IV. Environmental Impact Analysis

L.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 a Water Supply Assessment (WSA) prepared for the Project and adopted by LADWP and included in Appendix U of this Draft EIR, along with a copy of Resolution No. 021144 approving the WSA. Additional technical information used in the analysis is based on the *1360 Vine St Mixed Use Utility Infrastructure Technical Report: Energy, Water, and Wastewater* (Utility Report) prepared for the Project and included in Appendix F to this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

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

- California Urban Water Management Plan Act
- Senate Bill 610 (California Water Code Section 10910 et seq.)
- Senate Bill 221 (California Water Code Sections 11010, 65867.5, 66455.3 and 66473.7)
- Senate Bill 7 (California Water Code Section 10608)

- Senate Bill X7-7 (Water Conservation Act of 2009)
- Sustainable Groundwater Management Act of 2014
- California Code of Regulations (Title 20 and Title 24)
- State of Drought Emergency Declaration and Executive Orders B-29-15, B-36-15, B-37-16, and B-40-17
- California Water Plan and the California Water Action Plan
- Metropolitan Water District's Urban Water Management Plan, Integrated Resources Plan, the Water Surplus and Drought Management Plan, and the Water Supply Allocation Plan
- Los Angeles Department of Water and Power's 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,
- Community Plan
- Los Angeles Municipal Code (Ordinance Nos. 166,080, 181,288, 183,608, 184,250, 180,822, 181,480, 181,899, 183,833, 182,849, 184,692, and 184,248)
- Los Angeles Water Rate Ordinance

(1) State

(a) California Urban Water Management Plan Act (California Water Code Sections 10610–10656)

The California Urban Water Management Planning Act (California Water Code, Sections 10610–10656) addresses several State policies regarding water conservation and development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires water suppliers to develop water management plans every five years to identify short-term and long-term demand management measures to meet growing water demands during normal, single-dry, and multiple-dry years. Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (AFY) of water must adopt an urban water management plan.

(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 of 2009

SB X7-7, the Water Conservation Act of 2009, codified in California Water Code Section 10608, requires all water suppliers to increase water use efficiency. Enacted in 2009, this legislation sets an overall goal of reducing per capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020. The State of California was required to

[1] *SWRCB, 20 x 2020 Water Conservation Plan, February 2010.*

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 2014[5]

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.

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[2] *SWRCB, Fact Sheet, February 2017 Statewide Conservation Data, updated April 4, 2017.*

[3] *SWRCB, Media Release, "Statewide Water Savings Exceed 25 Percent in February; Conservation to Remain a California Way of Life," April 4, 2017.*

[4] *SWRCB, Fact Sheet, August 2017 Statewide Conservation Data, updated October 3, 2017.*

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

[6] *California Department of Water Resources, SGMA Groundwater Management, https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management, accessed February 9, 2022.*

(e) California Code of Regulations

(i) Title 20

Title 20, Section 1605.3 (h) and 1505(i) of the California Code of Regulations (CCR) establishes applicable State efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including fixtures such as showerheads, lavatory faucets and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured on or after July 1, 2018, is 1.8 gpm at 80 psi; and lavatory faucets manufactured after July 1, 2016, is 1.2 gpm at 60 psi. The standard for toilets sold or offered for sale on or after January 1, 2016, is 1.28 gallons per flush.[7]

(ii) CALGreen Code

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

(iii) Plumbing Code

Title 24, Part 5 of the California Code of Regulations establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2019 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2019.

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[7] *CCR, Title 20, Section 1605.3(h).*

(f) State of Drought Emergency Declaration and Executive Orders

In response to California's drought conditions, on January 17, 2014, Governor Jerry Brown declared a State of Drought Emergency and directed state officials to take numerous necessary actions with local Urban Water Suppliers and municipalities to reduce the impacts of the ongoing drought conditions that had been occurring in California since approximately 2009.[8] Subsequently, four Executive Orders were issued between April 2015 to April 2017 to address changing drought conditions and provide guidance for addressing the drought conditions.

Executive Order B-29-15 (April 2015) imposed a mandatory 25 percent statewide water reduction on potable water use by Urban Water Suppliers. It prioritized water infrastructure projects, incentivized water efficiencies, and streamlined permitting with new approval processes for water transfers and emergency drinking water projects. Executive Order B-37-16 called for long-term improvements to local drought preparation across the state, and directed the California State Water Resources Control Board (SWRCB) to develop proposed emergency water restrictions for 2017 if the drought persists.[9]

The regulatory requirements resulting from these executive orders were codified in California Code of Regulations Title 23, Article 22.5, Drought Emergency Water Conservation.

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

Finally, on April 7, 2017, Executive Order B-40-17 was issued to formally end the drought emergency and lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. In response to Executive Order B-40-17, on April 26, 2017, the SWRCB partially repealed the emergency regulation in regard to water supply stress test requirements and remaining mandatory conservation standards for urban water

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[8] *Office of Governor Edmund G. Brown Jr., Newsroom, Governor Brown Declares Drought State of Emergency, January 17, 2014, www.ca.gov/archive/gov39/2014/01/17/news18368/index.html, accessed March 5, 2021.*

[9] *Office of Governor Edmund G. Brown, Jr., Governor Brown Issues Order to Continue Water Savings as Drought Persists, May 9, 2016, www.ca.gov/archive/gov39/2016/05/09/news19408/index.html, accessed March 5, 2021.*

[10] *SWRCB, Resolution No. 2016-0029, To Adopt an Emergency Regulation for Statewide Urban Water Conservation, May 18, 2016.*

suppliers.[11,12] The order also rescinded two drought-related emergency proclamations and four drought-related executive orders. Cities and water districts throughout the state are required to continue reporting their water use each month. Executive Order B-40-17 continued the ban on wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

(g) California Water Plan

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

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

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

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[11] *SWRCB, Resolution No. 2016-0029, To Adopt an Emergency Regulation for Statewide Urban Water Conservation, May 18, 2016.*

[12] *SWRCB, Resolution No. 2017-0024, To Partially Repeal a Regulation for Statewide Urban Water Conservation, April 26, 2017.*

[13] *DWR, California Water Plan, www.water.ca.gov/Programs/California-Water-Plan, accessed March 5, 2021.*

[14] *DWR, News Release, DWR Releases Final California Water Plan Update 2018, July 16, 2019, https:// water.ca.gov/News/News-Releases/2019/July-19/Final-Water-Plan-Update-2018, accessed March 5, 2021.*

resolve systemic and institutional issues that contribute to many of the state's water challenges.[15]

(h) California Water Action Plan

The California Water Action Plan is a roadmap for the State's journey towards sustainable water management. The first California Water Action Plan was released in January 2014 under Governor Jerry Brown's administration and updated in 2016.[16] The California Water Action Plan discusses the challenges to water in California: uncertain water supplies, water scarcity/drought, declining groundwater supplies, poor water quality, declining native fish species and loss of wildlife habitat, floods, supply disruptions, and population growth and climate change further increasing the severity of these risks.[17]

