

IV. Environmental Impact Analysis

K.1 Utilities and Service Systems—Water Supply and Infrastructure

1. Introduction

This section evaluates potential Project impacts on water supply and whether the Project would require or result in the construction of new water treatment facilities, including conveyance infrastructure, the construction of which would cause significant environmental effects. The Los Angeles Department of Water and Power (LADWP) is the water supplier for the Project Site. This section describes LADWP's available water supplies, current and projected regional water demand, municipal water infrastructure serving the Project Site, and the adequacy of water supplies and infrastructure to meet Project demand. Project consistency with relevant plans and regulations is also assessed. This analysis is based on the *Utility Infrastructure Technical Report: Water* (Water Utility Report), prepared for the Project by KPFF Consulting Engineers, January 21, 2021, included as Appendix V to this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

There are several plans, policies, and programs regarding Water Supply & Infrastructure at the state, regional, and local levels. Described below, these include:

- California Urban Water Management Plan Act;
- Senate Bill (SB) 610 (California Water Code Section 10910 et seq.);
- Senate Bill 221 (California Water Code Sections 11010, 65867.5, 66455.3 and 66473.7);
- Senate Bill 7 (California Water Code Section 10608);
- Senate Bill X7-7 (Water Conservation Act of 2009);
- Sustainable Groundwater Management Act of 2014;

- California Code of Regulations (Title 20 and Title 24);
- State of Drought Emergency Declaration and Executive Orders B-29-15, B-36-15, B-37-16, and B-40-17;
- California Water Plan and the California Water Action Plan;
- Metropolitan Water District’s 2015 Urban Water Management Plan, Integrated Resources Plan, the Water Surplus and Drought Management Plan, and the Water Supply Allocation Plan;
- Los Angeles Department of Water and Power’s 2015 Urban Water Management Plan;
- Green New Deal;
- One Water LA 2040 Plan;
- City of Los Angeles General Plan, including:
 - Framework Element; and
 - Community Plan;
- Los Angeles Municipal Code (Ordinance Nos. 166,080, 181,288, 183,608, 184,250, 180,822, 181,480, 181,899, 183,833, 182,849, 184,692, and 184,248); and
- Los Angeles Water Rate Ordinance.

(1) State

(a) 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 Urban Water Management Plans (UWMPs) every five years to identify short-term 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 acre feet per year (afy) of water to customers.

(b) 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 January 1, 2002. SB 610, codified in Water Code Sections 10910-10915, specifies the requirements for water supply assessments (WSAs) and their role in the California Environmental Quality Act (CEQA) process, and defines the role UWMPs play in the WSA process. SB 610 requires that, for projects subject to CEQA that meet specific size criteria, the water supplier prepare WSAs that 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, the 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, 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 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use projects that include one or more of the projects specified in this subdivision; 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. (Water Code Section 912, CEQA Guidelines Section 15155(a).

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 5 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 Verification (WSV) is prepared at the end of the planning process for such projects. Under SB 221, a water supplier must prepare and adopt a WSV 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.¹ 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.

(c) 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 toward this goal by reducing per capita water use by at least 10

¹ California State Water Resources Control Board, *20 x 2020 Water Conservation Plan*, February 2010.

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 2013.² Cumulative statewide savings from June 2015 through February 2017 were estimated at 22.5 percent.³ 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.⁴

(d) Sustainable Groundwater Management Act of 2014⁵

The Sustainable Groundwater Management Act (SGMA) of 2014, passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.⁶ 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 and 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 SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For the basins that are critically overdrafted the timeline is 2040. For the remaining high and medium priority basins, the deadline is 2042.

² State Water Resources Control Board, *Fact Sheet, February 2017 Statewide Conservation Data*, updated April 4, 2017.

³ State Water Resources Control Board, *Media Release, "Statewide Water Savings Exceed 25 Percent in February; Conservation to Remain a California Way of Life,"* April 4, 2017.

⁴ State Water Resources Control Board, *Fact Sheet, August 2017 Statewide Conservation Data*, updated October 3, 2017.

⁵ *Sustainable Groundwater Management Act [And Related Statutory Provisions from SB1168 (Pavley), AB1739 (Dickinson), and SB1319 (Pavley) as Chaptered]*, 2015 Amendments, effective January 1, 2016.

⁶ California Department of Water Resources. *SGMA Groundwater Management*. <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>, accessed February 22, 2021.

(e) *California Code of Regulations*

(i) *Title 20*

Title 20, Section 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 gpm at 80 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.⁷

(ii) *CALGreen Code*

Part 11 of Title 24, 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.

(iii) *Plumbing Code*

Title 24, Part 5 of the California Code of Regulations 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 2019 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2019.

⁷ *California Code of Regulations, Title 20, Section 1605.3(h)*, <https://energycodeace.com/site/custom/public/reference-ace-t20/index.html#!Documents/section16053statestandardsforonfederallyregulatedappliances.htm#plumbingfixtures4.htm> , accessed February 22, 2021.

(f) *State of Drought Emergency Declaration and Executive Orders*

In response to California's drought conditions, on January 17, 2014, Governor Brown declared a State of Drought Emergency and directed state officials to take numerous necessary actions with local Urban Water Suppliers and municipalities to reduce the impacts of the ongoing drought conditions that had been occurring in California since approximately 2009.⁸ Subsequently, four Executive Orders were issued between April 2015 to April 2017 to address changing drought conditions and provide guidance for addressing the drought conditions.

Executive Order B-29-15 (April 2015) imposed a mandatory 25 percent statewide water reduction on potable water use by Urban Water Suppliers. It prioritized water infrastructure projects, incentivized water efficiencies, and streamlined permitting with new approval processes for water transfers and emergency drinking water projects. Executive Order B-36-15 (November 2015) called for additional actions to build on the state's response to record dry conditions and assisted recovery efforts from devastating wildfires; and Executive Order B-37-16 (May 2016) continued water use restrictions from Executive Order B-29-15 as drought conditions continued to persist. Executive Order B-37-16 called for long-term improvements to local drought preparation across the state, and directed the California State Water Resources Control Board (SWRCB) to develop proposed emergency water restrictions for 2017 if the drought persists.⁹

The regulatory requirements resulting from these Executive Orders were codified in Article 22.5, Drought Emergency Water Conservation of the CCR.

In May 2016, SWRCB adopted a revised emergency water conservation regulation, effective June 2016 through at least February 2017, which rescinded numeric reduction targets for Urban Water Suppliers, instead requiring locally developed conservation standards based upon each agency's specific circumstances.¹⁰

Finally, on April 7, 2017, Executive Order B-40-17 was issued to formally end the drought emergency and lifted the drought emergency in all California counties except

⁸ *State of California, Office of Governor Edmund G. Brown, Jr., Governor Brown Declares Drought State of Emergency, January 17, 2014, www.ca.gov/archive/gov39/2014/01/17/news18368/index.html, accessed February 22, 2021.*

⁹ *State of California, Office of Governor Edmund G. Brown, Jr., Governor Brown Issues Order to Continue Water Savings as Drought Persists, May 9, 2016, www.ca.gov/archive/gov39/2016/05/09/news19408/index.html, accessed February 22, 2021.*

¹⁰ *State of California Office of Administrative Law, Notice of Approval of Emergency Regulatory Action, State Water Resources Control Board, Title 23, May 31, 2016.*

Fresno, Kings, Tulare, and Tuolumne. In response to Executive Order B-40-17, on April 26, 2017, the SWRCB partially repealed the emergency regulation in regard to water supply stress test requirements and remaining mandatory conservation standards for urban water suppliers.^{11,12} The order also rescinded two drought-related emergency proclamations and four drought-related executive orders. Cities and water districts throughout the state are required to continue reporting their water use each month. Executive Order B-40-17 continued the ban on wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

(g) California Water Plan

Required by the CWC Section 10005(a), the California Water Plan is the state's strategic plan for managing and developing water resources statewide for current and future generations.¹³ It provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future.

The plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come.

In July 2019, DWR released the Final 2018 Update to the California Water Plan.¹⁴ The document provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome the State's most pressing water resource challenges. It reaffirms the State government's role and commitment to sustainable, equitable, long-term water resource management; and introduces implementation tools to inform decision-making. The 2018

¹¹ *California State Water Resources Control Board, Emergency Conservation Regulation, 2017.*

¹² *State Water Resources Control Board, Resolution No. 2017-0024.*

¹³ *California Department of Water Resources, California Water Plan, <https://water.ca.gov/Programs/California-Water-Plan>, accessed February 22, 2021.*

¹⁴ *California Department of Water Resources, <https://water.ca.gov/News/News-Releases/2019/July-19/Final-Water-Plan-Update-2018>, accessed February 22, 2021.*

Update recommends significant additional investment in infrastructure and ecosystem improvements to overcome challenges to sustainability; and it recommends actions to resolve systemic and institutional issues that contribute to many of the state's water challenges.¹⁵

(h) California Water Action Plan

The California Water Action Plan is a roadmap for the State's journey towards sustainable water management. The first California Water Action Plan was released in January 2014 under Governor Brown's administration and updated in 2016.¹⁶ The California Water Action Plan discusses the challenges to water in California: uncertain water supplies, water scarcity/drought, declining groundwater supplies, poor water quality, declining native fish species and loss of wildlife habitat, floods, supply disruptions, and population growth and climate change further increasing the severity of these risks.¹⁷

(2) Regional

As discussed in detail below, the Metropolitan Water District of Southern California (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, the 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.

