4.15 Utilities and Service Systems

This section addresses impacts associated with utilities and service systems, including water supply and infrastructure (Section 4.15.1), wastewater (Section 4.15.2), solid waste (Section 4.15.3), and energy infrastructure (i.e., electric power, natural gas, and telecommunications) (Section 4.15.4). These sections each describe the approach and methodology for the individual topics being addressed, based upon Appendix G of the CEQA Guidelines.

4.15.1 Water Supply and Infrastructure

This section provides an analysis of the proposed project's potential impacts to water supply and the water infrastructures system serving the project site. This section includes a description of regional water supplies and the existing water infrastructure serving the project site, the estimated water demand associated with the project, and an assessment of whether there is sufficient water supply and infrastructure capacity to meet the project's demand. This analysis is based on the Water Supply Assessment (WSA) adopted by the City of Los Angeles Department of Water and Power (LADWP) Board of Water and Power Commissioners on June 2, 2022, the Civil/Site Utilities Report dated November 2022, and Service Advisory Reports (SARs) and Information of Fire Flow Availability forms prepared for the project site by LADWP, included as Appendix J of this EIR/EIS.

4.15.1.1 Environmental Setting

a. Water Supply

LADWP is responsible for providing water in the city and ensuring the water quality meets applicable California health standards for drinking water. Water is supplied to the city from four primary sources: the Los Angeles Aqueducts (LAA), local groundwater, purchased water from the Metropolitan Water District of Southern California (MWD), and recycled water. As shown in Table 4.15-1, LADWP had an available water supply of 508,359 acre-feet (AF) in Fiscal Year (FY) 2020-2021 (the latest full FY for which data is available), with approximately 91 percent of this supply from imported sources, including the LAA and MWD (LADWP 2022a). LADWP's water sources are described in further detail below.

Table 4.15-1 LADWP Water Supply

Fiscal Year	LAA (AF)	Local Groundwater (AF)	MWD (AF)	Recycled Water (AF)	Transfer, Spread, Spills, and Storage (AF)	Total (AF)
2016-2017	224,724	50,439	216,299	8,032	9,350	**490,144**
2017-2018	307,671	21,760	182,706	9,778	-200	**522,116**
2018-2019	312,456	32,233	137,775	7,512	1,710	**488,266**
2019-2020	292,095	34,363	152,647	9,641	1,155	**487,591**
2020-2021	128,268	51,070	316,627	11,455	-938	**508,359**

LAA = Los Angeles Aqueducts; AF = acre-feet; MWD = Metropolitan Water District of Southern California
Source: LADWP 2022a

Los Angeles Aqueducts

As provided in the WSA prepared for the project included in Appendix J, snowmelt runoff from the Eastern Sierra Nevada Mountains is collected and conveyed to the city via the LAA. The LAA supplies come primarily from snowmelt and secondarily from groundwater pumping and can fluctuate yearly due to the varying hydrological conditions. In recent years, LAA supplies have been less than the historical average because of environmental restoration obligations in Mono and Inyo Counties (LADWP 2022a).

The City holds water rights in the Eastern Sierra Nevada where the LAA water supplies originate. These supplies originate from both streams and groundwater. As indicated in Table 4.15-1, approximately 128,268 AF of LADWP's water supplies were from the LAA in FY 2020-2021. Average deliveries from the LAA system have been approximately 253,043 AF annually from FY 2016-2017 to 2020-2021. This average delivery includes one of the five dry years that began in FY 2012-2013 and ended in FY 2016-2017. Since LAA supplies vary substantially from year to year, LADWP plans to increase resiliency to address climate change and natural disasters by developing sustainable local water supplies. The expected annual long-term LAA delivery over the next 25 years is approximately 192,000 AF for average years. However, annual deliveries for a series of dry years are expected to range from approximately 71,400 AF to 143,000 AF (LADWP 2022a).

Groundwater

Local groundwater provided approximately 8 percent of the City's total water supply from FY 2016-2017 to FY 2020-2021. LADWP pumps groundwater from three adjudicated basins, including the San Fernando, Sylmar, and Central Basins. The San Fernando Basin is the largest of the three basins (LADWP 2022a). LADWP has accumulated 591,460 AF of stored groundwater in the San Fernando Basin (LADWP 2021a). A portion of this water is available for the city to withdraw during normal and dry years, or in an emergency, in addition to the City's approximate 87,000 AF annual entitlement (LADWP 2022a). The City's current annual entitlements for the Sylmar and Central Basins are 3,570 AF and 17,236 AF, respectively. The City has also accumulated 9,014 AF of stored water credits in the Sylmar Basin and 22,943 AF of stored water credits in the Central Basin (LADWP 2021a and 2022a). Table 4.15-2 shows the historical local groundwater basin supply over the past five fiscal years. The City plans to continue to develop production from its groundwater basins in the coming years to offset reductions in imported supplies (LADWP 2022a).

Table 4.15-2 Local Groundwater Basin Supply

Fiscal Year	San Fernando Basin (AF)	Sylmar Basin (AF)	Central Basin (AF)
2016-2017	55,116	0	3,005
2017-2018	22,259	0	1
2018-2019	36,870	1	5
2019-2020	35,949	2	10
2020-2021	53,625	1,368	2,247

AF = acre-feet

Source: LADWP 2022a

Both LADWP and the California Department of Water Resources (DWR) have programs in place to monitor wells to prevent overdrafting. LADWP's groundwater pumping practice is based on a "safe yield" operation. Furthermore, basin management is achieved by collective efforts of a court-appointed Watermaster and the Upper Los Angeles River Area Administrative Committee of representatives from five public water supply agencies overlying the Upper Los Angeles River Area Committee. These efforts include operation of groundwater remediation systems, use of an extensive network of groundwater monitoring wells, routine reporting on groundwater elevation and water quality, management and mitigation of urban runoff water quality, and development of enhanced stormwater recharge and groundwater replenishment (LADWP 2021a).

Metropolitan Water District of Southern California

MWD is the largest water wholesaler for domestic and municipal uses in southern California. MWD imports a portion of its water supplies from northern California through the State Water Project (SWP) California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct (CRA). As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the LAA and local groundwater. As of FY 2020-2021, LADWP has a preferential right to purchase 17.93 percent of MWD's total water supply (LADWP 2022a). As shown in Table 4.15-1, LADWP received approximately 316,627 AF of water from MWD in FY 2020-2021. LADWP plans to reduce purchase of MWD water supplies through increased conservation, increased recycled water production, and enhanced groundwater pumping through stormwater capture and groundwater replenishment. Summaries of MWD's individual supplies, along with each supply's challenges and specific responsive actions taken by MWD, are presented below.

State Water Project

The SWP is owned by the State of California and operated by DWR, delivering water to two-thirds of the population in California and 750,000 acres of farmland. The SWP facilities include 36 storage facilities, 30 pumping and generating plants, and approximately 700 miles of aqueducts and pipelines (DWR 2022a). MWD is the largest of the 29 SWP contractors, holding a contract for 1.912 million AF per calendar year, or 46 percent of the total contracted amount of the 4.173 million AF ultimate delivery capacity of the SWP. Variable hydrology, environmental issues, and regulatory restrictions have periodically reduced the quantity of water that the SWP delivers to MWD (LADWP 2022a).

The SWP, under the original contracted amount at 100 percent allocation, provides MWD with 1.912 million AF of water each calendar year (LADWP 2022a). However, due to water quality and supply reliability challenges and conflicts caused by variable hydrology and environmental standards that limit pumping operations, SWP deliveries in the most critically dry years vary. For 2022, DWR has estimated an initial allocation of 5 percent (DWR 2021).

Colorado River

MWD owns and operates the CRA, which has delivered water from the Colorado River to southern California since 1942. The Colorado River currently supplies approximately 25 percent of southern California's water needs (MWD 2022a). MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. California is apportioned the use of 4.4 million AF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California, and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada (LADWP 2022a).

Since 2003, due to increased consumption, there has been no such unused, apportioned water available to California. Of the California apportionment, MWD holds the fourth priority right to 550,000 acre-feet per year (AFY) under the 1931 priority system governing allotments to California. This is the last priority within California's basic apportionment of 4.4 million AF. Beyond the basic apportionment, MWD holds the fifth priority right to 662,000 AFY of water. Historically, MWD has been able to claim most of its legal entitlement of Colorado River water and could divert over 1.2 million AF in any year but persistent drought conditions since 1999 have contributed to a decrease in these claims. The recent 16-year drought has been so severe that it has resulted in major reductions in water deliveries from the Colorado River (LADWP 2022a).

Additional Actions to Address Supply

MWD has been developing plans and making efforts to provide additional water supply reliability for the entire southern California region. LADWP coordinates closely with MWD to ensure implementation of these water resource development plans. MWD's long-term plans to meet its member agencies' growing reliability needs are through: (1) improvements to SWP as outlined in the EcoRestore plans; (2) conjunctive management efforts on the Colorado River; (3) water transfer programs and outdoor conservation measures; and (4) development of additional local resources, such as recycling, brackish water desalination, and seawater desalination (LADWP 2022a).

Additionally, MWD has approximately 6.0 million AF of storage capacity available in reservoirs and banking/transfer programs. MWD was estimated to have 3.91 million AF of water in Water Surplus Drought Management storage and additional 750,000 AF in emergency storage as of January 1, 2021. Continued efficiency in the region kept demands low in 2020, resulting in available water supplies far exceeding demands. With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD was able to add to storage in 2020 (LADWP 2022a).

MWD's 2020 Integrated Resources Plan establishes strategies to ensure regional water reliability through 2045. The 2020 Integrated Resources Plan reinforces MWD commitment to meeting the region's water supply needs through an evolving long-term strategy that calls for maintaining and stabilizing existing resources along with developing more conservation and new local supplies (MWD 2022b). In addition, the 2020 Urban Water Management Plan (UWMP) is another long-term MWD planning document that reports on water reliability and identifies projected supplies to meet the long-term demand within MWD's service area. As indicated in the MWD 2020 UWMP for the average year, and in LADWP's 2020 UWMP for the average, single dry-year and multiple dry-year, respectively, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2045 under average, single dry-, and multiple dry-year hydrologic conditions (MWD 2021 and LADWP 2021a).

Precipitation Conditions

According to the project-specific WSA, as of May 9, 2021, northern Sierra precipitation was 48 percent of the 50-year average for the time of year, and northern Sierra snowpack measured 72 percent of average for such time of year. Due to drought conditions, on March 23, 2021, DWR notified State Water Contractors that its calendar year 2021 allocation estimate of SWP water would be 5 percent of contracted amounts, or 95,575 AF for MWD (LADWP 2022a). The current 2022 allocation of SWP water is 5 percent (DWR 2021). Changes to this allocation may occur and are dependent on the developing hydrologic conditions (LADWP 2022a).

Based on the project-specific WSA, as of March 29, 2021, the Upper Colorado River Basin snowpack accumulation measured 88 percent of the 30-year April 1 median. As of May 9, 2021, the total system storage in the Colorado River Basin was 43 percent of capacity, a decrease of 9 percent (or 5.38 million AF) at the same time the prior year. Because of its higher priority, MWD will not be directly affected by this shortage in 2022 and will be able to continue to take intentionally created surplus out of Lake Mead and fill the CRA if needed (LADWP 2022a).

The Long Beach/San Pedro area received an annual average of 12.02 inches of precipitation between 1991 and 2021 according to the National Weather Service. From July 1, 2021 to June 30, 2022, the area received 7.46 inches of precipitation, 3.63 inches below the annual average (Los Angeles Almanac 2022).

Climate Change

As discussed in LADWP's 2020 UWMP, generally speaking, any water supplies that are dependent on natural hydrology are vulnerable to climate change, especially if the water source originates from mountain snowpack. For LADWP, the most vulnerable water sources subject to climate change impacts are imported water supplies from MWD and the LAA, although local sources can also expect to see some changes in the future. In addition to water supply impacts, changes in local temperature and precipitation are expected to alter water demand patterns. However, there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the city. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future research for the potential impacts of climate change on its water resources (LADWP 2021a).

MWD and DWR also continue to study climate change and address the implications of climate change on water supplies. MWD has established a technical process to identify key vulnerabilities from various sources, including climate change, in order to provide comprehensive analyses within its Integrated Water Resources Plans. In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning for the future (DWR 2022b). With updates published every five years, the latest California Water Plan Update 2018 built on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability (DWR 2019).

DWR has also been in the process of completing its Climate Action Plan since 2012. Phases I and II of the Climate Action Plan include the guidance of DWR in reducing greenhouse gas (GHG) emissions and the expertise of a climate change technical advisory group formed in 2012, respectively. Phase III of the plan was completed in 2017 with a vulnerability assessment and adaptation plan of DWR assets and activities, as related to the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply (DWR 2022c). Likewise, in May 2022, MWD adopted its Climate Action Plan consisting of nine strategies that include utility improvements, a zero emissions fleet, and increased support of conservation and local water resources programs in order to reduce GHG emissions and improve infrastructure reliability and energy resiliency (MWD 2022c). As such, climate change and its impacts on water supplies are key factors of new water supply regulations and UWMPs.

Water Conservation and Recycling

LADWP's 2020 UWMP details the City's efforts to promote the efficient use and management of its water resources and provides the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for the City in the next 25 years. To meet multiple water

conservation goals established in the Green New Deal and the Water Conservation Act of 2009, LADWP's 2020 UWMP aims to reduce per capita potable water use by 22.5 percent by 2025 and by 25 percent by 2035 compared to 2014 levels (LADWP 2021a). Following the target reduction of potable water use per capita by 25 percent by 2035, the Green New Deal adds an additional target for the City to maintain or reduce 2035 per capita water use through 2050 (City of Los Angeles 2019). The City also intends to build upon the success of Save the Drop and develop additional water conservation campaigns; continue benchmarking customer use and recognizing innovative water reduction initiatives; improve data gathering to identify program effectiveness; expand top performing conservation incentive programs for landscape transformation, washing machines, etc.; and expand sub-metering and evaluate smart water meter technologies (LADWP 2021a).

Further, based on LADWP's 2020 UWMP, recycled water use is projected to reach 24,300 AFY by 2025 and further increase to 41,000 AFY by 2045. Overall, the 2020 LADWP UWMP reports a 28-percent lower recycled water trend for municipal and industrial uses along with environmental uses than what was projected in the previous 2015 UWMP. In addition, based on programs and improvements contemplated in the 2020 LADWP UWMP, locally developed water supplies (including groundwater replenishment and stormwater capture) will increase from the current 11 percent to 48 percent in dry years, or to 43 percent in average years, by 2045 (LADWP 2021a). The Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035. Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses, such as those in the Los Angeles River (City of Los Angeles 2019).

b. Water Demand

Citywide Water Demand

LADWP's 2020 UWMP provides water supply and demand projections in five-year increments to 2045, based on projected population estimates provided by Southern California Association of Governments (SCAG) in its 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Table 4.15-3 shows the projected water demand from calendar year 2025 through 2045 for the City of Los Angeles. As shown in Table 4.15-3, in 2045, during average year hydrological conditions, the City's water demand is forecasted to be approximately 710,500 AFY with passive water conservation (LADWP 2021a and 2022a). LADWP's 2020 UWMP concludes that adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2045 (LADWP 2021a). Therefore, the City's water supply projections in LADWP's 2020 UWMP are sufficient to meet the water demand for projects that are determined by the CEQA lead agency to be consistent with the 2020–2045 RTP/SCS adopted by SCAG (LADWP 2022a).