(2) Regional

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

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

The MWD Regional UWMP (RUWMP) addresses the future of MWD's water supplies and demand through the year 2040.[18] Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions (i.e., under the most challenging weather conditions such as drought and service interruptions caused by natural disasters) is presented in Table 2-4 of the 2015 RUWMP.[19] The analysis in the 2015 RUWMP concluded that reliable water resources would be available to continuously meet demand through 2040.[20] In the 2015

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15 *DWR, California Water Plan Update 2018, Executive Summary, July 2019.*

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

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

18 *MWD, 2015 Regional Urban Water Management Plan, June 2016.*

19 *MWD, 2015 Regional Urban Water Management Plan, June 2016, p. 2-15.*

20 *MWD, 2015 Regional Urban Water Management Plan, June 2016, p. 2-15.*

RUWMP, the projected 2040 demand water is 2,201,000 AFY, whereas the expected and projected 2040 supply is 2,941,000 AFY based on current programs, and an additional 398,000 AFY is expected to become available under programs under development for a potential surplus in 2040 of 1,138,000 AFY.[21]

MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix including programs in the Colorado River Aqueduct, State Water Project, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. As set forth in its 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve a 20 percent per person potable water use reduction by 2020.

(b) MWD's Integrated Water Resources Plan

The MWD prepares an Integrated Water Resources Plan (IRP) that provides a water management framework with plans and programs for meeting future water needs. It addresses issues that can affect future water supply such as water quality, climate change, and regulatory and operational changes. The most recent IRP (2015 IRP) was adopted in January 2016.[22] It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions.

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

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[21] *MWD, 2015 Regional Urban Water Management Plan, June 2016, p. 2-15.*

[22] *MWD, Integrated Water Resources Plan 2015 Update, Report No. 1518, January 2016.*

years. MWD would make ecologically-sound infrastructure investments to the SWP so that the water system can capture sufficient supplies to help meet average year demands and to refill the MWD storage network in above-average and wet years.

Planned actions to keep supplies and demands in balance include, among others, lowering regional residential per capita demand by 20 percent by the year 2020 (compared to a baseline established in 2009 state legislation), reducing water use from outdoor landscapes and advancing additional local supplies. IRP Table ES-1, 2015 IRP Update Total Level of Average-Year Supply Targeted (Acre-Feet), of the 2015 IRP, shows the supply reliability and conservation targets. As presented in the IRP, the total supply reliability target for each five-year increase between 2016 and 2040 would exceed the retail demand after conservation. In 2040, retail demand after conservation is estimated to be 4,273,000 acre-feet and the total supply reliability target is approximately 4,539,000 acre-feet, representing an excess of 266,000 acre-feet.[23]

(c) MWD's Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water shortage contingency analysis that is required as part of any UWMP into a separate, more detailed plan, called the Water Surplus and Drought Management Plan. The overall objective of the Water Surplus and Drought Management Plan is to ensure that shortage allocation of MWD's imported water supplies is not required.[24] The Water Surplus and Drought Management Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's IRP. The Water Surplus and Drought Management Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The Water Surplus and Drought Management 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 and then outside of the region. The Shortage Actions of the Water Surplus and Drought Management Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories.

(d) MWD's Water Supply Allocation Plan

While the Water Surplus and Drought Management Plan includes a set of general actions and considerations for MWD staff to address during shortage conditions, it does not

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[23] *MWD, Integrated Water Resources Plan—2015 Update, Report 1518, p. VIII.*

[24] *MWD, Water Surplus and Drought Management Plan: Report No. 1150, August 1999.*

include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted a water supply plan called the Water Supply Allocation Plan (WSAP) in February 2008 to encourage proactive steps to reduce the region's water demand to mitigate the need for more severe actions, up to and including the implementation of the plan to allocate water supply shortages to member agencies.[25] The Water Supply Allocation Plan includes a formula for determining reductions of water deliveries 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 formula allocates shortages of MWD supplies and seeks to balance the impacts of a shortage at the retail level while maintaining equity on the wholesale level, and takes 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. The allocation period covers 12 consecutive months from July of a given year through the following June.

(e) MWD's Long-Term Conservation Plan[26]

The Long-Term Conservation Plan (LTCP), developed in collaboration with the member agencies, retailers, and other stakeholders, 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. The goals of the LTCP are to achieve conservation targets, pursue innovation that will advance water use efficiency and conservation, and transform the public's perception of the value of water within the region.

The LTCP uses market transformation as an overarching strategy, which includes the reduction of barriers or maximizing of opportunities to accelerate the adoption of efficiency measures to the point where continuation of the same publicly funded intervention is no longer needed in that specific market. Market transformation includes promoting one set of efficient technologies, processes, services or building design approaches until they are adopted into codes and standards (or otherwise substantially adopted by the market), while also moving forward to bring the next generation of even more efficient technologies to market.

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[25] *MWD, 2015 Urban Water Management Plan, June 2016.*

[26] *MWD, Long-Conservation Plan, Final Draft, July 2011.*

(3) Local

(a) LADWP Urban Water Management Plan

(i) 2015 UWMP

In accordance with the California Urban Water Management Planning Act, UWMPs are updated at 5-year intervals. LADWP adopted the 2015 UWMP on April 27, 2016. The 2015 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2010 UWMP and currently serves as the City's master plan for reliable water supply and resource management consistent with the City goals and objectives. The UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely on individual development demands to determine area-wide growth. Rather, the projected growth in water use for the entire service area was considered in developing long-term water projections for the City to the year 2040. Long range projections are based on Southern California Association of Government (SCAG) growth projections. The 2015 UWMP is based on projections in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). [27]

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

[27] *LADWP, 2015 Urban Water Management Plan, June 2016.*

these recent initiatives. On February 2, 2017, Mayor Eric Garcetti announced that the City's 20 percent water reduction target had been met.[28]

The 2015 UWMP includes several Near-Term Conservation Strategies and Long-Term Local Supply Strategies to be implemented by LADWP in order to meet its demand for water supply. The near-term strategies include such provisions as the following: enforcing the existing list of prohibited uses of water; expanding the list of prohibited uses of water; extending outreach efforts to the public through various media options and marketing of expanded water conservation incentive and rebate programs; and encouraging regional conservation measures through coordination with MWD. Long-term supply strategies include the following: increasing water conservation through reduction of outdoor water use and new technology (implementing such mechanisms as conservation rebates and incentives; actions by public agencies; conservation in new developments through the implementation of development codes and standards; and additional future studies regarding conservation procedures); water recycling (with mechanisms such as recycled master planning, implementation of water recycling projects inclusive of a Downtown water recycling project; and public outreach regarding recycled water programs); enhancing stormwater capture; and accelerating clean-up of the San Fernando Basin.[29]

LADWP has since adopted its 2020 UWMP. However, because the Project's NOP was issued on June 22, 2017, and its WSA was adopted by LADWP on February 9, 2021, both prior to the 2020 UWMP's adoption, the 2015 UWMP is considered throughout this analysis. Nevertheless, a brief discussion of the 2020 UWMP is presented below for informational purposes.