(a) Metropolitan Water District's 2015 Urban Water Management Plan

The Metropolitan Water District's (MWD) 2015 Regional UWMP (RUWMP) addresses the future of MWD's water supplies and demand through the year 2040.¹⁸ 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

¹⁵ California Department of Water Resources, *California Water Plan Update 2018, Executive Summary*, pages ES-1 to ES-2.

¹⁶ California Natural Resources Agency, *California Water Action Plan 2016 Update*.

¹⁷ California Natural Resources Agency, *California Water Action Plan 2016 Update*, pp. 2–3.

¹⁸ Metropolitan Water District of Southern California, *2015 Regional Urban Water Management Plan*, June 2016.

natural disasters, is presented in Table 2-4 of the 2015 RUWMP.¹⁹ The analysis in the 2015 RUWMP concluded that reliable water resources would be available to continuously meet demand through 2040.²⁰ In the 2015 RUWMP, the projected 2040 demand water is 2,201,000 afy, whereas the expected and projected 2040 supply is 2,941,000 afy based on current programs, and an additional 398,000 afy is expected to become available under programs under development for a potential surplus in 2040 of 1,138,000 afy.²¹

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. MWD has also 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 of the Southern California region. MWD is also 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 State Water Project (SWP) deliveries. In addition, MWD 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. As set forth in their 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve the 20 percent per person potable water use reduction by 2020.

(b) MWD's 2015 Integrated Resources Plan

The MWD prepares an Integrated Water 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 recent IRP (2015 IRP) was adopted in January 2016.²² 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.

¹⁹ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, p. 2-15.*

²⁰ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, p. 2-15.*

²¹ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, p. 2-15.*

²² *Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2015 Update, Report No. 1518, January 2016.*

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 that 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 (compared to a baseline established in 2009 state legislation), reducing water use from outdoor landscapes and advancing additional local supplies. IRP Table ES-1, 2015 IRP Update Total Level of Average-Year Supply Targeted (Acre-Feet), of the 2015 IRP, 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 acre-feet and the total supply reliability target is approximately 4,539,000 acre-feet, representing an excess of 266,000 acre-feet.²³

(c) MWD's 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 the agency's 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 of the region. The Shortage Actions of the WSDM 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.²⁴

²³ *Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2015 Update, Report 1518, p. VIII.*

²⁴ *Water Surplus and Drought Management Plan, Report No. 1150. August 1999.*

(d) MWD's Water Supply Allocation Plan

While the WSDM Plan included a set of general actions and considerations for MWD staff to address during shortage conditions, it did 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), which has since been implemented three times, most recently in April 2015 (under the new name Drought Rationing Plan). 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.²⁵ The allocation period covers 12 consecutive months from July of a given year through the following June.

(3) Local

(a) Los Angeles Department of Water and Power's 2015 Urban Water Management Plan (UWMP)

In accordance with the California Urban Water Management Planning Act, UWMPs are updated at 5-year intervals. LADWP adopted the 2015 UWMP on April 27, 2016, with the next update planned for 2020. The 2015 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2010 UWMP and currently serves as the City's master plan for reliable water supply and resource management consistent with the City 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 2040. Long range projections are based on Southern California Association of Government (SCAG) growth projections. The 2015 UWMP is based on projections in the 2012 Regional

²⁵ *Metropolitan Water District, 2015 Urban Water Management Plan, p. 2-21.*

Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2020 UWMP will take into account updated projections in the 2020–2045 RTP/SCS.

The 2015 UWMP takes into account a number of significant changes that have occurred since LADWP prepared its 2010 UWMP.²⁶ The year 2012 marked the beginning of the current multi-year drought in California. As stated above, in January 2014, Governor Brown proclaimed a drought state of emergency. In July 2014, the SWRCB implemented its Emergency Water Conservation Regulation (Emergency Regulation), as directed by Governor Brown, to take actions to reduce water use by 20 percent statewide. Later, the mandated reductions were increased to 25 percent statewide, with adjustments to account for different climates, expected growth, investment made to create drought-resilient water supplies by different cities through October 2016. In October 2014, Mayor Eric Garcetti issued Executive Directive No. 5 (ED5) Emergency Drought Response which set goals to reduce per capita water use, reduce purchases of imported potable water by 50 percent, and create an integrated water strategy to increase local supplies and improve water security considering climate change and seismic vulnerability. Lastly, in April 2015, the Mayor's Sustainable City pLAN, (updated in 2019 as the City's Green New Deal and discussed further below), was released establishing targets for the City over the next 20 years to strengthen and promote sustainability. The 2015 UWMP incorporates the objectives of these recent initiatives. Overall the 2015 UWMP projects a 7-percent lower water demand trend than what was projected in the previous 2010 UWMP.²⁷

The 2015 UWMP includes several Near-Term Conservation Strategies and Long-Term Local Supply Strategies to be implemented by LADWP in order to meet its demand for water supply. The near-term strategies include such provisions as the following: enforcing the existing list of prohibited uses of water; expanding the list of prohibited uses of water; extending outreach efforts to the public through various media options and marketing of expanded water conservation incentive and rebate programs; and encouraging regional conservation measures through coordination with MWD. Long-term supply strategies include the following: increasing water conservation through reduction of outdoor water use and new technology (implementing such mechanisms as conservation rebates and incentives; actions by public agencies; conservation in new developments through the implementation of development codes and standards; and additional future studies regarding conservation procedures); water recycling (with mechanisms such as recycled master planning, implementation of water recycling projects inclusive of a Downtown water recycling project; and public outreach regarding recycled water

²⁶ *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, pp. ES-1 to ES-3.*

²⁷ *Based on a comparison of water demand in 2035 in Los Angeles Department of Water and Power, 2010 Urban Water Management Plan, Exhibit 2J and Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, Exhibit 2K.*

programs); enhancing stormwater capture; and accelerating clean-up of the San Fernando Basin.²⁸

(b) Green New Deal

The City released the first Sustainable City pLAN in April 2015,²⁹ which has been updated in 2019 as the City's Green New Deal. 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.

(c) 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.³⁰ 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 2024.³¹ 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.

(d) City of Los Angeles General Plan

(i) General Plan Framework Element

The Citywide General Plan Framework Element (General Plan Framework) establishes the conceptual basis for the City's General Plan.³² The General Plan

²⁸ LADWP, *Water Supply Assessment—Angels Landing*, May 12, 2020, pp. 16 to 24.

²⁹ City of Los Angeles, *Sustainable City pLAN, 2015*, www.lacity.org/highlights/sustainable-city-plan, accessed February 22, 2021.

³⁰ City of Los Angeles, *One Water LA 2040 Plan, Volume 1, Summary Report*, April 2018.

³¹ City of Los Angeles, Office of the Mayor, *Executive Directive No. 5, Emergency Drought Response—Creating a Water Wise City*, October 14, 2014.

³² City of Los Angeles Department of City Planning, *Citywide General Plan Framework, An Element of the Los Angeles General Plan*, July 27, 1995.

Framework 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 General Plan Framework 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.³³ The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP.

The General Plan goals, objectives and policies related to water supply are shown in Table IV.K.1-1 on page IV.K.1-16.

(ii) Wilshire 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 Wilshire Community Plan does not include objectives or policies related to water supply and infrastructure.

(e) Los Angeles Municipal Code

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

- Ordinance Nos. 166,080, 181,288, 183,608, and 184,250—amending LAMC Chapter XII, Article 1 to clarify prohibited uses of water and modify certain water conservation requirements of the City's Emergency Water Conservation Plan. The City's Emergency Water Conservation Plan sets forth six different phases of water conservation, which shall be implemented based on water conditions. As

³³ *City of Los Angeles, General Plan Framework Element, Chapter 9: Infrastructure and Public Services—Water Supply.*

Table IV.K.1-1
Relevant General Plan Utilities and Service Systems Goals, Objectives, and Policies—Framework
Element: Chapter 9 Infrastructure and Public Services

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 9.1	Monitor and forecast demand based upon actual and predicted growth.
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.
<p>Source: City of Los Angeles General Plan, Framework Element, re-adopted 2001.</p>	

part of these requirements, watering is limited to specific days and hours. In determining which phase of water conservation shall be implemented, LADWP monitors and evaluates the projected water supply and demand. In addition, the Emergency Water Conservation Plan includes penalties for those that violate its requirements.

- 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 California Green Building Standards 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 square feet, 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 square feet 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 of Los Angeles also has adopted numerous requirements related to the provision of water for purposes 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 (LAFD), 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 gallons per minute (gpm) in low density residential areas to 12,000 gpm in high density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system with the required gpm flowing. As set forth in LAMC Section 57.507.3.1, Industrial and Commercial land uses (which the LAFD has classified the Project as) have a minimum required fire flow of 6,000 gpm to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 psi unless otherwise determined by LAFD. 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 square feet 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.

