*, Recycling Market Development Zones (RMDZ) are intended to assist sustainable companies that use recyclables as feedstock in manufacturing. The Long Beach RMDZ is combined with the City's Enterprise Zone, and the economic benefits that both programs offer are intended to assist in corporate development and expansion.

Waste Reduction Action 5. Encourage location of RMDZ businesses to the City by fast-tracking permits and licenses.

Waste Reduction Action 6. Promote community-based programs that provide jobs for disadvantaged individuals in RMDZ businesses.

Waste Reduction Action 7. Participate in e-waste recycling programs and support private e-waste programs and events.

Waste Reduction Action 8. Require City operations and encourage businesses and residents to buy recycled products to support the recycled products market.

Waste Reduction Action 9. Aggressively apply for grants and partner with others agencies to leverage funding to implement used oil and tire recycling programs and other litter programs.

Waste Reduction Action 10. Partner with the Conservation Corps and other local recycling businesses to further recycling and reuse.

**Water Initiative 1.** Ensure a sustainable water supply through conservation and reduced dependence on imported water.

Water Action 1. Make it illegal and socially unacceptable to waste water in the City.

Water Action 2. Reduce amount of water used for landscape irrigation by improving irrigation systems and by replacing grass lawns with landscapes that are more drought-tolerant, enhance the environment, require less maintenance, and reduce the amount and pollution load of urban runoff into the Long Beach coastal zone.

Water Action 3. Further reduce demand for potable water by converting industrial and irrigation demands to recycled water wherever practical and cost-effective.

Water Action 4. Continue research and development of cost-effective and environmentally responsible seawater desalination as an alternative, sustainable supply of potable water.

Water Action 5. Continue to improve management and yield of the groundwater basin that the City relies on for approximately 50 percent of its potable water.

Water Action 6. Update landscaping standards to require drought-tolerant and native landscaping to reduce water consumption.

**Water Initiative 2.** Implement low impact development strategies to reduce runoff and pollution at the source and increase the beneficial use of rainwater.

Water Action 1. Aggressively pursue strategies to keep trash off our beaches and pollution out of our ocean.

Water Action 2. Continue to manage urban and stormwater runoff by installing emerging treatment technologies into the storm drain system.

Water Action 3. Continue to work with upstream cities in the Los Angeles River Watershed to implement stormwater best management practices (BMPs) in the watershed to reduce pollutant loadings.

Water Action 4. Pursue legislation and secure funding to mitigate surface water and ground water pollution.

Water Action 5. Participate in and promote beach, neighborhood and community, and business corridor cleanups in order to keep our watersheds and beaches clean.

Water Action 6. Encourage the use of development techniques to direct rooftop runoff to pervious areas such as yards, garden beds, vegetated/soft bottom open channels, or on-site structural BMPs for capture, treatment, and reuse.

Water Action 7. Design streets to direct rainwater runoff to landscaped areas.

Water Action 8. Utilize and/or replace non-pervious surfaces with permeable materials (e.g., sidewalks, driveways, outdoor patios, and parking lots).

Water Action 10. Update development standards to require low impact development strategies such as detention basins, infiltration basins, infiltration trenches, conservation of natural areas, permeable pavements, treatment wetlands, bioswales, curb cuts, green roofs, rain gardens, and other pre/post construction BMPs.

Water Action 11. Expand Stormwater Management Education and Outreach programs to watershed-based programs and develop public-private educational partnerships to promote behavioral change.

#### 4.9.6 Thresholds of Significance

The following thresholds of significance criteria are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact on utilities providers if it would:

**Threshold 4.9.1:** 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;

**Threshold 4.9.2:** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

- Threshold 4.9.3:** 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;
- Threshold 4.9.4:** 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
- Threshold 4.9.5:** Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The proposed project is considered a policy/planning action and does not include any physical improvements. However, future new development facilitated by approval of the proposed LUE would be required to comply with all applicable federal, State, and local statutes and regulations related to solid waste. The CIWMB is the State agency tasked with overseeing, managing, and tracking solid waste generated in the State each year. The CIWMB promotes a sustainable environment, which encourages that resources are reused or recycled within local jurisdictions. In addition, the CIWMB promotes the use of technologies aimed at diverting solid waste from landfills. For example, the State passed the CIWM Act mandating that local jurisdictions achieve a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. Furthermore, Section 18.67.070, Compliance with the WMP, of the City's Municipal Code requires that all new projects requiring demolition recycle, reuse, or divert 60 percent of construction waste from landfills to disposal sites. All future developments facilitated by project approval would continue to be subject to the appropriate planning and permitting processes, thereby ensuring compliance with applicable waste laws and regulations. Therefore, impacts related to compliance with federal, State, and local statutes and regulations related to solid waste are not discussed further in this Recirculated Draft EIR (Threshold 4.9.5).

Refer to Section 4.10, Energy, for further discussion related to project-related impacts with respect to electric power and natural gas facilities(Threshold 4.9.1) , as well as a discussion of solar energy. The LUE policies identify investment in infrastructure systems, including green technology and renewable energy (LU-M-13), as well as maintaining adequate and sustainable infrastructure systems to protect the health and safety of all City residents, businesses, institutions, and regional-serving facilities (LU Policy 17-2). Solar infrastructure would be a part of the green technology, renewable energy, and infrastructure identified as necessary to promote green energy generation projects (LU Policy 2-1).

