

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.

The data and conclusions in this section regarding the availability of water supply to serve the Project are based on the *Artisan Hollywood Project Utility Infrastructure Technical Report: Water* (Water Utility Report) prepared for the Project by KPFF Consulting Engineers (May 2021) and included in Appendix K of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

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

- California Urban Water Management Plan Act
- Senate Bill 610, Senate Bill 221, and Senate Bill 7
- Senate Bill X7-7 (Water Conservation Act of 2009)
- Sustainable Groundwater Management Act of 2014
- California Code of Regulations
 - Title 20

- CALGreen Code
- Plumbing Code
- Executive Order B-40-17
- Executive Order N-10-21
- Metropolitan Water District
 - 2020 Urban Water Management Plan,
 - 2015 Integrated Resources Plan
 - Water Surplus and Drought Management Plan
 - Long-Term Conservation Plan
 - Water Supply Allocation Plan
- Los Angeles Department of Water and Power’s 2020 Urban Water Management Plan
- City of Los Angeles Green New Deal
- One Water LA 2040 Plan
- City of Los Angeles General Plan, including:
 - Framework Element; and
 - Hollywood Community Plan;
- Los Angeles Municipal Code (Ordinance Nos. 180,822, 181,480, 181,899, 183,833, 182,849, 184,692, and 184,248)

(1) State

(a) California Urban Water Management Plan

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

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

legislation sets an overall goal of reducing per capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020. The State of California was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Monthly statewide potable water savings reached 25.1 percent in February 2017 as compared to that in February 2013.² 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 over-drafted, 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 March 17, 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 CCR establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 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), p.306* <https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?transitionType=Default&contextData=%28sc.Default%29>, accessed March 17, 2021.

(f) *Executive Order B-40-17*

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

(g) *Executive Order N-10-21*

Title 24, Part 5 of the CCR establishes the California Plumbing Code. The California Plumbing Code set forth on July 8, 2021, Executive Order N-10-21 (Order), was issued calling for voluntary cutbacks of water usage by 15 percent from 2020 usage levels. The Order lists commonsense measures Californians can undertake to achieve water usage reduction goals and identifies the State Water Resources Control Board (Water Board) for tracking of monthly reporting on the State's progress.

(2) Regional

(a) *Metropolitan Water District*

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.

(i) *2020 Urban Water Management Plan*

The Metropolitan Water District's 2020 UWMP (MWD UWMP) addresses the future of MWD's water supplies and demand through the year 2040.⁸ Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions; i.e., under the most challenging weather conditions such as drought and service interruptions caused by natural disasters, is presented in Table 2-5 of the 2020 MWD UWMP.⁹ The analysis in the 2020 MWD UWMP concluded that reliable water resources would be available to continuously meet demand through 2045.¹⁰ In the 2020 MWD UWMP, the projected 2045 demand water during multiple-dry year conditions is

⁸ *Metropolitan Water District of Southern California, 2020 Regional Urban Water Management Plan, May 2021.*

⁹ *Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19.*

¹⁰ *Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19*

1,564,000 afy, whereas the expected and projected 2045 supply is 2,239,000 afy based on current programs, for a potential surplus in 2045 of 675,000 afy.¹¹

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.

(ii) 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 2016.¹² It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions.

The 2015 IRP reliability targets identify developments in imported and local water supply, and in water conservation that, if successful, would provide a future without water shortages and mandatory restrictions under planned conditions. For imported supplies, MWD would make investments to maximize Colorado River Aqueduct deliveries in dry years. MWD would make ecologically-sound infrastructure investments to the SWP so 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.

¹¹ *Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19.*

¹² *Metropolitan Water District of Southern California, Integrated Water Resources Plan--2015 Update, Report No. 1518, 2016.*

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.¹³

The 2020 IRP planning process is currently in development.¹⁴ The 2020 IRP analyzes multiple scenarios that could plausibly unfold in the future due to climate change, economic growth, legislation and regulations affecting water sources and demands, and other variables. With the variability of these impacts in mind, MWD is developing four scenarios to help understand the challenges of the future and effectively plan to ensure water reliability in the face of those challenges.

(iii) 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.¹⁵

¹³ *Metropolitan Water District of Southern California, Integrated Water Resources Plan – 2015 Update, Report No. 1518, 2016, page VIII.*

¹⁴ *Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2020.*

¹⁵ *Water Surplus and Drought Management Plan, Report No. 1150, 1999.*

(iv) Long-Term Conservation Plan

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

(v) 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). 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.¹⁶ 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 2020 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 2020 UWMP on May 25, 2021. The 2020 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2015 UWMP and currently serves as the City's master plan for reliable water supply and resource management consistent with the City 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

¹⁶ *Metropolitan Water District, 2020 Urban Water Management Plan, page 2-33.*

growth in water use for the entire service area was considered in developing long-term water projections for the City to the year 2045. Long range projections are based on Southern California Association of Government (SCAG) growth projections. The 2020 UWMP is based on projections in the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

(b) City of Los Angeles Green New Deal

The City released the first Sustainable City pLAN in April 2015,¹⁷ 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.¹⁸ 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 2024.¹⁹ 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.

¹⁷ *City of Los Angeles, Sustainable City pLAN, 2015, www.lacity.org/highlights/sustainable-city-plan, accessed March 18, 2021.*

¹⁸ *City of Los Angeles, One Water LA 2040 Plan, Volume 1, Summary Report, April 2018.*

¹⁹ *City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response - Creating a Water Wise City, October 14, 2014.*

*(d) City of Los Angeles General Plan**(i) General Plan Framework Element*

The Citywide General Plan Framework Element (Framework Element) establishes the conceptual basis for the City's General Plan.²⁰ The Framework Element sets forth a comprehensive Citywide long-range growth strategy and defines Citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure and public services. Chapter 9, Infrastructure and Public Services, of the City's Framework Element identifies goals, objectives, and policies for City utilities including water service. Goal 9C is to provide adequate water supply, storage facilities, and delivery system to serve the needs of existing and future water needs.²¹ The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP.

Table IV.K.1-1 on page IV.K.1-13 shows the General Plan goals, objectives and policies related to water supply.

(ii) Hollywood 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. As discussed in Section IV.F, Land Use and Planning, of this Draft EIR, the Project is located within the Hollywood Community Plan area.²² Objective 5 of the Hollywood Community Plan addresses the need to provide a basis

²⁰ *City of Los Angeles Department of City Planning, Citywide General Plan Framework, An Element of the Los Angeles General Plan, July 27, 1995.*

²¹ *City of Los Angeles, General Plan Framework Element, Chapter 9: Infrastructure and Public Services – Water Supply.*

²² *The Los Angeles Department of City Planning is currently in the process of updating the Hollywood Community Plan. The most recent draft was released in February 2021, with updates to the exhibits released in August 2021. Information on the update can be accessed at <https://planning.lacity.org/plans-policies/community-plan-update/hollywood-community-plan-update#the-plan>.*

**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 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.
<hr/> <p><i>Source: City of Los Angeles, City of Los Angeles General Plan, Framework Element, re-adopted 2001.</i></p>	

for the location and programming of public services and utilities and to coordinate the phasing of public facilities with private development.

(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 No. 180,822—Amended LAMC Chapter XII, Article 5 to establish water efficiency requirements for new development and renovation of existing buildings, and mandate installation of high efficiency plumbing fixtures in residential and commercial buildings.