(ii) 2020 UWMP

On May 25, 2021, LADWP adopted the 2020 UWMP. Like the 2015 UWMP, the 2020 UWMP builds upon the goals and progress made in the previous UWMPs and currently serves as the City's master plan for reliable water supply and resource management consistent with the City goals and objectives. The UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely on individual development demands to determine area-wide growth. Rather, the projected growth in water use for the entire service area

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[28] *City of Los Angeles, Mayor Eric Garcetti, Press Release, Los Angeles Achieves Mayor Garcetti's Goal of 20 Percent Water Savings, released February 2, 2017, www.lamayor.org/los-angeles-achieves-mayor-garcetti%E2%80%99s-goal-20-percent-water-savings, accessed March 5, 2021.*

[29] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

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 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Like the 2015 UWMP, the 2020 UWMP takes into account a number of significant changes that have occurred since LADWP prepared its 2010 UWMP. The year 2012 marked the beginning of the current multi-year drought in California, continued through 2016 and ended with record precipitation in 2017. As stated above, in January 2014, Governor Brown proclaimed a drought state of emergency. In 2019, Mayor Eric Garcetti issued an update to the LA Sustainable City pLAn, which includes targets to increase local water supplies through recycled water, stormwater capture, conservation, and water efficiency. In July 2020, Governor Gavin Newsom's Water Resilience Portfolio was issued. The portfolio outlined goals and actions for the state to address its water challenges. The portfolio focused on three priorities: (1) maintaining access to safe and clean drinking water, (2) establishing voluntary agreements to collaboratively manage water resources and protect fish and wildlife, and (3) advancing the Delta Conveyance Project. The 2020 UWMP incorporates the objectives of these recent initiatives.

(b) Green New Deal

The City released the first Sustainable City pLAn in April 2015,[30] 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.[31]

(c) City of Los Angeles IRP and One Water LA 2040 Plan

LADWP works closely with MWD, LASAN, other regional water providers, and various stakeholders to develop and implement programs that reduce overall water use. One example of such collaboration was the integrated resources planning process. The City's IRP involved technical integration and community participation to guide policy decisions and water resources facilities planning. Initiation of the City's IRP began in 1999 and culminated in its adoption in 2006. Through the stakeholder-driven IRP process, detailed facilities plans were developed for the City's wastewater and stormwater systems through the planning horizon of 2020.

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[30] *Mayor's Office of Sustainability, Sustainable City pLAn, First Annual Report for 2015–2016, April 2016.*

[31] *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAn, 2019.*

The One Water LA 2040 Plan (One Water LA Plan) is an initiative that builds on the progress of the City's IRP. One Water LA extends the City's IRP planning period to year 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.[32] Major challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes.

(d) Los Angeles Municipal Code

(i) General Plan Framework Element

The Citywide General Plan Framework Element (Framework Element) establishes the conceptual basis for the City's General Plan. The Framework Element sets forth a comprehensive Citywide long-range growth strategy and defines Citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure and public services. Chapter 9, Infrastructure and Public Services, of the Framework Element identifies goals, objectives, and policies for City utilities including water service. Goal 9C is to provide adequate water supply, storage facilities, and delivery system to serve the needs of existing and future water needs.[33] The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP. Table IV.L.1-1 on page IV.L.1-17 includes 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 Framework Element 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

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

[33] *City of Los Angeles, General Plan Framework Element, Chapter 9: Infrastructure and Public Services—Water, https://planning.lacity.org/cwd/framwk/chapters/09/09.htm#watersupply, accessed March 5, 2021.*

Table IV.L.1-1
Relevant General Plan Water 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.

Source: City of Los Angeles, 2001.

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.G, Land Use, of this Draft EIR, the Project is located within the Hollywood Community Plan area. The Hollywood Community Plan, adopted on December 13, 1988, does not include any objectives or policies that specifically relate to water.

(e) Los Angeles Municipal Code

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

- City Ordinance Nos. 166,080, 181,288, 183,608, and 184,250—amending LAMC Chapter XII, Article 1 to clarify prohibited uses of water and modify certain water conservation requirements of the City's Emergency Water Conservation Plan. The City's Emergency Water Conservation Plan sets forth six different phases of water conservation, which shall be implemented based on water conditions. As part of these requirements, watering is limited to specific days and hours. In determining which phase of water conservation shall be implemented, LADWP monitors and evaluates the projected water supply and demand. In addition, the Emergency Water Conservation Plan includes penalties for those that violate its requirements.

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

- City Ordinance No. 181,480—amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the California Green Building Standards Code. This ordinance added mandatory measures for newly constructed low-rise residential and non-residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20-percent reduction in baseline water use.

- City Ordinance Nos. 181,899 and 183,833—amended Chapter VI, Article 4 of the LAMC regarding stormwater and urban runoff to expand the applicability of the existing Standard Urban Stormwater Mitigation Plan (SUSMP) requirements by imposing rainwater Low Impact Development (LID) strategies on projects that require building permits; to collect fees to recover Bureau of Sanitation costs of administering the provisions of this Ordinance; to meet the requirements of the Municipal Separate Storm Sewer (MS4) Permit and to provide consistency with other existing ordinances.

- City 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.

- City 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 (Chapter V, Article 7 of the LAMC). Section 57.507.3.1 of the Fire Code 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 gpm in low density residential areas to 12,000 gpm in high density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system with the required gpm flowing. As set forth in LAMC Section 57.507.3.1, Industrial and Commercial land use category land uses have a minimum required fire flow of 6,000 to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 psi. 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 2.5-inch by 4-inch or 4-inch by 4-inch double fire hydrants. Regardless of land use, every first story of a residential, commercial, and industrial building must be within 300 feet of an approved hydrant.

(f) Los Angeles Water Rate Ordinance

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

sports. The new water rate structure increases the number of tiers from two to four for single-dwelling unit customers. In addition, this ordinance intends to maintain cost-of-service principles, incremental tier pricing based on the cost of water supply, and added pumping and storage costs.

b. Existing Conditions

(1) Water Supply

LADWP is responsible for providing water within the City of Los Angeles limits and ensuring that the water quality meets applicable California health standards for drinking water. As the Project Site is located within the City, LADWP is the water provider for the Project Site. Water is supplied to the City from four primary sources: the Los Angeles Aqueducts; local groundwater; purchased water from MWD; and recycled water.[34] Based on Table IV.L.1-2 on page IV.L.1-21, in 2017, prior to accounting for the transfer, spread, spill, and storage of water, the LADWP had a water supply of 499,494 acre-feet, of which approximately 224,724 acre-feet (45 percent) was from the Los Angeles Aqueducts, approximately 50,439 acre-feet (10.1 percent) was from local groundwater, approximately 216,299 acre-feet (43.3 percent) was from the MWD, and approximately 8,032 acre-feet (1.6 percent) was from recycled water. As shown in Table IV.L.1-2, after accounting for the transfer, spread, spill, and storage of the water supply, LADWP determined that a total of 490,144 acre-feet of water was available in 2017. LADWP's water sources are described in further detail below.