#### **4.9.7 Compliance Measures and Project Design Features**

The proposed project would not be required to adhere to any compliance measures and would not include any project design features related to utilities and service systems. Although there are no compliance measures and project design features related to utilities, the LUE and UDE Goals, Strategies, and Policies are intended to reduce the impacts of future development envisioned under the proposed project.

#### 4.9.7.1 Proposed Land Use Element and Urban Design Element Goals, Strategies, and Policies

The following proposed strategies and policies are applicable to the analysis of utilities and would replace existing goals, strategies, and policies outlined in the City's existing LUE and the Scenic Routes Element (SRE) (1975) following project approval:

##### **Land Use Element.**

**LU Policy 1-3:** Require sustainable design strategies to be integrated into public and private development projects.

LU-M-10: Continue to utilize solar power within public buildings and on public sites, and continue to study means by which solar power can be incorporated into all aspects of municipal services.

**LU Policy 1-6:** Require that new building construction incorporate solar panels, vegetated surface, high albedo surface and/or similar roof structures to reduce net energy usage and reduce the heat island effect.

**LU Policy 2-1:** Promote the establishment of local green energy generation projects along with the infrastructure to support such projects.

LU-M-66: Implement a City green business program that incorporates goals and strategies for waste reduction, energy efficiency, water conservation, green purchasing, and similar strategies.

**LU Policy 3-1:** Implement land use regulations and economic development strategies that will help diversify the local economy and expand job growth. Accommodate a mix of industries in Long Beach, including high technology, telecommunications, aerospace, green technology, renewable energy, healthcare, higher education, manufacturing, port and shipping, professional services, restaurants, entertainment and the film industry.

LU-M-13: Invest in infrastructure systems and community services that support a wide range of industries, including high technology, telecommunications, aerospace, green technology, renewable energy, healthcare, higher education, manufacturing, port and shipping, professional services, restaurants/ entertainment and the film industry.

**Strategy No. 17:** Improve public infrastructure to serve new development, established neighborhoods, commercial centers, and industry and regional-serving facilities.

**LU Policy 17-1:** Coordinate land use development and infrastructure investment.

**LU Policy 17-2:** Maintain adequate and sustainable infrastructure systems to protect the health and safety of all City residents, businesses, institutions, and regional-serving facilities.

LU-M-65: Implement a City green business program that incorporates goals and strategies for waste reduction, energy efficiency, water conservation, green purchasing, and similar strategies.

LU-M-105: Verify the feasibility of using reclaimed water as a major source of the City's domestic water supply by 2020.

**LU Policy 20-9:** Recycle or beneficially reuse a majority and growing proportion of the City's wastewater supply.

**LU Policy 20-10:** Seek to supply a majority and growing proportion of the City's water for both domestic and non-potable demand through use of reclaimed and recharged groundwater sources by 2030.

**LU Policy 20-11:** Coordinate with other agencies to reduce stormwater runoff by capturing runoff for groundwater recharge, irrigation, and recycling purposes.

#### **Urban Design Element (2018).**

**Strategy No. 1:** Improve function and connectivity within neighborhoods and districts.

**UD Policy 1-2:** Focus development and supporting infrastructure improvements within targeted Areas of Change identified within the Land Use Element.

**Strategy No. 5:** Integrate healthy living and sustainable design practices and opportunities throughout Long Beach.

**Policy UD 5-5:** Accommodate space for the use of rooftop solar panels and other forms of renewable energy on buildings, underutilized sites, utility plants, and parking facilities through a simplified permitting process, wherever feasible.

**Strategy No. 6:** Improve public infrastructure to serve new development, established neighborhoods, commercial centers, and industry and regional-serving facilities within areas of change and future growth areas.

**UD Policy 6-1:** Prioritize improvements to remedying infrastructure, public facilities, and service deficiencies to underserved neighborhoods and business hubs.

**UD Policy 6-3:** Maintain adequate and sustainable infrastructure systems to protect and enhance the health and safety of all City residents, businesses, institutions, and regional-serving facilities.

**UD Policy 6-4:** Promote sustainability through the use of new technologies and green infrastructure systems and equipment. Prioritize areas to retrofit with green infrastructure, Low Impact Development, and Stormwater BMPs.

**UD Policy 31-7:** Ensure that landscaping for new projects complies with Title 23, Chapter 2.7 of the California Code of Regulations, Model for Water Efficient Landscape Ordinance.

**UD Policy 31-8:** Incorporate water conservation methods, such as regular adjustment of irrigation controllers, irrigation scheduling based on plant water needs, preventing overspray, water-efficient landscape designs using low water-use plants, efficient irrigation systems, minimizing turf areas, soil improvement and mulch, watering during early or late hours, and water budgeting using Water Use Classification of Landscape Species (WUCOLS) to reduce the amount of water used in a landscape.

**Strategy No. 39:** Beautify the City with trees and landscaping while being conscious of water resources and utilizing sustainable practices.

**UD Policy 39-4:** Ensure that landscaping for new projects complies with Title 23, Chapter 2.7 of the California Code of Regulations, Model for Efficient Landscape Ordinance.