- Ordinance No. 181,480—Amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the CALGreen Code. This ordinance added mandatory measures for newly constructed low-rise residential and non-residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20 percent reduction in baseline water use.
- Ordinance Nos. 181,899 and 183,833—Amended LAMC Chapter VI, Article 4.4, Section 64.72, regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.
- Ordinance No. 182,849—Amended LAMC Chapter IX, Article 9 (Green Building Code) to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 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. 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.

b. Existing Conditions

(1) Water Supply²³

LADWP is responsible for providing water in the City 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 urban water provider for the Project Site.

Water is supplied to the City from four primary sources: the Los Angeles Aqueducts (LAA), local groundwater, purchased water from MWD, and recycled water. As shown in Table IV.K.1-2 on page IV.K.1-16, LADWP had an available water supply of 487,591 acre-feet in 2020 (the latest full year for which data is available), with approximately 91 percent of this supply from imported sources including the LAA and MWD. 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 LAA. The LAA supplies come primarily from snowmelt and secondarily from groundwater pumping, and can fluctuate yearly due to the varying hydrological conditions. In recent years, LAA supplies have been less than the historical average because of environmental restoration obligations in Mono and Inyo Counties.

The City holds water rights in the Eastern Sierra Nevada where the LAA water supplies originate. These supplies originate from both streams and groundwater. As indicated in Table IV.K.1-2 on page IV.K.1-16, approximately 292,095 acre-feet of LADWP's water supplies were from the LAA in 2020.

Average deliveries from the LAA system have been approximately 238,960 acre-feet annually from Fiscal Year (FY) FY 2015/2016 to 2019/2020. This average delivery includes two of the five dry years that began in FY 2012/2013 and ended in FY 2016/2017. On April 1, 2021, the Eastern Sierra snowpack was 100 percent of an average year.²⁴ Since LAA supplies vary substantially from year to year, LADWP plans to increase resiliency to address climate change and natural disasters by developing sustainable local water supplies.²⁵

²³ This discussion of existing water supply conditions relies upon information derived from LADWP's 2020 UWMP, much of which is excerpted from the Water Supply Assessment for the Sunset and Wilcox Project, dated June 30, 2021 and approved by the LADWP Board of Water and Power Commissioners on July 14, 2021.

²⁴ LADWP, Eastern Sierra Snow Survey Results, April 1, 2020.

²⁵ LADWP, Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.

**Table IV.K.1-2
LADWP Water Supply**

Fiscal Year Ending	Los Angeles Aqueducts (af)	Local Groundwater (af)	MWD (af)	Recycled Water (af)	Transfer, Spread, Spills, and Storage (af)	Total (af)
2016	57,853	79,056	339,975	9,913	-3,509	490,306
2017	224,724	50,439	216,299	8,032	9,350	490,144
2018	307,671	21,760	182,706	9,778	-200	522,116
2019	312,456	32,233	137,775	7,512	-1,710	488,266
2020	292,095	34,363	152,647	9,641	-1,155	487,591

af = acre-feet.
Source: LADWP, Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.

Various lawsuits and injunctions, and resulting agreements, affect water supplies from the LAA. 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 (GBUAPCD) 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 measures.²⁶ 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.²⁷ Based on the agreement, the GBUAPCD's potential future dust mitigation orders to LADWP cannot exceed an additional 4.8 square miles.²⁸ As a result, LADWP expects to reduce total lake-wide water use by at least 50 percent, through strategic use of waterless or water efficient control measures and groundwater under Owens Lake for dust control.²⁹

LADWP projects that the average annual long-term LAA delivery between 2020 and 2045 will be approximately 192,000 afy due, in part, to implementation of environmental

²⁶ LADWP, 2020 Urban Water Management Plan, May 2021.

²⁷ LADWP, LADWP News, *The Los Angeles Department of Water and Power Continues its Commitment to the Preservation and Restoration of the Owens Valley*, www.ladwpnews.com/the-los-angeles-department-of-water-and-power-continues-its-commitment-to-the-preservation-and-restoration-of-the-owens-valley/, accessed September 10, 2021.

²⁸ LADWP, 2020 Urban Water Management Plan, May 2021.

²⁹ LADWP, Owens Lake Master Project, April 2013.

projects throughout the Eastern Sierra and environmental enhancement and mitigation projects in the Mono Basin and Owens Valley that includes water allocations from the LAA.³⁰

(b) Groundwater

LADWP pumps groundwater from three adjudicated basins, including the San Fernando, Sylmar, and Central Basins. The San Fernando Basin (SFB) is the largest of the four basins. LADWP has accumulated 591,460 acre-feet of stored groundwater in the SFB as of October 1, 2018 (the latest year for which data is available).³¹ A portion of this water is available for the City to withdraw during normal and dry years, or in an emergency, in addition to the City's approximately 87,000 acre-feet annual entitlement. With regard to the Sylmar and Central Basins, the City's annual entitlements are 3,570 acre-feet and 17,236 acre-feet, respectively. The City's has also accumulated 9,014 acre-feet of stored water credits, in the Sylmar Basin³² and 22,943 acre-feet of stored water credits in the Central Basin.^{33, 34}

As shown in Table IV.K.1-3 on page IV.K.1-18, the City extracted 42,913 acre-feet, 11 acre-feet, and 3 acre-feet of groundwater from the San Fernando, Central, and Sylmar Basins, respectively, during FY 2019-2020. The City plans to continue to develop production from its groundwater basins in the coming years to offset reductions in imported supplies.³⁵

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. These efforts include operation of groundwater remediation systems, use of an extensive network of groundwater monitoring wells, routine reporting on groundwater elevation and water quality, management and mitigation of urban runoff water quality, and development of enhanced stormwater recharge and groundwater replenishment.³⁶

³⁰ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021..

³¹ LADWP, *2020 Urban Water Management Plan*, May 2021, page 5-7.

³² LADWP, *2020 Urban Water Management Plan*, May 2021, page 5-14.

³³ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021.

³⁴ *Stored water credits refers to groundwater that is stored within the Basin when the City pumps less than its annual water right, and may be pumped in future years to supplement the City's water supply.*

³⁵ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021.

³⁶ LADWP, *2020 Urban Water Management Plan*, May 2021, page 5-14.

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

Fiscal Year (July–June)	San Fernando Basin (af)	Sylmar Basin (af)	Central Basin (af)
2015–2016	75,958	682	8,395
2016–2017	55,116	0	3,005
2017–2018	22,259	0	1
2018–2019	36,870	1	5
2019–2020	42,913	3	11

af = acre-feet
Historical data from the Upper Los Angeles River Area Watermaster Monthly Reports, July 2014 to June 2019.
Source: LADWP, Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.

(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 SWP 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 LAA and local groundwater. As of fiscal year end 2020, LADWP has a preferential right to purchase 18.12 percent of MWD’s total water supply.³⁷

LADWP plans to reduce purchase of MWD water supplies through increased conservation, increased recycle water production, and enhanced groundwater pumping through stormwater capture and groundwater replenishment.