(f) *Los Angeles Water Rate Ordinance*

The City's Water Rate Ordinance was adopted in June 1995 and last amended by the City's Board of Water and Power Commissioners pursuant to Ordinance No. 184,130. Effective since April 15, 2016, this City Water Rate Ordinance restructured water rates to help further promote conservation. Specifically, the goal of the ordinance is to incentivize water conservation while recovering the higher costs of providing water to high volume users and accelerating development of sustainable local water supply. Tiered water rate schedules were established for: single-dwelling unit customers; multi-dwelling unit customers; commercial, industrial, and governmental customers and temporary construction; recycled water service; private water service; publicly sponsored irrigation, recreational, agricultural, horticultural, and floricultural uses, community gardens and youth sports. The new water rate structure increases the number of tiers from two to four for single-dwelling unit customers. In addition, this ordinance intends to maintain cost-of-service principles, incremental tier pricing based on the cost of water supply, and added pumping and storage costs.

b. Existing Conditions

(1) Water Supply

LADWP is responsible for providing water within the City of Los Angeles limits and ensuring that the water quality meets applicable California health standards for drinking water. As the Project Site is located within the City, LADWP is the water provider for the Project Site. Water is supplied to the City from four primary sources: the Los Angeles Aqueducts, local groundwater, purchased water from MWD, and recycled water.³⁴ As shown in Table IV.K.1-2 on page IV.K.1-19, in 2019, the most recent year for which estimated data are available, LADWP had an available water supply of 480,539 acre-feet. LADWP water sources are described in further detail below.

(a) Los Angeles Aqueducts

Snowmelt runoff from the Eastern Sierra Nevada Mountains is collected and conveyed to the City via the Los Angeles Aqueducts. The Los Angeles Aqueducts' supplies come primarily from snowmelt and secondarily from groundwater pumping, and can fluctuate yearly due to the varying hydrological conditions. The City holds water rights in the Eastern Sierra Nevada where the Los Angeles Aqueducts water supplies originate from both streams and groundwater. As indicated in Table IV.K.1-2, approximately 245,941 acre-feet of LADWP's water supplies were from the Los Angeles Aqueducts in 2018.

³⁴ LADWP, *Water Supply Assessment—Angels Landing, May 12, 2020, p. 25.*

**Table IV.K.1-2
LADWP 2007–2019 Water Supply**

Calendar Year	Los Angeles Aqueducts	Local Groundwater	MWD	Recycled Water	Transfer, Spread, Spills, and Storage^a	Total
2007	127,392	88,041	439,353	3,595	57	658,438
2008	148,407	64,604	427,422	7,048	(1,664)	645,817
2009	137,261	66,998	351,959	7,570	(554)	563,234
2010	251,126	68,346	205,240	6,900	938	532,550
2011	357,752	49,915	119,481	7,708	153	535,009
2012	166,858	59,109	326,123	5,965	(1,182)	556,873
2013	64,690	66,272	438,534	9,253	2,404	581,153
2014	63,960	96,394	391,307	11,307	(2,020)	560,948
2015	33,244	80,155	378,539	9,829	(430)	501,337
2016	95,573	72,503	314,336	9,095	981	492,487
2017	380,329	14,695	113,033	8,509	(5,730)	510,835
2018	245,942	42,458	212,938	8,832	858	511,027
2019 ^b	344,622	26,433	101,722	8,807	(1,045)	480,539

Units are in acre-feet.

^a The figures presented account for the transfer, spread, spill, and storage of the water supply as determined by LADWP

^b 2019 water supply data are preliminary and may change.

Source: LADWP, Water Supply Assessment—Angels Landing Project, May 12, 2020, Table III.

According to LADWP, average deliveries from the Los Angeles Aqueducts system from Fiscal Year (FY) 2011/12 through 2015/16 were approximately 111,293 acre-feet of water annually. During this period, the record low snowpack for Los Angeles Aqueducts watershed in the Eastern Sierra Nevada Mountains was recorded on April 1, 2015. Supply conditions have changed drastically since 2015. Snowpack in the Eastern Sierra Nevada Mountains was recorded at 203 percent of an average year on April 1, 2017. As such, Mayor Garcetti had proclaimed a state of local emergency for the Los Angeles Aqueducts in 2017 to assist LADWP in taking immediate steps to protect infrastructure and manage runoff in the Owens Valley including, but not limited to, protection of facilities and diversion of conveyance flows. More recently, snowpack in the Eastern Sierra Nevada Mountains was recorded at 54 percent of an average year on April 1, 2020.³⁵

³⁵ LADWP, Eastern Sierra Snow Survey Results, April 1, 2020.

Various lawsuits and injunctions, and resulting agreements, also affect water supplies from the Los Angeles Aqueducts. These include an agreement with the County of Inyo regarding groundwater levels and enhancement and mitigation projects in the Owens Valley, and the imposition of new regulatory requirements by the SWRCB regarding export from Mono Lake and restoration and monitoring programs for the Mono Basin. In addition, in November 2014, an agreement between the City and the Great Basin Unified Air Pollution Control District was reached wherein LADWP will continue to implement measures to address dust emissions at Owens Lake and implement additional water conservation through increasing use of water efficient and waterless dust control measures. Upon completion of the Phase 9/10 Project on December 31, 2017, LADWP had mitigated dust emissions from 48.6 square miles of Owens Lake. Based on the agreement, the Great Basin Unified Air Pollution Control District’s potential future dust mitigation orders to LADWP cannot exceed an additional 4.8 square miles. As a result, LADWP expects to save significant amounts of water over the next 10 years with implementation of the Owens Lake Master Project and other water conservation projects.³⁶

(b) Groundwater

LADWP pumps groundwater from three adjudicated basins, including the San Fernando, Sylmar, and Central Basins. LADWP has accumulated 554,500 acre-feet of stored water credits in the San Fernando Basin as of October 1, 2017.³⁷ This water can be withdrawn from the basin during normal and dry years or in an emergency, in addition to LADWP’s approximately 87,000 AFY entitlement in the basin. The City’s current annual entitlements also include 3,570 AFY from the Sylmar Basin and 17,236 AFY from the Central Basin.

As shown in Table IV.K.1-3 on page IV.K.1-21, during the FY 2018/19 (July through June), LADWP extracted 36,871 acre-feet from the San Fernando Basin and 5 acre-feet from the Central Basin.³⁸ LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported water supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. Both LADWP and 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 (ULARA) Administrative Committee of representatives from five public water supply agencies overlying the ULARA Committee.³⁹ These efforts include

³⁶ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p.27.

³⁷ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 28.

³⁸ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 28.

³⁹ LADWP, *2015 Urban Water Management Plan*, June 2016, p. 6-3.

**Table IV.K.1-3
Local Groundwater Basin Supply**

Fiscal Year (July–June)	San Fernando Basin (acre-feet)	Sylmar Basin (acre-feet)	Central Basin (acre-feet)
2014–2015	80,097	1	6,948
2015–2016	75,958	683	8,395
2016–2017	55,116	0	3,005
2017–2018	22,259	0	0.77
2018–2019	36,871	1	5
2019–2020 ^a	90,000	4,170	18,500
2024–2025 ^a	88,000	4,170	18,500
2029–2030 ^a	84,000	4,170	18,500
2034–2035 ^a	92,000	4,170	18,500
2039–2040 ^a	92,000	3,570	18,500

Units are in acre-feet.

^a *Projected production from LADWP 2015 UWMP, Exhibit 6I.*

Source: LADWP, Water Supply Assessment—Angels Landing Project, May 12, 2020, Table IV.

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.

(c) 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's California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the Los Angeles Aqueducts and local groundwater. As of June 30, 2019, LADWP has a preferential right to purchase 18.25 percent of MWD's total water supply.⁴⁰

The Sustainable City pLAn, discussed above, calls for a reduction in purchased imported water by 50 percent by 2025 from the FY 2013/14 level, which was approximately 441,870 acre-feet.⁴¹ L.A.'s Green New Deal also reaffirms this initiative.⁴² To meet these

⁴⁰ LADWP, *Water Supply Assessment—Angels Landing Project, May 12, 2020, p. 30.*

⁴¹ LADWP, *Water Supply Assessment—Angels Landing Project, May 12, 2020, p. 31.*

targets, LADWP plans to increase conservation, enhance the ability for groundwater pumping through increased stormwater capture projects and groundwater replenishment with highly treated recycled water, as well as remediation of contaminated groundwater supplies in the San Fernando Basin. LADWP also plans to increase recycled water use for non-potable purposes. With these initiatives and under average hydrologic conditions, LADWP's 2015 UWMP projects MWD purchases to be approximately 65,930 AFY in 2025.⁴³

Through continued and additional local supply development and conservation savings, LADWP's reliance on MWD water supplies may be reduced significantly from the five-year average from FY 2010/11 through 2014/15 of 57 percent of total demand to 11 percent under average weather conditions and to 44 percent under single-dry year conditions by fiscal year 2040.⁴⁴ As indicated in Table IV.K.1-2 on page IV.K.1-19, LADWP received approximately 214,940 acre-feet of water from MWD in 2018, which was a reduction from the previous year. Summaries of MWD's individual supplies, along with each supply's challenges and specific responsive actions taken by MWD, are presented below.

(i) State Water Project

MWD imports water from the State Water Project, owned by the State of California and operated by the DWR. The State Water Project is a water storage and delivery system of pump stations, reservoirs, aqueducts, tunnels, and power plants. The main purpose of the State Water Project is to divert and store surplus water during wet periods and distribute it to areas throughout the State. Other purposes of the State Water Project include flood control, power generation, recreation, fish and wildlife protection, and water quality management in the Sacramento–San Joaquin River Delta (Delta). The State Water Project transports Feather River water stored in and released from Oroville Dam and conveyed through the Delta, as well as unregulated flows diverted directly from the Delta south via the California Aqueduct to four delivery points near the northern and eastern boundaries of MWD's service area.