Table 4.15-3 City of Los Angeles Water Demand Projections

	Year (thousand AF)				
Hydrological Condition	**2025**	**2030**	**2035**	**2040**	**2045**
Average Year	642.6	660.2	678.8	697.8	710.5
Single Dry Year	674.7	693.2	712.7	732.7	746.0
Multiple Dry Year	662.3	680.4	699.6	719.2	732.3

AF = acre-feet
Source: LADWP 2021a

Existing Project Site Water Demand

The OSP Specific Plan Site is developed with the Rancho San Pedro housing complex, which includes 478 residential units and 8,000 sf of services, amenities, and administrative uses. The 327 Harbor Site is vacant and undeveloped. Water use associated with existing development on the project site is approximately 105 AFY (LADWP 2022a).

c. Water Infrastructure

Potable water infrastructure in the vicinity of the project site is maintained and operated by LADWP. LADWP's distribution system includes 115 storage tanks and reservoirs, 85 pump stations, 7,340 miles of distribution mains and trunk lines within the City, and a total storage capacity of 323,362 AF, according to the estimates for FY 2021–2022 (LADWP 2022b). Much of the water flows north to south, entering Los Angeles at the LAA Filtration Plant in Sylmar, which is owned and operated by LADWP. Water entering the LAA Filtration Plant undergoes treatment and disinfection before being distributed throughout the LADWP's water service area (LADWP 2021a).

Domestic water service in the vicinity of the project site is available via LADWP water lines within the adjacent streets. According to the Civil/Site Utility Report included in Appendix J, there are four water mains serving the OSP Specific Plan Site, including an 8-inch water main in Santa Cruz Street, 6-inch water main in Mesa Street, 8-inch water main in 3rd Street, and 12-inch water main in Harbor Boulevard (KPFF Consulting Engineers [KPFF] 2022). The 327 Harbor Site is adjacent to existing 12-inch water mains in O'Farrell Street and Harbor Boulevard (LADWP 2022c).

In addition to providing domestic water service, LADWP provides water to the project site for fire protection services in accordance with the City's Fire Code (Los Angeles Municipal Code [LAMC] Chapter V, Article 7). According to the Information of Fire Flow Availability for the OSP Specific Plan Site provided by LADWP on June 24, 2022, there are four fire hydrants serving the OSP Specific Plan Site: one at the southwest corner of Santa Cruz Street and Beacon Street, one at the southwest corner of 1st Street and Centre Street, one at the southwest corner of 2nd Street and Harbor Boulevard, and one 250 feet east of 2nd Street and Centre Street. Total flow available to the OSP Specific Plan Site from these four hydrants is 6,000 gallons per minute (LADWP 2022d). Additionally, according to the Information of Fire Flow Availability for the 327 Harbor Site provided by LADWP on June 24, 2022, there are four fire hydrants serving the 327 Harbor Site: one at the southwest corner of O'Farrell Street and Beacon Street, one at the southwest corner of O'Farrell Street and Harbor Boulevard, one 200 feet north of O'Farrell and Harbor Boulevard along O'Farrell Street, and one along the east side of O'Farrell Street and Harbor Boulevard. Total flow available to the 327 Harbor Site from these four hydrants is 6,000 gallons per minute (LADWP 2022e).

4.15.1.2 Regulatory Setting

a. State Laws and Regulations

California Urban Water Management Plan Act

The California Urban Water Management Planning Act (Water Code, Section 10610, et seq.) addresses several State policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires Urban Water Suppliers to develop UWMPs every five years to identify short- and long-term demand management measures to meet growing water demands during normal, dry, and

multiple-dry years. Urban Water Suppliers are defined as water suppliers that either serve more than 3,000 customers or provide more than 3,000 AFY of water to customers.

Senate Bill 610, Senate Bill 221, and Senate Bill 7

Two of the State laws addressing the assessment of water supply necessary to serve large-scale development projects, Senate Bill (SB) 610 and SB 221, became effective on January 1, 2002. SB 610, codified in Water Code Sections 10910-10915, specifies the requirements for WSAs and their role in the CEQA process, and defines the role UWMPs play in the WSA process. SB 610 requires, for projects subject to CEQA that meet specific size criteria, the water supplier prepare WSAs to determine whether the water supplier has sufficient water resources to serve the projected water demands associated with the projects. SB 610 provides specific guidance regarding how future supplies are to be calculated in the WSAs where an applicable UWMP has been prepared. Specifically, a WSA must identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' actual water deliveries received by the public water system. In addition, a WSA must address water supplies over a 20-year period and consider normal, single-dry, and multiple-dry year conditions. In accordance with SB 610, codified in California Water Code Section 912 and CEQA Guidelines Section 15155(a), projects for which a WSA must be prepared are those subject to CEQA that meet any of the following criteria:

- Residential developments of more than 500 dwelling units;
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 sf of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 sf of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area;
- Mixed-use projects that include one or more of the projects specified in this list; or
- Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.

The WSA must be approved by the public water supplier serving the project at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the WSA.

In addition, under SB 610, a water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, the following additional information must be included in the UWMP: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

SB 221 also addresses water supply in the land use approval process for large residential subdivision projects. However, unlike SB 610 WSAs, which are prepared at the beginning of a planning process, SB 221-required Water Supply Verifications are prepared at the end of the planning process for such

projects. Under SB 221, a water supplier must prepare and adopt a Water Supply Verification indicating sufficient water supply is available to serve a proposed subdivision, or the local agency must make a specific finding that sufficient water supplies are or will be available prior to completion of a project, as part of the conditions for the approval of a final subdivision map. SB 221 specifically applies to residential subdivisions of 500 units or more. However, Government Code Section 66473.7(i) exempts "…any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses; or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses; or housing projects that are exclusively for very low- and low-income households."

SB 7, enacted on November 10, 2009, mandates new water conservation goals for UWMPs, requiring Urban Water Suppliers to achieve a 20-percent per capita water consumption reduction by the year 2020 statewide, as described in the "20 x 2020" State Water Conservation Plan (DWR 2010). As such, each updated UWMP must now incorporate a description of how each respective Urban Water Supplier will quantitatively implement this water conservation mandate, which requirements, in turn, must be taken into consideration in preparing and adopting WSAs under SB 610.

Senate Bill X7-7 – Water Conservation Act

SB X7-7 (Water Conservation Act of 2009), codified in California Water Code Section 10608, requires all water suppliers to increase water use efficiency. Enacted in 2009, this legislation sets an overall goal of reducing per capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020. The State of California was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Monthly statewide potable water savings reached 25.1 percent in February 2017, as compared to that in February 2013 (California State Water Resources Control Board [SWRCB] 2017a). Cumulative statewide savings from June 2015 through February 2017 were estimated at 22.5 percent (SWRCB 2017b). Following a multi-year drought and improvements to hydrologic conditions, statewide potable water savings reached 14.7 percent in August 2017, as compared to August 2013 potable water production (SWRCB 2017c).

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA), passed in September 2014, is a comprehensive, three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities (DWR 2022d). The SGMA requires the formation of local groundwater sustainability agencies to assess local water basin conditions and adopt locally based management plans. Local groundwater sustainability agencies were required to be formed by June 30, 2017. The SGMA provides 20 years for groundwater sustainability agencies to implement plans, achieve long-term groundwater sustainability, and protect existing surface water and groundwater rights. The SGMA provides local groundwater sustainability agencies with the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. Furthermore, SGMA requires governments and water agencies of high- and medium-priority basins to stop overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under the SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For the basins that are critically over-drafted, the timeline is 2040. For the remaining high- and medium-priority basins, the deadline is 2042.

California Code of Regulations

Title 20

Title 20, Sections 1605.3(h) and 1505(i) of the California Code of Regulations (CCR), establishes applicable State efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including fixtures such as showerheads, lavatory faucets, and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured on or after July 1, 2018 is 1.8 gallons per minute (gpm) at 80 pounds per square inch (psi), and lavatory faucets manufactured after July 1, 2016 is 1.2 gpm at 60 psi. The standard for toilets sold or offered for sale on or after January 1, 2016 is 1.28 gallons per flush.

California Green Building Standards Code

Part 11 of Title 24 of the California Code of Regulations, the title that regulates the design and construction of buildings, establishes the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or a positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code includes both mandatory measures, as well as voluntary measures. The mandatory measures establish minimum baselines that must be met in order for a building to be approved. The mandatory measures for water conservation provide limits for fixture flow rates, which are the same as those for the Title 20 efficiency standards listed above. The voluntary measures can be adopted by local jurisdictions for greater efficiency. The 2022 CALGreen Code update includes new requirements for the inclusion of electric vehicle charging stations. These requirements went into effect January 1, 2023.

Plumbing Code

Title 24, Part 5 of the CCR establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2022 California Plumbing Code was published by the California Building Standards Commission and went into effect on January 1, 2023.

Executive Order B-40-17

On April 7, 2017, Executive Order B-40-17 was issued. Cities and water districts throughout the State are required to report their water use each month. This Executive Order also bans wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

Executive Order N-10-21

Title 24, Part 5 of the CCR establishes the California Plumbing Code, which sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures including showerheads and lavatory faucets. On July 8, 2021, Executive Order N-10-21 was issued, calling for voluntary cutbacks of water usage by 15 percent from 2020 usage levels. The Executive Order lists commonsense measures Californians can undertake to achieve water usage reduction goals and identifies the SWRCB for tracking of monthly reporting on the State's progress.

b. Regional Laws and Regulations

Metropolitan Water District of Southern California

As discussed in detail below, MWD is a primary source of water supply within southern California. Based on the water supply planning requirements imposed on its member agencies and ultimate customers, MWD has adopted a series of official reports on the state of its water supplies. As described in further detail below, in response to recent developments in the Sacramento Delta, MWD has developed plans intended to provide solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, including the City of Los Angeles.

2020 Urban Water Management Plan

MWD's 2020 UWMP addresses the future of MWD's water supplies and demand through 2045 (MWD 2021). Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions (i.e., under the most challenging weather conditions such as drought and service interruptions caused by natural disasters) is presented in Table 2-5 of the 2020 UWMP (MWD 2021:2-19). The analysis in the 2020 UWMP concluded that reliable water resources would be available to continuously meet demand through 2045. In the 2020 UWMP, the projected 2045 demand water during multiple-dry year conditions is 1,564,000 AFY, whereas the expected and projected 2045 supply is 2,239,000 AFY based on current programs, for a potential surplus in 2045 of 675,000 AFY (MWD 2021).

MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. Additionally, MWD has developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside the southern California region. MWD is working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of SWP deliveries. MWD also has plans for supply implementation and continued development of a diversified resource mix, including programs in the Colorado River Aqueduct, SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs.

2015 Integrated Resources Plan

MWD prepared an Integrated Resources Plan (IRP) that provides a water management framework with plans and programs for meeting future water needs. It addresses issues that can affect future water supply such as water quality, climate change, and regulatory and operational changes. The most recently adopted IRP (2015 IRP) was adopted in January 2016 (MWD 2016). It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions.

The 2015 IRP reliability targets identify developments in imported and local water supply and in water conservation that, if successful, would provide a future without water shortages and mandatory restrictions under planned conditions. For imported supplies, MWD would make investments to

maximize Colorado River Aqueduct deliveries in dry years. MWD would make ecologically sound infrastructure investments to the SWP so the water system can capture sufficient supplies to help meet average year demands and to refill the MWD storage network in above average and wet years.

Planned actions to keep supplies and demands in balance include, among others, lowering regional residential per capita demand by 20 percent by the year 2020, a goal which MWD has met (compared to a baseline established in 2009 state legislation), reducing water use from outdoor landscapes and advancing additional local supplies (MWD 2021). The 2015 IRP Table ES-1, *2015 IRP Update Total Level of Average-Year Supply Targeted*, shows the supply reliability and conservation targets. As presented in the IRP, the total supply reliability target for each five-year increase between 2016 and 2040 would exceed the retail demand after conservation. In 2040, retail demand after conservation is estimated to be 4,273,000 AFY and the total supply reliability target is approximately 4,539,000 AFY, representing an excess of 266,000 AFY (MWD 2016).

The 2020 IRP planning process is currently in development (MWD 2022b). The 2020 IRP analyzes multiple scenarios that could plausibly unfold in the future due to climate change, economic growth, legislation and regulations affecting water sources and demands, and other variables. With the variability of these impacts in mind, MWD is developing four scenarios to help understand the challenges of the future and effectively plan to ensure water reliability in the face of those challenges.

Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water storage contingency analysis that is required as part of any UWMP into a separate, more detailed plan, called the Water Surplus and Drought Management Plan (WSDM Plan). The overall objective of the WSDM Plan is to ensure that shortage allocation of MWD's imported water supplies is not required. The WSDM Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in its IRP. The WSDM Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The WSDM Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water, first inside then outside the region. The Shortage Actions of the WSDM Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories (MWD 1999).

Long-Term Conservation Plan

The Long-Term Conservation Plan provides a framework of goals and strategies to reduce per capita water use through conservation and water use efficiency. The plan recognizes the challenges and uncertainties to achieving the IRP target. As a result, the Long-Term Conservation Plan uses adaptive management and strategies to adjust implementation approaches (MWD 2011).

Water Supply Allocation Plan

While the WSDM Plan includes a set of general actions and considerations for MWD staff to address during shortage conditions, it does not include a detailed water supply allocation plan or implementation approach. Therefore, in February 2008, MWD adopted a water supply plan called the Water Supply Allocation Plan (WSAP). The WSAP includes a formula for determining equitable, needs-based reductions of water deliveries, with the potential application of a surcharge, to member agencies during extreme water shortages in MWD's service area conditions (i.e., drought conditions or unforeseen interruptions in water supplies).

The WSAP allows member agencies the flexibility to choose among various local supply and conservation strategies to help ensure that demands on MWD stay in balance with limited supplies. The WSAP formula addresses shortages of MWD supplies, by taking into account growth, local investments, changes in supply conditions and the demand hardening aspects of non-potable recycled water use and the implementation of conservation savings programs (MWD 2016b). The allocation period covers 12 consecutive months from July of a given year through the following June.

c. Local Laws and Regulations

Los Angeles Department of Water and Power's 2020 Urban Water Management Plan

In accordance with the California Urban Water Management Planning Act, UWMPs are updated at five-year intervals. LADWP adopted its 2020 UWMP on May 25, 2021. The 2020 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2015 UWMP and currently serves as the City's master plan for reliable water supply and resource management consistent with the City's goals and objectives. The UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely on individual development demands to determine area-wide growth. Rather, the projected growth in water use for the entire service area was considered in developing long-term water projections for the city to the year 2045. Long range projections are based on SCAG growth projections. The 2020 UWMP is based on projections in the 2020 RTP/SCS, as discussed further in Section 4.15.1.1, *Environmental Setting* (MWD 2021).