As indicated in Table IV.K.1-2 on page IV.K.1-16, LADWP received approximately 152,647 acre-feet of water from MWD in 2020, which was a substantial reduction from previous years. 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

The SWP is owned by the State of California and operated by DWR, delivering water to two-thirds of the population of California and 750,000 acres of farmland. The SWP

³⁷ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.*

facilities include 30 dams, 20 reservoirs, 29 pumping and generating plants, and approximately 700 miles of aqueducts and pipelines. The water stored and delivered by the SWP originates from Northern California's watersheds, where most of the State's precipitation occurs. SWP facilities originate in Northern California at Lake Oroville on the Feather River and is pumped from the Bay-Delta region to contractors in areas north and south of the San Francisco Bay and south of the Bay-Delta.³⁸

MWD began receiving water from the SWP in 1972. MWD is the largest of the 29 SWP contractors, holding a contract for 1.912 million acre-feet (MAF) per year, or 46 percent of the total contracted amount of the 4.173 MAF ultimate delivery capacity of the project. Variable hydrology, environmental issues, and regulatory restrictions in the San Francisco Bay/Sacramento–San Joaquin River Delta (Bay-Delta) have periodically reduced the quantity of water that the SWP delivers to MWD.³⁹

The SWP, under the original contracted amount at 100-percent allocation, provides MWD with 1,911,500 acre-feet of water each calendar year.⁴⁰ However, due to water quality and supply reliability challenges and conflicts due to variable hydrology and environmental standards that limit pumping operations, SWP deliveries in the most critically dry years varied. For 2019, DWR estimated an initial allocation of 10 percent⁴¹ but increased the allocation to 15 percent⁴² by January due to changes in precipitation and available water supplies.

Challenges to State Water Project Supply

Litigation and various regulations have created challenges for the SWP.⁴³ 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 SWP operations and created more uncertainty in SWP supply reliability. Based on DWR's 2015 *SWP Delivery Capability Report*, future SWP deliveries will continue to be impacted by restrictions on SWP and Central Valley Project Delta pumping, and climate change, which is altering the hydrologic conditions in the State.⁴⁴

³⁸ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021.

³⁹ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021..

⁴⁰ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, Appendix F, June 30, 2021. .

⁴¹ California Department of Water Resources, *Notice to State Water Project Contractors, Number 18-06, 2019 State Water Project Initial Allocation—10 Percent*.

⁴² California Department of Water Resources, *Notice to State Water Project Contractors, Number 19-03, 2019 State Water Project Allocation Increase—15 Percent*.

⁴³ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, Appendix F, June 30, 2021. .

⁴⁴ California Department of Water Resources, *The State Water Project—Final Delivery Capability Report 2015, July 2015*.

On October 22, 2019, USFWS and the National Marine Fisheries Service released new biological opinions. The Bureau of Reclamation completed its environmental review of the proposed action covered by the new biological opinions on February 19, 2020. The new opinions replace the existing federal permits for the Central Valley Project.

On March 31, 2020, the California Department of Fish and Wildlife issued an Incidental Take Permit to DWR for long-term operations of the SWP. In April 2020, MWD, with the MWD Board approval, joined the State Water Contractors in their litigation against DWR and CDFW over the Incidental Take Permit. The impacts to MWD from the ongoing negotiation of Voluntary Agreements on the new biological opinions and Incidental Take Permit, as well as litigation challenging them, remain unknown.

(ii) The Colorado River

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 25 percent of Southern California's water needs.⁴⁵ 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.⁴⁶ In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada.⁴⁷

Since 2003, due to increased consumption, there has been no such unused, apportioned water available to California. Of the California apportionment, MWD holds the fourth priority right to 550,000 acf under a 1931 priority system governing allotments to California. This is the last priority within California's basic apportionment of 4.4 million acre-feet. Beyond the basic apportionment, MWD holds the fifth priority right to 662,000 acre-feet of water. Historically, MWD has been able to claim most of its legal entitlement of Colorado River water and could divert over 1.2 million acre-feet in any year, but persistent drought conditions since 1999 have contributed to a decrease in these claims. The recent 16-year drought has been so severe that it has resulted in major reductions in water deliveries from the Colorado River.⁴⁸

⁴⁵ *The Metropolitan Water District of Southern California, Metropolitan Declares Water Supply Alert In Response To Severe Drought, August 17, 2021, www.mwdh2o.com/newsroom-press-releases/metropolitan-declares-water-supply-alert-in-response-to-severe-drought/, accessed September 10, 2021.*

⁴⁶ *LADWP, Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.*

⁴⁷ *LADWP, Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021.*

⁴⁸ *LADWP, Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021.*

(iii) Additional MWD Actions to Address Supply

MWD has been developing plans and making efforts to provide additional water supply reliability for the entire Southern California region. LADWP coordinates closely with MWD to ensure implementation of these water resource development plans. MWD's long-term plans to meet its member agencies' growing reliability needs are through: (1) improvements to SWP as outlined in the EcoRestore plans; (2) conjunctive management efforts on the Colorado River; (3) water transfer programs; outdoor conservation measures; and (4) development of additional local resources, such as recycling, brackish water desalination, and seawater desalination.⁴⁹

Additionally, MWD has more than 6.0 million acre-feet of storage capacity available in reservoirs and banking/transfer programs. MWD was estimated to have 3.95 million acre-feet of water in Water Surplus Drought Management storage and additional 750,000 acre-feet in emergency storage as of January 1, 2021. Continued efficiency in the region kept demands low in 2020, resulting in available water supplies far exceeding demands. With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD was able to add to storage in 2020.⁵⁰

MWD's 2015 IRP builds upon the strong foundation of diversification and adaptation developed in previous IRPs. The 2015 IRP reinforces MWD commitment to meeting the region's water supply needs through an evolving long-term strategy that calls for maintaining and stabilizing existing resources along with developing more conservation and new local supplies.⁵¹

In addition, as reported in the MWD's 2020 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2045 under average year, single dry-year, and multiple dry-year hydrologic conditions.^{52,53}

(d) Precipitation Conditions

As of January 11, 2021, northern Sierra precipitation was 41 percent of the 50-year average for the time of year, and northern Sierra snowpack measured 60 percent of average for such time of year. On December 1, 2020, DWR notified State Water Contractors that its calendar year 2021 allocation estimate of SWP water would be 10 percent of contracted

⁴⁹ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021.* .

⁵⁰ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021.* .

⁵¹ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021.* .

⁵² LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.*

⁵³ LADWP, *2020 Urban Water Management Plan, May 2021.*

amounts, or 191,150 acre-feet for MWD.⁵⁴ As California experiences a second consecutive dry year, DWR announced in March 2021 an adjustment to its initial SWP allocation for the 2021 water year from 10 percent to 5 percent. Changes to this allocation may occur and are dependent on the developing hydrologic conditions.⁵⁵

As of January 11, 2021, the Upper Colorado River Basin snowpack accumulation measured 70 percent of the 30-year average as of this date and the total system storage in the Colorado River Basin was 46 percent of capacity, a decrease of 6 percent or 3.8 million acre-feet at the same time the prior year. Because of the current storage level, no shortage will be declared in Colorado River water supply availability conditions for calendar year 2021, resulting in projected available supply of Colorado River water in calendar year 2021 of 1,007,700 acre-feet for MWD.⁵⁶

The City of Los Angeles receives an average of 14.67 inches of precipitation per year according to the National Weather Service.⁵⁷ During the 2020-2021 rain season (extending from July 1, 2020 to June 30, 2021), Downtown Los Angeles received 5.82 inches of precipitation.⁵⁸

(e) Global Warming and Climate Change

As discussed in the LADWP's 2020 UWMP, generally speaking, any water supplies that are dependent on natural hydrology are vulnerable to climate change, especially if the water source originates from mountain snowpack. For LADWP, the most vulnerable water sources subject to climate change impacts are imported water supplies from MWD and the LAA, 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. However, there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future research for the potential impacts of climate change on its water resources.⁵⁹

⁵⁴ California Department of Water Resources, *DWR Releases Initial State Water Project Allocation, December 1, 2020*, <https://water.ca.gov/News/News-Releases/2020/Dec-20/DWR-Releases-Initial-State-Water-Project-Allocation>.