MWD is one of the 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 19 million), the share of the State Water Project that it has contracted to receive

⁴² *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAN, 2019, p. 107.*

⁴³ *LADWP, Water Supply Assessment—Angels Landing Project, May 12, 2020, p. 38.*

⁴⁴ *LADWP, 2015 Urban Water Management Plan, June 2016, p. 8-1.*

(approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 49 percent for 2018–2019).⁴⁵

The State Water Project, under the original contracted amount at 100 percent allocation, will provide MWD with 1,911,500 acre-feet of water each calendar year through December 31, 2035.⁴⁶ However, due to water quality and supply reliability challenges and conflicts associated with variable hydrology and environmental standards that limit pumping operations, State Water Project deliveries have varied in the most critically dry years. Contractual amounts were 5 percent in 2014 and 20 percent in 2015.⁴⁷ For 2016, the DWR had provided an estimated an initial allocation of 10 percent but increased the allocation to 60 percent by April, primarily due to changes in hydrologic conditions.⁴⁸ Allocation levels were also 60 percent in January 2017 and increased to 85 percent in April 2017.⁴⁹ In 2018, however, DWR allocation levels were reduced to 20 percent in January and 35 percent in May.⁵⁰

For the 2019 calendar year, DWR allocation levels were initially further reduced to 15 percent in January, but levels were subsequently increased to 35 percent in February and 75 percent in June.⁵¹ In May 2020, DWR adjusted the allocation to 20 percent.⁵² DWR approval of allocation levels are based on precipitation, runoff, and water conditions. Other considerations include the existing storage in State Water Project conservation reservoirs, State Water Project operational regulatory constraints (e.g., conditions of the Biological Opinions for Delta Smelt and Salmonids, and the Longfin Smelt incidental take permit), and 2019 contractor demands. Furthermore, DWR may revise the allocation and subsequent allocations if warranted by the year's developing hydrologic and water supply conditions.⁵³

⁴⁵ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, Appendix F, p. A-9.

⁴⁶ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, Appendix F, p. A-11.

⁴⁷ MWD, *2015 Urban Water Management Plan*, June 2016, p. 3-10.

⁴⁸ CA DWR, *Notice to State Water Project Contractors*, Nos. 15-07 and 16-06.

⁴⁹ CA DWR, *Notice to State Water Project Contractors*, Nos. 17-01 and 17-05.

⁵⁰ CA DWR, *Notice to State Water Project Contractors*, Nos. 18-02 and 18-05.

⁵¹ CA DWR, *Notice to State Water Project Contractors*, Nos. 19-03, 19-06, and 19-10.

⁵² California Department of Water Resources, *Notice to State Water Project Contractors*, Number 20-05, *2020 State Water Project Allocation Increase—20 Percent*.

⁵³ CA DWR, *Notice to State Water Project Contractors*, No. 19-10.

Challenges to State Water Project Supply

Litigation and various regulations have created challenges for the State Water Project. In particular, the listing of several fish species in the Delta as threatened or endangered under the federal and/or California Endangered Species Acts (ESA/CESA) has constrained State Water Project operations and created more uncertainty in State Water Project supply reliability. Under direction by Governor Gavin Newsom, DWR is beginning an environmental review and planning process for a single tunnel project to address delta conveyance.⁵⁴

In addition, as discussed in DWR's Bulletin 132-17, Management of the California State Water Project published in January 2019 (which reports on State Water Project planning, construction, finance, management, and operations during calendar year 2016), demands for State Water Project water are expected to increase and change as California's population continues to grow and as the effects of climate change impact the State's water resources. Increasingly, issues such as escalating costs, environmental concerns, and increased non-State Water Project demand for limited water supplies have become important factors affecting the planning and construction of new facilities.⁵⁵

(ii) Colorado River Aqueduct

MWD owns and operates the Colorado River Aqueduct, which has delivered water from the Colorado River to Southern California since 1942. The Colorado River currently supplies approximately 17 percent of Southern California's water needs, and on average makes up about 15 percent of LADWP's purchases from MWD.⁵⁶ 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 acre-feet 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.⁵⁷ In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada. Since 2003, due to increased consumption, no such unused apportioned water has been available to California.

⁵⁴ California Department of Water Resources, *State Withdraws WaterFix Approvals, Initiates Planning and Permitting for a Smaller Single Tunnel*, published May 2, 2019, <https://water.ca.gov/News/News-Releases/2019/May/State-Withdraws-WaterFix-Approvals>, accessed February 24, 2021.

⁵⁵ California Department of Water Resources, *Bulletin 132-17, Management of the California State Water Project*, January 2019.

⁵⁶ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 33.

⁵⁷ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 34.

Challenges to Colorado River Supply

As the Colorado River water supplies come from watersheds of the Upper Colorado River Basin, snowpack and runoff can impact storage levels at Lake Powell and Lake Mead, which then affect the likelihood of surplus or shortage conditions in the future. Although the MWD has two principal sources of water supply and is able to utilize supplies from the Colorado River to offset reductions in State Water Project supplies and buffer impacts from drought in California, the MWD also has been developing plans and making efforts to provide additional water supply reliability for the Southern California region.⁵⁸

Historically, MWD has been able to claim most of its legal entitlement of Colorado River water and could divert over 1.2 million acre-feet in any year, but persistent drought conditions since 1999 have contributed to a decrease in these claims.⁵⁹ The Colorado River Basin also has experienced a prolonged drought, with runoff in 2012 being among the four driest in history.⁶⁰ During these drought conditions, Colorado River system storage decreased to 50 percent of capacity.⁶¹ In response, the federal government, states and urban and agricultural water districts that depend on the Colorado River worked together toward a solution. Their efforts resulted in the adoption and enactment of the Drought Contingency Plan in 2019. The Drought Contingency Plan is a collection of agreements within and among the seven western states in the Colorado River Basin to boost reservoir storage levels in Lake Mead and Lake Powell and prevent the reservoirs from reaching critically low levels.⁶²

Federal and state environmental laws protecting fish species and other wildlife species also have the potential to affect Colorado River operations. A number of species that are either endangered or threatened are present in the Lower Colorado River. To address this issue, a state/federal/tribal/private regional partnership comprised of water, hydroelectric power, and wildlife management agencies in Arizona, California, and Nevada developed the Lower Colorado River Multi-Species Conservation Program. The program allows MWD to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The Lower Colorado River Multi-Species Conservation Program also covers operations of federal

⁵⁸ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 34.

⁵⁹ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 34.

⁶⁰ MWD, *2015 Urban Water Management Plan*, June 2016, p. 3-5.

⁶¹ MWD, *2015 Urban Water Management Plan*, June 2016, p. 3-5.

⁶² LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 35.

dams and power plants on the river that deliver water and hydroelectric power for use by MWD and other agencies.⁶³

Management of Colorado River Supply

There are various agreements and guidelines that affect the management of Colorado River water supplies, and MWD has taken steps to augment its share of Colorado River water supplies by entering into agreements with other agencies that have rights to use such water.⁶⁴ Specifically, under a 1988 water conservation agreement between MWD and the Imperial Irrigation District, MWD provided funding for the Imperial Irrigation District to construct and operate a number of conservation projects that are currently conserving up to 109,460 acre-feet of water per year that is provided to MWD.⁶⁵ In addition, in August 2004, MWD and the Palo Verde Irrigation District signed an agreement for a Land Management, Crop Rotation and Water Supply Program, which provides up to 133,000 acre-feet of water to be available to MWD in certain years. Furthermore, in May 2008, MWD joined the Central Arizona Water Conservation District and the Southern Nevada Water Authority in funding the Warren H. Brock Reservoir, which conserves approximately 70,000 AFY of water. MWD is also participating in numerous pilot programs to augment its water supplies. Other agreements and guidelines that continue to affect the management of water supplies from the Colorado River include the Quantification Settlement Agreement, executed in October 2003, and the Transfer Agreement executed in 1998. Additional guidelines and programs that influence management of the Colorado River water supplies include the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, the Intentionally Created Surplus Program, and the Quagga Mussel Control Program.

(iii) Additional MWD Actions to Address Supply

To improve water supply reliability for the entire Southern California region, MWD has also been pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts, and individuals. Programs include the Arvin–Edison Storage Program; the Semitropic Storage Program; the San Bernardino Storage Program; the San Gabriel Valley MWD Exchange Program; the Antelope Valley–East Kern Water Agency Exchange and Storage Program; the Kern-Delta Water District Storage Program; the Mojave Storage Program; and the Central Valley Transfer Programs.⁶⁶

⁶³ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, Appendix F, p. A-23.

⁶⁴ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, Appendix F, p. A-26.

⁶⁵ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, Appendix F, p. A-27.

⁶⁶ MWD, *2015 Urban Water Management Plan*, June 2016, p. 3-24.

In addition, MWD continues to develop plans and make 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. As discussed above, MWD's long-term plans to meet its member agencies' reliability needs include improvements to the State Water Project, conjunctive management efforts on the Colorado River, water transfer programs and outdoor conservation measures, and development of additional local resources, such as recycling brackish water desalination and seawater desalination.⁶⁷

MWD also has more than 5 million acre-feet of storage capacity of available reservoirs and banking/transfer programs, with approximately 2.98 million acre-feet of water in Water Surplus Drought Management storage and an additional 750,000 acre-feet in emergency storage as of January 1, 2020.⁶⁸ With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD was able to add storage in 2019 beginning with approximately 3.1 million acre-feet of water in its dry-year storage portfolio.⁶⁹ As described in the MWD's 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under average-year, single dry-year, and multiple dry-year hydrologic conditions.