City of Los Angeles Green New Deal

The City released the first Sustainable City pLAn in April 2015, which was updated in 2019 as the City's Green New Deal (City of Los Angeles 2019). The Green New Deal includes a multi-faceted approach to developing a locally sustainable water supply to reduce reliance on imported water, reducing water use through conservation, and increasing local water supply and availability. Water supply and availability are discussed further in Section 4.15.1.1, *Environmental Setting*.

One Water LA 2040 Plan

In April 2018, the City prepared the One Water LA Plan, an integrated approach to citywide recycled water supply, wastewater treatment, and stormwater management (City of Los Angeles 2018). The new plan builds upon the City's Water IRP, which projected needs and set forth improvements and upgrades to wastewater conveyance systems, recycled water systems, and runoff management programs through 2020, and extends its planning horizon to 2040. The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for the city of Los Angeles to ensure greater resilience to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive Directive to reduce the City's purchase of imported water by 50 percent by 2024 (City of Los Angeles 2014). Major challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes.

General Plan Framework Element

The Framework Element establishes the conceptual basis for the City's General Plan (City of Los Angeles 2001). The Framework Element sets forth a comprehensive citywide long-range growth strategy and defines citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. Chapter 9, Infrastructure and Public Services, of the City's Framework Element identifies goals, objectives, and policies for City utilities, including water service. Goal 9C is to provide adequate water supply, storage facilities, and delivery system to serve the needs of existing and future water needs (City of Los Angeles 2001). The goals, objectives, and policies are addressed by the City in its ordinances and preparation of its UWMP. Table 4.15-4 shows the General Plan goals, objectives, and policies that relate to water supply.

Table 4.15-4 Relevant General Plan Framework's Water Supply Goals, Objectives, and Policies

Goal/Objective/Policy	Description
Goal 9C	Adequate water supply, storage facilities, and delivery system to serve the needs of existing and future residents and businesses.
Objective 9.8	Monitor and forecast water demand based upon actual and predicted growth.
Policy 9.8.1	Monitor water usage and population and job forecast to project future water needs.
Objective 9.9	Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.
Policy 9.9.1	Pursue all economically efficient water conservation measures at the local and statewide level.
Policy 9.9.7	Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.
Objective 9.10	Ensure that water supply, storage, and delivery systems are adequate to support planned development.
Policy 9.10.1	Evaluate the water system's capability to meet water demand resulting from the Framework Element's land use patterns.
Policy 9.10.2	Solicit public involvement, when appropriate, in evaluating options for the construction of new and/or expansion of existing water facilities.
Objective 9.11	Ensure, to the maximum extent possible, the continued provision of water capacity, quality and delivery after an earthquake or other emergency.
Policy 9.11.1	Provide for the prompt resumption of water service with adequate quantity and quality of water after an emergency.

Source: City of Los Angeles 2001

San Pedro Community Plan

The Land Use Element of the City's General Plan includes 35 community plans. Community plans are intended to provide an official guide for future development and propose approximate locations and dimensions for land use. The community plans establish standards and criteria for the development of housing, commercial uses, and industrial uses, as well as circulation and service systems. The community plans implement the City's General Plan Framework at the local level and consist of both text and an accompanying generalized land use map. The community plans' texts express goals, objectives, policies, and programs to address growth in the community, including those that relate to utilities and service systems required to support such growth. The community plans' maps depict the

desired arrangement of land uses, as well as street classifications and the locations and characteristics of public service facilities.

The project site is located within the San Pedro Community Plan Area. The following goals and policies in the San Pedro Community Plan related to water are applicable to the proposed project:

- **Goal CF8:** Provision of a high-quality and reliable supply of potable water to existing and future residents of the San Pedro community.
  - **Policy CF8.1, Conserve water.** Meet increases in the demand for water through conservation, the use of recycled water, and recharged local groundwater aquifers where permitted.
  - **Policy CF8.2, Water conservation for projects.** Require water conservation measures/ devices that limit water usage for all new municipal and private projects and major alterations to existing municipal and private facilities.

Los Angeles Municipal Code

The City has adopted several ordinances, later codified in the LAMC, in an effort to reduce water consumption. A summary of the City's key regulations regarding water conservation is provided below.

- Ordinance No. 180,822—amended LAMC Chapter XII, Article 5 to establish water efficiency requirements for new development and renovation of existing buildings, and mandate installation of high efficiency plumbing fixtures in residential and commercial buildings.
- Ordinance No. 181,480—amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the CALGreen Code. This ordinance added mandatory measures for newly constructed low-rise residential and non-residential buildings to reduce indoor water use by at least 20 percent by (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20-percent reduction in baseline water use.
- Ordinance Nos. 181,899 and 183,833—amended LAMC Chapter VI, Article 4.4, Section 64.72, regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.
- Ordinance No. 182,849—amended LAMC Chapter IX, Article 9 (Green Building Code) to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 sf, separate sub-meters or metering devices shall be installed for outdoor potable water use. This ordinance also required that for new non-residential construction with at least 1,000 sf of cumulative landscaped area, weather or soil moisture–based irrigation controllers and sensors be installed.
- Ordinance No. 184,692—amended LAMC Chapter IX, Article 4 (Plumbing Code) by adopting by reference various sections of the California Plumbing Code. This ordinance also added requirements for plumbing fixtures and fixture fitting.
- Ordinance No. 184,248—amended LAMC Chapter IX, Article 4 (Plumbing Code) and Article 9 (Green Building Code) to establish citywide water efficiency standards and mandate a number of new fixture requirements and methods of construction for plumbing and irrigation systems.

The City also has adopted numerous requirements related to the provision of water for the purpose of fire protection. These requirements are set forth in the Fire Code (LAMC Chapter V, Article 7). LAMC Section 57.507.3.1 establishes fire water flow standards. Fire water flow requirements, as determined by the Los Angeles Fire Department, vary by project site as they are dependent on land use (e.g., higher intensity land uses require higher flow from a greater number of hydrants), life hazard,

occupancy, and fire hazard level. As set forth in LAMC Section 57.507.3.1, fire water flow requirements vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial and/or industrial areas. A minimum residual water pressure of 20 psi is to remain in the water system with the required gpm flowing. LAMC Section 57.507.3.2 also addresses land use-based requirements for fire hydrant spacing and type. Land uses in the Industrial and Commercial category require one hydrant per 80,000 sf of land with 300-foot distances between hydrants, and 2.5-inch by 4-inch double fire hydrants or 4-inch by 4-inch double fire hydrants. Regardless of land use, every first story of a residential, commercial, and industrial building must be within 300 feet of an approved hydrant.

4.15.1.3 Environmental Impacts

a. Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a project would result in a significant impact related to water supply and/or infrastructure if it would:

1. Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects; and/or
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

For this analysis, the CEQA Guidelines Appendix G thresholds listed above are relied upon. The analysis also utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide (Thresholds Guide), as appropriate, to assist in answering the Appendix G threshold questions.

The Thresholds Guide identifies the following criteria to evaluate impacts related to water supply and/or infrastructure impacts:

- Would implementation of the proposed project cause the Community Plan Area to exceed the projected growth in population, housing, or employment for the year of project occupancy/ buildout?
- Would the project's water consumption require the construction of additional off-site water infrastructure?

Methodology

The analysis of project impacts on water supply is based on the WSA included in Appendix J. The WSA includes a conservative calculation of the project's anticipated water demand by applying wastewater generation rates to the proposed land uses associated with the project. Wastewater generation is based on land use-based generation factors from the City's Sewerage Facilities Charge Sewage Generation Factor for Residential and Commercial Categories (LASAN 2012). The WSA accounts for the reduction in project water demand with implementation of water conservation features. Existing water usage associated with existing uses on the project site is also considered. The resulting net increase in water demand associated with the project is then analyzed relative to LADWP's existing and planned future water supplies as set forth in its 2020 UWMP to determine if LADWP would be able to accommodate the project's water demand during average, single-dry and multiple-dry year hydrologic conditions.

b. Project Design Features

Construction and operation of the project would be implemented in accordance with applicable regulatory requirements (refer to Section 4.15.1.2, *Regulatory Setting*). No specific project design features are proposed with regard to water supply or infrastructure.

c. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Impact U-1 THE PROPOSED PROJECT WOULD INCLUDE NEW CONNECTIONS TO THE EXISTING POTABLE WATER DISTRIBUTION SYSTEM OWNED AND OPERATED BY LADWP, AS WELL AS POTENTIAL RELOCATIONS/UPGRADES OF EXISTING WATER MAINS WITHIN THE ROADWAYS SURROUNDING THE PROJECT SITE. THE POTENTIAL ENVIRONMENTAL EFFECTS ASSOCIATED WITH CONSTRUCTION OF THE PROPOSED NEW AND/OR RELOCATED INFRASTRUCTURE ARE ANALYZED THROUGHOUT THIS EIR/EIS, CONCURRENTLY WITH THE PROPOSED PROJECT AS A WHOLE. IN CONCLUSION, THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE CONSTRUCTION AND RELOCATION OF WATER FACILITIES FOR THE PROJECT WOULD BE LESS THAN SIGNIFICANT. DURING PROJECT OPERATION, NO IMPACTS ASSOCIATED WITH THE CONSTRUCTION AND RELOCATION OF WATER FACILITIES WOULD OCCUR.

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum of 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts to water facilities applies to both Scenario A and Scenario B.

Construction

The project site is composed of the OSP Specific Plan Site, which is currently developed with existing residential and supporting uses, and the 327 Harbor Site, which is currently undeveloped. Under the proposed project, a new potable water distribution system would be established across the project site to connect the proposed land uses to LADWP's existing water supply. As with the existing uses at the OSP Specific Plan Site, connections would be provided to the existing LADWP potable water mains located beneath the roadways surrounding the project site. In accordance with City of Los Angeles requirements, each building requires a separate domestic and fire water connection. It is anticipated that existing water laterals would be used to serve the proposed project, and some new laterals may also be required to satisfy the City standards (KPFF 2022).

Preliminary SARs and Information of Fire Flow Availability forms were completed for the existing water mains serving the OSP Specific Plan Site to determine if water capacity would be available to meet the proposed project's net water demand and fire flow increase requirements (LADWP 2022d and 2022f). The SAR and Information of Fire Flow Availability forms indicate the surrounding existing 8-inch water mains would likely satisfy the private water demands but that some existing mains may

need to be upgraded to meet fire flow requirements for the proposed project (KPFF 2022). A SAR and Information of Fire Flow Availability form were also completed for the 327 Harbor Site, and they indicate the existing surrounding water mains would likely satisfy the private water demands and fire flow requirements of the proposed development at the 327 Harbor Site (LADWP 2022c and 2022e). Accordingly, if it is determined by LADWP that water mains within and/or adjacent to the project site have insufficient capacity to deliver the necessary private water supply and fire flow to the project site, improvements to the existing water mains serving the project site may be required. Final requirements would be determined in coordination with LADWP and the Los Angeles Fire Department (LAFD) (KPFF 2022).

Construction impacts associated with the installation and/or upgrading of water distribution lines would primarily involve trenching to place the lines below the surface. Installation of new water infrastructure would be limited to on-site water distribution and off-site work associated with water main relocations/upgrades and connections to the public main. Improvements to the existing mains serving the project site, if required, as well as connections to serve the proposed new structures, would be installed within the project's disturbance footprint and in previously disturbed roadways.

Prior to ground disturbance, project contractors would coordinate with LADWP to identify the locations and depth of all water mains and lines. LADWP would be notified in advance of proposed ground disturbance activities to avoid existing underground utilities and disruption of existing water service to current site occupants and surrounding land uses. The potential environmental effects associated with proposed new and/or relocated infrastructure are analyzed throughout Section 4, *Environmental Impacts*, of this EIR/EIS, concurrently with the proposed project as a whole. Sections in the EIR which describe potential environmental effects associated with water supply infrastructure include, but are not limited to: (1) Section 4.3, *Cultural Resources*, Section 4.4, *Geology and Soils*, Section 4.5, *Hazards and Hazardous Materials*, Section 4.7, *Hydrology and Water Quality*, Section 4.14, *Tribal Cultural Resources*, and Section 4.16, *Effects Found Not to be Significant*, which discuss potential impacts associated with ground-disturbing activities, and (2) Section 4.2, *Air Quality*, Section 4.5, *Greenhouse Gas Emissions*, Section 4.9, *Noise*, which discuss emissions, noise, and vibration from construction; and (3) Section 4.11, *Public Services*, and 4.13, *Transportation*, which discuss the potential impacts to the circulation system and emergency access and response due to construction activities in the public rights-of-way. In conclusion, the potential environmental impacts associated with the construction and relocation of water facilities for the project would be less than significant.

Operation

Upon completion of construction activities, the water distribution system serving the project site would be adequately sized to accommodate the proposed land uses and density. Occasional minor maintenance activities may be required to repair infrastructure as it ages. However, future relocation and expansion of the water distribution system during project operation are not anticipated. Therefore, no operational impacts associated with the construction and relocation of water facilities are anticipated.

Mitigation Measures

Project-level impacts associated with the construction and relocation of water facilities would be less than significant. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts would be less than significant without mitigation.

Threshold 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?

Impact U-2 SHORT-TERM AND TEMPORARY PROJECT CONSTRUCTION WATER DEMAND WOULD BE MINIMAL AND MAINLY LIMITED TO SUPPRESSING DUST DURING THE DEMOLITION, SITE PREPARATION, AND GRADING STAGES. CONSTRUCTION IMPACTS WOULD BE LESS THAN SIGNIFICANT. DURING OPERATION, THE PROPOSED PROJECT'S NET INCREASE IN WATER USE ON THE PROJECT SITE WOULD BE APPROXIMATELY 126.94 AFY. SUFFICIENT WATER SUPPLY DURING PROJECT OPERATION WOULD BE AVAILABLE TO SERVE THE PROJECT AND REASONABLY FORESEEABLE FUTURE DEVELOPMENT DURING NORMAL, DRY, AND MULTIPLE DRY YEARS BASED ON LADWP'S UWMP, AND OPERATIONAL IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum off 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts to water facilities applies to both Scenario A and Scenario B.

Construction

Water usage at the project site would slightly increase during project construction, mainly for dust control during soil excavation/export, removal, and re-compaction during the demolition, site preparation, and grading stages. Pursuant to the requirements of SCAQMD Rule 403, as described in Section 4.2, *Air Quality*, all graded/disturbed areas within the project site are required to be watered daily throughout the construction period to reduce fugitive dust generation from construction activities. Water consumption by construction workers and for equipment rinsing/cleaning may also account for a small portion of overall construction water demand.

Water demand for dust suppression is highly dependent on a number of site-specific variables, including soil properties, antecedent moisture conditions, and other climatic factors. A 2017 analysis prepared by SCAQMD estimated water demand associated with Rule 403 dust suppression requirements for construction sites in SCAQMD jurisdiction at approximately 1,000 gallons per acre per day (SCAQMD 2017). Dust suppression would be required during project site preparation, grading, utilities trenching/installation, and demolition activities. On the OSP Specific Plan, a total of 897 days of construction would require dust suppression, resulting in approximately 6,147,526 gallons of water use over the approximately 14-year construction period, or an average of 439,109 gallons of water per year. At the 327 Harbor Site, there would be approximately 27 days of construction requiring dust suppression, resulting in approximately 15,149 gallons of water use during construction. This demand would be short-term and temporary in nature and would represent less water usage than current water use associated with the existing Rancho San Pedro housing complex, which is 34,061,199 gallons per year. Given the temporary and minimal amount of construction water demand, there would be sufficient water supplies to provide adequate water during project construction. Impacts to water supplies during project construction would be less than significant.