⁵⁵ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021*.

⁵⁶ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project, Appendix F, June 30, 2021*.

⁵⁷ Los Angeles Almanac, *Total Seasonal Rainfall (Precipitation) Downtown Los Angeles—USC Campus*, www.laalmanac.com/weather/we13.php, accessed September 10, 2021.

⁵⁸ Los Angeles Almanac, *Total Seasonal Rainfall (Precipitation) Downtown Los Angeles—USC Campus*, www.laalmanac.com/weather/we13.php, accessed September 10, 2021.

⁵⁹ LADWP, *2020 Urban Water Management Plan, May 2021, page 12-1*.

MWD and DWR also continue to study climate change and address the implications of climate change on water supplies. MWD has established a technical process to identify key vulnerabilities from various sources, including climate change, in order to provide comprehensive analyses within its Integrated Water Resources Plans. In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning for the future.⁶⁰ With updates published every five years, the most recent *California Water Plan Update 2018* built on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability.⁶¹

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 plan was completed in 2017 with a vulnerability assessment and adaptation plan DWR assets and activities, as related to the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply.⁶² As such, climate change and its impacts on water supplies are key factors of new water supply regulations and UWMPs.

(f) Water Conservation and Recycling

LADWP's 2020 UWMP details the City's efforts to promote the efficient use and management of its water resources and provides the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for the City in the next 25 years. To meet multiple water conservation goals established in ED 5, the Sustainable City pLAN, and the Water Conservation Act of 2009, LADWP's 2020 UWMP aims to reduce per capita potable water use by 22.5 percent by 2025 and by 25 percent by 2035.⁶³ Following the target reduction of potable water use per capita by 25 percent by 2035, L.A.'s Green New Deal adds an additional target for the City to maintain or reduce 2035 per capita water use through 2050.⁶⁴ The City also intends to build upon the success of Save the Drop and develop additional water conservation campaigns; continue benchmarking customer use and recognizing innovative water reduction initiatives; improve data gathering to identify program effectiveness; expand top performing conservation incentive programs

⁶⁰ California Department of Water Resources, *California Water Plan Update 2013, Investing in Innovation & Infrastructure, Highlights, October 2014*.

⁶¹ California Department of Water Resources, *California Water Plan Update 2018*, <https://water.ca.gov/Programs/California-Water-Plan/Update-2018>, accessed December 30, 2020.

⁶² California Department of Water Resources, *Climate Action Plan Phase III: Climate Change Vulnerability Assessment, February 2019*.

⁶³ LADWP, *2020 Urban Water Management Plan, May 2021*.

⁶⁴ City of Los Angeles, *L.A.'s Green New Deal, Sustainable City pLAN, 2019*.

for landscape transformation, washing machines, etc.; and expand sub-metering and evaluate smart water meter technologies.⁶⁵

Further, based on LADWP’s 2020 UWMP, recycled water use is projected to reach 24,300 AFY by 2025 and further increase to 41,000 AFY by 2045.⁶⁶ Overall, the 2020 LADWP UWMP reports a 28-percent lower recycled water trend for municipal and industrial uses along with environmental uses than what was projected in the previous 2015 UWMP.⁶⁷ In addition, based on programs and improvements contemplated in the 2020 LADWP UWMP, locally developed water supplies (including groundwater replenishment and stormwater capture) will increase from the current 11 percent to 48 percent in dry years, or to 43 percent in average years by 2045.⁶⁸ The Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035.⁶⁹ Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the Los Angeles River.

(2) Water Demand

(a) Citywide Water Demand

LADWP’s 2020 UWMP provides water supply and demand projections in five-year increments to 2045, based on projected population estimates provided by the Southern California Association of Governments (SCAG) in its 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS). Table IV.K.1-4 on page IV.K.1-25 shows the projected water demand from the year 2025 through 2045 for the City.

As shown in Table IV.K.1-4, in 2045 during average year hydrological conditions, the City’s water demand is forecasted to be approximately 710,500 AFY (with passive water conservation).^{70,71} LADWP’s 2020 UWMP concludes that adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2045.⁷² Therefore, the City’s water supply projections in LADWP’s 2020 UWMP are sufficient to meet the water demand for projects that are

⁶⁵ LADWP, 2020 Urban Water Management Plan, May 2021.

⁶⁶ LADWP, 2020 Urban Water Management Plan, May 2021.

⁶⁷ LADWP, 2020 Urban Water Management Plan, May 2021.

⁶⁸ LADWP, 2020 Urban Water Management Plan, May 2021.

⁶⁹ Baseline from LASAN: In Fiscal Year 2017–2018, 27 percent of wastewater was recycled.

⁷⁰ LADWP, 2020 Urban Water Management Plan, May 2021.

⁷¹ LADWP, Water Supply Assessment for the Sunset and Wilcox Project, June 30, 2021.

⁷² LADWP, 2020 Urban Water Management Plan, May 2021.

**Table IV.K.1-4
City of Los Angeles Water Demand Projections
(thousand afy)**

Hydrological Conditions	Years				
	2025	2030	2035	2040	2045
Average Year	642.6	660.2	678.8	697.8	710.5
Single Dry Year (FY 2014–2015)	674.7	693.2	712.7	732.7	746
Multi-Dry Year (2011–2015)	662.3	680.4	699.6	719.2	732.3
<hr/> <i>afy = acre-feet per year</i> <i>Source: LADWP, 2020 Urban Water Management Plan, Exhibits 11E, 11F, and 11G.</i>					

determined by the CEQA lead agency to be consistent with the 2020-2045 RTP/SCS adopted by SCAG.⁷³

(b) Existing Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the portion of the Project Site to be developed (Development Area) consists of a surface parking area with approximately 84 vehicle parking spaces. The remainder of the Project Site contains additional commercial structures that will not be modified as part of the Project. However, there is 4,000 square feet of floor area within the existing commercial structures that has been vacant since prior to 2018 and is assumed to be occupied by a high-turnover restaurant in the future. The existing parking uses to be removed on the Project Site do not generate water demand.

(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 according to the estimates for FY 2018–2019.⁷⁴ Much of the water flows north to south, entering Los Angeles at the LAA Filtration Plant in Sylmar, which is owned

⁷³ LADWP, *Water Supply Assessment for the Sunset and Wilcox Project*, June 30, 2021.

⁷⁴ LADWP, *2018–2019 Briefing Book*, June 2019.

and operated by LADWP. Water entering the LAA Filtration Plant undergoes treatment and disinfection before being distributed throughout the LADWP's water service area.⁷⁵

Domestic water service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Water Utility Report included in Appendix K of this Draft EIR, there is an eight-inch water main in Selma Avenue and a 16-inch water main in Ivar Avenue.⁷⁶ In addition to providing domestic water service, LADWP provides water for fire protection services in accordance with the City's Fire Code (LAMC Chapter V, Article 7). As discussed in the Water Utility Report, there are six existing fire hydrants within the vicinity of the Project, with additional fire hydrants located in the general Project area.⁷⁷

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.