(a) Los Angeles Aqueducts

The City holds water rights in the Eastern Sierra Nevada from which snowmelt runoff is collected and conveyed to the City via the Los Angeles Aqueduct system. The Los Angeles Aqueduct supplies originate primarily from snowmelt and secondarily from groundwater pumping, and can fluctuate yearly due to the varying hydrologic conditions. As indicated in Table IV.L.1-2, approximately 380,711 acre-feet of LADWP's water supplies were from the Los Angeles Aqueducts in 2017.

(i) Background

By 1913, the first Los Angeles Aqueduct began water deliveries to the City primarily from surface water diversions from the Owens River and its tributaries. Groundwater extractions from City-purchased land in the Owens Valley also augmented these supplies. In 1940, the first Los Angeles Aqueduct was extended further north to deliver water from

[34] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

Table IV.L.1-2
LADWP Water Supply

Fiscal Year	Los Angeles Aqueducts	Local Groundwater	MWD	Recycled Water	Total[a]
2016	57,853	79,056	339,975	9,913	**490,306**
2017	224,724	50,439	216,299	8,032	**490,144**
2018	307,671	21,760	182,706	9,778	**522,116**
2019	312,456	32,233	137,775	7,512	**488,266**
2020	292,095	34,363	152,647	9,641	**487,591**

Units are in acre-feet.

[a] *The figures presented account for the transfer, spread, spill, and storage of the water supply as determined by LADWP. In 2017, transfer, spread, spill, and storage accounted for 9,350 AF (499,494-9,350 = 490,144).*

Source: LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.

the Mono Basin to the City pursuant to water rights permits and licenses granted by the SWRCB. By 1970, the second Los Angeles Aqueduct was completed to increase the total delivery capacity of the Los Angeles Aqueducts system by, in part, increasing groundwater pumping in the Owens Valley.

In 1972, Inyo County filed a CEQA lawsuit challenging the City's groundwater pumping program for the Owens Valley. In 1991, Inyo County and the City entered into the Inyo/LA Long-Term Water Agreement to manage groundwater in the Owens Valley. That same year, the EIR for the Agreement and groundwater impacts was certified. In 1997, the EIR challenges and CEQA lawsuit had settled. The Agreement, entered as a judgment of the Superior Court in the County of Inyo (County of Inyo vs. City of Los Angeles, Superior Court No. 12908), outlines the management of the City's Owens Valley groundwater resources. As a result of this water agreement and subsequent MOU, LADWP has dedicated approximately 37,000 acre-feet of water annually for enhancement and mitigation projects throughout Owens Valley, including the re-watering of 62 miles of the Lower Owens River. LADWP also provides approximately 80,000 acre-feet of water annually for other uses in the Owens Valley such as irrigation, town water supplies, stockwater, wildlife, and recreational purposes. In addition, as water diversion from the Owens River has exposed the lakebed and resulted in windblown dust, LADWP has implemented dust mitigation programs at Owens Lake following agreements with the Great Basin Unified Air Pollution Control District. An agreement from 2014 allows LADWP to use water-efficient and waterless dust mitigation measures, while maintaining existing wildlife habitat on the lakebed. As a result, LADWP is expected to save significant amounts of

water with the implementation of the Owens Lake Master Project and additional water conservation projects.

In regard to the Mono Basin, due to actions of the Superior Court and SWRCB, LADWP's allowable amount of export from Mono Basin is dependent on the Mono Lake elevation. LADWP has implemented an extensive restoration and monitoring programs there to increase water levels and improve stream conditions, fisheries, and waterfowl habitats. With reduced diversions from the Mono Basin and favorable hydrologic conditions, Mono Lake's elevation has risen over time.

Average deliveries from LAA system have been approximately 238,960 AF annually from FY 2015/16 to 2019/20. This average delivery includes two of the five dry years that began in FY 2012/2013 and finally ended in FY 2016/2017 with the highest levels of snowpack at 203 percent of normal. Since imported supplies vary from year to year depending on the hydrology, LADWP plans to increase resiliency to address climate change and natural disasters by developing sustainable local water supplies.

(b) Groundwater

LADWP pumps groundwater from three adjudicated basins within the City. The San Fernando Basin and Sylmar Basin are subject to the judgment in the *City of Los Angeles vs. City of Fernando, et al*. Groundwater pumping by LADWP and other parties is tracked and reported to the court-appointed Upper Los Angeles River Area (ULARA) Watermaster. In addition, the Central Basin is also subject to court judgment, and pumping is reported to the Water Replenishment District of California, the administrative member of the Central Basin Water Rights Panel.[35]

The San Fernando Basin is the largest of four basins in the ULARA and comprises 91.2 percent of the ULARA valley fill area. LADWP has accumulated approximately 591,460 acre-feet of stored groundwater in the San Fernando Basin as of October 1, 2018.[36] 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 entitlement of approximately 87,000 AFY. With San Fernando remediation facilities expected to be operational by FY 2023, the groundwater storage credits may be used to optimize pumping beyond this annual entitlement.[37]

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[35] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[36] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[37] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

The Sylmar Basin comprises 4.6 percent of the ULARA valley fill area. The City's current entitlement based on the Sylmar Safe Yield is 3,570 AFY. As of October 1, 2019, the City has accumulated 9,014 AF of stored water credits in the Sylmar Basin. Sylmar Basin production is anticipated to increase to 4,170 AFY from FY 2021 to FY 2036 for the City to utilize groundwater accumulated in storage. The entitlement will return to 3,570 AFY in FY 2037.[38]

The City's entitlement in the Central Basin is 17,236 AFY. As of July 1, 2020, LADWP has accumulated 22,943 AF of stored water in the Central Basin, and pumping can be temporarily increased until stored water credits have been expended.

As shown in Table IV.L.1-3 on page IV.L.1-24, during the FY 2016/2017, LADWP extracted 55,116 acre-feet from the San Fernando Basin and 3,005 acre-feet from the Central Basin[39] LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported water supplies. However, extraction from the basins may be limited by water quality, sustainable pumping practices, and groundwater elevations.

Both LADWP and the California Department of Water Resources 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 ULARA Administrative Committee of representatives from five public water supply agencies overlying the ULARA Committee.[40] 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.