Operation

The proposed project would result in a net increase in long-term operational water demand, which was analyzed in a project-specific WSA prepared by LADWP (LADWP 2022a). The existing water demand of the project site is approximately 104.53 AFY. Based on the development of 1,600 residential units, 85,000 sf of neighborhood serving uses, 45,000 sf of commercial uses, 431,159 sf of landscaping, and 945,090 sf of covered parking areas, the proposed project would require approximately 247.58 gross AFY of water without implementing water conservation measures (LADWP 2022a). As stated in the WSA, the project applicant has committed to water conservation measures that would reduce the proposed project's water demand by approximately 16.11 AFY (LADWP 2022a). The water conservation measures include use of low-flow toilets and showerhead fixtures. Accordingly, the net increase in water demand for the project site after construction would be approximately 126.94 AFY[1] (or 113,305 gpd) (LADWP 2022a).

LADWP finds adequate water supplies would be available to meet the total net water demand of 126.94 AFY for the proposed project, including during normal, single-dry, and multiple-dry water years, as well as the existing and planned future demands on LADWP (LADWP 2022a).

The basis for approving WSAs for projects is LADWP's most recently adopted UWMP. LADWP's water demand forecast, as contained in LADWP's 2020 UWMP, uses long-term demographic projections for population, housing, and employment. The California Urban Water Management Planning Act requires water suppliers to develop an UWMP every five years to identify short- and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. If the projected water demand associated with the proposed project was not accounted for in the most recently adopted LADWP 2020 UWMP, the WSA must include a discussion with regard to whether LADWP's total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection would meet the projected water demand associated with the project, in addition to LADWP's existing and planned future uses.

The City's water demand projection in LADWP's 2020 UWMP was developed based on the 2020-2045 RTP/SCS demographic projection by SCAG. The demographic projection was provided to LADWP from MWD, who collaborates with SCAG to aggregate demographic data for each of its 26 member agencies. LADWP's 2020 UWMP identified water supplies to meet projected water demands through 2045. Therefore, the City's water supply projections in LADWP's 2020 UWMP are sufficient to meet the water demand for projects that are determined by the CEQA lead agency to be consistent with the 2020-2045 RTP/SCS.

The proposed project would include a General Plan Amendment for implementation of the OSP Specific Plan. As discussed in Section 4.10, *Population and Housing*, the proposed project would be consistent with the city's population projections in the 2020-2045 RTP/SCS. As previously stated, pursuant to the project-specific WSA, the project's anticipated water supply demand is accounted for within LADWP's 2020 UWMP projected water supplies for normal, single-dry, and multiple-dry years through the year 2045 and is also within the LADWP's 2020 UWMP 25-year water demand growth projection. Additionally, LADWP's 2020 UWMP contains a Water Shortage Contingency Plan (WSCP) that was adopted in May 2021. The WSCP complies with the California Water Code and is based on the City's Emergency Water Conservation Plan implemented in June 2009. The WSCP establishes six standard water supply shortage levels and corresponding shortage response actions, which the City can implement during a water supply shortage.

[1] 247.58 gross AFY – 104.53 existing AFY – 16.11 AFY for water conservation measures = 126.94 AFY

In addition, LADWP issued a "Will Serve" letter for the proposed project on March 9, 2021 (LADWP 2021b), consistent with the findings of the WSA for the project (LADWP 2022a). As described above, the proposed project's projected net increase in water demand would be within the anticipated increase in water demand through 2040, as accounted for in LADWP's 2020 UWMP.

In summary, there would be sufficient water supplies available to serve project operation, as well as reasonably foreseeable future development, during normal, dry, and multiple dry years, and project operational impacts on water supply would be less than significant.

Mitigation Measures

Impacts associated with water supply during construction and operation of the proposed project would be less than significant. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts would be less than significant without mitigation.

4.15.1.4 Cumulative Impacts

The geographic area to analyze cumulative impacts to water infrastructure and water supply includes the entire service territory of LADWP, which is the water supply provider for the proposed project site. The proposed project would include new connections to the existing potable water distribution system owned and operated by LADWP, as well as potential relocations/upgrades of existing water mains within the roadways surrounding the proposed project site. The potential environmental effects associated with proposed project-related new and/or relocated infrastructure are analyzed throughout this EIR/EIS, concurrently with the proposed project as a whole, and potential proposed project-related impacts would be less than significant (Impact U-1). Cumulative projects would also likely result in the need for new and/or upgraded water mains and pipelines through the LADWP service area. Similar to the analysis in this EIR/EIS, as part of the CEQA compliance process for cumulative projects would analyze potential environmental effects associated with the construction and relocation of associated water infrastructure. Similar to the proposed project, cumulative projects would likely result in less than significant impacts associated with the construction and relocation of water facilities because it is anticipated that such activities would occur within the disturbance footprint and would be coordinated with LADWP. Therefore, cumulative impacts associated with the construction/relocation of water facilities would be less than significant.

With regard to water supply, as discussed under Impact U-2, the proposed project would result in a net increase in water demand at the proposed project site of 126.94 AFY and, based on the proposed project-specific WSA prepared by LADWP, LADWP would have sufficient water supply to serve the proposed project during normal, dry, and multiple dry years. The WSA for the proposed project is based on projected water demands within LADWP's current (2020) UWMP. The 2020 UWMP is based on the projected population growth in the service area included in SCAG's 2020-2045 RTP/SCS, and therefore, the UWMP takes into account the cumulative projects. Additionally, cumulative projects would be subject to the requirement of project-specific WSAs from LADWP prior to approval. LADWP's 2020 UWMP also includes a WSCP and establishes response actions the City will implement in the event of a water supply shortage (LADWP 2022a). Furthermore, MWD, from which LADWP purchases its imported SWP and Colorado River water supplies, is actively developing plans and making efforts to provide additional water supply reliability for the entire southern California region (LADWP 2022a; MWD 2021). Accordingly, sufficient water supply would be available for the proposed

project and cumulative development, and cumulative impacts to water supply would be less than significant.

4.15.2 Wastewater Treatment

This section provides an analysis of the proposed project's potential impacts to wastewater treatment infrastructure/facilities serving the project site. This section includes a description of the existing wastewater infrastructure and treatment facilities serving the project site, estimated wastewater generation associated with the proposed project, and an assessment of whether there would be sufficient wastewater infrastructure and treatment facility capacity to meet the needs of the project. This analysis is based in part on the project-specific WSA, the Civil/Site Utilities Report dated July 2019, and the Wastewater Service Information letters provided by the City of Los Angeles Bureau of Sanitation (LASAN), included as Appendix J of this EIR/EIS.

4.15.2.1 Environmental Setting

a. Wastewater Generation

As discussed in Section 2, *Project Description*, the OSP Specific Plan Site is currently developed with 478 residential units and 8,000 sf of amenities, services, and administrative uses. The 327 Harbor Site is currently vacant and undeveloped. Existing wastewater generation for the project site was calculated using standard wastewater generation rates from LASAN *Sewerage Facilities Charge Sewage Generation Factor for Residential and Commercial Categories* (LASAN 2012). Based on these rates, the total existing average daily wastewater generation is approximately 75,420 gpd, as shown in Table 4.15-5.

Table 4.15-5 Wastewater Generation – Existing Development

Land Use	Development	Wastewater Generation Rate (gpd)[1]	Wastewater Generation (gpd)
One-Bedroom Units	104	110/du	11,440
Two-Bedroom Units	255	150/du	38,250
Three-Bedroom Units	75	190/du	14,250
Four-Bedroom Units	34	230/du	7,820
Five-Bedroom Units	10	270/du	2,700
Existing Services and Amenities (sf)	8,000	120/1,000 gross sf	960
Total			**75,420**

du = dwelling unit; gpd = gallons per day; sf = square feet
[1] LASAN 2012

b. Wastewater Infrastructure

Sanitary sewer service for the project site is provided by LASAN. The existing wastewater collection system includes more than 6,700 miles of public sewers, which serves a population of more than four million people and conveys approximately 400 million gallons per day (mgd) of raw wastewater to the City's four wastewater treatment and water reclamation plants (LASAN 2022a).

As described in the Requests for Wastewater Service Information included in Appendix K, sanitary sewer service to the project site is provided by LASAN from 13 existing sanitary sewer lines in the vicinity of the project site, as listed in Table 4.15-6.

Table 4.15-6 Sanitary Sewer Service

Pipe Location	Pipe Diameter (inches)	50% Design Capacity (mgd)
Mesa Street	8	0.92
2nd Street	8	0.59
Santa Cruz Street	8	1.21
Palos Verdes Street	8	1.38
Beacon Street	8	0.23
Harbor Boulevard	8	0.23
O'Farrell Street	8	0.30
1st Street	15	0.78
Terminal Way	20	0.42
Harbor Boulevard	21	1.50
Harbor Boulevard	33	1.59
Beacon Street	33	10.53
Front Street	54	24.33

mgd = million gallons per day
Source: LASAN 2022b and 2022c (Appendix K)

Sewer flows originating from the project site are collected and conveyed through a network of sewer lines for treatment at the Terminal Island Water Reclamation Plant (LASAN 2022b and 2022c).

c. Wastewater Treatment

LASAN is responsible for the operation of wastewater treatment facilities in the city. The main purpose of these treatment facilities is to remove potential pollutants from sewage in order to protect river and marine environments and public health (LASAN 2022d). LASAN operates four water reclamation plants and divides the wastewater treatment system of the city into two major service areas: the Hyperion Service Area and the Terminal Island Service Area. The Hyperion Service Area includes the Hyperion Water Reclamation Plant, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant. The Terminal Island Service Area includes the Terminal Island Water Reclamation Plant. The project site is located within the Terminal Island Service Area and is served by the Terminal Island Sanitary Sewer System and Terminal Island Water Reclamation Plant.

Terminal Island Sanitary Sewer System

The existing design capacity of the Terminal Island Sanitary Sewer System is approximately 30 mgd, and approximately 15 mgd of wastewater is treated at the water reclamation plant. Roughly 60 percent of the wastewater treated at the Terminal Island Water Reclamation Plant is produced by

industrial uses in the harbor area, with 40 percent from residential areas (LASAN 2022e). The One Water LA 2040 Plan – Wastewater Facilities Plan projects that annual average wastewater flows in the Terminal Island Sanitary Sewer System would increase to 16 mgd in 2020, 18 mgd in 2030 and 2040 (LASAN 2018). As such, current and projected flows to the year 2040 are and would continue to be below the design capacity of approximately 30 mgd for the Terminal Island Sanitary Sewer System.

Terminal Island Water Reclamation Plant

As discussed above, wastewater generated from the project site is conveyed via the local collector sanitary sewer system directly to the Terminal Island Water Reclamation Plant for treatment. The water reclamation plant has the capacity to treat approximately 30 mgd. According to LASAN, the Terminal Island Water Reclamation Plant currently treats a daily average of approximately 15 mgd (LASAN 2022e). As such, the Terminal Island Water Reclamation Plant is currently operating at approximately 50 percent of its capacity, with a remaining available capacity of approximately 15 mgd.

Incoming wastewater to the treatment plant initially passes through screens and basins to remove coarse debris and grit. This is followed by primary treatment, which is a physical separation process where heavy solids settle to the bottom of tanks while oil and grease float to the top. These solids, called sludge, are collected, treated, and recycled. The portion of water that remains, called primary effluent, is treated through secondary treatment using a natural, biological approach. Living micro-organisms are added to the primary effluent to consume organic pollutants. These micro-organisms are later harvested and removed as sludge (LASAN 2022f). In addition, the Terminal Island Water Reclamation Plant is also equipped with an advanced water purification facility, which allows the purification of 12 mgd of wastewater to produce recycled water of drinking water quality (LASAN 2022e). The majority of effluent produced at the Terminal Island Water Reclamation Plant is recycled and reused for non-potable uses in the harbor area, including for groundwater injection into the Dominguez Gas Seawater Intrusion Barrier (LASAN 2018). The Terminal Island Water Reclamation Plant is also permitted to discharge brine, peak wet weather flows, and preventative maintenance flows into the Los Angeles Harbor via an outfall.

4.15.2.2 Regulatory Setting

a. State Laws and Regulations

California Green Building Standards Code

The CALGreen Code is set forth in CCR Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all flush toilets are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at 2.0 gpm at 80 psi for showerheads, 1.2 gpm at 60 psi for residential lavatory faucets, and 1.8 gpm at 60 psi for kitchen faucets.

b. Local Laws and Regulations

City of Los Angeles General Plan Framework

The Framework Element establishes the conceptual basis for the City's General Plan (City of Los Angeles 2001). The Framework Element sets forth a comprehensive citywide long-range growth strategy and defines citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. Chapter 9, Infrastructure and Public Services, of the Framework Element identifies goals, objectives, and policies for utilities in the city, including wastewater collection and treatment. Goal 9A is to provide adequate wastewater collection and treatment capacity for the city and in basins tributary to City-owned wastewater treatment facilities (City of Los Angeles 2001).

Los Angeles Integrated Resources Plan

The City of Los Angeles' IRP was developed by multiple departments in order to address the facility needs of the City's wastewater program, recycled water, and urban runoff/stormwater management through the year 2020 (LASAN and LADWP 2006).

The Final Water IRP 5-Year Review was released in June 2012, which included 12 projects that were separated into two categories: (1) "Go Projects" for immediate implementation; and (2) "Go-If Triggered Projects" for implementation in the future once a trigger is reached (LASAN and LADWP 2012). Triggers for these projects include wastewater flow, population, regulations, or operational efficiency. Based on the Final IRP 5-Year Review, the Go Projects consisted of six capital improvement projects for which triggers were considered to have been met at the time the IRP EIR was certified. The Go-If Triggered Projects consisted of six capital improvement projects for which triggers were not considered to have been met at the time the IRP EIR was certified.

Since the implementation of the IRP, new programs and projects, which have resulted in a substantial decrease in wastewater flows, have affected the Go Projects and Go-If Triggered Projects. Based on the Final IRP 5-Year Review, two of the Go Projects have been moved to the Go-If Triggered category (Go Project 2 and Go Project 3) and two have been deferred beyond the 2020 planning window of the IRP (Go Project 4 and Go Project 5). Construction of wastewater storage facilities at the Donald C. Tillman Water Reclamation Plant (Go Project 1) has been completed. In addition, Go Project 6, involving the design of the Northeast Interceptor Sewer Phase II, is no longer being pursued (City of Los Angeles Bureau of Engineering [LABOE] 2022).