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

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 *L.A. CEQA Thresholds Guide*, as appropriate, to assist in answering the Appendix G Threshold questions. Refer to Section IV.K.2, Utilities and Service Systems—Wastewater, of this Draft EIR for a discussion of wastewater impacts; the Project's Initial Study included in Appendix A of this Draft EIR for a discussion of stormwater impacts; Section IV.K.3, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, Other CEQA Considerations for a discussion of telecommunications facility impacts.

⁷⁵ LADWP, 2020 Urban Water Management Plan, May 2021.

⁷⁶ KPFF Consulting Engineers, Artisan Hollywood Project Utility Infrastructure Technical Report: Water, May 2021, page 5. Refer to Appendix K of this Draft EIR.

⁷⁷ KPFF Consulting Engineers, Artisan Hollywood Project Utility Infrastructure Technical Report: Water, May 2021, page 6. Refer to Appendix K of this Draft EIR.

The *L.A. CEQA Thresholds Guide* identifies the following factors 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;
- 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 water supply is based on a calculation of the Project's anticipated net water demand. Consistent with LADWP's methodology, the estimated net water demand for the Project is calculated by applying the City of Los Angeles Bureau of Sanitation's (LASAN) sewer generation factors to the Project's proposed uses. The water demand of the existing uses to be removed, if any, would then be subtracted from the Project's total water demand to determine the Project's net water demand. The resulting net demand for water associated with the Project is then analyzed to determine if LADWP would be able to accommodate the Project's water demands during average, single-dry, and multiple-dry years hydrologic conditions.

The analysis of the Project's potential impacts to water infrastructure is based on the Water Utility Report prepared for the Project by KPFF Consulting Engineers, which is included in Appendix K of this Draft EIR. The Water Utility Report includes a comparison of the estimated net water demand for the Project to the available capacity of the existing water infrastructure. In addition, LADWP performed a hydraulic analysis of their water system to determine if the existing infrastructure can provide adequate fire flow to the fire hydrants surrounding the Project Site. Based on the results, LADWP determines whether they can meet the Project fire hydrant flow needs based on existing infrastructure. In addition, LADWP performed a flow test to determine if available water conveyance exists for future development. LADWP's approach consists of data ranging from available static pressure (meaning how much pressure is available at the source before applying the Project's demand), to the available pressure at the maximum demand needed for the Project. Based on the results, LADWP determines whether they can meet the Project needs based on existing infrastructure.

c. Project Design Features

The following water supply and infrastructure-related project design feature is proposed as part of the Project:

WAT-PDF-1: In addition to regulatory requirements, 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, or less;
- Domestic Water Heating System located in close proximity of point(s) of use;
- Individual metering and billing for water use for commercial space;
- 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?⁷⁸

(1) Impact Analysis

(a) Construction

As discussed in the Water Utility Report included in Appendix K of this Draft EIR, Project construction activities would require water for a variety of activities, including dust control, cleaning of equipment, excavation/export, and removal and re-compaction. Based on a review of construction projects of similar size and duration, a conservative estimate of Project water use during construction ranges from 1,000 to 2,000 gallons per day (gpd). The estimated construction-period demand is significantly less than the Project's estimated

⁷⁸ Refer to Section IV.C, Energy, of this Draft EIR for a discussion of electric power and natural gas impacts. Refer to the Initial Study included in Appendix A of this Draft EIR for a discussion of stormwater, wastewater, and telecommunications facility impacts

operational demand, which as discussed below, would be accommodated by existing infrastructure. It is therefore anticipated that the existing water infrastructure would similarly meet the limited and temporary water demand associated with construction of the Project. As such, water needs during construction of the Project 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.

The Project would require construction of new, on-site water distribution lines to serve the new building. Construction of the new water distribution lines would primarily involve on-site trenching to place the lines below the surface, and minor off-site work associated with connection to the existing public water mains. In accordance with City requirements, prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. Furthermore, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and 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, Project construction activities 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, Project construction-related water infrastructure impacts would be less than significant.

(b) Operation

As discussed above, water service to the Project Site would continue to be supplied by LADWP for domestic and fire protection uses. 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.⁷⁹ Nevertheless, conservative analyses for both fire suppression and domestic water flows have been completed by LADWP for the Project. These analyses are summarized and described in more detail in the Water Utility Report included in Appendix K of this Draft EIR.

⁷⁹ *KPFF Consulting Engineers, Artisan Hollywood Project Utility Infrastructure Technical Report: Water, May 2021. Refer to Appendix K of this Draft EIR.*

(i) Fire Flow

Fire flow to the Project's proposed building would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3, which establishes fire flow standards by development type. As confirmed by LAFD, the required fire flow for the Project Site has been determined to be 6,000 to 9,000 gpm from four to six fire hydrants flowing simultaneously with a residual pressure of 20 psi, which corresponds to the Industrial and Commercial category. However, because the Project is a high-rise building, LAFD has indicated that the required fire flow for the Project would be 9,000 gpm, the upper limit of the range. This translates to a required flow of 1,500 gpm for each hydrant in the Project vicinity. As noted above, there are six existing fire hydrants within the Project vicinity. As part of the Water Utility Report included in Appendix K of this Draft EIR, an Information of Fire Flow Availability Request (IFFAR) was submitted to LADWP to determine if there is adequate water flow and water pressure to serve the Project. Based on the completed IFFAR, which is included as Exhibit 2 of the Water Utility Report, each of the six existing public fire hydrants in the vicinity of the Project Site can provide 1,500 gpm, for a total of 9,000 gpm flowing simultaneously, with a residual pressures ranging between 71 and 75 psi. This meets the required flow set for the Project Site.

The Project would also incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which would be subject to LAFD review and approval. Based on LAMC Section 94.2020.0, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. The information from the Service Advisory Request (SAR) that was submitted to LADWP, which is included as Exhibit 3 of the Water Utility Report included in Appendix K of this Draft EIR, indicates that 1,400 gpm can be delivered to the Project with a minimum residual pressure of 69 psi.

Therefore, based on the IFFAR and SAR, there is adequate fire flow available for the Project to comply with requirements identified for the Project in accordance with LAMC Section 57.507.3 and LAMC Section 94.2020.0. Thus, fire flow impacts to LADWP's water infrastructure capacity would be less than significant.

(ii) Domestic Water Demand

Domestic water demand has been estimated based on LASAN's sewage generation factors for applicable land use categories. As discussed further under Threshold (b) below, the Project would generate a net increase in water demand of 83,949 gpd. The Project proposes to connect to the existing 16-inch main in Ivar Avenue. The will-serve response from LADWP, which is included as Exhibit 1 of the Water Utility Report included in Appendix K of this Draft EIR, confirms that sufficient capacity is available for the Project.⁸⁰

⁸⁰ *KPFF Consulting Engineers, Artisan Hollywood Project Utility Infrastructure Technical Report: Water, May 2021, pages 8-9. Refer to Appendix K of this Draft EIR.*

Based on the above, upon completion of the necessary upgrades to improve the surrounding adjacent water mains, the Project would not exceed the available capacity of existing water facilities, including the 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 would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project impacts with regard to water infrastructure would be less than significant without mitigation. Therefore, no mitigation measures are required, 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