As discussed above in regard to the Sustainable Groundwater Management Act, under Water Code Section 10720.7, groundwater sustainability agencies responsible for high- and medium-priority basins must adopt groundwater sustainability plans. The City overlies both adjudicated and unadjudicated basins. LADWP is working with its regional partners towards compliance with the SGMA for the unadjudicated basins, such as the Santa Monica Basin. The Hollywood Basin, also within the City boundary, was classified as low priority and not mandated to develop a Groundwater Sustainability Agencies/ Groundwater Sustainability Plans. Similarly, areas associated with adjudicated basins, like

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[38] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[39] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[40] *LADWP, 2015 Urban Water Management Plan, June 2016.*

Table IV.L.1-3
Local Groundwater Basin Supply

Fiscal Year (July–June)	San Fernando	Sylmar	Central
2014–2015	80,097	1	6,948
2015–2016	75,958	683	8,395
2016–2017	55,116	0	3,005
2017–2018	22,259	0	0.77
2018–2019	36,871	1	5
2019–2020	35,948	2	10

Units are in acre-feet. Historical data are from the Upper Los Angeles River Area Watermaster Monthly Reports, July 2014 to June 2019.

Source: Los Angeles Department of Water and Power, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.

the northern area of Central Basin, were eventually characterized as lower priority and exempt by DWR.

In September 2017, DWR approved the formation of the SMBGSA as the exclusive GSA in the SMB. The five member agencies include LADWP, the City of Beverly Hills, the City of Santa Monica, the City of Culver City, and the County of Los Angeles. In November 2019, the SMBGSA initiated the development of a GSP for the SMB. As discussed in the WSA, it was anticipated that the final GSP would be submitted to DWR by January 31, 2022.[41]

(c) Metropolitan Water District of Southern California

MWD is the largest water wholesaler for domestic and municipal uses in Southern California. MWD imports a portion of its water supplies from Northern California through the State Water Project's California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the Los Angeles Aqueduct and local groundwater. As of June 30, 2020, LADWP has a preferential right to purchase 18.12 percent of MWD's total water supply.[42]

[41] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[42] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

L.A.'s Green New Deal calls for a reduction in purchased imported water by 50 percent by 2025 from the FY 2013/2014 level, which was approximately 441,870 acre-feet.[43] To meet these targets, LADWP plans to reduce water demand through increased conservation and increase local supply development. Local supply development includes enhancing the ability of groundwater pumping through increased stormwater capture projects and groundwater replenishment with highly treated recycled water as well as remediation of contaminated groundwater supplies in the San Fernando Basin. LADWP also plans to increase recycled water use for non-potable purposes. With these initiatives and under average hydrologic conditions, LADWP's 2015 Urban Water Management Plan projects MWD purchases to be approximately 65,930 acre-feet per year in 2025.[44]

LADWP will continue to rely on MWD to meet its current and future supplemental water needs. Summaries of MWD's individual supplies, along with the challenges facing each supply and specific actions that MWD is taking to meet each of the challenges facing its water supplies, are presented below.

(i) State Water Project

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

MWD is one of the 29 agencies that have long-term contracts for water service from the DWR and is the largest agency in terms of the number of people it serves (approximately 19 million), the share of the State Water Project that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to the DWR by agencies with state water contracts (approximately 49 percent for FY 2018/ 2019).[45]

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[43] *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAn, 2019.*

[44] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[45] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

The State Water Project, under the original contracted amount at 100 percent allocation, provides MWD with 1,911,500 acre-feet of water each calendar year through December 31, 2035.[46] However, due to water quality and supply reliability challenges and conflicts associated with variable hydrology and environmental standards that limit pumping operations, State Water Project deliveries in the most critically dry years have varied. Contractual amounts were 5 percent in 2014 and 20 percent in 2015.[47] For 2016, the DWR had estimated an initial allocation of 10 percent but increased the allocation to 60 percent by April 2016, primarily due to changes in hydrologic conditions.[48] In November 2016, the DWR had estimated an initial allocation of 20 percent for 2017, due to factors including, but not limited to: existing storage in State Water Project conservation reservoirs; conservation constraints for the delta smelt; and contractor demands.[49,50] Due to the observed changes in hydrologic conditions, the DWR subsequently increased 2017 allocation levels to 45 percent in December 2016, 60 percent in January 2017, and 85 percent on April 14, 2017.[51]

On November 29, 2017, the DWR set an initial State Water Project allocation of 15 percent for most State Water Project contractors for the 2018 calendar year.[52] This allocation increased to 20 percent on January 29, 2018, 30 percent on April 24, 2018, and 35 percent on May 21, 2018.[53]

On November 30, 2018, the DWR set an initial State Water Project allocation of 10 percent for most State Water Project contractors for the 2019 calendar year.[54] This allocation increased to 15 percent on January 25, 2019, 35 percent on February 20, 2019, and 70 percent on March 20, 2019.[55] In May 2020, DWR adjusted the allocation to 20 percent.[56] In December 2020, DWR set an initial allocation of 10 percent.[57] The approval by DWR was based on precipitation, runoff, and water conditions. The approval

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46 *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

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

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

49 *DWR, Notice to State Water Project Contractors, Number 16-09.*

50 *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

51 *DWR, Notice to State Water Project Contractors, Numbers 16-10, 17-01, and 17-05.*

52 *DWR, Notice to State Water Project Contractors, Number 17-10.*

53 *DWR, Notice to State Water Project Contractors, Numbers 18-02, 18-03, and 18-05.*

54 *DWR, Notice to State Water Project Contractors, Number 18-06.*

55 *DWR, Notice to State Water Project Contractors, Number 19-03, 19-06, and 19-07.*

56 *DWR, Notice to State Water Project Contractors, Number 20-05.*

57 *DWR, Notice to State Water Project Contractors, Number 20-06.*

also considered several factors, including existing storage in State Water Project conservation reservoirs, State Water Project operational regulatory constraints (e.g., conditions of the 2019 Biological Opinions for federally-listed species and the 2020 Incidental Take Permit for State-listed species), and the 2021 SWP contractors' demands. The DWR may revise the allocation and subsequent allocations if warranted by the year's developing hydrologic and water supply conditions.

Recent Events at Oroville Dam

Oroville Dam, a DWR-operated facility of the State Water Project, is an earthfill embankment dam on the Feather River that impounds Oroville Lake. In early 2017, due to continued precipitation, DWR increased releases to manage higher in-flows in the Feather River Basin. On February 7, 2017, the Oroville Dam main flood-control spillway experienced significant damage during the releases. In response, the DWR, for the first time in its history, stopped releases on the main spillway and diverted water to the emergency spillway. However, the emergency spillway quickly eroded, causing officials to order the temporary evacuation of downstream residents while ramping up water releases over the main spillway to control lake levels.

Following a multi-agency investigation and recovery design, demolition and repairs began in May 2017. As of November 1, 2018, the main spillway has been successfully reconstructed, meeting DWR's public safety construction milestone. Work on the emergency spillway was completed in 2019, and mitigation measures such as slope revegetation are expected to be completed in 2021.[58]

Challenges to State Water Project Supply

Litigation and various regulations have created challenges for the State Water Project. In particular, the listing of several fish species in the Delta as threatened or endangered under the federal and/or California Endangered Species Acts has constrained State Water Project operations and created more uncertainty in State Water Project supply reliability. Based on DWR's 2019 State Water Project Delivery Capability Report, future State Water Project deliveries will continue to be impacted by restrictions on State Water Project and Central Valley Project Delta pumping, and climate change, which is altering the hydrologic conditions in the State.