One Water LA 2040 Plan

In April 2018, the City prepared the One Water LA 2040 Plan (One Water LA Plan), an integrated approach to citywide recycled water supply, wastewater treatment, and stormwater management (City of Los Angeles 2018). The new plan builds upon the City's Water IRP, which projected needs and set forth improvements and upgrades to wastewater conveyance systems, recycled water systems, and runoff management programs through the year 2020, and extends its planning horizon to 2040. The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for Los Angeles to ensure greater resilience to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive Directive to reduce the City's purchase of imported water by 50 percent by 2024 (City of Los Angeles 2014). Major

challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes.

Los Angeles Municipal Code

Los Angeles Green Building Code

The City has been pursuing a number of green development initiatives intended to promote energy conservation and reductions in the amount of GHG emissions generated within the city. While these ordinances do not focus on the provision of sewer services, they do mandate the use of water conservation features in new developments. Examples of such water conservation features include, but are not limited to, low water shower heads, toilets, clothes washers, and dishwashers. Because the flow through these fixtures is reduced, residual wastewater passing through is reduced, in turn reducing the demand for sewage conveyance and treatment.

LAMC Chapter IX, Article 9, the Los Angeles Green Building Code (LA Green Building Code, Ordinance No. 181,480), was adopted in April 2008 and provides standards and a mechanism for evaluating projects for their water conservation features during site plan review. The LA Green Building Code has been subsequently amended to incorporate various provisions of the CALGreen Code. The LA Green Building Code includes mandatory requirements and elective measures pertaining to wastewater for three categories of buildings, the first of which applies to the proposed project: (1) low-rise residential buildings; (2) non-residential and high-rise residential buildings; and (3) additions and alterations to residential and non-residential buildings.

Sewer Capacity Availability Review

The LAMC includes regulations that require the City to assure available sewer capacity for new projects and to collect fees for improvements to the infrastructure system. LAMC Section 64.15 requires that the City perform a Sewer Capacity Availability Review when an applicant seeks a sewer permit to connect a property to the City's sewer system, proposes additional discharge through its existing public sewer connection, or proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day. A Sewer Capacity Availability Review provides a preliminary assessment of the capacity of the existing municipal sewer system to safely convey a project's newly generated wastewater to the appropriate sewage treatment plant.

Sewerage Facilities Charge

LAMC Sections 64.11 and 64.12 require approval of a sewer permit, also called an "S" Permit, prior to connection to the wastewater system. LAMC Sections 64.11.2 and 64.16.1 require the payment of fees for new connections to the City's sewer system to assure the sufficiency of sewer infrastructure. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength as well as volume. The determination of wastewater flow strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Sewerage Facilities Charge fees are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including, but not limited to, industrial waste control and water reclamation purposes.

Bureau of Engineering Special Order

The City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City standards (LABOE Special Order No. SO 06-0691). Pursuant to the Special Order, lateral sewers, which are sewers 18 inches or less in diameter, must be designed for a planning period of 100 years. The Special Order also requires that sewers be designed so that the peak dry weather flow depth during their planning period does not exceed one-half of the pipe diameter (i.e., depth-to-diameter ratio) (LABOE 1991).

4.15.2.3 Environmental Impacts

a. Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a project would result in a significant impact related to wastewater infrastructure if it would:

1. Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects; and/or
2. 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.

For this analysis, the CEQA Guidelines Appendix G thresholds listed above are relied upon. The analysis also utilizes factors and considerations identified in the Thresholds Guide, as appropriate, to assist in answering the Appendix G threshold questions.

The Thresholds Guide identifies the following criteria to evaluate impacts related to wastewater infrastructure impacts:

- The project would cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; and/or
- The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.

Methodology

The rate of wastewater generated from a given project site is estimated using land use-based generation factors from the City's *Sewerage Facilities Charge Sewage Generation Factor for Residential and Commercial Categories* (LASAN 2012). Wastewater generation rates associated with existing uses on the project site are also considered and evaluated against the proposed project land uses and associated wastewater generation. To evaluate potential impacts of the proposed project, and as directed by the current CEQA Guidelines and the Thresholds Guide, the analyses below evaluate the proposed project's needs for wastewater treatment, including as related to the conveyance of raw effluent from project development to the Terminal Island Water Reclamation Plant for treatment, as well as the capacity of the Terminal Island Water Reclamation Plant to meet the wastewater treatment needs of the project in addition to other existing and anticipated demands.

b. Project Design Features

Construction and operation of the project would be implemented in accordance with applicable regulatory requirements (refer to Section 4.15.2.2, *Regulatory Setting*). No specific project design features are proposed with regard to wastewater.

c. Project Impacts and Mitigation Measures

Threshold 3:	Would the project require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

Impact U-3 THE PROPOSED PROJECT WOULD INCLUDE NEW SEWER CONNECTIONS WITHIN THE PROJECT SITE AND COULD ALSO POTENTIALLY REQUIRE ADDITIONAL SEWER LINES OFF SITE TO ENSURE ADEQUATE FLOW CAPACITY. THE POTENTIAL ENVIRONMENTAL EFFECTS ASSOCIATED WITH PROPOSED NEW INFRASTRUCTURE ARE ANALYZED THROUGHOUT THIS EIR/EIS, CONCURRENTLY WITH THE PROPOSED PROJECT AS A WHOLE. THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF WASTEWATER CONVEYANCE/TREATMENT FACILITIES FOR THE PROJECT WOULD BE LESS THAN SIGNIFICANT. IT IS NOTED THAT IF THE EXTENT OF NEW SEWER LINES EXTENDS BEYOND THE ROADWAYS SURROUNDING THE PROJECT SITE, ADDITIONAL CEQA COMPLIANCE MAY BE REQUIRED PRIOR TO CONSTRUCTION OF SUCH SEWER LINES. DURING PROJECT OPERATION, NO IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF WASTEWATER CONVEYANCE/TREATMENT FACILITIES WOULD OCCUR.

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum off 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts to wastewater facilities applies to both Scenario A and Scenario B.

Construction

Requests for Wastewater Service applications were completed for the sewer mains in the project area to determine if there is adequate availability to accommodate the anticipated wastewater flow associated with the proposed project (LASAN 2022b and 2022c). Based on the conceptual site plan and proposed unit counts, LASAN concluded the existing sewer system may be able to accommodate increased wastewater flows from the project (LASAN 2022b and 2022c). LASAN noted that further detailed gauging and evaluation would be required as part of the permit process to identify specific sewer connection points, and if the public sewer has insufficient capacity, the project developer would be required to construct additional sewer lines from the project site to intersect with existing sewer mains/lines with current capacity to accommodate the increased wastewater from the project site (LASAN 2022b and 2022c). Wastewater from the proposed project would then be conveyed to the Terminal Island Water Reclamation Plant for treatment. The Terminal Island Water Reclamation Plant has sufficient capacity to accommodate the net increase in wastewater from the project (LASAN 2022b and 2022c).

Construction impacts associated with the installation of any necessary sewer lines would primarily involve trenching to place the lines below the surface. Installation of new sewer infrastructure for the project would be limited to on- and off-site work associated with on-site sewer lines and off-site sewer connections to intersect with existing off-site mains/lines with adequate capacity to accommodate the increased wastewater from the project site. Sewer improvements, if required, would be installed within the project's disturbance footprint and in previously disturbed roadways.

Prior to ground disturbance, project contractors would coordinate with LASAN to identify the locations and depth of all sewer mains and lines. LASAN would be notified in advance of proposed ground disturbance activities to avoid existing underground utilities and disruption of existing sewer service to current site occupants and surrounding land uses. The potential environmental effects associated with potential new infrastructure are analyzed throughout Section 4, *Environmental Impacts*, of this EIR/EIS, concurrently with the proposed project as a whole. Sections in the EIR which describe potential environmental effects associated with new wastewater infrastructure include, but are not limited to: (1) Section 4.3, *Cultural Resources*, Section 4.4, *Geology and Soils*, Section 4.5, *Hazards and Hazardous Materials*, Section 4.7, *Hydrology and Water Quality*, Section 4.14, *Tribal Cultural Resources*, and Section 4.16, *Effects Found Not to be Significant*, which discuss potential impacts associated with ground-disturbing activities, (2) Section 4.2, *Air Quality*, Section 4.5, *Greenhouse Gas Emissions*, Section 4.9, *Noise*, which discuss emissions, noise, and vibration from construction; and (3) Section 4.11, *Public Services*, and 4.13, *Transportation*, which discuss the potential impacts to the circulation system and emergency access and response due to construction activities in the public rights-of-way. In conclusion, the potential environmental impacts associated with the construction of new or expanded wastewater treatment facilities and infrastructure for the project would be less than significant.

Operation

Upon completion of construction activities, the wastewater conveyance/treatment system serving the project site would be adequately sized to accommodate the proposed land uses and density. Occasional minor maintenance activities may be required to repair infrastructure as it ages. However, future relocation and expansion of the wastewater conveyance/treatment system during project operation are not anticipated. Therefore, no operational impacts associated with the construction and relocation of wastewater facilities are anticipated.

Mitigation Measures

Project-level impacts associated with the construction of wastewater treatment facilities would be less than significant. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts would be less than significant without mitigation.

Threshold 4:	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 commitments?

Impact U-4 THE NET INCREASE IN WASTEWATER GENERATION AT THE PROJECT SITE BY THE PROPOSED PROJECT (150,902 GPD) WOULD BE TREATED AT THE TERMINAL ISLAND WATER RECLAMATION PLANT, WHICH HAS SUFFICIENT CAPACITY TO SERVE THE PROJECT IN ADDITION TO EXISTING WASTEWATER TREATMENT DEMANDS. THEREFORE, PROJECT IMPACTS TO LASAN'S WASTEWATER TREATMENT FACILITIES WOULD BE LESS THAN SIGNIFICANT.

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum off 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts to wastewater facilities applies to both Scenario A and Scenario B.

The project site is served by existing wastewater conveyance infrastructure within the adjacent roadways. The OSP Specific Plan Site is currently developed with Rancho San Pedro, which includes 478 residential units and 8,000 sf of supporting services and amenities. The existing wastewater generation rates associated with these land uses are shown above in Table 4.15-5. The existing land uses at the OSP Specific Plan Site generate approximately 75,420 gpd of wastewater. The 327 Harbor Site is currently undeveloped, and no wastewater is generated on the site. Wastewater flows from the project site are treated at the Terminal Island Water Reclamation Plant, as discussed in Section 4.15.2.1, *Environmental Setting*.

The proposed project would increase the density of development on the project site and result in increased wastewater flows and treatment demand. Based on the LASAN *Sewerage Facilities Charge Sewage Generation Factor for Residential and Commercial Categories*, as applied in the project-specific WSA, the proposed project's average daily wastewater generation would be approximately 226,322 gpd (LADWP 2022a). This equates to a net increase of 150,902 gpd compared to existing uses, as shown in Table 4.15-7.

Table 4.15-7 Proposed Project Wastewater Generation

Land Use	Development	Wastewater Generation Rate (gpd)	Wastewater Generation (gpd)
Studio Units	203	75/du	15,225
One-Bedroom Units	599	110/du	65,890
Two-Bedroom Units	497	150/du	74,550
Three-Bedroom Units	261	190/du	49,590
Four-Bedroom Units	30	230/du	6.900
Five-Bedroom Units	10	270/du	2,700
Administration and Recreation Center	5,000 sf	120/1,000 gross sf	600
Health Clinic	5,000 sf	250/1,000 gross sf	1,250
Workforce Development Center	5,000 sf	120/1,000 gross sf	600
Senior Center	5,000 sf	120/1,000 gross sf	600
Childcare Center	4,000 sf	200/1,000 gross sf	800
Business Incubator	10,000 sf	120/1,000 gross sf	1,200
Art and Maker Space	4,000 sf	120/1,000 gross sf	480
Youth Center	14,000 sf	120/1,000 gross sf	1,680
Wellness Center	5,000 sf	120/1,000 gross sf	600
Bike Shop	4,000 sf	50/1,000 gross sf	200
Neighborhood Serving Commercial Uses	24,000 sf	50/1,000 gross sf	1,200
Market/Pharmacy	15,000 sf	50/1,000 gross sf	750
Restaurants	240 seats	30/seat	7,200
Shops/Food	24,000 sf	50/1,000 gross sf	1,200
Total Wastewater Production			226,322
Existing Wastewater Production			*75,420*
Net Wastewater Production			**150,902**

du = dwelling unit; gpd = gallons per day; sf = square feet
Sources: LASAN 2012; LADWP 2022a

Wastewater produced by the proposed project would be treated at the Terminal Island Water Reclamation Plant, which has a treatment capacity of 30 mgd, and currently treats approximately 15 mgd of wastewater on a dry weather day (LASAN 2022e). Therefore, the Terminal Island Water Reclamation Plant has a remaining capacity of approximately 15 mgd. The project's net wastewater generation rate would be approximately 0.151 mgd, or approximately 1 percent of the existing remaining capacity at Terminal Island Water Reclamation Plant. As indicated in the Requests for Wastewater Service Information letters provided by LASAN, the Terminal Island Water Reclamation Plant has sufficient capacity to accommodate the proposed project in addition to LASAN's existing

commitments (LASAN 2022b and 2022c). Therefore, project impacts to wastewater treatment facilities would be less than significant.

Mitigation Measures

Project-level impacts associated with LASAN's wastewater treatment facilities would be less than significant. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts would be less than significant without mitigation.

4.15.2.4 Cumulative Impacts

The geographic area to analyze cumulative impacts to wastewater treatment includes the entire service territory of LASAN, which is the wastewater conveyance and treatment provider for the proposed project site. The proposed project would include new sewer connections within the proposed project site and could also potentially require additional sewer lines off site to ensure adequate flow capacity. The potential environmental effects associated with proposed project-related new sewer infrastructure are analyzed throughout this EIR/EIS, concurrently with the proposed project as a whole, and potential proposed project-related impacts would be less than significant (Impact U-3). Cumulative projects would also likely result in the need for new and/or upgraded sewer lines throughout the LASAN service area. Similar to the analysis in this EIR/EIS, as part of the CEQA compliance process for cumulative projects would analyze potential environmental effects associated with the construction of associated sewer infrastructure. Like the proposed project, cumulative projects would likely result in less than significant impacts associated with the construction of wastewater conveyance/treatment facilities. Therefore, cumulative impacts associated with the construction of wastewater conveyance/treatment facilities would be less than significant.

As discussed under Impact U-4, the proposed project would result in a net increase in wastewater generation at the proposed project site of 150,902 gpd, which would be treated at the Terminal Island Water Reclamation Plant, which has sufficient capacity to serve the proposed project in addition to cumulative projects. Accordingly, cumulative impacts to LASAN's wastewater treatment facilities would be less than significant.

4.15.3 Solid Waste

4.15.3.1 Environmental Setting

a. Solid Waste Collection and Disposal

Within the city, solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Refuse from single-family residential, small multi-family residential uses (fewer than four units), and some City facilities is collected by LASAN and disposed of at City-operated recycling and transfer stations. LASAN collects over one million tons of refuse annually, averaging 6,652 tons per day (LASAN 2022g). Large multi-family residences, such as apartment complexes and condominiums, and commercial and industrial buildings, are serviced through the Zero Waste LA Franchise System and disposed of at a landfill operated by the County or a private company. In March 2013, the City achieved a waste diversion

rate of 76.4 percent, exceeding the required 50 percent diversion rate required by Assembly Bill (AB) 939 (LASAN 2022h).

b. Landfills

Landfills that serve Los Angeles County are shown in Table 4.15-8. As shown, the landfills serving the county have a remaining daily intake capacity of 25,640 tons per day (tpd).