(d) Precipitation Conditions

During the 2018 water year (i.e., October 1, 2017, through September 30, 2018), California experienced dry conditions statewide, with nearly all the state experiencing below precipitation and much of Southern California receiving half or less of its average annual precipitation. The 2018 water year followed California's second-wettest year of record as measured by statewide runoff, ending a historic five-year drought.⁷⁰

The 2019 water year (i.e., October 1, 2018, to September 30, 2019) ended with significantly more water in storage than the previous year due to above-average snow and precipitation.⁷¹

During the 2020 water year (i.e., October 1, 2019, to September 30, 2020), dry conditions in October and November were followed by precipitation in December that

⁶⁷ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 35.

⁶⁸ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 35.

⁶⁹ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020, p. 35.

⁷⁰ CA DWR, *Water Year 2018: Hot and Dry Conditions Return*, September 2018, p. 2.

⁷¹ CA DWR, *Water Year 2020 Begins with Robust Reservoir Storage*, October 1, 2019, <https://water.ca.gov/News/News-Releases/2019/October-19/Water-Year-2020-Begins-with-Robust-Reservoir-Storage>, accessed February 24, 2021.

measured 120 percent of average. Then, very dry conditions returned to much of the State in January and February, with March and April storms leading to the snowpack peaking at just 66 percent of average on April 9, 2020.⁷² While March and April storms brought needed snow to the Sierras, the gains were not nearly enough to offset a very dry January and February.⁷³ Based on DWR's survey on April 30, 2020, DWR forecasted that snowmelt runoff into the reservoirs would be below average.⁷⁴

The 2021 water year (i.e., October 1, 2020 to September 30, 2021) has been abnormally dry, with the winter to date looking like Water Year 2014, the third year of California's most severe drought since the 1920s to '30s.⁷⁵ Specifically, according to the National Drought Mitigation Center, as of February 16, 2021, approximately 99.3 percent of the state was experiencing some degree of drought.⁷⁶ This indicates a shift from the previous year, when approximately 59.98 percent of the state was experiencing some degree of drought.⁷⁷

California continues to experience variable weather and precipitation, as does the City of Los Angeles with its many periods of dry years and wet years. Therefore, the State continues to develop and implement necessary strategies and actions to address future drought conditions and account for year-to-year fluctuations in precipitation.

(e) *Climate Change*

As discussed in the LADWP's 2015 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

⁷² CA DWR, News Release, *Spring Storms Not Enough to Offset Dry Winter: California Enters Summer with Precipitation and Snowpack Below Average*, April 30, 2020, <https://water.ca.gov/News/News-Releases/2020/April-20/April-30-2020-Snow-Survey>, accessed February 24, 2021.

⁷³ CA DWR, News Release, *Spring Storms Not Enough to Offset Dry Winter: California Enters Summer with Precipitation and Snowpack Below Average*, April 30, 2020, <https://water.ca.gov/News/News-Releases/2020/April-20/April-30-2020-Snow-Survey>, accessed February 24, 2021.

⁷⁴ CA DWR, News Release, *Spring Storms Not Enough to Offset Dry Winter: California Enters Summer with Precipitation and Snowpack Below Average*, April 30, 2020, <https://water.ca.gov/News/News-Releases/2020/April-20/April-30-2020-Snow-Survey>, accessed February 24, 2021.

⁷⁵ CA DWR, *Water Year 2021: How Are We Doing?*, <https://water.ca.gov/News/Blog/2021/January/Water-Year-2021-How-Are-We-Doing>, January 27, 2021, accessed February 19, 2021.

⁷⁶ United States Drought Monitor, *State Drought Monitor, California*, February 16, 2021, <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA>, accessed February 19, 2021.

⁷⁷ United States Drought Monitor, *State Drought Monitor, California*, February 16, 2021, <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA>, accessed February 19, 2021.

Los Angeles Aqueducts, though 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. 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.⁷⁸

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 IRP. 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.⁷⁹ As mentioned above, with updates published every five years, the most recent California Water Plan Update 2018 builds on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability.⁸⁰

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 emission and the expertise of a climate change technical advisory group formed in 2012, respectively. Phase III of the Climate Action Plan includes a vulnerability assessment, which was completed in February 2019 and identifies DWR assets and activities that have vulnerabilities related climate change and the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply. Phase III also includes an adaptation plan, which is expected for release in 2020. This document will help prioritize DWR resiliency efforts such as infrastructure improvements, enhanced maintenance and operation procedures, revised health and safety procedures, and improved habitat management.⁸¹ As such, climate change and its impacts on water supplies are key factors of new water supply regulations and urban water management plans.

⁷⁸ LADWP, *2015 Urban Water Management Plan*, June 2016, p. 12-1.

⁷⁹ CA DWR, *California Water Plan Update 2013, Investing in Innovation & Infrastructure, Highlights*, October 2014.

⁸⁰ CA DWR, *California Water Plan Update 2018*, July 2019.

⁸¹ CA DWR, *Climate Action Plan*, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed February 24, 2021.

(f) *Water Conservation and Recycling*

LADWP's 2015 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 of Los Angeles in the next 25 years. To meet multiple water conservation goals established in ED 5, the Sustainable City pLAN, and the Water Conservation Act of 2009, LADWP's 2015 UWMP aims to reduce per capita potable water use by 22.5 percent by 2025 and by 25 percent by 2035, based on Fiscal Year 2013–2014 levels.⁸² L.A.'s Green New Deal adds an additional target for the City, following the reduction of potable water use per capita by 25 percent by 2035, to maintain or reduce 2035 per capita water use through 2050.⁸³ The City 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.

Furthermore, based on LADWP's 2015 UWMP, recycled water use is projected to reach 59,000 AFY by 2025 and further increase to 75,400 AFY by 2040.⁸⁴ L.A.'s Green New Deal also sets a goal to recycle 100 percent of all wastewater for beneficial use by 2035.⁸⁵ To achieve its goals, the LADWP has initiated water recycling projects in Elysian Park, Downtown Los Angeles, and other parts of the City and is pursuing strategies related to groundwater replenishment and the non-potable reuse of water by irrigation and industrial customers. Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the L.A. River.⁸⁶

(2) Water Demand

(a) *Citywide Water Demand*

LADWP's 2015 UWMP provides water supply and demand projections in five-year increments to 2040, based on projected population estimates provided by the Southern

⁸² LADWP, *2015 Urban Water Management Plan*, June 2016, p. 11-14.

⁸³ City of Los Angeles, *L.A.'s Green New Deal, Sustainable City pLAN*, 2019, p. 44.

⁸⁴ LADWP, *2015 Urban Water Management Plan*, June 2016, ES-18.

⁸⁵ As noted in *L.A.'s Green New Deal*, the baseline from LASAN is from Fiscal Year 2017–2018 in which 27 percent of wastewater was recycled.

⁸⁶ LADWP, *Water Supply Assessment—Angels Landing Project*, May 12, 2020.

California Association of Governments (SCAG) in its 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS).⁸⁷ Table IV.K.1-4 on page IV.K.1-32 shows the projected water demand from the year 2020 through 2040 for the City of Los Angeles.

As shown in Table IV.K.1-4, in 2040 during average year hydrological conditions, the City's water demand is forecasted to be approximately 675,700 AFY. Use of the current demand per capita within this demand forecast provides a conservative estimate of projected future water demand to ensure that water supplies are available to meet projected demands. LADWP's 2015 UWMP anticipates 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 2040.⁸⁸

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the Project Site is currently developed with the following: a 6,848-square-foot cathedral; three ancillary church buildings with a total of 12,370 square feet of floor area, including a 2,520-square-foot rectory, a 5,426 square-foot social hall, and a 4,424-square-foot building with offices and meeting rooms; and a surface parking lot. As discussed in the Water Utility Report, the existing uses generate approximately 3,524 gallons per day (gpd) of water.

(3) Water Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 117 storage tanks and reservoirs, 84 pump stations, 7,326 miles of distribution mains and trunk lines within the City, and a total storage capacity of 311,000 acre-feet.⁸⁹ Much of the water flows north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant in Sylmar, which is owned and operated by LADWP. Water entering the Los Angeles Aqueduct Filtration Plant undergoes

⁸⁷ As discussed above, the 2015 UWMP was prepared based on SCAG's 2012–2035 RTP/SCS. Since the release of the 2015 UWMP, however, new growth forecasts have become available in SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS. In order to compare the growth forecasts (i.e., population, households, and employment) of the 2012–2035 RTP/SCS, 2016–2040 RTP/SCS, and 2020–2045 RTP/SCS, straight-line interpolations were conducted to determine current (2020) and future (2045) estimates. From these calculations, the growth forecasts from the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS were observed to be only marginally higher than those from the 2012–2035 RTP/SCS. Thus, the growth forecasts of the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS would not significantly affect water demand projections.

⁸⁸ LADWP, *2015 Urban Water Management Plan*, June 2016, p. 11-10.

⁸⁹ LADWP, *Briefing Book 2018–2019*, p. 16.

Table IV.K.1-4
City of Los Angeles Water Demand Projections Based on Hydrological Conditions

Hydrological Conditions	Years				
	2020	2025	2030	2035	2040
Average Year	611.8	644.7	652.9	661.8	675.7
Single Dry Year (FY 2014–2015)	642.4	676.9	685.5	694.9	709.5
Multi-Dry Year (2011–2015)	642.4	676.9	685.5	694.9	709.5

Units are in thousand AFY.
Source: LADWP, 2015 Urban Water Management Plan, Exhibits 11F, 11G, and 11H.

treatment and disinfection before being distributed throughout the LADWP's water service area.⁹⁰ To ensure its infrastructure is sufficient to meet ongoing demand, LADWP would continue to implement its \$6.3 billion, five-year water system capital improvement plan, which includes replacement of distribution mainlines, trunk lines, large valves, and water meters, as well as ongoing maintenance and rehabilitation of facilities such as pump stations, pressure regulators, and in-city reservoirs and tanks.⁹¹

Domestic water service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Water Utility Report, included as Appendix U to this Draft EIR, there is an existing 8-inch water main in S. San Vicente Boulevard, an existing 6-inch water main in Holt Avenue, and an existing 12-inch water main in W. Burton Way. Also, the 656 S. San Vicente Boulevard lot within the Project Site is served by two 1.5-inch existing water services off of S. San Vicente Boulevard.