[58] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

Programs Addressing Challenges within the Delta

In 2006, multiple State and federal resource agencies, water agencies, and other stakeholder groups entered into a planning agreement for the Bay-Delta Conservation Plan (BDCP). BDCP included alternatives for new water conveyance infrastructure and extensive habitat restoration in the Bay-Delta. In 2015, during the administration of the Governor Brown, the State and federal lead agencies proposed an alternative implementation strategy and new alternatives to the BDCP to provide for the protection of water supplies conveyed through the Bay-Delta and the restoration of the ecosystem of the Bay-Delta, termed California WaterFix and California EcoRestore, respectively. While DWR certified a Final EIR and approved an improvement to the State Water Project in 2017, Governor Newsom issued an executive order for State agencies to instead develop a comprehensive statewide strategy to build a climate-resilient water system via a single-tunnel Bay-Delta conveyance. In August 2020, the U.S. Army Corps of Engineers issued a Notice of Intent for the development of a new EIR. Planning, environmental review and conceptual design work by DWR for the proposed single tunnel Delta Conveyance Project is expected to take approximately 36 to 48 months.[59]

In addition, a primary consideration in the operation of the State Water Project is avoiding, minimizing, and/or offsetting adverse impacts to species of concern, species listed as threatened or endangered by a State or federal agency, or species proposed for listing. The State Water Project is operated pursuant to biological opinions issued under the federal Endangered Species Act (ESA), and consistency determinations or incidental take permits issued under the California Endangered Species Act (CESA).[60]

(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 17 percent of Southern California's water needs and on average makes up about 15 percent of LADWP's purchases from MWD.[61] 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 half of any surplus that may be available for use collectively in Arizona, California, and Nevada.[62] In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by,

[59] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[60] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[61] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[62] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

Arizona or Nevada. Since 2003, due to increased consumption, no such unused apportioned water has been available to California. 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.[63]

Challenges to Colorado River Supply

As the Colorado River water supplies come from watersheds of the Upper Colorado River Basin, snowpack and runoff can impact storage levels at Lake Powell and Lake Mead, which then affect the likelihood of surplus or shortage conditions in the future. Although the MWD has two principal sources of water supply and is able to utilize supplies from the Colorado River to offset reductions in State Water Project supplies and buffer impacts from drought in California, the MWD also has been developing plans and making efforts to provide additional water supply reliability for the Southern California region.[64] The Colorado River Basin also has experienced a prolonged drought, with runoff in 2012 being among the four driest in history.[65] During these drought conditions, Colorado River system storage decreased to 50 percent of capacity.[66]

MWD has developed a number of supply and conservation programs to increase the amount of supply available from the Colorado River. However, other users along the Colorado River have rights that will allow their water use to increase as their water demands increase. The Colorado River faces long-term challenges of water demands exceeding available supply with additional uncertainties due to climate change. Because MWD holds the lowest priority rights in California during a normal Lake Mead storage condition, the available future supply could decrease.[67]

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

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63 *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

64 *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

65 *MWD, 2015 Urban Water Management Plan, June 2016.*

66 *MWD, 2015 Urban Water Management Plan, June 2016.*

67 *MWD, 2015 Urban Water Management Plan, June 2016.*

resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The Lower Colorado River Multi-Species Conservation Program also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by MWD and other agencies.[68]

Management of Colorado River Supply

There are various agreements and guidelines that affect the management of Colorado River water supplies, and MWD has taken steps to augment its share of Colorado River water supplies by entering into agreements with other agencies that have rights to use such water. Specifically, under a 1988 water conservation agreement between MWD and the Imperial Irrigation District, MWD provided funding for the Imperial Irrigation District to construct and operate a number of conservation projects that are currently conserving up to 109,460 acre-feet of water per year that is provided to MWD.[69] In addition, in August 2004, MWD and the Palo Verde Irrigation District signed an agreement for a Land Management, Crop Rotation and Water Supply Program, which provides up to 133,000 acre-feet of water to be available to MWD in certain years.[70] Furthermore, in May 2008, MWD joined the Central Arizona Water Conservation District and the Southern Nevada Water Authority in funding of the Warren H. Brock Reservoir, which conserves approximately 70,000 AFY of water by capturing and storing water that would otherwise be lost from the system. In return for its funding, MWD received 100,000 acre-feet of water stored in Lake Mead for future use and has the ability to receive up to 25,000 acre-feet of water in any single year. As of January 1, 2020, MWD had taken delivery of 35,000 acre-feet of the water and had 65,000 acre-feet of remaining in storage.[71]

MWD is also participating in numerous pilot programs to augment its water supplies. Other agreements and guidelines that continue to affect the management of water supplies from the Colorado River include the 2003 Quantification Settlement Agreement, which amended the 1998 Water Conservation and Transfer Agreement. The Quantification Settlement Agreement, executed by MWD, Coachella Valley Water District, and Imperial Irrigation District in 2003, establishes Colorado River water use limits for the Coachella and Imperial districts and provides for specific acquisitions of conserved water and water supply arrangements. With full implementation of the programs identified in the agreement, at times when California is limited to its basic apportionment of 4.4 million acre-feet per year,

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[68] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

[69] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

[70] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

[71] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

MWD expects to be able to annually divert to its service area approximately 850,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops.

Additional guidelines and programs that influence management of the Colorado River water supplies include, but are not limited, to the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, and Intentionally Created Surplus Program, and the Quagga Mussel Control Program. Specifically, the Interim Surplus Guidelines are used to determine the conditions under which certain availability of surplus water can be used within the lower basin states of Arizona, California, and Nevada. Such guidelines were amended in 2007 and extend through 2026. The Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead provide federal guidelines that concern the operation of the Colorado River system, particularly during drought and low reservoir conditions, and the delivery of water for Lower Basin states such as Arizona, California, and Nevada. These guidelines include, but are not limited to: water release criteria from Lake Powell; water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin; and a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead. The Intentionally Created Surplus (ICS) program allows Lower Basin States to store conserved water in Lake Mead. ICS water is water that has been conserved through a variety of programs using extraordinary conservation measures, such as land fallowing. The Quagga Mussel Control Program was developed by MWD in 2007 to control the spreading of the invasive quagga mussels in the Colorado River's canals and reservoirs.[72]

(iii) Additional MWD Actions to Address Supply

To improve water supply reliability for the entire Southern California region, MWD has also been pursuing voluntary water transfer and exchange programs with state, federal, public, and private water districts and individuals. The MWD is currently operating several State Water Project storage programs to increase the reliability of supplies from the California Aqueduct. Programs include, but are not limited to: the Yuba River Accord; Arvin-Edison/Metropolitan Water Management Program; Semitropic/Metropolitan Groundwater Storage and Exchange Program; Mojave Storage Program; Antelope Valley East Kern Storage and Exchange Program; the San Gabriel Valley Municipal Water District Exchange Program; and Metropolitan/Central Valley Water District/Desert Water Agency Exchange and Advance Delivery Agreement.[73]