As described above, construction activities for the Project would result in a temporary demand for water associated with a variety of activities including dust control, equipment and site cleanup, excavation and export, soil compaction and earthwork, mixing and placement of concrete, irrigation for plant and landscaping establishment, testing of water connections, flushing, and other short-term related activities. These activities would occur incrementally throughout construction of the Project (an approximately 26-month period until Project buildout in 2025). 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 anticipated water demand during construction would be less than the 83,949 gpd of the Project's net new water consumption at buildout provided in Table IV.K.1-5 on page IV.K.1-32. Furthermore, as concluded in LADWP's 2020 UWMP, projected water demand for the City would be met by the available supplies during all hydrologic conditions (average year, single-dry year, and multiple-dry year) in each year from 2025 through 2045, in addition to the existing and planned future water demands within LADWP's service area through the year 2045. Therefore, the Project's temporary and

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

Land Use	No. of Units/ Floor Area	Water Demand Rate (gpd/unit) ^a	Demand (gpd)
EXISTING TO BE REMOVED			
Surface Parking Lot	32,129 sf	N/A	0
Total Existing			0
PROPOSED			
Apartment: Bachelor	92 du	75/du	6,900
Apartment: 1 Bed	93 du	110/du	10,230
Apartment: 2 Bed	75 du	150/du	11,250
Apartment: 3 Bed	10 du	190/du	1,900
Lounge ^b	21,817 sf	50/kgsf	1,091
Gym	1,869 sf	200/kgsf	374
Pool ^c	5,465 cu	7.48 gal/cu	40,878
Health Spa	532 sf	650/kgsf	346
Bar	250 sf	720/kgsf	180
Restaurant: High-Turnover ^d	360 seats ^e	30/seat	10,800
Subtotal Water Demand			83,949
Net Additional Water Demand (Proposed – Existing)			83,949
<p>cu = cubic feet du = dwelling units gal/cu = gallons per cubic feet gpd = gallons per day kgsf = thousand gross square feet sf = square feet</p> <p>^a The average daily demand based on LASAN's Sewage Generation Factors (2012). ^b Lounge was used for all Project amenity spaces that do not have a designation as specified in LASAN's Sewage Generation Factors. ^c Pool volume obtained from Architectural Floor Plan. Includes pools located on Level 4 and Level 25. ^d Includes 6,790 square feet of proposed floor area and 4,000 of existing vacant floor area. Conservatively assumes that all of the new and existing vacant commercial square footage would be occupied by high-turnover restaurant uses. ^e Assumes 30 square feet per person.</p> <p>Source: KPFF Consulting Engineers, Artisan Hollywood Project Utility Infrastructure Technical Report: Water, May 2021.</p>			

intermittent demand for water during construction could be 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, single-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’s new high-rise building would include approximately 260,378 square feet of floor area including up to 270 multi-family residential units and 6,790 square feet of new retail/restaurant floor area. The six existing buildings within the Project Site that comprise approximately 33,828 square feet would be retained. Up to 4,000 square feet of floor area within the existing commercial buildings that have been vacant since prior to 2018 is assumed to be occupied in the future with high-turnover restaurant uses. The Project would remove the existing surface parking area located in the northeastern portion of the Project Site (Development Area). As the Project would include less than 500 dwelling units and would demand an amount of water less than the amount of water required by a 500 dwelling unit project, the Project is not subject to the requirements of SB 610 (preparation of a water supply assessment).

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 100 percent of the sewage generation rates established by LASAN, which serves to estimate water demand, to the proposed uses.

As shown in Table IV.K.1-5 on page IV.K.1-32, assuming constant water use throughout the year, the Project would result in a net average daily water demand of 83,949 gpd, or approximately 94 AFY.

The 2020 UWMP utilized SCAG’s 2020–2045 RTP/SCS data that provided for more reliable water demand forecasts, taking into account changes in population, housing units and employment. The Project would generate a net of approximately 632 new residents,⁸¹ 270 new households, and up to 43 new employees.⁸² The Project would be consistent with growth projections anticipated by the SCAG and the demographic projection for the City in

⁸¹ *Based on a rate of 2.25 persons per multi-family unit and 3.14 person per affordable housing (family) unit based on the City of Los Angeles VMT Calculator Documentation Guide, Table 1, May 2020.*

⁸² *Based on a rate of 4.0 employees per 1,000 square feet for high-turnover restaurant uses based on the City of Los Angeles VMT Calculator Documentation Guide, Table 1, May 2020. Conservatively assumes that all of the new and existing vacant commercial space would be occupied by high-turnover restaurant uses.*

the 2020–2045 RTP/SCS. Specifically, based on SCAG’s projections for the City of Los Angeles Subregion between 2020 and 2025 (buildout year), the estimated 632 residents generated by the Project would represent approximately 0.44 percent of the projected population growth, the estimated 270 households would represent approximately 0.37 percent of the projected household growth, and the estimated 14 employees would represent approximately 0.03 percent of the projected employment growth.⁸³ Therefore, the Project would be well within SCAG’s projections for the City of Los Angeles Subregion.

Lastly, as outlined in its 2020 UWMP, LADWP is committed to providing a reliable water supply for the City.⁸⁴ The 2020 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.⁸⁵ The 2020 LADWP UWMP also furthers the goals of the City’s ED 5 and Sustainable City pLAn, addresses the current and future SWP supply shortages, and concludes that MWD’s actions in response to the threats to the SWP will ensure continued reliability of its water deliveries.⁸⁶ 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.⁸⁷ Additionally, as reaffirmed by L.A.’s Green New Deal, the City is committed to conserving and recycling water to help meet future water demands in the City.⁸⁸

Based on the above, LADWP would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal,

⁸³ *Based on a linear interpolation of SCAG’s 2016–2045 data, the 2020 values for population, housing, and employment are calculated using SCAG’s 2016 and 2045 values to find the average increase between years and then applying that annual increase to each year until 2025.*

Population growth between 2020 (4,049,317 persons) and 2025 (4,193,714 persons) is approximately 144,397 persons. The Project’s 632 net new residents would represent approximately 0.44 percent of this growth ((632 ÷ 144,397) × 100 = 0.44).

Household growth between 2020 (1,425,759 households) and 2025 (1,499,207 households) is approximately 73,448 households. The Project’s 270 net new households would represent approximately 0.37 percent of this growth ((270 ÷ 73,448) × 100 = 0.37).

Employment growth between 2020 (1,887,969 employees) and 2025 (1,937,555 employees) is approximately 49,586 employees. The Project’s 14 net new employees would represent approximately 0.03 percent of this growth ((14 ÷ 49,586) × 100 = 0.03).

⁸⁴ LADWP, 2020 Urban Water Management Plan, May 2021.

⁸⁵ LADWP, 2020 Urban Water Management Plan, May 2021.

⁸⁶ LADWP, 2020 Urban Water Management Plan, May 2021.

⁸⁷ LADWP, 2020 Urban Water Management Plan, May 2021.

⁸⁸ City of Los Angeles, L.A.’s Green New Deal, Sustainable City pLAn, 2019.

single-dry, and multiple-dry years. Therefore, the Project's operation-related impacts on water supply would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project impacts with regard to water supply would be less than significant without mitigation. Therefore, no mitigation measures are required, and the impact levels remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) *Water Infrastructure*

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the area served by the same water infrastructure as the Project). Development of the Project and the cumulative or related projects within this geographic area would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, the related projects would be subject to LADWP review (e.g., preparation of a SAR and IFFAR) to ensure that the existing water infrastructure is adequate to meet the domestic and fire water demands of each project and would be required to provide water infrastructure improvements to serve the project if the existing infrastructure is inadequate. In addition, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement and update its Water Infrastructure Plan (WIP), with the current (2018–2019) WIP containing a five-year water system capital improvement plan that includes \$6.3 billion for needed water system infrastructure improvements and maintenance.⁸⁹ Furthermore, in accordance with City requirements, prior to ground disturbance, the related projects would be required to coordinate with LADWP to identify the locations and depths of all lines, and LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service associated with the related projects. LADWP would also review and approve all appropriate connection requirements, pipe depths, and connection location(s) associated with the related projects.