**UD Policy 39-5:** Integrate native, drought-tolerant, or low-water-use plant species in streetscapes and design for ease of maintenance to assure their longevity and limit water and resource use.

**UD Policy 39-7:** Consider providing bioswales, pervious strips, flow-through planters, and pervious pavement to help infiltrate stormwater runoff before it enters the sewer system.

#### 4.9.8 Project Impacts

**Threshold 4.9.1:** Would the project 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?

OR

**Threshold 4.9.2:** Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

**Less Than Significant Impact.** The proposed project does not include physical improvements or development; however, project implementation would allow for the future construction of up to 28,524 units and approximately 13,542,617 sf of non-residential square footage within the planning area by 2040. Future development projects associated with project implementation would result in both short-term and long-term increases in water demand; however, the project-related increase in demand for water may not directly correlate with the project-related increase in housing units since the bulk of anticipated new units is needed to alleviate overcrowding of existing residences that are already using water. An increase in short-term demand for water is anticipated to occur during construction of future development while an increase in long-term demand for water is anticipated

to occur during operation of future development. As required for all new development in California, the proposed project would comply with California State law regarding water conservation measures, including pertinent provisions of Title 24 of the California Government Code (Title 24) regarding the use of water-efficient fixtures.

**Construction.** Short-term demand for water may occur during construction activities associated with future projects facilitated by approval of the proposed project. Water demand for soil watering (fugitive dust control), cleanup, masonry painting, and other activities would be temporary and would cease under the anticipated General Plan build out scenario (2040). Overall, demolition and construction activities require minimal water as compared to water demand associated with the anticipated General Plan build out scenario (2040). Therefore, construction activities are expected to result in less than significant impacts on the water system or available water supplies, and no mitigation would be required.

**Operation.** The 2015 UWMP projects future water demands separately for each land use sector. These projections account for distribution system losses and water conservation measures. Numerous policies and programs outlined in the 2015 UWMP and the General Plan Update would reduce water consumption and wastewater flow, which will decrease the overall burden on existing water facilities and decrease the number of facilities that would need to be constructed or expanded. As previously identified, the LBWD is implementing the following water conservation programs to reduce demand:

- Turf Replacement Program
- Water Rate Structure
- System Loss Program
- Public Education and Outreach

The water demand projections in the 2015 UWMP account for SCAG's 2012 RTP population, housing, and employment growth projections for year 2035, which are higher than the most current socioeconomic projections included in SCAG's Final 2016 RTP for year 2040 (refer to Table 3.B, Anticipated General Plan Build-Out Summary, in Chapter 3.0, Project Description, for socioeconomic projections). Because the 2015 UWMP water demand projections use the higher 2035 growth projections, project water demands by sector, as shown in Table 4.9.C, are conservative estimates since socioeconomic projections in SCAG's Final 2016 RTP are substantially lower. Because the proposed project accommodates growth consistent with SCAG's growth projections, project-related growth and its associated water demand have been accounted for in the 2040 scenario identified in the 2015 UWMP. Water demand projections for the City are shown in Table 4.9.C, below.

**Table 4.9.C: Current and Projected Water Demand by Sector (in acre-feet)**

Land Use Type	2015 Usage	2040 Anticipated Build Out
Single-Family Residential	17,778	20,363
Duplex	3,114	3,421
Multi-Family Residential	15,517	20,562
Irrigation	2,187	2,208
Commercial	14,359	16,374
Industrial	219	122
Fire Lines	4	3
Losses	2,028	2,882
Conservation	0	(6,830)
<b>Total</b>	<b>55,206</b>	<b>59,105</b>

Source: Long Beach Water Department (LBWD). 2016. *2015 Urban Water Management Plan*, Table 6: Water Demand by Sector.

As illustrated in Table 4.9.C, the anticipated General Plan build out scenario (2040) would result in a forecasted demand of approximately 59,105 af or an increase of approximately 3,900 af (7 percent) over 2015 usage. However, according to the City’s total water usage in 2018, the project-related increase in demand for water would be approximately 286 af (0.5 percent) over 2018 usage.<sup>1</sup> As such, the anticipated increase in water demand by 2040 would represent less than one percent of the LBWD’s total projected water supply for year 2040. Total water demand by 2040 (59,105 af) is expected to utilize approximately 75 percent of projected available water supply (total water supply by 2040 is estimated at 79,291 af [refer to Table 4.9.B]). In addition, the LBWD anticipates that water supplies will be sufficient to meet all demands through year 2040 during normal, single dry year, and multiple dry year hydrologic conditions. Therefore, the project-related increase in water demand would also be within the LBWD’s anticipated water supply for its service area in year 2040.

UWMPs are essential documents by which cities and counties determine their water supplies consistent with General Plan updates. The accuracy and usefulness of UWMPs allow for cities and counties to determine water demand for a proposed development by determining whether or not the project was included as part of the projected water demand of the current UWMP, which accounts for growth projections outlined in a city or county’s General Plan. Consequently, the water demand does not need to be separately evaluated as long as a project is consistent with the UWMP and General Plan. The LBWD’s most current UWMP was adopted in 2015 and its existing service population was based on 2015 data from the California Department of Finance (DOF) and population projections included in the SCAG 2012 RTP/SCS.<sup>2</sup> As previously stated, SCAG’s 2012 RTP/SCS includes population projections that are higher than population projections included in SCAG’s Final 2016 RTP. As such, water demand projections in the UWMP are considered more

<sup>1</sup> As documented by the City, the total water usage in 2018 was 58,819 af. This data is not available by land use type and, therefore, was not included in Table 4.9.C.