Table 4.15-8 Landfill Capacities

Facility Name	Estimated Remaining Life (years)	Estimated Remaining Capacity (tons)	Permitted Daily Intake (tpd)	Average Daily Disposal (tpd)	Available Daily Intake (tpd)
Antelope Valley Recycling and Disposal Facility	9	10,178,644	3,600	2,785	815
Azusa Land Reclamation Company Landfill	—*	58,841,274	8,000	1,025	6,975
Burbank Landfill No. 3	110	2,370,357	240	125	115
Calabasas Landfill	14	4,028,220	3,500	955	2,545
Chiquita Canyon Landfill	27	54,420	12,000	6,114	5,886
Lancaster Landfill and Recycling Center	81	9,873,404	3,000	395	2,605
Pebbly Beach Landfill	6	32,093	49	9	40
Scholl Canyon	8	3,408,185	3,400	1,486	1,914
Sunshine Canyon City/County Landfill	17	54,079,158	12,100	7,420	4,680
Whittier (Savage Canyon) Landfill	35	4,261,790	350	285	65
Total					**25,640**

* = Information not available; tpd = tons per day

Source: LACDPW 2021

Transformation Facilities and Conversion Technologies

The Southeast Resource Recovery Facility is the only transformation facility within the County. This facility is located in the city of Long Beach and has a permitted intake of 2,240 tpd of solid waste and takes in an average of 1,231 tpd. Therefore, this facility has a daily intake availability of 1,009 tpd of solid waste. It is expected that this facility will continue to operate at its current permitted capacities through the planning period of 2024. The County is exploring the use of conversion technologies to reduce future disposal needs as well as address global climate change. These technologies encompass a variety of processes that convert nonhazardous household trash into renewable energy, biofuels, and other useful products (Los Angeles County Department of Public Works [LACDPW] 2021).

c. Recycling Facilities

As of 2013, approximately 76 percent of waste generated in the city was diverted from landfills and recycled (LASAN 2022h). The Solid Resources Citywide Recycling Division of LASAN develops and implements source reduction, recycling, and composting programs in the city. The Solid Resources Citywide Recycling Division also provides technical assistance to public and private recycling

operations, oversees the City's recycling program, manages the Household Hazardous Waste Program, and helps create markets for recyclable materials (LASAN 2013).

In order to help meet the diversion goals of AB 939, the City adopted the Citywide Construction and Demolition Waste Recycling Ordinance (Ordinance No. 181,519). This ordinance requires that all haulers and contractors responsible for handling construction and demolition waste obtain a Private Solid Waste Hauler Permit from LASAN prior to collecting, hauling, and transporting construction and demolition waste. It requires that all construction and demolition waste generated within city limits be taken to City-certified construction and demolition waste processors, where the waste would be recycled to the extent feasible. Additionally, the Solid Resources Citywide Recycling Division published the Construction and Demolition Recycling Guide, which is a directory of recyclers and certified mixed-debris processors that serve the greater Los Angeles area. In addition to an alphabetical listing of companies, the Construction and Demolition Recycling Guide also provides listings by materials accepted (e.g., wood waste, scrap metal, drywall) so that developers and contractors can tailor their recycling choices to suit different project needs. Some of the recycling companies listed in the Construction and Demolition Recycling Guide also recycle operational waste (LASAN 2007). The LACDPW maintains a list of all types of landfill and recycling facilities in the County (LACDPW 2021).

d. Existing Solid Waste Generation

The OSP Specific Plan Site is currently developed with 478 residential units and 8,000 sf of amenities, services, and administrative uses associated with the existing Rancho San Pedro housing complex. The 327 Harbor Site is vacant and undeveloped. Based on the City of Los Angeles CEQA Thresholds Guide (2006) and conservatively only accounting for the existing residential uses on the project site, existing uses on the project site generate approximately 5,846 pounds of solid waste per day (City of Los Angeles 2006)[2].

4.15.3.2 Regulatory Setting

a. State Laws and Regulations

Assembly Bill 939: Integrated Waste Management Act of 1089

The California Integrated Waste Management Act of 1989 (AB 939), as amended, was enacted to reduce, recycle, and reuse solid waste generated in the State. AB 939 requires city and county jurisdictions to divert 50 percent of the total waste stream from landfill disposal. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. AB 939 further requires each city and county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element to describe how it would reach these goals. The Source Reduction and Recycling Element contains programs and policies for fulfillment of the goals of AB 939, including the above-noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. Per Public Resources Code Section 41821, California cities and counties are required to submit annual reports to the California Department of Resources Recycling and Recovery (CalRecycle) to update their progress toward the AB 939 goals. CalRecycle is a department within the California Environmental Protection Agency that administers

[2] 478 units x 12.23 pounds per unit per day = 5,846 pounds per day

and provides oversight for all of California's State-managed nonhazardous waste handling and recycling programs.

Assembly Bill 1327

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900-42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional buildings; marinas; and residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is to be determined by the appropriate jurisdiction's ordinance. Pursuant to AB 1327, the City adopted the Space Allocation Ordinance (Ordinance No. 171,687), as discussed below.

Senate Bill 1374

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004.

Assembly Bill 1826

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multi-family residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate 4 cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week also are required to arrange for organic waste recycling services. In September 2020, CalRecycle reduced this threshold to 2 cubic yards of solid waste (i.e., total of trash, recycling, and organics) per week generated by covered businesses (CalRecycle 2022).

Senate Bill 1383

SB 1383 establishes statewide organic waste diversion rate goal of 75 percent by 2025. Beginning in 2022, SB 1383 required every jurisdiction to provide organic waste collection services to all residents and businesses, including food, green material, landscaping waste, organic textiles, lumber, paper products, manure, biosolids, digestate, and sludges. Jurisdictions are also required to educate residents and businesses about the collection requirements.

Zero Waste California

Zero Waste California is a State program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste by maximizing existing recycling and reuse efforts, while ensuring that

products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

California Green Building Standards

The CALGreen Code sets standards for new structures to minimize the State's carbon output. California requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction retains the administrative authority to exceed the new CALGreen Code requirements. The 2022 CALGreen Code went into effect January 1, 2023.

Assembly Bill 341

AB 341, signed on February 10, 2011, directed that no less than 75 percent of solid waste generated in California be source reduced[3], recycled, or composted by 2020, and required CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandated local jurisdictions to implement commercial recycling by July 1, 2012.

b. Regional Laws and Regulations

Countywide Integrated Waste Management Plan

Pursuant to AB 939, each county is required to prepare and administer a Countywide Integrated Waste Management Plan (CoIWMP), including preparation of an Annual Report. The ColWMP is to comprise of the various counties' and cities' solid waste reduction planning documents, plus an Integrated Waste Management Summary Plan (Summary Plan) and a Countywide Siting Element. The Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated State diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The County Department of Public Works is responsible for preparing and administering the Summary Plan and the Countywide Siting Element.

The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity. The most recent annual report, the CoIWMP 2019 Annual Report, published in September 2020, provides disposal analysis and facility capacities for 2019, as well as projections to the CoIWMP's horizon year of 2034 (LACDPW 2021). As stated within the CoIWMP 2019 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions (LACDPW 2021). A variety of strategies, including mandatory commercial recycling, diversion of organic waste, and alternative technologies (e.g., engineered municipal solid waste conversion facilities) would be implemented to ensure that the County would be able to accommodate the solid waste generated through the horizon year of 2034 (LACDPW 2021).

[3] Source reduction refers to activities designed to reduce the volume, mass, or toxicity of products throughout their life cycle. It includes the design and manufacture, use, and disposal of products with minimum toxic content, minimum volume of material, and/or a longer useful life.

c. Local Laws and Regulations

City of Los Angeles General Plan Framework Element

The City's Framework Element, adopted in August 2001, includes general guidance regarding land use issues that include direction on infrastructure and public services. The Framework Element includes an Infrastructure and Public Services Chapter, which responds to federal and State mandates to plan for adequate infrastructure in the future. The Framework Element supports AB 939 and its goals by encouraging "an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal." The Framework Element addresses many of the programs the City has implemented to divert waste from disposal facilities such as source reduction programs and recycling programs (e.g., Curbside Recycling Program and composting). Furthermore, the Framework Element states that for these programs to succeed, the City should locate businesses where recyclables can be handled, processed, and/or manufactured to allow a full circle recycling system to develop. The Framework Element indicates that more transfer facilities will be needed to dispose of waste at remote landfill facilities due to the continuing need for solid waste transfer and disposal facilities, as well as the limited disposal capacity of the landfills in Los Angeles. Several landfill disposal facilities accessible by truck and waste-by-rail landfill disposal facilities that could be used by the City are identified to meet its disposal needs (City of Los Angeles 2001).

City of Los Angeles Solid Waste Integrated Resources Plan

LASAN developed the Solid Waste Integrated Resources Plan (SWIRP) also known as the "Zero Waste Plan," a 20-year master plan to reduce solid waste, increase recycling, and manage trash in the city through the year 2030 (LASAN 2022i). This plan encompasses ongoing solutions and programs (i.e., blue and green bin recycling, multi-family recycling, restaurant food scrap diversion, alternative technologies, hazardous waste recycling, Los Angeles Unified School District recycling program, etc.), as well as new programs to be implemented during the planning horizon. In addition, the SWIRP is the result of a mayoral directive that is in line with the City Council's RENEW LA plan, as further discussed below. In May 2008, the stakeholders of the Zero Waste Plan adopted the SWIRP guiding principles to help the City achieve its zero waste goals by 2030 (LASAN 2022i). The SWIRP is intended to provide a long-term outline of the policies, programs, infrastructure, regulations, incentives, new green jobs, technology, and financial strategies necessary to achieve a 90-percent diversion of solid waste by 2025 (LASAN 2022i). The term "zero waste" refers to maximizing recycling, minimizing waste, reducing consumption, and encouraging the use of products with recycled/reused materials. As noted by the City, "zero waste" is a goal and not a categorical imperative; the City is seeking to come as close to "zero waste" as possible.

RENEW LA Plan

RENEW LA was adopted by the City Council in March 2006 for the purpose of facilitating a shift from solid waste disposal to resource recovery. This shift is predicted to result in "zero waste" and an overall diversion level of 90 percent by 2025 (City of Los Angeles 2016). The plan focuses on combining key elements of existing reduction and recycling programs and infrastructure with new systems and conversion technologies to achieve resource recovery (without combustion) in the form of traditional recyclables; soil amendments; and renewable fuels, chemicals, and energy. The RENEW LA Plan also calls for reductions in the quantity of residual materials disposed in landfills and their associated environmental impacts.

City of Los Angeles Space Allocation Ordinance

Pursuant to the California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327), the City enacted the Space Allocation Ordinance (Ordinance No. 171,687) on August 13, 1997, which is incorporated in various sections of the LAMC. The Space Allocation Ordinance requires the provision of an adequate recycling area or room for collecting and loading recyclable materials in all new construction projects, all existing multi-family residential projects of four or more units where the addition of floor area is 25 percent or more, and all other existing development projects where the addition of floor area is 30 percent or more.

Citywide Construction and Demolition Debris Recycling Ordinance

On March 5, 2010, the City Council approved Council File 09-3029 pertaining to a Citywide Construction and Demolition Debris Recycling Ordinance (Ordinance No. 181,519) that requires LASAN to ensure that all mixed construction and demolition waste generated within city limits be taken to a City-certified construction and demolition waste processor. These facilities process received materials for reuse and have recycling rates that vary from 70 percent to 86 percent, thus exceeding the 70 percent reclamation standard. Additionally, compliance with the Ordinance and LAMC Section 66.32, which requires the haulers to meet the diversion goals, would ensure that 70 percent of solid waste generated by the city, including construction and demolition waste, would be recycled.

Citywide Exclusive Franchise System for Municipal Waste Collection and Handling and Zero Waste-LA Franchise System

Solid waste collection, management, and disposal in the city are handled both by LASAN crews and by various permitted private solid waste haulers. The City provides solid waste collection, recycling, and green waste collection services primarily for single-family uses and multi-family uses with four units or less. Private solid waste haulers collect from most multi-family residential uses with four or more units and commercial uses based on an open permit system. Permitted waste haulers must obtain an annual permit, submit an annual report, and pay quarterly fees. However, unlike LASAN, private waste haulers are not required to provide recycling services, operate clean fuel vehicles, offer similar costs for similar services, or reduce vehicle miles traveled. Thus, the existing open permit system limits the ability of the City to address compliance with State environmental mandates and the City's waste diversion goals. Although the City has obtained a 76-percent solid waste diversion rate as identified in the 2013 Zero Waste Progress Report, nearly three million tons of solid waste from the city are still disposed in landfills annually, nearly 70 percent of which is comprised of waste collected by private waste haulers from multi-family residential and commercial customers (LASAN 2013).

To respond to these challenges, and in response to City Council directive, LASAN established Zero Waste LA, a new public-private partnership designed to address the three million tons of waste disposed annually by businesses, consumers, and residents. This innovative franchise system establishes a waste and recycling collection program for all commercial, industrial, and large multi-family customers in the city. In April 2014, the Mayor and City Council approved the ordinance that allows the City to establish an exclusive franchise system with 11 zones. With a single trash hauler responsible for each zone, the franchise system will allow for the efficient collection and sustainable management of solid waste resources and recyclables. Among other requirements, the City will mandate maximum annual disposal levels and specific diversion requirements for each franchise

zone to promote solid waste diversion from landfills in an effort to meet the City's zero waste goals. This program began in July 2017.

Los Angeles Green Building Ordinance

On December 17, 2013, the Los Angeles City Council approved Ordinance No. 182,849, which amended Chapter IX, Article 9 of the LAMC to reflect local administrative changes and incorporate by reference portions of the CALGreen Code. The amended Article 9 is referred to as the "Los Angeles Green Building Code." Projects must comply with the Los Angeles Green Building Code as amended to comply with various provisions of the CALGreen Code. The Los Angeles Green Building Code creates a set of development standards and guidelines to further energy efficiency and reduction of GHGs. It builds upon and sets higher standards than those incorporated in the CALGreen Code and is implemented through the building permit process.

4.15.3.3 Environmental Impacts

a. Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a project would result in a significant impact related to solid waste if it would:

1. 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; and/or
2. Not Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

For this analysis, the CEQA Guidelines Appendix G thresholds listed above are relied upon. The analysis also utilizes factors and considerations identified in the Thresholds Guide, as appropriate, to assist in answering the Appendix G threshold questions.

The Thresholds Guide identifies the following criteria to evaluate impacts related to solid waste impacts:

- Amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates;
- Need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and
- Whether the project conflicts with solid waste policies and objectives in the Source Reduction and Recycling Element or its updates, City of Los Angeles Solid Waste Management Policy Plan, Framework Element or the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the Source Reduction and Recycling Element.