⁸⁹ LADWP, 2018–2019 Water Infrastructure Plan.

As with the Project, off-site connection activities and infrastructure improvements associated with the related projects could temporarily affect access in adjacent rights-of-way. However, as with the Project, the related projects would be required to implement a Construction Traffic Management Plan to ensure that adequate and safe access remains available within and near the related project sites during construction activities. As part of the Construction Traffic Management Plan, appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure emergency access to the related project sites and traffic flow is maintained on adjacent rights-of-way.

Based on the above, the Project, together with related projects, would not result in significant water infrastructure impacts related to the construction or expansion of water facilities, nor would the Project contribute considerably to cumulative water infrastructure impacts. As such, cumulative water infrastructure impacts 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 2020 UWMP accounts for existing development within the City, as well as projected growth through the year 2045.

As identified in Section III, Environmental Setting, of this Draft EIR, there are 46 related projects located in the vicinity of the Project Site, all of which are located within the LADWP service area. The estimated water demand of these related projects is shown in Table IV.K.1-6 on page IV.K.1-37. As indicated therein, the related projects would generate a total average water demand of approximately 2,065,961 gpd (or approximately 2,314 afy). Together with the approximately 83,949 gpd (approximately 94 afy) net new demand from the Project, total cumulative water demand would be approximately 2,149,910 gpd (approximately 2,408 afy). These estimates are conservative because the related projects do not account for the potential removal of existing uses that generate water demand.

The total water demand of the Project and related projects of approximately 2,408 afy would represent approximately 0.49 percent⁹⁰ of LADWP's 2020 water supply of

⁹⁰ $(2,408 \text{ afy} \div 487,591 \text{ afy}) \times 100 = 0.49 \text{ percent}$

**Table IV.K.1-6
Cumulative Water Demand**

No.	Project Name/Address	Land Use	Size	Generation Factor^{a, b, c}	Total Water Demand (gpd)
1	Cahuenga Boulevard Hotel 1525 N. Cahuenga Blvd.	Hotel	64 rm	120 gpd/rm	7,680
		Rooftop Restaurant/Lounge	700 sf	30 gpd/seat	700
		Restaurant	3,300 sf	30 gpd/seat	3,300
2	Ivar Gardens Hotel 6409 W. Sunset Blvd.	Hotel	275 rm	120 gpd/rm	33,000
		Retail	1,900 sf	0.025 gpd/sf	48
3	6400 Sunset Mixed-Use 6400 Sunset Blvd.	Apartments	232 du	190 gpd/du	44,080
		Restaurant	7,000 sf	30 gpd/seat	7,000
4	6630 West Sunset Boulevard 6630 W. Sunset Blvd.	Apartments	40 du	190 gpd/du	7,600
5	Selma–Wilcox Hotel 6421 W. Selma Ave.	Hotel	114 rm	120 gpd/rm	13,680
		Restaurant	1,993 sf	30 gpd/seat	1,993
6	Thompson Hotel 1541 N. Wilcox Ave.	Hotel	200 rm	120 gpd/rm	24,000
		Restaurant	9,000 sf	30 gpd/seat	9,000
7	Tommie Hotel 6516 W. Selma Ave.	Hotel	212 rm	120 gpd/rm	25,440
		Bar/Lounge	3,855 sf	0.72 gpd/sf	2,776
		Rooftop Bar/Event Space	8,500 sf	0.72 gpd/sf	6,120
8	Godfrey Hotel 1400 N. Cahuenga Blvd.	Hotel	220 rm	120 gpd/rm	26,400
		Restaurant	2,723 sf	30 gpd/seat	2,723
		Bar	1,440 sf	0.72 gpd/sf	1,037
9	Hotel & Restaurant 6381 W. Hollywood Blvd.	Hotel	80 rm	120 gpd/rm	9,600
		Restaurant	15,290 sf	30 gpd/seat	15,290
10	Schrader Hotel Mixed-Use 1600 N. Schrader Blvd.	Hotel	168 rm	120 gpd/rm	20,160
		Restaurant	5,979 sf	30 gpd/seat	5,979
11	CD 13 Schrader Temp Bridge Housing Shelter 1533 Schrader Blvd.	Shelter	70 beds	70 gpd/bed	4,900

**Table IV.K.1-6 (Continued)
Cumulative Water Demand**

No.	Project Name/Address	Land Use	Size	Generation Factor ^{a, b, c}	Total Water Demand (gpd)
12	Modera Argyle Mixed-Use 1546 N. Argyle Ave.	Apartments	276 du	190 gpd/du	52,440
		Retail	9,000 sf	0.025 gpd/sf	225
		Restaurant	15,000 sf	0.3 gpd/sf	15,000
13	Hudson Building 6523 W. Hollywood Blvd.	Restaurant	10,402 sf	30 gpd/seat	10,402
		Office	4,074 sf	0.12 gpd/sf	489
		Storage	890 sf	0.03 gpd/sf	27
14	Wilcox Hotel 1717 N. Wilcox Ave.	Hotel	133 rm	120 gpd/rm	15,960
		Retail	3,580 sf	0.025 gpd/sf	90
15	Palladium Residences 6201 W. Sunset Blvd.	Apartments	731 du	150 gpd/du	138,890
		Retail/Restaurant	24,000 sf	30 gpd/seat 0.025 gpd/sf ^d	18,150
16	Onni Group Mixed-Use Development 1360 N. Vine St.	Office	463,521 sf	0.12 gpd/sf	55,623
		Rehabilitated Uses	8,988 sf	30 gpd/seat ^e	8,988
		Restaurant	11,914 sf	30 gpd/seat	11,914
17	1723 Wilcox 1723 N. Wilcox Ave.	Hotel	81 rm	120 gpd/rm	9,720
		Restaurant	2,236 sf	30 gpd/seat	2,236
18	Pantages Theater Office 6225 W. Hollywood Blvd.	Office	210,000 sf	0.12 gpd/sf	25,200
19	6250 Sunset Mixed-Use (Old Nickelodeon Site) 6250 W. Sunset Blvd.	Apartments	200 du	190 gpd/du	38,000
		Retail	4,700 sf	0.025 gpd/sf	118
20	Hollywood & Wilcox 6430–6440 W. Hollywood Blvd.	Apartments	260 du	190 gpd/du	49,400
		Office	3,580 sf	0.12 gpd/sf	430
		Retail	11,020 sf	0.025 gpd/sf	276
		Restaurant	3,200 sf	30 gpd/seat	3,200
21	Hollywood Center Mixed-Use (Formerly Millennium) 1720 N. Vine St.	Apartments	872 du	190 gpd/du	165,680
		Affordable Senior Housing	133 du	70 gpd/du ^f	14,630
		Retail	30,176 sf	0.025 gpd/sf	754