<sup>2</sup> LBWD. 2016. *Long Beach Water 2015 Urban Water Management Plan*, Population and Demographics.

conservative because they use higher socioeconomic projections than those included in SCAG's Final 2016 RTP. Moreover, water demand projections in the UWMP are considered conservative because they do not account for the fact that new residential units are likely to use significantly less water as a result of building code requirements and reduced landscaping associated with proposed multi-family residential units, which account for the majority of new residential development under the proposed project. Because future development that may occur with implementation of the proposed project has been determined to be consistent with water demands in the 2015 UWMP and because the LBWD has identified a surplus water supply to serve the projected water demands through year 2040, the future project-related demand for water would be consistent with the City's UWMP.

While projected water demands associated with the anticipated General Plan build out scenario (2040) would be within the ability of the LBWD to serve the project, the LBWD plans to continue to replace aging water infrastructure in order to provide reliable water infrastructure into the future (Goal 7 of the proposed LUE). These improvements are accounted for in the City's *Fiscal Year 2019 Adopted Budget Capital Improvement Program*<sup>1</sup> and include, but are not limited to, water pipeline system improvements, water supply projects, and facility improvements. All improvements identified in the Capital Improvement Program that require a discretionary action would be required to go through the environmental review process to identify project-specific impacts. However, it is anticipated that environmental impacts associated with upgrades to water facilities would be minimal because most of the existing water lines are located within roadway rights-of-way that have previously been disturbed. Moreover, future development projects facilitated by the proposed project would be required to undergo the Site Plan Review process, during which the City would identify potable water systems serving a project and would assess Plumbing Permit and Plan Check Fees. Payments of these fees would fund future upgrades to water facilities within the planning area. Therefore, water infrastructure that is adequately sized to serve existing and future needs would be provided during the anticipated General Plan build out scenario (2040).

Although existing water supplies available to the LBWD provide sufficient quality and reliability, the LBWD continues to explore opportunities to augment its water supply. Examples include using the excess capacity at WRD's Advanced Water Treatment Facility to inject in the local groundwater basin; using unused effluent produced at the Long Beach WRP, transporting the effluent to a LBWD-owned and operated advanced water treatment facility that would produce high-quality water for injection into the local groundwater basin; partnering with other Central Basin pumpers to construct extraction wells in the Montebello Forebay Spreading Grounds, and delivering the extracted water to LBWD and the partners, to allow for more percolation; and constructing extraction wells within the West Coast Basin where LBWD has rights to 0.7 af/yr of water.

Additionally, under AB 610, a WSA would be required for any project if it is a residential development consisting of 500 units or more; a commercial or business development employing more than 1,000 persons or consisting of 500,000 sf or more of floor space; a commercial office

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<sup>1</sup> City of Long Beach. Fiscal Year 2019 Adopted Budget-Capital Improvement Program Budget. Website: <http://www.longbeach.gov/globalassets/pw/media-library/documents/resources/general/capital-improvement-plan/capital-improvement-plan/fy-19-adopted-cip-book> (accessed January 21, 2019).

building employing more than 1,000 persons or consisting of more than 250,000 sf of floor space; or an industrial, manufacturing, or processing plant or industrial park planning to house more than 1,000 persons, occupying more than 40 acres, or having more than 650,000 sf of floor area. Individual projects occurring under the proposed project would be required to prepare a WSA if they meet any of the requirements under AB 610.

With the continued good practice within the City to reduce water demand in compliance with State and local ordinances aimed at water conservation, the proposed project would not result in the need for additional water infrastructure that would result in a significant impact. Therefore, implementation of the proposed project would not necessitate the construction or relocation of new water supply or conveyance facilities. Impacts would be less than significant, and no mitigation would be required.

**Threshold 4.9.1:** Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

OR

**Threshold 4.9.3:** Would the project 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 commitment?

**Less Than Significant Impact.** Although the nature of potential future projects is not known at this time, future development that is facilitated from approval of the proposed project would result in a connection to the existing sewer system that is ultimately routed to the JWPCP or the Long Beach WRP. The JWPCP treats approximately 300 mgd and has a total permitted design capacity of 400 mgd, whereas the Long Beach WRP has a total permitted capacity of 25 mgd and treats approximately 13 mgd of recycled water.<sup>1</sup>

**Construction.** Short-term demand for wastewater treatment services may occur during construction activities associated with future projects facilitated by approval of the proposed project. It is anticipated that sanitary services during construction of future projects would likely be provided by portable toilet facilities, which would transport waste off site for treatment and disposal. The demand for wastewater treatment services during construction would be temporary in nature and would be minimal water as compared to the demand for wastewater treatment services associated with the anticipated General Plan build out scenario (2040). Therefore, construction activities are expected to result in less than significant impacts on the wastewater treatment and collection system, and no mitigation would be required.