Methodology

Solid waste generation associated with the proposed project was estimated based on anticipated demolition debris and operational waste generation as reported in the California Emissions Estimator

Model (CalEEMod). CalEEMod calculates annual waste generation based on land use-based waste disposal rates reported by CalRecycle (California Air Pollution Control Officers Association 2017). Refer to Section 4.2, *Air Quality*, for a discussion of the CalEEMod modeling methodology. The CalRecycle Solid Waste Information System database, a publicly available resource, was also consulted as part of this analysis.

b. Project Design Features

Construction and operation of the project would be implemented in accordance with applicable regulatory requirements (refer to Section 4.15.3.2, *Regulatory Setting*). No specific project design features are proposed with regard to solid waste.

c. Project Impacts and Mitigation Measures

Threshold 5:	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?
Threshold 6:	Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Impact U-5 **THE PROPOSED PROJECT WOULD INCREASE SOLID WASTE GENERATED AT THE PROJECT SITE DURING BOTH CONSTRUCTION AND OPERATION. THE PROJECT WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL MANAGEMENT AND REDUCTION STATUTES AND REGULATIONS RELATED TO SOLID WASTE SO AS TO MINIMIZE THE AMOUNT OF SOLID WASTE ENTERING LANDFILLS. SOLID WASTE FROM THE PROPOSED PROJECT WOULD BE DISPOSED OF AT THE SUNSHINE CANYON LANDFILL AND AZUSA LAND RECLAMATION IN ACCORDANCE WITH STATE AND LOCAL STANDARDS. THERE IS SUFFICIENT PERMITTED DISPOSAL CAPACITY AVAILABLE TO PROVIDE ADEQUATE SOLID WASTE DISPOSAL FOR THE PROJECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum off 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts related to solid waste applies to both Scenario A and Scenario B.

Construction

Solid waste would be generated during demolition, grading, and construction activities. During construction, the existing development on the OSP Specific Plan Site would be demolished to prepare the site for the proposed project; demolished materials would be reused or recycled to the maximum extent feasible, and all remaining materials would be transported to the Sunshine Canyon Landfill in unincorporated Los Angeles County and the Azusa Land Reclamation in the city of Azusa.

Grading and demolition activities associated with the proposed project would not occur all at once but rather would be spread across multiple stages. In total, grading activities would result in

approximately 382,945 cubic yards of soil export. Demolition on the OSP Specific Plan Site would also generate 18,193 cubic yards of demolished materials. Sunshine Canyon Landfill and Azusa Land Reclamation Company Landfill accept construction/demolition waste; other area landfills that accept soil and construction debris may also be used for the project's construction disposal needs, including those in nearby San Bernardino and Riverside counties. Soil material may also be used beneficially as landfill cover or imported fill material at other construction sites. Sunshine Canyon Landfill and Azusa Land Reclamation Company Landfill have an estimated remaining capacity of approximately 77,900,000 cubic yards and 51,512,201 cubic yards, respectively (CalRecycle 2023a and 2023b). The addition of 382,945 cubic yards of soil and 18,193 cy of demolition debris would represent less than 1.0 percent of the remaining capacity of these landfills and would not result in an exceedance of the remaining capacity or permitted daily intake of the Sunshine Canyon Landfill or Azusa Land Reclamation Company Landfill. As a result, disposal of soils from grading of the project would not exceed the capacity of local solid waste disposal facilities.

The handling of all debris and waste generated during construction of the proposed project would be subject to the latest CALGreen Code requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity. Compliance with LAMC Section 66.32 would ensure at least 75 percent of the demolition and construction waste generated by future development would be diverted from landfills serving the city. Therefore, impacts related to solid waste during construction would be less than significant.

Operation

Waste Generation

During operation of the proposed project, solid waste would be generated in types and quantities typical of residential mixed-use land uses, and would be disposed of consistent with all federal, State, and local statutes and regulations. Solid waste associated with project operation has been estimated using factors established by CalRecycle, as informed by the Thresholds Guide, shown in Table 4.15-9.

Table 4.15-9 Operational Solid Waste Generation

Land Use	Proposed Project	Solid Waste Generation Rate[1]	Daily Total	Annual Total
Residential	1,600 du	12.23 lbs/du/day	19,568 lbs (9.8 tons)	7,142,320 lbs (3,571 tons)
Commercial retail	45,000 sf	5 lbs/1,000 sf/day	225 lbs (0.1 ton)	82,125 lbs (37 tons)
Neighborhood Serving Uses	85,000 sf	5 lbs/1,000 sf/day	425 lbs (0.2 ton)	155,125 lbs (73 tons)
Total			20,218 lbs (10.1 tons)	7,379,570 lbs (3,690 tons)
Existing Solid Waste Generation			5,846 lbs (2.9 tons)	2,133,790 lbs (1066.9 tons)
Net Solid Waste Generation			**14,372 lbs (7.2 tons)**	**5,245,780 lbs (2,622.9 tons)**

lbs = pounds; du = dwelling units; sf = square feet

[1] CalRecycle 2019

As shown above, operation of the proposed project would result in a net increase of 14,372 pounds per day (7.2 tpd) of solid waste on the project site, which equates to approximately 2,623 tons per year. As described in Section 4.15.3.1, *Environmental Setting*, solid waste from the project site would be routed to landfills serving the city of Los Angeles. Table 4.15-8 indicates landfills serving the city have a total remaining daily capacity of 25,640 tpd. Solid waste generated by the proposed project would account for less than 1.0 percent of the remaining daily capacity of landfills serving the city. Therefore, the proposed project would not generate solid waste in excess of the capacity of local infrastructure and would not require the expansion or construction of a new solid waste disposal or recycling facility to handle project-generated waste. Additionally, solid waste collection services are currently provided to the project site and surrounding area by LASAN. The project site is in an urban area with established solid waste collection routes. Transport of the project's operational solid waste would occur along one of the established routes and would not result in the need for additional solid waste collection routes. Based on the above, the project generate would not 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. Impacts would be less than significant.

Consistency with Solid Waste Statutes and Regulations

CONSTRUCTION

SB 1374 requires jurisdictions to divert 50 percent to 75 percent of all construction and demolition waste from landfills. In addition, the CALGreen Code, Ordinance No. 181,519, and LAMC Section 66.32 establish similar construction and demolition debris diversion requirements. In compliance with these regulations, the project would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of nonhazardous demolition and construction debris. Therefore, project construction would comply with the applicable solid waste management and reduction statutes and regulations and impacts would be less than significant.

OPERATION

The project would include trash enclosures with clearly marked, source-sorted receptacles for disposing of solid waste, recyclables, and organic waste, consistent with the requirements of Ordinance No. 171,687, and would contract with the local LASAN hauler for solid waste, recycling, and organics recycling services. LASAN handles solid waste consistent with the waste reduction goals set forth by the City's SWIRP, the RENEW LA Plan, the General Plan Framework Element, the Source Reduction and Recycling Element, Solid Waste Management Policy Plan, and Curbside Recycling Program. As discussed in Section 4.15.3.2, *Regulatory Setting*, the City already exceeds State goals with respect to reduction of solid waste generation and diversion of solid waste from landfills. Additionally, through the provisioning of the required source-separated bins and solid waste hauling services, the project would be consistent with the Statewide organic waste and recycling goals and requirements established by AB 341, AB 939, AB 1826, SB 1383, and CALGreen Code, as well as local goals and policies for solid waste diversion outlined in the SWIRP, RENEW LA Plan, General Plan Framework Element, Source Reduction and Recycling Element, Solid Waste Management Policy Plan, and Curbside Recycling Program.

Therefore, because proposed development under the project would comply with applicable solid waste policies and objectives and would not generate solid waste in excess of the capacity of local infrastructure, impacts related to solid waste would be less than significant.

Mitigation Measures

Project-level impacts associated with solid waste would be less than significant. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts would be less than significant without mitigation.

4.15.3.4 Cumulative Impacts

The geographic extent of analysis for cumulative impacts related to solid waste is Los Angeles County because the landfills open to the city of Los Angeles also serve the entire county. The proposed project, in combination with the cumulative projects, would result in an increase in solid waste generation during both construction and operation. As discussed above, solid waste generated by the proposed project would not exceed the available daily capacity of the landfills serving the city of Los Angeles.

The Countywide Solid Waste Integrated Resources Plan, which serves as the primary planning documents for the county's waste disposal needs, inclusive of its annual reports, forecasts conditions over a 15-year planning horizon and extends the planning horizon by one year with each subsequent annual report, concludes there is enough capacity within permitted solid waste facilities (i.e., landfills) to serve the County through the 15-year planning period of 2018 through 2034 with implementation of all or some of the following actions (LACDPW 2021):

- Maximize waste reduction and recycling;
- Expand existing landfills;
- Study, promote, and develop alternative technologies;
- Expand transfer and processing infrastructure; and
- Out-of-county disposal (including waste-by-rail).

The County continues to address landfill capacity through the preparation of Integrated Waste Management Plan annual reports. Because each annual report assesses a planning horizon of 15 years, should a shortage in solid waste disposal availability be identified during one of the annual assessments, sufficient time would be available to address the shortage. Therefore, sufficient disposal capacity is available for the cumulative projects, and cumulative impacts would be less than significant.

4.15.4 Electric Power, Natural Gas, and Telecommunications

4.15.4.1 Environmental Setting

The project site is served by existing electricity, natural gas, and telecommunications facilities, which would continue to serve the proposed project development, along with select improvements included under the proposed project. Electric power to the project site is provided by LADWP, while natural gas is provided by the Southern California Gas Company (SoCalGas), and telecommunications (telephone and internet services) are provided by private companies such as Spectrum and Frontier. Additional information regarding the supply and distribution systems of electric power, natural gas, and telecommunications is provided below.

a. Electricity

LADWP's power system is the nation's largest municipal electric utility, serving a 465-square-mile area in Los Angeles and much of the Owens Valley, and supplying more than 26 million megawatt-hours of electricity per year. LADWP has over 7,880 megawatts of generation capacity from a diverse mix of energy sources including renewable energy, natural gas, nuclear, large hydro, coal, and other sources (LADWP 2022g). The power supplied to LADWP customers is distributed through a network of approximately 6,752 miles of overhead distribution lines and approximately 3,626 miles of underground distribution lines (LADWP 2022g). Power to the project site is available from overhead power lines throughout the surrounding streets including O'Farrell Street, Santa Cruz Street, 1st Street, Palos Verdes Street, 3rd Street, and Centre Street.

b. Natural Gas

SoCalGas provides natural gas resources in the city and most of southern and central California, including 21.8 million customers over a 24,000-square-mile service area (SoCalGas 2022a). SoCalGas is under the jurisdiction of the California Public Utilities Commission (CPUC) and other federal regulatory agencies; therefore, the availability of natural gas is based upon present conditions of gas supply and regulatory policies. SoCalGas receives gas supplies from several sedimentary basins, including supply basins located in New Mexico (San Juan Basin), western Texas (Permian Basin), the Rocky Mountains, and western Canada, as well as local California supplies. Gas supply available to SoCalGas from California sources averaged 69 million cubic feet per day in 2021. SoCalGas projects total gas demand to decline at an annual rate of 1.5 percent from 2022 to 2035 due to energy efficiency, fuel substitution, and renewable energy goals and standards (California Gas and Electric Utilities 2022). SoCalGas encourages reduced consumption of natural gas by offering its customers energy efficiency programs with rebates and incentives. Natural gas is supplied to the area through a system of existing gas mains located under the streets and public rights-of-way. Natural gas is delivered to the project site through natural gas facilities underneath the adjacent public streets.

c. Telecommunications

Communication systems located throughout the project area include underground fiber optic cable, telephone transmission lines (overhead and underground), and cellular towers owned or leased by telecommunications service providers. Landline telephone service is provided by various commercial communications companies. The majority of the landline facilities are located in county- or city-owned rights-of-way and on private easements.

Cellular towers have also been erected along major travel corridors to meet emergency service objectives. The cellular towers closest to the project area are located at 222 West 6th Street in San Pedro, approximately 0.3 mile south of the OSP Specific Plan Site; 1350 West 25th Street in San Pedro, approximately 2 miles southwest of the OSP Specific Plan Site; and 3900 Crest Road in Palos Verdes, approximately 3 miles west of the OSP Specific Plan Site (City of Los Angeles 2020). Service from an individual cellular tower can range and service is not necessarily provided by the closest cellular tower; therefore, other cellular towers in Los Angeles County likely provide service to the project area.

4.15.4.2 Regulatory Setting

a. Federal Laws and Regulations

United States Department of Energy (Energy Policy Act of 2005)

The United States Department of Energy is the federal agency responsible for establishing policies regarding energy conservation, domestic energy production, and infrastructure. The Federal Energy Regulatory Commission (FERC) is an independent federal agency, officially organized as part of the Department of Energy, which is responsible for regulating interstate transmission of natural gas, oil, and electricity; reliability of the electric grid; and approving of construction of interstate natural gas pipelines and storage facilities. The Energy Policy Act of 2005 also granted FERC with additional responsibilities of overseeing the reliability of the nation's electricity transmission grid and supplementing state transmission siting efforts in national interest electric transmission corridors.

FERC has authority to oversee mandatory reliability standards governing the nation's electricity grid. FERC has established rules on certification of an Electric Reliability Organization which establishes, approves, and enforces mandatory electricity reliability standards. The North American Electric Reliability Corporation has been certified as the nation's Electric Reliability Organization by FERC to enforce reliability standards in all interconnected jurisdictions in North America. Although FERC regulates the bulk energy transmission and reliability throughout the United States, the areas outside of FERC's jurisdictional responsibility include State-level regulations and retail electricity and natural gas sales to consumers which falls under the jurisdiction of State regulatory agencies.

The Federal Communications Commission requires all new cellular tower construction to be approved by the State or local authority for the proposed site and comply with Federal Communications Commission rules involving environmental review. Additionally, the Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority.

b. State Laws and Regulations

California Independent System Operator

The California Independent System Operator (ISO) is an independent public benefit corporation responsible for operating California's long-distance electric transmission lines. The California ISO is led by a five-member board appointment by the Governor and is also regulated by FERC. While transmission owners and private electric utilities own their lines, the California ISO operates the transmission system independently to ensure that electricity flows comply with federal operational standards. The California ISO analyzes current and future electrical demand and plans for any needed expansion or upgrade of the electric transmission system.

California Public Utilities Commission

The CPUC establishes policies and rules for electricity and natural gas rates provided by private utilities in California such as Southern California Edison and SoCalGas. Public-owned utilities such as the LADWP do not fall under the CPUC's jurisdiction. The Digital Infrastructure and Video Competition Act of 2006 established the CPUC as the sole cable/video TV franchising authority in the State of California and took effect January 1, 2007.

The CPUC is overseen by five commissioners appointed by the Governor and confirmed by the State Senate. The CPUC's responsibilities include regulating electric power procurement and generation,

infrastructure oversight for electric transmission lines and natural gas pipelines, and permitting of electrical transmission and substation facilities.