In addition to providing domestic water service, LADWP also provides water for fire protection services in accordance with the City's Fire Code (LAMC Chapter V, Article 7). According to the Water Utility Report, there are four existing LADWP fire hydrants located near the Project Site:

- West side of S. San Vicente Boulevard, 225 feet north of the centerline of S. San Vicente Boulevard and W. Burton Way;
- North side of W. Burton Way, 70 feet west of the centerline of W. Burton Way and Holt Avenue;

⁹⁰ LADWP, 2015 Urban Water Management Plan, June 2016, p. 12-24.

⁹¹ LADWP, 2018-19 Water Infrastructure Plan, revised 11/2019, p. 2.

- South side of W. Burton Way, 35 feet west of the centerline of W. Burton Way and Holt Avenue; and
- South side of W. Burton Way, 57 feet west of the centerline of W. Burton Way and Le Doux Road.

3. Project Impacts

a. Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G, the Project would have a significant impact related to water supply and infrastructure if it would:

Threshold (a): Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.⁹²

Threshold (b): (Not) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

The City uses Appendix G as the thresholds of significance in assessing impacts related to water supply and infrastructure in this section. The factors and considerations identified below from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G threshold questions.

The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate water supply and infrastructure:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;

⁹² Refer to the Project's Initial Study (Appendix A to this Draft EIR) for a discussion of wastewater and stormwater impacts; Section IV.K.2, Utilities and Service Systems - Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure; and Section VI, Other CEQA Considerations, for a discussion of telecommunications facility infrastructure.

- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of project completion; and
- The degree to which scheduled water infrastructure or project design features would reduce or offset service impacts.

b. Methodology

The analysis of the Project's impacts relative to water supply is based on a calculation of the Project's anticipated water demand. Consistent with LADWP's methodology, the estimated net water demand for the Project is calculated by applying the LASAN sewer generation factors to the existing uses to be removed and the Project's proposed uses. The Project's net water demand is then analyzed relative to LADWP's existing and planned future water supplies in order to determine if LADWP will be able to accommodate the Project's water demands during average year, single-dry year and multiple-dry years hydrologic conditions.

The analysis with regard to water infrastructure is based in part on the Water Utility Report included in Appendix V to this Draft EIR. The Water Utility Report includes a comparison of the estimated water demand for the Project to the available capacity of the existing water infrastructure.

c. Project Design Features

The following project design feature is proposed with regard to water supply:

Project Design Feature WAT-PDF-1: The Project design shall incorporate the following water conservation features to support water conservation, in addition to those measures required by the City's current codes and ordinances:

- High-Efficiency Toilets with a flush volume of 1.0 gallon per flush.
- Showerheads with a flow rate of 1.5 gallons per minute.
- High-efficiency Energy Star-rated residential and commercial clothes washers.
- High-efficiency Energy Star-rated residential dishwashers, should dishwashers be provided.
- Domestic Water Heating System located in close proximity of point(s) of use.
- Drip/Subsurface Irrigation (Micro-Irrigation).

- Proper Hydro-Zoning/Zoned Irrigation (groups plants with similar water requirements together).
- Drought-Tolerant Plants.

d. Analysis of Project Impacts

***Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*⁹³**

(1) Impact Analysis

(a) Construction

As discussed in the Water Utility Report included as Appendix V to this Draft EIR, the Project would require the construction of new on-site water distribution lines to serve the new buildings. Construction activities for the Project would also result in a temporary demand for water associated with soil compaction and earthwork, dust control, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment, testing of water connections and flushing, and other short-term related activities. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water demand would be approximately 1,000 to 2,000 gpd. As such, the estimated construction water demand would be substantially less than the existing water demand (approximately 3,524 gpd), and far less than the Project's estimated operational water demand (approximately 39,648 gpd). As discussed further below, there is adequate water supply and sufficient water infrastructure to meet the Project's operational water demand, such that the substantially less and temporary construction water demand would also be accommodated by existing infrastructure. Therefore, water needed during construction would not result in the construction of new or expanded water distribution facilities, and the existing off-site LADWP water infrastructure system would be adequate to provide for the water flow necessary to serve the Project during construction.

Construction of the new on-site water distribution lines would primarily involve trenching to place the lines below the surface, and minor off-site work to connect to the

⁹³ Refer to the Project's Initial Study (Appendix A to this Draft EIR) for a discussion of wastewater and stormwater impacts; Section IV.K.2, Utilities and Service Systems - Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure; and Section VI, Other CEQA Considerations, for a discussion of telecommunications facility infrastructure.

existing public water mains. No upgrades to the public water mains are anticipated. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depths of all lines. Furthermore, LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service. LADWP would review and approve all appropriate connection requirements, pipe depths, and connection location(s). The limited off-site connection activities could also temporarily affect access in adjacent rights-of-way. However, as discussed Section IV.I, Transportation, of this Draft EIR, a Construction Traffic Management Plan would be implemented to ensure that adequate and safe access remains available within and near the Project Site during construction activities. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure emergency access to the Project Site and traffic flow is maintained on adjacent rights-of-way.

Overall, construction activities associated with the Project would not require or result in the relocation or construction of new water facilities or expansion of existing facilities that could cause a significant environmental effect. As such, the Project's construction-related impact on water infrastructure would be less than significant.

(b) Operation

Water service to the Project Site would continue to be supplied by LADWP for domestic and fire protection uses. As discussed in the Water Utility Report, while domestic water demand is typically the main contributor to operational water consumption, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore, are the primary means for analyzing infrastructure capacity. Nevertheless, conservative analyses for both fire suppression and domestic water flows have been completed by LADWP for the Project. These analyses are summarized below and described in more detail in the Water Utility Report included as Appendix V to this Draft EIR.

Fire flow to the proposed Project buildings would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3.1, which establishes fire flow standards by development type. As previously described, the Project falls within the High Density Residential and Neighborhood Commercial category, which has a required fire flow of 4,000 gallons per minute (gpm) from four adjacent hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch (psi). This translates to a required flow of 1,000 gpm for each of four hydrants flowing simultaneously. As discussed above, there are four existing fire hydrants adjacent to the Project Site. As part of the Water Utility Report, an Information of Fire Flow Availability Request (IFFAR) was submitted to LADWP to confirm adequate hydrant fire flow is available to the Project. Based on the completed IFFAR (see Exhibit 2 of Appendix V to this Draft EIR), the four existing public fire hydrants flowing simultaneously can deliver combined flows greater than

6,000 gpm, which exceeds the required range of 4,000 gpm with a residual pressure greater than 20 psi. Therefore, based on the IFFAR, there is adequate fire flow available for the Project to comply with the fire flow requirements identified for the Project in accordance with LAMC Section 57.507.3. Furthermore, the Project also includes a fire sprinkler suppression system, which would be subject to LAFD review and approval during the design and permitting of the Project.

In addition, two Service Advisory Reports (SARs) were submitted to LADWP to determine if the existing domestic water infrastructure would meet the demands of the Project. The Project includes the connection of the new residential use to the existing 6-inch main in Holt Avenue with a new 6-inch fire and new 6-inch domestic water service. In addition, the Project includes the connection of the church uses to the existing 8-inch main in S. San Vicente Boulevard with a new 6-inch fire and new 2-inch domestic service. As shown in Exhibit 1 to Appendix V, LADWP has approved both combined services.

Based on the above analyses, the Project would not exceed the available capacity of the existing water distribution infrastructure that would serve the Project Site. Accordingly, the Project would not 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. Therefore, the Project's operational impacts on water infrastructure would be less than significant.

(2) Mitigation Measures

Project-level impacts with regard to water infrastructure would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to water infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Construction

Construction activities for the Project would result in a temporary demand for water associated with soil compaction and earthwork, dust control, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment, testing of water connections and flushing, and other short-term related activities. These activities would occur incrementally throughout construction of the Project (from the start of construction to project buildout). The amount of water used during construction would vary depending on soil conditions, weather, and the specific activities being performed. However, given the temporary nature of construction activities and the short-term and intermittent water use during construction of the Project, the Water Utility Report estimates that the anticipated water demand would be approximately 1,000 to 2,000 gpd, which is substantially less than the 3,524 gpd of existing water consumption of the Project. Moreover, as discussed in LADWP's 2015 UWMP, the projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2015 through 2040, in addition to the existing and planned future water demands within LADWP's service area through the year 2040. Therefore, the Project's temporary and intermittent demand for water during construction could be similarly met by the City's available supplies during each year of Project construction.

Based on the above, LADWP would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, the Project's construction-related impacts on water supply would be less than significant.

(b) Operation

As described in Section II, Project Description, of this Draft EIR, the Project includes 153 residential units, a 7,790-square-foot rehabilitated cathedral, and approximately 23,649 square feet of new ancillary church uses, including 3,400 square feet of church offices, 7,649 square feet of church meeting rooms, and a new 12,600-square-foot multi-purpose room. Based on the size of the proposed uses and the Project's estimated water demand, the Project is not subject to the requirements of SB 610 regarding the preparation of a WSA.