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<sup>1</sup> LACSD. JWPCP Total Energy Facility. Website:<http://www.lacsd.org/solidwaste/swpp/energyrecovery/digestergastoenergy/jwpcpwrptotalenergy.asp> (accessed July 11, 2018).

**Operation.** The additional future development facilitated from implementation of the proposed project would place a higher demand on wastewater facilities. As illustrated by Table 4.9.D, the greatest increase in service demand would be in areas targeted for commercial, industrial, and public facilities/institutional uses. Table 4.9.D shows the projected wastewater demand associated with project implementation. According to the LACSD average wastewater generation factors,<sup>1</sup> the proposed project is anticipated to generate a total estimated wastewater flow of approximately 43 mgd, or an approximate 5.52 mgd increase over 2012 usage. This projection is anticipated to be conservative and representative of a “worst-case scenario” due to the fact that a bulk of projected new housing units through 2040 is anticipated to alleviate overcrowding of existing housing units in Long Beach with current Long Beach residents who are already generating wastewater within the City. Moreover, new units are likely to use significantly less water and thereby generate less wastewater due to building codes requiring reduced water consumption and reduced landscaping associated with proposed multi-family residential units, which account for the majority of new residential development under the proposed project. Therefore, these projections do not consider the large proportion of existing residents anticipated to be served by new housing units.

**Table 4.9.D: Wastewater Demand – Current and Projected (gpd)**

Land Use Type	Unit Type	Usage Factor	2012 Existing Units/ Square Footage	2040 Build-Out Units/ Square Footage	2012 Usage (gpd)	2040 Usage (gpd)	Project-Related Increase (gpd)
Single-Family Residential	gpd/unit	260	63,934 units	65,208 units	16,622,840	16,954,080	331,240
Multi-Family Residential	gpd/unit	156	99,860 units	127,110 units	15,578,160	19,829,160	4,251,000
Commercial/Retail	gpd/ksf	100	21,015,600 sf	22,691,099 sf	2,101,560	2,269,110	167,550
Office	gpd/ksf	200	7,984,400 sf	10,595,584 sf	1,596,880	2,119,117	522,237
Industrial	gpd/ksf	25	17,571,000 sf	25,987,327 sf	439,275	649,683	210,408
Public Facilities/ Institutional	gpd/ksf	50	21,474,000 sf	22,313,607 sf	1,073,700	1,115,680	41,980
<b>Total</b>	-	-	-	-	<b>37,412,415</b>	<b>42,936,830</b>	<b>5,524,415</b>

Source: Los Angeles County Sanitation District (LACSD). Table 1. Website: <http://www.lacsd.org/civica/filebank/blobdload.aspx?blobid=3531>.

gpd = gallons per day

gpd/ksf = gallons per day per thousand square feet

gpd/unit = gallons per day per unit

sf = square feet

As previously stated, the LACSD facilities serving the City have a remaining capacity of 146.9 mgd. The anticipated project-related increase in wastewater from potential future development would represent approximately 4 percent of the remaining capacity of these facilities. As such, there is

<sup>1</sup> LACSD. Wastewater Loadings for Each Class of Land Use. Website: <http://lacsd.org/civica/filebank/blobdload.asp?BlobID=3531> (accessed July 11, 2018).

sufficient wastewater treatment capacity within the LACSD facilities to accommodate the increase in wastewater demand citywide, and no major improvements are required. The projected future increase in wastewater flows associated with development that may occur with implementation of the proposed project would not exceed the treatment requirements of the RWQCB for the JWPCP and Long Beach WRP of the LACSD.

Future development projects facilitated by project approval would be reviewed by the City on a project-by-project basis and would be required to comply with any requirements in effect when the review is conducted, including sewer capacity considerations as part of the City development review and approval process. For example, projects would be required to pay Sewer Capacity Fees to fund the construction, reconstruction, maintenance, and operation of existing and future improvements to the sanitary sewer system, including improvements outlined in the City's 2019 Capital Improvement Program. Improvements and upgrades to sewer lines would continue to be prioritized based on need and would occur throughout the planning period associated with the proposed project (i.e., 2019 through 2040).

The proposed project would not substantially or incrementally exceed the current or future scheduled capacity of the JWPCP or the Long Beach WRP by generating flows greater than those anticipated. Furthermore, the City would require future project applicants to pay a Sewer Capacity Fee, which would further reduce potential impacts related to wastewater treatment. Therefore, project impacts related to wastewater treatment would be less than significant. In addition, project implementation would not necessitate the construction of wastewater supply or conveyance facilities. No mitigation would be required.

**Threshold 4.9.1:**        **Would the project 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?**

**Less Than Significant Impact.** The proposed project does not include any physical improvements, but would facilitate future development that would have the potential to create a need for new or expanded stormwater drainage facilities within the City.