California Energy Commission

The California Energy Commission (CEC) is a planning agency which provides guidance on setting the State's energy policy. Responsibilities include forecasting electricity and natural gas demand, promoting and setting energy efficiency standards throughout the state, developing renewable energy resources, and permitting thermal power plants 50 megawatts and larger. The CEC also has regulatory specific regulatory authority over publicly owned utilities to certify, monitor, and verify eligible renewable energy resources procured.

Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323), adopted in 2002, requires the development of an integrated plan for electricity, natural gas, and transportation fuels. Under the bill, the CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. In 2018, the CEC decided to write the Integrated Energy Policy Report in two volumes. Volume I, which was published on August 1, 2018, highlights the implementation of California's innovative policies and the role they have played in moving toward a clean energy economy. Volume II, which was adopted in February 2019, identifies several key energy issues and actions to address these issues and ensure the reliability of energy resources (CEC 2019).

Senate Bill 649

SB 649 requires small cellular installations be on vertical infrastructure and on property outside public rights-of-way. The installation is required to comply with all applicable federal, State, and local health and safety regulations. Additionally, cellular equipment that is no longer in use is required to be removed at no cost to the City.

c. Local Laws and Regulations

City of Los Angeles Information Technology Agency

The City of Los Angeles Information Technology Agency is responsible for a broad spectrum of services related to technology services to both internal and external customers. These range from classic information technology services, such as computer support, enterprise applications, data networks, and a 24/7 data center to progressive digital services, such as a television station (e.g., LACityview), 3-1-1 Call Center, public safety radio/microwave communications, helicopter avionics, enterprise social media, and more.

The Information Technology Agency's Video Services Regulatory Division advises the Mayor and City Council on certain issues relating to video/cable television services and private telecommunications franchises. The Video Services Regulatory Division regulates and monitors the compliance of video/cable television services and franchises issued by the CPUC. More specifically, it ensures that video/cable television service providers comply with local, State, and federal laws and oversees the video/cable television service interests of city residents.

City of Los Angeles Municipal Code Section 10.5.4

Section 10.5.4 of the LAMC states that telecommunications providers are required to comply with all City, State, and federal regulations during installation and operation of equipment. Additionally, each lease, sublease, or license facilitated by telecommunications providers are required to seek approval from the City.

4.15.4.3 Environmental Impacts

a. Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a project would result in a significant impact related to solid waste if it would:

1. Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

For this analysis, the CEQA Guidelines Appendix G thresholds listed above are relied upon. The analysis also utilizes factors and considerations identified in the Thresholds Guide, as appropriate, to assist in answering the Appendix G threshold questions. The Thresholds Guide identifies the following criteria to evaluate impacts related to solid waste impacts:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities;
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

Methodology

This analysis evaluates the potential impact of the project on existing energy and telecommunications infrastructure by comparing the estimated project energy demand and telecommunications needs with the available infrastructure and capacity.

Project energy usage, including electricity and natural gas, was calculated using CalEEMod version 2020.4.0, as detailed in Section 4.2, *Air Quality*. During project construction, energy would be consumed in the form of electricity to power lights, temporary construction offices, electronic equipment, or other construction activities necessitating electrical power. Construction activities would not involve the consumption of natural gas. During project operation, energy consumption would include electricity and natural gas from uses such as heating, ventilation, and air conditioning (HVAC); water heating; cooking; lighting; and use of electronics/appliances. Additional details regarding project energy usage are provided in Section 4.16.3, *Energy*.

The project's estimated energy demands were also analyzed relative to LADWP's and SoCalGas' existing and planned energy supplies in 2037 (i.e., the anticipated project buildout year) to determine if the energy utility companies and local infrastructure would be able to meet the proposed project's energy demands.

b. Project Design Features

Construction and operation of the project would be implemented in accordance with applicable regulatory requirements (refer to Section 4.15.4.2, *Regulatory Setting*). No specific project design features are proposed with regard to natural gas, or telecommunications.

c. Project Impacts and Mitigation Measures

Threshold 7:	Would the project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact U-6 THE PROPOSED PROJECT WOULD INCLUDE INSTALLATION OF NEW CONNECTIONS TO EXISTING ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS FACILITIES, AS WELL AS SELECT UPGRADES NEEDED TO SAFELY SUPPORT THE PROJECT CONNECTIONS. THE POTENTIAL ENVIRONMENTAL EFFECTS ASSOCIATED WITH PROPOSED NEW INFRASTRUCTURE ARE ANALYZED THROUGHOUT THIS EIR/EIS, CONCURRENTLY WITH THE PROPOSED PROJECT AS A WHOLE. THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF NEW ELECTRICAL POWER, NATURAL GAS, AND TELECOMMUNICATIONS INFRASTRUCTURE FOR THE PROJECT WOULD BE LESS THAN SIGNIFICANT. DURING PROJECT OPERATION, NO IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF NEW ELECTRICAL POWER, NATURAL GAS, AND TELECOMMUNICATIONS INFRASTRUCTURE WOULD OCCUR.

Two project development scenarios are proposed (see Section 2, *Project Description*) that would involve phasing construction on the OSP Specific Plan Site in two development patterns, referred to as Scenario A and Scenario B. Under Scenario A, the densest development would be located in Phases 2 and 3, whereas under Scenario B, development would be densest in Phases 1 and 2 (refer to Figure 2-4 in Section 2, *Project Description*, for a map of the Phases). Under both scenarios, the development footprint would be identical and a maximum off 1,553 residential units, 45,000 sf of commercial retail uses, and 85,000 sf of Neighborhood Serving Uses would be developed, and construction activities would be comparable. Likewise, development at the 327 Harbor Site would be identical under both development scenarios and would include construction of 47 affordable housing units. Therefore, the below analysis of potential impacts to electricity, natural gas, and telecommunications facilities applies to both Scenario A and Scenario B.

Electricity

Construction

Construction activities at the project site would require minor quantities of electricity for lighting, power tools, and other support equipment. Heavy construction equipment would be powered with diesel fuel. Electricity use during project construction would be within the supply and infrastructure service capabilities of LADWP, and the existing electrical infrastructure has capacity to provide service for construction activities. As existing power lines are located in the vicinity of the project site, electricity during project construction would be obtained from existing electrical lines. Therefore, existing off-site infrastructure would not require replacement or expansion to provide electricity to the project site for the purpose of construction.

The proposed project would include select upgrades to the existing electricity lines on/beneath the project site to meet the net increase in electricity demand, as well as to modernize and repair existing, aging infrastructure. Electrical system upgrades would be required, including installation of new

aboveground electricity poles, new transformers, and potentially new underground electricity utilities to service the proposed development. As discussed in Section 2.5.2.8, *Utilities and Mechanical Equipment*, improvements to the electrical distribution system for the proposed project would be determined by LADWP through the permitting process and would include a "backbone" electricity transmission corridor consisting of at least six 5-inch ducts and vaults in the street of each block. LADWP is also requiring pad-mounted transformers for panels over 600 amps, and the proposed buildings would generally have electrical loads necessitating one or two mounted transformers for each building, pursuant to LADWP's requirements.

The new connections necessary to serve the proposed future facilities would be installed within previously disturbed roadways or within the disturbance footprint of proposed buildings. The potential environmental effects associated with new electrical infrastructure are analyzed throughout this EIR/EIS concurrently with construction of the proposed project as a whole. Sections in the EIR which describe potential environmental effects associated with new electrical infrastructure include, but are not limited to: (1) Section 4.3, *Cultural Resources*, Section 4.4, *Geology and Soils*, Section 4.5, *Hazards and Hazardous Materials*, Section 4.7, *Hydrology and Water Quality*, Section 4.14, *Tribal Cultural Resources*, and Section 4.16, *Effects Found Not to be Significant*, which discuss potential impacts associated with ground-disturbing activities, (2) Section 4.2, *Air Quality*, Section 4.5, *Greenhouse Gas Emissions*, Section 4.9, *Noise*, which discuss emissions, noise, and vibration from construction; and (3) Section 4.11, *Public Services*, and 4.13, *Transportation*, which discuss the potential impacts to the circulation system and emergency access and response due to construction activities in the public rights-of-way. . In addition, HACLA would be required to coordinate electrical infrastructure removals or relocations with LADWP and comply with site-specific requirements set forth by LADWP, which would ensure that service disruptions and potential impacts associated with all stages of construction within LADWP easements are minimized. Project contractors would notify and coordinate with LADWP to identify the locations of power lines and avoid disruption of electric service to other properties. In conclusion, the potential environmental impacts associated with the construction of new or expanded electrical infrastructure for the project would be less than significant.

Operation

The project's net electricity consumption would be 17,403,690 kilowatt-hours per year (Appendix B). This would represent less than 0.1 percent of LADWP's projected electricity sales of 26,654 gigawatt-hours in FY 2036-2037, the project's anticipated buildout year (LADWP 2017). Furthermore, as described above under Construction, the project would implement all necessary connections and upgrades required by LADWP to ensure that LADWP would be able to adequately serve the project. Upon completion of construction activities, the electricity infrastructure serving the project site would be adequately sized to accommodate the proposed land uses and density. Occasional minor maintenance activities may be required to repair infrastructure as it ages. However, future relocation and expansion of electricity infrastructure during project operation are not anticipated. Therefore, no operational impacts associated with the construction and relocation of electricity facilities are anticipated.

Natural Gas

Construction

Construction activities, including the construction of new buildings and hardscape, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be required to support

project construction activities and there would be no expected demand generated by construction. Additionally, the project site is served by existing natural gas infrastructure and no improvements to the existing natural gas infrastructure or new natural gas infrastructure would be required other than minor construction activities for connections to the existing lines. The new connections necessary to serve the proposed new facilities would be installed within previously disturbed roadways or within the disturbance footprint of proposed buildings. The potential environmental effects associated with new natural gas connections are analyzed throughout this EIR/EIS, concurrently with construction of the proposed project as a whole. Sections in the EIR which describe potential environmental effects associated with natural gas infrastructure include, but are not limited to: (1) Section 4.3, *Cultural Resources*, Section 4.4, *Geology and Soils*, Section 4.5, *Hazards and Hazardous Materials*, Section 4.7, *Hydrology and Water Quality*, Section 4.14, *Tribal Cultural Resources*, and Section 4.16, *Effects Found Not to be Significant*, which discuss potential impacts associated with ground-disturbing activities, (2) Section 4.2, *Air Quality*, Section 4.5, *Greenhouse Gas Emissions*, Section 4.9, *Noise*, which discuss emissions, noise, and vibration from construction; and (3) Section 4.11, *Public Services*, and 4.13, *Transportation*, which discuss the potential impacts to the circulation system and emergency access and response due to construction activities in the public rights-of-way. In addition, prior to ground disturbance, contractors would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Therefore, the potential environmental impacts associated with the construction of new or expanded natural gas infrastructure for the project would be less than significant.

Operation

The project's annual net natural gas demand of 916 cubic feet per year or 2.5 cubic feet per day would represent less than 0.0001 percent of the 2035 (the latest year for which projections are available) forecasted consumption of 4,857 million cubic feet per day in SoCalGas' planning area (SoCalGas 2022b). Furthermore, the project would implement any necessary connections required by SoCalGas to ensure that SoCalGas would be able to adequately serve the project. Upon completion of construction activities, the natural gas infrastructure serving the project site would be adequately sized to accommodate the proposed land uses and density. Occasional minor maintenance activities may be required to repair infrastructure as it ages. However, future relocation and expansion of natural gas infrastructure during project operation are not anticipated. Therefore, no operational impacts associated with the construction and relocation of natural gas facilities are anticipated.

Telecommunications

Construction

The project site and vicinity are served by existing telecommunications (e.g., internet, telephone, and cellular) infrastructure. Construction-related activities, including grading and excavation, could encroach on existing telecommunication facilities. However, before project construction begins, the contractors would notify and coordinate with applicable telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated during construction. This would involve disconnecting existing connections and establishing new connections to the proposed structures. Such improvements would be localized in nature and would utilize existing conduit and service lines. The potential environmental effects associated with telecommunications connections are analyzed throughout this EIR/EIS, concurrently with construction of the proposed project as a whole. Sections in the EIR which describe potential environmental effects associated with new telecommunications infrastructure include, but are not

limited to: (1) Section 4.3, *Cultural Resources*, Section 4.4, *Geology and Soils*, Section 4.5, *Hazards and Hazardous Materials*, Section 4.7, *Hydrology and Water Quality*, Section 4.14, *Tribal Cultural Resources*, and Section 4.16, *Effects Found Not to be Significant*, which discuss potential impacts associated with ground-disturbing activities, (2) Section 4.2, *Air Quality*, Section 4.5, *Greenhouse Gas Emissions*, Section 4.9, *Noise*, which discuss emissions, noise, and vibration from construction; and (3) Section 4.11, *Public Services*, and 4.13, *Transportation*, which discuss the potential impacts to the circulation system and emergency access and response due to construction activities in the public rights-of-way. In addition, coordination with telecommunications providers to identify the locations of existing infrastructure would ensure that construction would not result in disruption of telecommunications service to other properties. Therefore, the potential environmental impacts associated with the construction of new or expanded telecommunications infrastructure for the project would be less than significant.

Operation

As previously discussed, telecommunication lines to serve the project would be installed on the project site during construction activities and would connect to the existing telecommunications infrastructure serving the project area. As telecommunication providers already provide services to commercial and residential buildings in the vicinity of the project site, it is anticipated that existing telecommunications facilities would be sufficient to support the project's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated during project operation. Therefore, no operational impacts associated with the construction and relocation of telecommunications facilities are anticipated.

Mitigation Measures

Project-level impacts associated with the construction of new electrical power, natural gas, and telecommunications infrastructure would be less than significant, and no operational impacts associated with the construction and relocation of telecommunications facilities are anticipated of new electrical power, natural gas, or telecommunications infrastructure are anticipated. Therefore, mitigation is not required.

Significance After Mitigation

Project impacts associated with the construction of new electrical power, natural gas, and telecommunications infrastructure would not occur or be less than significant without mitigation.

4.15.4.4 Cumulative Impacts

The proposed project would not increase population beyond the existing projections that inform long-range planning documents, including the City of Los Angeles' General Plan and LADWP's UWMP. Existing facilities for electric power, natural gas, and telecommunications throughout the city are typically improved or expanded in response to increasing demand, which is a factor of population size. Cumulative projects would also require new service connections to existing facilities for electricity, natural gas, and telecommunications.

The cumulative projects requiring connections to electricity would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Cumulative project applicants would be required to provide for the needs of their individual projects,

thereby contributing to the electrical infrastructure in the proposed project area. Cumulative impacts related to new electrical infrastructure would be less than significant.

SoCalGas would continue to provide natural gas and expand delivery capacity if necessary to meet demand increases within its service area. Furthermore, the cumulative projects are expected to incorporate energy conservation features, comply with applicable regulations including the CALGreen Code and State energy standards under Title 24, and incorporate mitigation measures, as applicable. As such, cumulative impacts to natural gas infrastructure would be less than significant.

The city is also well-served by existing telecommunications facilities and there are no restrictions on future expansion of services. Impacts associated with the construction of new facilities would depend on the location, size, and nature of such facilities but would primarily consist of temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of this EIR/EIS and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA. Therefore, cumulative impacts associated with new telecommunications infrastructure would be less than significant.