Development of the Project would result in an increase in long-term water demand for consumption, operational uses, maintenance, and other activities on the Project Site. Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply is based on a calculation of the Project's water demand by applying the sewage generation rates established by LASAN, which also serve to estimate water

demand, to the proposed uses. As shown in Table IV.K.1-5 on page IV.K.1-40, assuming constant water use throughout the year, it is estimated that the operation of the Project would result in a net water demand of approximately 36,124 gallons per day.

The 2015 UWMP utilized SCAG's 2012–2035 RTP/SCS data that provide for more reliable water demand forecasts, taking into account changes in population, housing units and employment. The Project would generate approximately 369 new residents⁹⁴ and 153 new households and would not generate any new employees. The Project would be consistent with growth projections anticipated by the SCAG and the demographic projection for the City in both the 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.⁹⁵ Specifically, based on SCAG's projections for the City of Los Angeles Subregion between 2019 and 2024 (the Project's buildout year), the estimated 369 residents generated by the Project would represent approximately 0.35 percent of the projected population growth, and the estimated 153 households would represent approximately 0.27 percent of the projected household growth.⁹⁶ Therefore, the Project would be well within SCAG's projections for the City of Los Angeles Subregion.

The Project's net water demand of 36,124 gpd has been accounted for in the City's overall total demand projections set forth in LADWP's 2015 UWMP. Specifically, as previously discussed, the 2015 LADWP UWMP forecasts adequate water supplies to meet all projected water demands in the City through the year 2040 during average years, single-dry years, and multiple-dry years. LADWP, therefore, concluded that the increase in

⁹⁴ As a note, the Initial Study for the Our Lady of Mt. Lebanon Project (Appendix A of this Draft EIR) applied an estimated rate of 2.6 persons per multi-family unit, which was the available rate provided by the City of Los Angeles at the time of publication of the Initial Study. This Draft EIR utilizes the updated rate of 2.41 persons per multi-family unit provided by the City of Los Angeles, which results in 369 new residents (153 x 2.41).

⁹⁵ The demand projections in LADWP's 2015 Urban Water Management Plan are based on demographic growth projections in SCAG's 2012–2035 RTP/SCS, the 2000 U.S. Census data, and the 2010 U.S. Census data. Since preparation of LADWP's 2015 Urban Water Management Plan, new growth forecasts have become available in SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS. However, the growth forecasts in SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS are only marginally higher than those in the 2012–2035 RTP/SCS, in terms of current (2020) estimates and future (2045) projections for the SCAG Region, and, therefore, would not materially affect water demand projections.

⁹⁶ Based on a linear interpolation of SCAG's 2008–2020 and 2020–2035 data, as shown in SCAG's 2012–2035 RTP/SCS Growth Forecast Appendix, Table 18:

Population growth between 2019 (3,973,267 persons) and 2024 (4,079,407 persons) is approximately 106,140 persons. The Project's 369 residents would represent approximately 0.35 percent of this growth ((369 ÷ 106,140) × 100 = 0.35).

Household growth between 2019 (1,443,550 households) and 2024 (1,501,273 households) is approximately 57,723 households. The Project's 153 households would represent approximately 0.27% of this growth ((153 ÷ 57,723) × 100 = 0.27).

**Table IV.K.1-5
Estimated Project Water Demand**

Land Use	No. of Units/ Floor Area	Water Demand Rate^a (gpd/unit)	Demand (gpd)
Existing			
Cathedral ^b	288 seats	3 gpd/seat	864
Parish Rectory	1 unit	230 gpd/unit	230
Social Hall	5,426 sf	0.350 gpd/sf	1,899
Office/Meeting Rooms ^c	4,424 sf	0.120 gpd/sf	531
<i>Subtotal Existing</i>			3,524
Proposed			
Residential Apartment: Studio	13 du	75 gpd/du	975
Residential Apartment: 1-bedroom	80 du	110 gpd/du	8,800
Residential Apartment: 2-bedroom	60 du	150 gpd/du	9,000
Swimming Pool and Jacuzzi ^d	—	—	15,390
Lease Office ^e	210 sf	0.120 gpd/sf	25
Fitness Room ^f	676 sf	0.650 gpd/sf	439
Lobbies (Residential and Cathedral) ^g	1,100 sf	0.5 gpd/sf	56
Cathedral ^b	306 seats	3 gpd/sf	918
Cathedral Food Prep Kitchen ^h	1,790 sf	0.300 gpd/sf	537
Cathedral Multi-Purpose Room ⁱ	7,285 sf	0.350 gpd/sf	2,550
Cathedral Office/Meeting Rooms ^c	6,730 sf	0.120 gpd/sf	808
Cathedral Lounge ^j	2,284 sf	0.05 gpd/sf	114
Cathedral Library/Activity Room ^k	718 sf	0.05 gpd/sf	36
<i>Subtotal Proposed</i>			39,648
Project Net Water Demand			36,124
<p><i>du = dwelling units</i> <i>gpd = gallons per day</i> <i>sf = square feet</i> All totals have been rounded and may not sum due to rounding.</p> <p>^a Based on 100 percent of sewage generation rates provided by LASAN (effective April 6, 2012). ^b Cathedral is considered as "Church" for water generation purposes. ^c Offices/Meeting Rooms are considered as "Conference Room of Office Building" for water generation purposes. ^d Jacuzzi is considered as "Swimming Pool" for water generation purposes. ^e Lease office is considered as "Office Building" for water generation purposes. ^f Fitness Room is considered as "Health Club/Spa" for water generation purposes. ^g Residential lobby and cathedral lobby are considered as "Lobby of Retail Area" for water generation purposes. ^h Food Prep Kitchen is considered as "Restaurant: Take Out" for water generation purposes. The food prep kitchen would not be a restaurant and would support the multi-purpose room and/or events following church services.</p>			

**Table IV.K.1-5 (Continued)
Estimated Project Water Demand**

Land Use	No. of Units/ Floor Area	Water Demand Rate ^a (gpd/unit)	Demand (gpd)
<p>ⁱ Multi-Purpose Room is considered as “Banquet Room/Ballroom” for water generation purposes.</p> <p>^j These proposed cathedral uses would include a vestibule, cry room, reception waiting area, and recreational room. Such uses are considered as “Lounge” for water generation purposes.</p> <p>^k The cathedral library would not be open to the public and would be connected to the church lobby. Such uses are considered as “Library: Public Area” for water generation purposes.</p> <p>Source: KPFF, Utility Infrastructure Technical Report: Water, January 21, 2021. Refer to Appendix V to this Draft EIR.</p>			

water demand for the Project falls within the available and projected water supplies during an average year, single-dry year, and multiple-dry year through the year 2040, as well as the intervening years (i.e., 2024), as described in its 2015 UWMP.

As discussed in its 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 LADWP UWMP takes into account the realities of climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2015 LADWP UWMP also furthers the goals of the City’s ED 5, addresses the current and future State Water Project supply shortages, and concludes that MWD’s actions in response to the threats to the State Water Project will ensure continued reliability of its water deliveries. By focusing on demand reduction and alternative sources of water supplies, LADWP will further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages. Additionally, as provided in L.A.’s Green New Deal, water conservation and recycling will play an increasing role in meeting future water demands in the City.

Based on the above, LADWP would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As such, the Project’s operation-related impacts on water supply would be less than significant. Nonetheless, pursuant to Project Design Feature WAT-PDF-1, the Project would incorporate water conservation features in addition to those required by the City’s current codes and ordinances. Therefore, implementation of such features would further reduce the Project’s less-than-significant impacts on water supply during operation.

(2) Mitigation Measures

Project-level impacts with regard to water supply would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to water supply were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

The Project, in conjunction with growth forecasted in the City through 2024 (i.e., the Project's buildout year), would increase the demand for water, thus potentially resulting in cumulative impacts on water supplies and water infrastructure. Cumulative growth in the Project Site vicinity through 2024 conservatively includes both 44 specific known development projects plus general ambient growth projected to occur. Specifically, 17 of the related projects are located within the LADWP service area, while the remaining related projects are located in the City of Beverly Hills and the City of West Hollywood and are not located within the LADWP service area.⁹⁷ Therefore, as the Project Site is served by LADWP, the 17 related projects served by LADWP are considered in this cumulative analysis.

As discussed in Section III, Environmental Setting, of this Draft EIR, the projected growth reflected by the 17 related projects within the LADWP service area is a conservative assumption, as some of the related projects may not be built out by 2024, may never be built, or may be approved and built at reduced densities. In addition, much of this growth is anticipated by the City and will be incorporated into the next Wilshire Community Plan update. To provide a conservative forecast, the future baseline forecast assumes that Related Project Nos. 1 through 17 located within the LADWP service area are fully built out by 2024, unless otherwise noted.