**Construction.** Future development facilitated by the proposed project would be required to comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), or any other subsequent applicable permits. The NPDES program regulates stormwater and non-stormwater discharges associated with construction or demolition activities including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance equal to or greater than 1 acre. Future grading and construction activities would disturb soils and construction of structures that would increase impervious area, which can increase stormwater runoff during construction. However, the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented during project construction in order to reduce impacts to water quality, including those impacts associated with soil erosion, siltation, spills,

and increased runoff. Furthermore, as future individual projects are proposed, the City would review grading plans and construction documents to identify project features aimed at reducing construction impacts to storm drain facilities. Where necessary, the City would identify project conditions required to ensure the adequate capacity and operation of the storm drain system during construction activities. Therefore, construction activities associated with implementation of the proposed project would not require or result in the relocation or construction of new stormwater drainage systems, the construction of which would cause significant environmental impacts. Impacts would be less than significant level, and no mitigation would be required.

**Operation.** The development of future projects could increase impervious surface area, which would reduce infiltration. Future projects would be reviewed on a project-by-project basis and would need to comply with any requirements in effect when the review is conducted, including payment of Development Fees to fund future improvements to the City's stormwater infrastructure. Such improvements are outlined in the City's 2019 Capital Improvement Program and include upgrades related to storm drain pipelines, pump stations, and stormwater monitoring equipment.

Depending on the size and nature of the projects, a Water Quality Management Plan (WQMP) would be developed on a project-specific basis to address post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects. Detailed information about on-site hydrology, runoff flow rates, and pollutant loads are included in these project-specific analyses. The hydrological analyses included in the WQMPs prepared for future projects would identify BMPs and improvements to the existing storm drain system that would ensure that the City would be able to adequately handle increased stormwater runoff as a result of the proposed project.

The proposed project would have less than significant impacts related to hydrology and water quality because the proposed project is a planning/policy action and does not include the physical construction of any development that could impede or impair water quality and because future projects facilitated by project approval would be required to comply with applicable regulations pertaining to hydrology and water quality. In addition, most projects envisioned under the proposed LUE are infill development projects, replacement of existing parking lots, and low-intensity retail uses that are paved, impervious, and currently lack best management practices (BMPs) for drainage and filtration. Infill and redevelopment projects envisioned under the proposed LUE have the potential to improve water quality and on-site stormwater treatment through the implementation of stormwater treatment BMPs and design features. Moreover, future projects would also be required to comply with goals and policies outlined in the proposed LUE that are aimed at reducing stormwater runoff and mitigating off-site impacts related to pollutants entering natural water bodies (refer to Section 4.9.7, Compliance Measures and Project Design Features, for a list of applicable goals, policies, and strategies). Therefore, the proposed project would result in less than significant impacts related to the construction or expansion of stormwater drainage facilities, and no mitigation would be required.

**Threshold 4.9.1: Would the project 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?**

**Less Than Significant Impact.** The proposed project does not include any physical improvements, but would facilitate future development that would have the potential to create a need for new or expanded telecommunications facilities within the City.

**Construction.** Construction activities associated with future projects facilitated by approval of the proposed project would not increase the demand for telecommunications facilities. As such, construction activities would not require or result in the construction of new or the relocation of existing telecommunication facilities. Construction of the proposed project would not result in impacts to telecommunications facilities, and no mitigation would be required.

**Operation.** Future development facilitated by the proposed project could result in the need for new or relocated telecommunications facilities. Similar to existing market conditions, Spectrum Communications, Frontier Communications, and AT&T U-Verse would extend existing services to meet the increased demand for telephone, internet, and cable services as future developments are proposed. Where necessary, infrastructure improvements would be made to existing telecommunications facilities in order to meet customer demands and achieve compliance with the City's goal of investing in telecommunications infrastructure systems (LU-M-13). Most telecommunications facilities in the City are currently located within existing right-of-way areas and/or are located underground. As such, environmental impacts associated with future improvements to telecommunications facilities are anticipated to be minimal, as these facility areas would have previously been disturbed through association with past infrastructure improvements. Furthermore, future telecommunications infrastructure improvements may be subject to further environmental review depending on the extent and nature of those improvements. Therefore, implementation of the proposed project would result in less than significant impacts related to the construction or relocation of existing telecommunications facilities, and no mitigation would be required.

**Threshold 4.9.4: Would the project 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?**

**Less Than Significant Impact.** The proposed project does not include any physical improvements, but would facilitate future development that could result in an increased demand for solid waste collection and disposal services. As noted in Section 4.6, Population and Housing, implementation of the proposed project could result in the development of up to an additional 28,524 dwelling units and the addition of 18,230 persons.

**Construction.** Construction of some future projects facilitated by the proposed project may generate demolition waste; however, such debris would be accommodated by the County's existing landfills, with a large majority of the City's solid waste being disposed of at the SERRF. In addition, at least 60

percent of construction waste would be recycled pursuant to Chapter 18.67, Construction and Demolition Recycling Program, of the City's Municipal Code. Under the Municipal Code, covered projects requiring demolition or building permits issued on or after January 1, 2017, are required to divert at least 60 percent of all project-related construction and demolition material from landfills. Compliance with this chapter of the Municipal Code would be a condition of approval on any construction or demolition permit issued for a covered project. Therefore, the proposed project would have a less than significant impact related to solid waste generation during construction, and no mitigation measures regarding construction debris are required.