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[72] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

[73] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

In addition, MWD continues to develop plans and make efforts to provide additional water supply reliability for the entire Southern California region. LADWP coordinates with MWD to ensure implementation of these water resource development plans. As discussed above, MWD's long-term plans to meet its member agencies' reliability needs include improvements to the State Water Project as outlined in the California WaterFix and EcoRestore Plans, conjunctive management efforts on the Colorado River, water transfer programs, outdoor conservation measures, and development of additional local resources, such as recycling, brackish water desalination and seawater desalination.[74]

Additionally, MWD has more than 5 million acre-feet of storage capacity of available reservoirs and banking/transfer programs, with approximately 3.1 million acre-feet in Water Surplus Drought Management storage and an additional 750,000 acre-feet in emergency storage as of January 1, 2020.[75] Continued efficiency in the region kept demands low in 2019, resulting in available water supplies far exceeding demands. With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD began calendar year 2020 with approximately 3.1 million acre-feet of water in its dry-year storage portfolio.[76]

As described in the MWD's 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under average-year, single dry-year, and multiple dry-year hydrologic conditions.

(d) Precipitation Conditions

The City of Los Angeles receives an average of 14.73 inches of precipitation per year according to the National Weather Service.[77] During the 2020–2021 rain season (extending from July 1, 2020, to June 30, 2021), Downtown Los Angeles received 5.82 inches of precipitation.[78]

(e) Climate Change

As discussed in LADWP's 2015 UWMP, generally speaking, water supplies that are dependent on natural hydrology are vulnerable to climate change, especially if the water

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[74] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Appendix F.*

[75] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[76] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

[77] *Los Angeles Almanac, Total Seasonal Rainfall (Precipitation) Downtown Los Angeles—USC Campus, www.laalmanac.com/weather/we13.php, accessed February 9, 2022.*

[78] *Los Angeles Almanac, Total Seasonal Rainfall (Precipitation) Downtown Los Angeles—USC Campus, www.laalmanac.com/weather/we13.php, accessed February 9, 2022.*

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 Los Angeles Aqueduct. Local sources can expect to see some changes in the future as well. 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 of Los Angeles. 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.

DWR and MWD 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.[79] As mentioned above, the most recent California Water Plan Update 2018 builds on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability.[80]

To mitigate future climate impacts, DWR is also developing its Climate Action Plan. The Climate Plan Action comprises three phases of which Phase I was completed with the development of the Greenhouse Gas Emissions Reduction Plan. The completion of Phase II resulted in the development of the Climate Change Analysis Guidance document, which provides a framework for consistent analysis for climate change impacts in DWR's project and program planning activities. Phase III describes, evaluates, and quantifies the vulnerabilities of DWR's assets and business to potential climate change impacts. Phase III's Adaptation Plan prioritizes DWR resiliency efforts such as infrastructure improvements, enhanced maintenance and operation procedures, revised health and safety procedures, and improved habitat management.[81] As such, climate change and its impacts on water supplies are key factors of new water supply regulations and urban water management plans.

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

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

[81] *DWR, Climate Action Plan, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed March 8, 2021.*

(f) Water Conservation and Recycling

LADWP's 2015 UWMP details the City's efforts to promote the efficient use and management of its water resources and provides the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for the City of Los Angeles in the next 25 years. To meet multiple water conservation goals established in Executive Directive 5, the Sustainable City pLAn, and the Water Conservation Act of 2009, LADWP's 2015 UWMP aims to reduce per capita potable water use by 20 percent by 2017, by 22.5 percent by 2025, and by 25 percent by 2035, based on Fiscal Year 2013–2014 levels.[82] L.A.'s Green New Deal adds an additional target for the City, following the reduction of potable water use per capita by 25 percent by 2035, to maintain or reduce 2035 per capita water use through 2050.[83] The City intends to build upon the success of Save the Drop and develop additional water conservation campaigns; continue benchmarking customer use and recognizing innovative water reduction initiatives; improve data gathering to identify program effectiveness; expand top performing conservation incentive programs for, landscape transformation, washing machines, etc.; and expand sub-metering and evaluate smart water meter technologies.

Furthermore, the LADWP is projected to increase recycled water use to 59,000 AFY by 2025 through planned municipal/industrial use and indirect potable reuse (i.e., groundwater replenishment). L.A.'s Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035.[84] 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.

(i) LADWP Water Conservation Potential Study

In Fall 2017, LADWP completed the Water Conservation Potential Study, one of the most comprehensive assessments of the potential for future water conservation ever taken by a municipal water utility.[85] The study conducted detailed single- and multi-family surveys, completed comprehensive onsite audits of City-owned facilities, and developed a water conservation model to project future conservation potential. The study determined that 140,000 AFY in additional water conservation potential is achievable by FY 2034/2035. The study also noted that meeting the City's 2025 and 2035 conservation goals will require utilization of additional conservation measures, of which a large portion of the remaining conservation potential will result from passive water savings through compliance with City

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[82] *LADWP, 2015 Urban Water Management Plan, June 2016.*

[83] *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAn, 2019.*

[84] *Baseline from LASAN: In Fiscal Year 2017–2018, 27 percent of wastewater was recycled.*

[85] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

conservation codes and ordinances and implementation of additional customers' water efficiency actions.

As such, LADWP will use the study's findings and conservation model to develop a balanced conservation plan that achieves the City's long-term conservation goals. The findings show that a large portion of the remaining conservation potential will come from passive water savings through customers' actions to comply with all City conservation codes and ordinances and finding additional opportunities to improve water efficiency for their residential or commercial properties.[86]

(2) Water Demand

(a) Regional Water Demand

LADWP's 2015 UWMP provides water supply and demand projections in five-year increments to 2040, based on projected population estimates provided by the Southern California Association of Governments (SCAG) in its 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS).[87] Table IV.L.1-4 on page IV.L.1-36 shows the projected water demand from the year 2020 through 2040 for the City of Los Angeles.

As shown in Table IV.L.1-4, in 2040 during average year hydrological conditions, the City's water demand is forecasted to be approximately 675,700 AFY. Use of the current demand per capita within this demand forecast provides a conservative estimate of projected future water demand to ensure that water supplies are available to meet projected demands. LADWP's 2015 UWMP anticipates adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2040.[88]

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[86] *LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021.*

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

[88] *LADWP, 2015 Urban Water Management Plan, Exhibits 11D–11H.*

Table IV.L.1-4
City of Los Angeles Water Demand Projections Based on Hydrological Conditions
(in Thousand AFY)

Hydrological Conditions[a]	Years				
	2020	2025	2030	2035	2040
Average Year	611.8	644.7	652.9	661.8	675.7
Single Dry Year	642.4	676.9	685.5	694.9	709.5
Multi-Dry Year	642.4	676.9	685.5	694.9	709.5

AFY = acre-feet per year

Demands include existing passive conservation.