(a) Water Infrastructure

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site within the LADWP service area (i.e., the water infrastructure that would serve both the Project and the 17 identified related projects). Development of the Project and future new development in the vicinity of the Project Site would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, other new development projects would be subject to LADWP review to

⁹⁷ *The related projects located in the City of Beverly Hills and the City of West Hollywood are located within the City of Beverly Hills' Water Service Area, based on the City of Beverly Hills 2015 UWMP June 21, 2016.*

ensure that the existing public infrastructure would be adequate to meet the domestic and fire water demands of each project, and individual projects would be subject to LADWP and City requirements regarding infrastructure improvements needed to meet respective water demands, flow and pressure requirements, etc. In addition, LADWP, the Los Angeles Department of Public Works, and the LAFD would conduct on-going evaluations of its infrastructure to ensure facilities are adequate. Furthermore, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP would continue to implement its \$6.3 billion five-year water system capital improvement plan, which includes replacement of distribution mainlines, trunk lines, large valves, and water meters, as well as ongoing maintenance and rehabilitation of facilities such as pump stations, pressure regulators, and in-city reservoirs and tanks.⁹⁸ **Therefore, significant cumulative impacts related to water infrastructure would not occur. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts on the water infrastructure system would be less than significant.**

(b) Water Supply

The geographic context for the cumulative impact analysis on water supply is the LADWP service area (i.e., the City and portions of the cities of West Hollywood, Culver City, South Pasadena, and the Owens Valley). As discussed above, LADWP, as a public water service provider, is required to prepare and periodically update its urban water management plan to plan and provide for water supplies to serve existing and projected demands. LADWP's 2015 UWMP accounts for existing development within the City, as well as projected growth through the year 2040.

As discussed above, there are 17 related projects located within both the Project vicinity and LADWP service area. The estimated water demand of the related projects is shown in Table IV.K.1-6 on page IV.K.1-44. As shown therein, the 17 related projects would generate a total average water demand of approximately 392,779 gpd (or approximately 440.0 AFY). The estimate of the 17 related projects' water demand is conservative as it does not account for water conservation measures such as the mandatory indoor water reduction rates required by the City of Los Angeles Green Building Code. The 17 related projects' water demand and the Project's net water demand of 36,124 gpd (approximately 40.5 AFY) would result in a cumulative increase in average daily water use of approximately 428,903 gpd (approximately 480.5 AFY), or approximately 0.09 percent of LADWP's water supply in 2018 (511,517 AFY as shown in Table IV.K.1-2 on page IV.K.1-19).

⁹⁸ LADWP, 2018-19 Water Infrastructure Plan, revised 11/2019, p. 2.

**Table IV.K.1-6
Cumulative Water Demand—City of Los Angeles**

No.	Project	Land Use	Size	Water Demand Rate ^{a,b}	Total Daily Water Demand (gpd)
1	Four Seasons Residences 300 S. Wetherly Dr.	Condominium	140 du	190 gpd/du	26,600
2	Cedars-Sinai Medical Center Project West Tower 8723 W. Alden Dr.	Hospital	100 beds	70 gpd/bed	7,000
3	S. La Cienega Boulevard Eldercare Facility 1022 S. La Cienega Blvd.	Assisted Living	183 beds	70 gpd/bed	12,810
		Skilled Nursing	22 du	75 gpd/du	1,650
4	6535 Wilshire Boulevard Mixed-Use Project 6535 Wilshire Blvd.	Office	62,000 gsf	0.12 gpd/sf	7,440
		Apartments	22 du	190 gpd/du	4,180
		Retail	5,603 gsf	0.025 gpd/sf	140
5	Beverly & Fairfax Mixed-Use Project 7901 W. Beverly Blvd.	Apartments	71 du	190 gpd/du	13,490
		Retail	11,454 gsf	0.025 gpd/sf	286
6	333 La Cienega Boulevard Project 333 S. La Cienega Blvd.	Apartments	145 du	190 gpd/du	27,550
		Supermarket	27,685 gsf	0.025 gpd/sf	692
		Restaurant (3,370 gsf)	225 seats	30 gpd/seat	6,740
7	6399 W. Wilshire Boulevard Mixed-Use Hotel 6399 W. Wilshire Blvd.	Hotel	176 rooms	120 gpd/room	21,120
		Restaurant (871 gsf)	58 seats	30 gpd/seat	1,742
		Lounge	860 gsf	0.05 gpd/sf	43
8	Unified Elder Care Facility/Mixed-Use 8052 W. Beverly Blvd.	Synagogue ^c	208 seats	3 gpd/seat	624
		Apartments	102 du	190 gpd/du	19,380
		Medical Office	15,000 gsf	0.25 gpd/sf	3,750
		Retail	1,000 gsf	0.025 gpd/sf	25
9	8000 W. Beverly Boulevard Mixed-Use Project 8000 W. Beverly Blvd	Apartments	48 du	190 gpd/du	9,120
		Retail	7,400 gsf	0.025 gpd/sf	185
10	Edin Park 8001 W. Beverly Blvd.	Restaurant (22,600 gsf)	1,507 seats	30 gpd/seat	45,200
		Office	11,358 gsf	0.12 gpd/sf	1,363

Table IV.K.1-6 (Continued)
Cumulative Water Demand—City of Los Angeles

No.	Project	Land Use	Size	Water Demand Rate^{a,b}	Total Daily Water Demand (gpd)
11	488 S. San Vicente Boulevard Mixed-Use Project 488 S. San Vicente Blvd.	Apartments	53 du	190 gpd/du	10,070
		Retail	6,585 gsf	0.025 gpd/sf	165
12	Solstice 431 N. La Cienega Blvd.	Apartments	72 du	190 gpd/du	13,680
13	Third Street Mixed-Use Project 8000 W. 3rd St.	Apartments	45 du	190 gpd/du	8,550
		Affordable Housing	5 du	190 gpd/du	950
		Retail	7,251 gsf	0.025 gpd/sf	181
14	7951 W. Beverly Boulevard Mixed-Use Project 7951 W. Beverly Blvd.	Apartments	51 du	190 gpd/du	9,690
		Affordable Housing	6 du	190 gpd/du	1,140
		Retail	1,142 gsf	0.025 gpd/sf	29
		Restaurant (6,294 gsf)	420 seats	30 gpd/seat	12,588
15	316 N. La Cienega Boulevard Mixed-Use Project 316 N. La Cienega Blvd.	Apartments	44 du	190 gpd/du	8,360
		Affordable Housing	6 du	190 gpd/du	1,140
		Retail	4,096 gsf	0.025 gpd/sf	102
16	3rd and Fairfax Project 300-370 South Fairfax Ave., 6300-6370 West 3rd St., and 347 South Ogden Dr.	Apartments	331 du	190 gpd/du	62,890
		Commercial Retail	13,412 gsf	0.025 gpd/sf	335
		Restaurant (7,500 gsf)	500 seats	30 gpd/seat	15,000
		Supermarket	63,082 gsf	0.025 gpd/sf	1,577
17	656 S. San Vicente Medical Office Project	Medical Office	140,305 gsf	0.250 gpd/sf	35,076
		Retail	5,000 gsf	0.025 gpd/sf	125
Related Projects Water Demand					392,779
Project Net Water Demand					36,124
Total Water Demand for Related Projects and Project					428,903

Table IV.K.1-6 (Continued)
Cumulative Water Demand—City of Los Angeles

No.	Project	Land Use	Size	Water Demand Rate ^{a,b}	Total Daily Water Demand (gpd)
<p><i>du = dwelling units</i> <i>gpd = gallons per day</i> <i>sf = square feet</i></p> <p><i>The Project is located within the LADWP service area. Therefore, this cumulative analysis only considers the related projects that are also located within the LADWP service area.</i></p> <p>^a <i>This analysis is based on 100 percent of sewage generation rates provided by LASAN (effective April 6, 2012).</i></p> <p>^b <i>This analysis conservatively assumes that all dwelling units are 3-bedroom units. In addition, a standard factor of 15 square feet per seat was assumed to calculate the number of seats for restaurant uses.</i></p> <p>^c <i>The proposed synagogue is 5,000 square feet. Based on 24 square feet per seat with the Project, a total of 208 seats was estimated.</i></p> <p><i>Source: Eyestone Environmental, 2021.</i></p>					

As previously stated, based on water demand projections through 2040 in its 2015 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2040, as well as the intervening years (i.e., 2024, the Project's buildout year) based on demographic growth projections in SCAG's 2012–2035 RTP/SCS, which includes the Project and related projects.

In addition, compliance of the Project and other future development projects with the numerous regulatory requirements that promote water conservation described above would also reduce water demand on a cumulative basis. For example, certain related projects would be subject to the City's Green Building Code requirement to reduce indoor water use by at least 20 percent and all projects would be required to use fixtures that conserve water. In addition, certain large related projects meeting the thresholds under SB 610 would be required to prepare and receive LADWP approval of a WSA that demonstrates how the project's water demand will be met.

Overall, as discussed above, the 2015 LADWP UWMP demonstrates that the City will meet all new water demands from projected population growth, through a combination of water conservation and water recycling. LADWP's 2015 UWMP specifically outlined the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP's 2015 UWMP also incorporates the goals of ED 5. LADWP is planning to achieve these goals by expanding its water conservation efforts through public education, installing high-efficiency water fixtures, providing incentives, and expanding the City's outdoor water conservation program.⁹⁹ To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge.¹⁰⁰ Furthermore, LADWP will continue to update its UWMP every five years to ensure that sufficient water supply continues to be available.

Based on the related projects list and projections provided in adopted plans (e.g., MWD's 2015 UWMP, LADWP's 2015 UWMP, and L.A.'s Green New Deal), it is anticipated that LADWP would be able to meet the water demands of the Project and future growth through 2024 and beyond. **Therefore, significant cumulative impacts related to water supply would not occur. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts associated with water supply would be less than significant.**

⁹⁹ LADWP, *2015 Urban Water Management Plan*, June 2016.

¹⁰⁰ LADWP, *2015 Urban Water Management Plan*, June 2016.

(2) Mitigation Measures

Cumulative impacts with regard to water supply and infrastructure would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to water supply and infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.