**Operation.** The City's Environmental Services Bureau provides solid waste collection services to collect and dispose of the solid waste/refuse generated by the City. Solid waste generated in the City is also transported to LACSD facilities when solid waste is considered unprocessable at the SERRF. Solid waste generated by operations associated with future development facilitated by the proposed project would be collected by the City's Environmental Services Bureau and hauled to the SERRF, which currently processes an average of 1,290 tons per day (tpd) (2,580,000 pounds) of municipal solid waste,<sup>1</sup> with a maximum capacity of 2,240 tpd (4,480,000 pounds).<sup>2</sup> Therefore, the SERRF is currently operating at approximately 58 percent of its daily design capacity.<sup>3</sup>

As described previously, it was determined that approximately 302,541 tons per year (605,082,000 pounds) of solid waste were disposed of in the City in 2017. Solid waste demand projections are shown in Table 4.9.E, below. As shown in this table, with the proposed project, the City is forecasted to generate approximately 1.62 million pounds per day (lbs/day) of solid waste in 2040, or an increase of approximately 193,744 lbs/day.

As shown previously in Table 4.9.A, the solid waste facilities that are accepting the remaining solid waste generated from the City that is not treated at the SERRF have a combined remaining capacity of approximately 211.5 million cubic yards and closure dates as late of 2045. Therefore, there is sufficient landfill capacity in the region to serve solid waste generated by future projects facilitated by the proposed project. Furthermore, future development would also include efficient waste management procedures to reduce the amount of solid waste generated in the planning area.

Therefore, impacts related to solid waste generation are considered less than significant, and no mitigation would be required.

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<sup>1</sup> LACSD. Southeast Resource Recovery Facility (SERRF) Brochure. Website. <http://www.lacsd.org/solidwaste/swfacilities/rtefac/serrf/brochure.asp> (accessed July 11, 2018).

<sup>2</sup> CalRecycle. Facility/Site Summary Details: Southeast Resource Recovery Facility (19-AK-0083). Website. <http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AK-0083/Detail/> (accessed July 27, 2018).

<sup>3</sup> 781 tons per day/2,240 tons per day = 0.348 (35 percent).

**Table 4.9.E: Solid Waste Demand – Current and Projected (lbs/day)**

Land Use Type	Unit Type	Usage Factor	2012 Existing Units/ Square Footage	2040 Build-Out Units/ Square Footage	2012 Usage (lbs/day)	2040 Usage (lbs/day)	Project-Related Increase (lbs/day)
Single-Family <sup>1</sup>	lbs/unit/day	10	63,934 units	65,208 units	639,340	652,080	12,740
Multi-Family <sup>2</sup>	lbs/unit/day	4	99,860 units	127,110 units	399,440	508,440	109,000
Commercial / Retail <sup>3</sup>	lbs/1,000 sf/day	5	21,015,600 sf	22,691,099 sf	105,078	113,455	8,377
Office <sup>4</sup>	lbs/1,000 sf/day	6	7,984,400 sf	10,595,584 sf	47,906	63,574	15,668
Industrial <sup>5</sup>	lbs/1,000 sf/day	5	17,571,000 sf	25,987,327 sf	87,855	129,937	42,082
Public Facilities/ Institutional <sup>6</sup>	lbs/sf/day	0.007	21,474,000 sf	22,313,607 sf	150,318	156,195	5,877
<b>Total</b>	-	-	-	-	<b>1,429,937</b>	<b>1,623,681</b>	<b>193,744</b>

Source: California Department of Resources Recycling and Recovery (CalRecycle). Estimated Solid Waste Generation and Disposal Rates (accessed July 27, 2018).

- <sup>1</sup> County of Los Angeles Dept. of Regional Planning, Vesting Tentative Tract No. 47905, etc. (August 1992)
- <sup>2</sup> County of Los Angeles Dept. of Regional Planning, Vesting Tentative Tract No. 47905, etc. (August 1992)
- <sup>3</sup> County of Los Angeles Dept. of Regional Planning, Vesting Tentative Tract No. 47905, etc. (August 1992)
- <sup>4</sup> Stevenson Ranch Draft EIR (Phase IV) , Los Angeles County (April 1992)
- <sup>5</sup> Stevenson Ranch Draft EIR (Phase IV) , Los Angeles County (April 1992)
- <sup>6</sup> Draft EIR for the Central Commercial Redevelopment Project (Monterey Park Redevelopment Agency) (1992)

EIR = Environmental Impact Report  
 lbs/day = pounds per day  
 lbs/1,000 sf/day = pounds per thousand square feet per day  
 lbs/sf/day = pounds per square feet per day  
 lbs/unit/day = pounds per unit per day  
 sf = square feet

### 4.9.9 Mitigation Measures

The proposed project would not result in any significant adverse impacts related to utilities, and no mitigation measures are required.

### 4.9.10 Cumulative Impacts

As defined in the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for utilities. The planning area includes the entire 50 square miles within the limits of the City of Long Beach; the cumulative area for utilities is listed below for each individual utility provider. The cumulative timeframe for the anticipated General Plan build out scenario is 2040. Cumulative projects in the service area for each utility provider would cause significant impacts if they cause an exceedance of wastewater treatment requirements of the Los Angeles RWQCB with jurisdiction in Long Beach and Los Angeles County, generate wastewater in exceedance of the combined capacities of wastewater treatment plants that serve the planning area, create the need for additional water supplies, or generate solid waste in exceedance of the combined capacities of the landfills that serve the planning area and the County.