**Table IV.K.1-6 (Continued)
Cumulative Water Demand**

No.	Project Name/Address	Land Use	Size	Generation Factor^{a, b, c}	Total Water Demand (gpd)
22	Mixed-Use 1310 N. Cole Ave.	Apartments	369 du	190 gpd/du	70,110
		Office	2,570 sf	0.12 gpd/sf	308
23	6200 West Sunset Boulevard 6200 W. Sunset Blvd.	Apartments	270 du	190 gpd/du	51,300
		Restaurant	1,750 sf	30 gpd/seat	1,750
		Pharmacy	2,300 sf	0.025 gpd/sf	58
		Retail	8,070 sf	0.025 gpd/sf	202
24	Citizen News 1545 N. Wilcox Ave.	Flexible Event Space	16,100 sf	0.35 gpd/sf	5,635
		Restaurant	14,800 sf	30 gpd/seat	14,800
25	1637 North Wilcox Mixed-Use 1637 N. Wilcox Ave.	Apartments	93 du	190 gpd/du	17,670
		Affordable Housing	61 du	190 gpd/du	11,590
		Commercial	6,586 sf	0.05 gpd/sf	329
26	Mixed-Use 1524–1538 N. Cassil Pl.	Apartments	200 du	190 gpd/du	38,000
		Restaurant	1,400 sf	30 gpd/seat	1,400
27	Academy Square 1341 Vine St.	Office	285,719 sf	0.12 gpd/sf	34,286
		Apartments	200 du	190 gpd/du	38,000
		Restaurant	16,135 sf	30 gpd/seat	16,135
28	citizenM Hotel 1718 Vine St.	Hotel	240 rm	120 gpd/rm	28,800
		Restaurant	5,373 sf	30 gpd/seat	5,373
29	6445 Sunset 6445 Sunset Blvd.	Hotel	175 rm	120 gpd/rm	21,000
		Restaurant	12,500 sf	30 gpd/sf	12,500
30	6360 Hollywood 6360 Hollywood Blvd.	Hotel	90 rm	120 gpd/rm	10,800
		Restaurant	11,000 sf	30 gpd/seat	11,000
31	1400 Vine 1400 Vine St.	Residential	179 du	190 gpd/du	34,010
		Affordable Housing	19 du	190 gpd/du	3,610
		Restaurant	16,000 sf	30 gpd/seat	16,000
32	6140 Hollywood 6140 Hollywood Blvd.	Hotel	102 rm	120 gpd/rm	12,240
		Condominium	27 du	190 gpd/du	5,130
		Restaurant	11,460 sf	30 gpd/seat	11,460

**Table IV.K.1-6 (Continued)
Cumulative Water Demand**

No.	Project Name/Address	Land Use	Size	Generation Factor ^{a, b, c}	Total Water Demand (gpd)
33	Hollywood Crossroads 1540–1552 Highland Ave.	Residential	950 du	190 gpd/du	180,500
		Hotel	308 rm	120 gpd/rm	36,960
		Office	95,000 sf	0.12 gpd/sf	11,400
		Commercial/Retail	185,000 sf	0.05 gpd/sf	9,250
34	Hollywood Gower Mixed-Use 6100 W. Hollywood Blvd.	Apartments	220 du	190 gpd/du	41,800
		Restaurant	3,270 sf	30 gpd/seat	3,270
35	Mixed-Use 6220 W. Yucca St.	Hotel	210 rm	120 gpd/rm	25,200
		Apartments	136 du	190 gpd/du	25,840
		Retail	3,450 sf	0.025 gpd/sf	86
		Restaurant	9,120 sf	30 gpd/seat	9,120
36	1719 Whitley Hotel 1719 N. Whitley Ave.	Hotel	156 rm	120 gpd/rm	18,720
37	Sunset Gower Studios 1438 N. Gower St.	Sound Stage	169,400 sf	0.05 gpd/sf	8,470
		Production Support	52,800 sf	0.05 gpd/sf	2,640
		Office	852,830 sf	0.12 gpd/sf	102,340
		Restaurant	6,516 sf	30 gpd/seat	6,516
38	1235 Vine Street Project 1235 Vine St.	Office	109,190 sf	0.12 gpd/sf	13,103
		Restaurant	7,960 sf	30 gpd/seat	7,960
39	Apartments 1601 N. Las Palmas Ave.	Apartments	202 du	190 gpd/du	38,380
40	Las Palmas Residential (Hollywood Cherokee) 1718 N. Las Palmas Ave.	Residential	224 du	190 gpd/du	42,560
		Retail	985 sf	0.025 gpd/sf	25
41	Hotel 1921 Wilcox Ave.	Hotel	122 rm	120 gpd/rm	14,640
		Restaurant	4,225 sf	30 gpd/seat	4,225
42	6753 Selma Mixed-Use 6753 Selma Ave.	Apartments	51 du	190 gpd/du	9,690
		Retail	438 sf	0.025 gpd/sf	11

**Table IV.K.1-6 (Continued)
Cumulative Water Demand**

No.	Project Name/Address	Land Use	Size	Generation Factor ^{a, b, c}	Total Water Demand (gpd)
43	Hotel 1133 N. Vine St.	Hotel	112 rm	120 gpd/rm	13,440
		Café	661 sf	0.28 gpd/sf	185
44	Apartments 1749 Las Palmas Ave.	Apartments	70 du	190 gpd/du	13,300
		Retail	3,117 sf	0.025 gpd/sf	78
45	1708 Cahuenga 1708 N. Cahuenga Blvd.	Office/Commercial	217,269 sf	0.12 gpd/sf	26,072
46	Residential 1818 N. Cherokee Ave.	Apartments	65 du	190 gpd/du	12,350
		Affordable Housing	21 du	190 gpd/du	3,990
Total Related Projects					2,065,961
Project					83,949
Related Projects + Project					2,149,910

du = dwelling units

rm = rooms

sf = square feet

^a LASAN's Sewage Generation Factors (2012).

^b Assumes all restaurant space is full service with 30 sf per seat.

^c Assumes rate for 3-bedroom units for all dwelling units (with the exception of senior housing).

^d Assumes 75 percent restaurant and 25 percent retail.

^e The rehabilitated uses could include residential, restaurant, or office uses. This analysis conservatively assumes the generation rate for restaurant uses.

^f Assumes rate for 1-bedroom units.

Source: Gibson Transportation Consulting, Inc., December 2020, and Eyestone Environmental, 2021.

487,591 acre-feet, with the Project's share of 94 acre-feet representing approximately 0.02 percent⁹¹ of LADWP's 2020 water supply.

As previously stated, based on water demand projections through 2045 in its 2020 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2045, as well as the intervening years (i.e., 2025, the Project buildout year) based on demographic growth projections in SCAG's 2020–2045 RTP/SCS, which include the Project and likely most of the 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 would be met.

Overall, as discussed above, the 2020 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 2020 UWMP specifically outlined the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP's 2020 UWMP also incorporates the goals of ED 5 and the City's Sustainability pLAn. 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.⁹² To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge. Furthermore, LADWP will continue to update its UWMP every five years to ensure that sufficient water supply continues to be available.

Based on the above, it is anticipated that LADWP would be able to meet the water demands of the Project and future growth within its service area through at least 2045. Therefore, the Project, together with the related projects, would not result in significant cumulative impacts related to water supply, nor would the Project contribute considerably to cumulative water demand. As such, cumulative water supply impacts would be less than significant.

⁹¹ $(94 \text{ afy} \div 487,591 \text{ afy}) \times 100 = 0.02 \text{ percent}$

⁹² LADWP, *2020 Urban Water Management Plan*, May 2021.

(2) Mitigation Measures

Cumulative impacts related 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, and the impact level remains less than significant.