**Wastewater.** The geographic area for the cumulative analysis for wastewater treatment is defined as the City and the LACSD. Within its service area, LACSD uses United States Census Bureau population information for population projections, as well as existing land use and build out or

zoned land use to project current and future wastewater flows. The City is almost entirely built out, with most new development occurring as in-fill projects.

Cumulative projects would result in an increase in development that would require wastewater treatment services. Similar to the proposed project, an increase in wastewater treatment demand that is disproportionate to wastewater treatment capabilities would result in a violation of the Los Angeles RWQCB. However, compliance with applicable federal and State regulations along with specific jurisdictional ordinances, as well as further CEQA review for projects requiring discretionary approvals, would reduce cumulative impacts related to potential wastewater treatment violations to a less than significant level. Therefore, implementation of the proposed project, in combination with cumulative projects, would not result in a significant cumulative impact with regard to wastewater treatment.

Cumulative projects, such as those proposed under adjacent city and county General Plans or private projects, would result in an increase in development that would result in an increased demand for water and wastewater treatment services. An increase in the demand for these services could result or require the construction of new treatment facilities or the expansion of existing facilities, the construction of which could result in significant environmental effects. Future treatment projects requiring discretionary approvals would be required to conduct environmental review under CEQA, which would require that significant environmental effects be mitigated to a less than significant level to the extent feasible. In addition, the cumulative projects would be required to comply with federal and State regulations, as well as local ordinances, aimed at reducing potential significant effects. Therefore, the proposed project's contribution to wastewater generation in the LACSD service area would not be cumulatively considerable, and no mitigation is required.

**Water.** The geographic area for the cumulative analysis of water infrastructure includes the service territory of the LBWD. According to the City's 2015 UWMP, the MWD's future water supplies are reliable because the MWD current allocation plan guarantees an amount of water close to the LBWD's need for water, and because the LBWD has a preferential right to the MWD supplies in excess of its need for that water. In addition, LBWD, which provides the groundwater supply to the City, projects that there are sufficient groundwater supplies to meet any future demand requirements in the City. Further, the current 2015 UWMP accounts for the proposed project's transition from traditional land uses to PlaceTypes and has demonstrated that the LBWD has the ability to serve the project-related increase in water demand through year 2040.

While the MWD would accommodate the project-related demand for water, the Southern California region is currently facing a challenge in securing its firm water supplies. Due to increased environmental regulations and competition for water from outside of the region, Southern California has seen a reduced supply of imported water. Furthermore, continued population and economic growth has resulted in increased water demands, which have affected water delivery reliability and water availability.

MWD's 2015 Regional UWMP describes water availability and identifies future water supplies to meet the region's long-term water demand. The MWD 2015 Regional UWMP also identifies supply

capacities from 2020 through 2040 under single dry-year, multiple dry-year, and average year hydrologic conditions. The MWD 2015 Regional UWMP indicates that the region can provide reliable water supplies under both normal conditions and under the single-driest-year and multiple-dry-year scenarios. While the MWD 2015 Regional UWMP has identified long-term water supplies to serve the region, the MWD has prepared for the possibility of being unable to meet the water demands of its member agencies. The MWD has established the Water Supply Allocation Plan (WSAP), which calculates each member agency's supply allocations and key implementation elements required for administering the allocation. The WSAP also considers how the MWD would be able to provide water to its member agencies during a catastrophic interruption in water supply. Therefore, impacts related to water demand are addressed in these water usage planning documents and would be less than cumulatively significant; therefore, no mitigation is required.

**Solid Waste.** The geographic area for the cumulative analysis of impacts to solid waste disposal capacity is the County of Los Angeles. Development associated with the proposed project and other past, present, and reasonably foreseeable projects within the County would contribute to an increase in demand for landfill capacity and solid waste services for the County. As stated previously, the SERRF, a refuse-to-energy transformation facility, serves the planning area and does not have a scheduled closure date. Remaining capacity and estimated closure dates for the SERRF are not determined because the facility is a transformation facility that converts solid waste to energy and ash. The SERRF currently does not exceed its daily maximum permitted disposal capacity. Solid waste considered unprocessable by SERRF would be taken to landfills in Orange, San Bernardino, Riverside, and Imperial Counties. There is currently sufficient permitted capacity within the LACSD system serving Los Angeles County to provide adequate future capacity for the County's solid waste needs.

In addition, all projects, including those proposed under this project, would be required to comply with all federal, State, and local statutes and regulations related to solid waste. Therefore, the proposed project would not have a cumulatively significant impact on waste disposal capacity at LACSD facilities, and no mitigation would be required.

**Telecommunications.** The geographic area for cumulative analysis of cable, telephone, and internet services is defined as the service territory for Spectrum Communications, Frontier Communications, and AT&T U-Verse. These services are not operating above capacity; however, these service providers are anticipated to extend current facilities to meet project service demands on an as-needed basis, as is the case under existing market conditions. Therefore, the proposed project's impacts related to cable, telephone, and internet services would not be cumulatively significant.

#### 4.9.11 Level of Significance after Mitigation

There would be no significant and unavoidable adverse impacts related to utilities. No mitigation is required.