[a] *The LADWP defined three hydrologic conditions: average year (50-year average hydrology from Fiscal Years 1961-1962 through 2010–2011; single dry year (such as a repeat of the Fiscal Year 2014–2015 drought; and multi-dry year (such as a repeat of Fiscal Years 2012–2013 through 2014–2015.)*

Source: LADWP, 2015 Urban Water Management Plan, Exhibits 11F, 11G, and 11H.

As discussed above, as of February 2, 2017, the City has met its goal established by Executive Directive No. 5 and the Sustainable City pLAn to reduce the per capita water use by 20 percent by 2017. The City's potable water consumption has been reduced to 104 gallons per capita per day, which equates to a 20 percent reduction from the 131 gallons per capita per day baseline in Fiscal Year 2013–2014.[89]

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the Project Site is currently developed with a mix of uses that consist of a 17,100-square-foot post-production facility, a 8,044-square-foot commercial building, six bungalows that comprise approximately 8,988 square feet of floor area, and an eight-unit multi-family building comprised of approximately 7,700 square feet of floor area.[90] A surface parking lot is also located behind the commercial building. As provided in Table IV.L.1-5 on page IV.L.1-45 in the Project Impacts analysis below, the existing uses on the Project Site have a water demand of approximately 2,792 gpd.

[89] *City of Los Angeles, Mayor Eric Garcetti, Press Release, Los Angeles Achieves Mayor Garcetti's Goal of 20 Percent Water Savings, released February 2, 2017, www.lamayor.org/los-angeles-achieves-mayor-garcetti%E2%80%99s-goal-20-percent-water-savings, accessed March 5, 2021.*

[90] *Three of the six bungalows are occupied by office/post-production uses, while the three remaining bungalows are vacant. The eight-unit multi-family residential building is also vacant.*

(3) Water Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by the LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 115 storage tanks and reservoirs, 84 pump stations, 7,337 miles of distribution mains and trunk lines within the City, and a total storage capacity of 323,820 acre-feet.[91] Much of the water flows north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant in Sylmar, which is owned and operated by LADWP. Water entering the Los Angeles Aqueduct Filtration Plant undergoes treatment and disinfection before being distributed throughout LADWP's water service area.[92]

Domestic water service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Utility Report, included as Appendix F to this Draft EIR, there is a 10-inch water main in Vine Street, an 8-inch water main in De Longpre Avenue, and a 4-inch water main in Afton Place. The Project Site also has multiple domestic water connections along these three streets.

In addition to providing domestic water service, LADWP also provides water for fire protection services in accordance with the City's Fire Code (Chapter V, Article 7 of the LAMC). There are six existing public fire hydrants in the vicinity of the Project Site. Two hydrants are located along De Longpre Avenue, and the four others are located along Homewood Avenue, Leland Way, Fountain Avenue, and Afton Place.

3. Project Impacts

a. Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G (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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the

[91] *LADWP, 2019–2020 Briefing Book.*

[92] *LADWP, 2015 Urban Water Management Plan, June 2016.*

construction or relocation of which could cause significant environmental effects;[93] or

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

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

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

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of project completion; and
- The degree to which scheduled water infrastructure or project design features would reduce or offset service impacts.

b. Methodology

The analysis of the Project's impacts relative to water supply is based on the Water Supply Assessment for the Project prepared by LADWP pursuant to SB 610. The Water Supply Assessment includes a conservative calculation of the Project's anticipated net water demand (including potential land uses with the highest water demand) by applying the City of Los Angeles Bureau of Sanitation (LA Sanitation) wastewater generation rates to the Project's proposed land uses. The WSA accounts for the water use associated with the existing uses to be removed, as well as the Project's water demand with implementation of water conservation features. In accordance with SB 610, the resulting

[93] *Refer to Section IV.L.2, Utilities and Service Systems—Wastewater, of this Draft EIR for a discussion of wastewater infrastructure; Section IV.L.3, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure; the Project's Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater drainage; and Section VI, Other CEQA Considerations for a discussion of telecommunications facilities infrastructure.*

net demand for water associated with the Project is then analyzed relative to LADWP's existing and planned future water supplies 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 with regard to water infrastructure is based on the Utility Report included in Appendix F of this Draft EIR. The Utility Report includes a comparison of the estimated net water demand for the Project to the available capacity of the existing water infrastructure. Capacity determinations are based on coordination with LADWP.

c. Project Design Features

The following project design features are proposed with regard to water:

Project Design Feature WAT-PDF-1: The Project design shall incorporate the following design features to support water conservation in addition to those required by codes and ordinances for the entire Project:

- High Efficiency Toilets for residential units with a flush volume of 1.0 gallon per flush.
- Showerheads with flow rate of 1.5 gallons per minute, or less.
- Domestic Water Heating System located in close proximity to point(s) of use.
- Individual metering and billing for water use for commercial space will be used.
- Drip/ Subsurface Irrigation (Micro-Irrigation).
- Proper Hydro-zoning/Zoned Irrigation (groups plants with similar water requirements together).
- Drought Tolerant Plants—72 percent of total landscaping.
- Installation of a meter on the pool make-up line so water use can be monitored and leaks can be identified and repaired.
- Leak Detection System for swimming pools and jacuzzi.
- Pool splash troughs around the perimeter that drain back into the pool.
- Pool/spa recirculating filtration equipment.
- Reuse of pool backwash water for irrigation.
- Water-Saving Pool Filter

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Draft EIR, the Project proposes two development options—the Residential Option and the Office Option.

The Residential Option would develop a new high-rise building with four levels of subterranean parking consisting of up to 429 new residential units, including 36 units designated for Very Low Income households, an approximately 55,000-square-foot grocery store, approximately 5,000 square feet of neighborhood-serving commercial retail uses, and 8,988 square feet of uses in the bungalows. The bungalows would be rehabilitated and adapted for reuse as either restaurants or 12 residential units, in which case the development would still propose a total of 429 residential units.

The Office Option would develop a new high-rise building with eight levels of subterranean parking with approximately 463,521 square feet of office uses and 11,914 square feet of restaurant uses in the proposed building, as well as 8,988 square feet of uses in the bungalows. The bungalows would be rehabilitated and adapted for reuse as either restaurants or nine residential units.

The following analysis accounts for both development options and the term "Project" is used to describe all development scenarios unless stated otherwise.

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?[94]

(1) Impact Analysis

(a) Construction

As discussed in the Utility Report included as Appendix F to this Draft EIR and as summarized below, the existing LADWP water infrastructure would be adequate to provide for the water flow necessary to serve the Project during operation. Thus, no upgrades to the mainlines that serve the Project Site would be required. However, the Project would

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[94] *Refer to Section IV.L.2, Utilities and Service Systems—Wastewater, of this Draft EIR for a discussion of wastewater infrastructure; Section IV.L.3, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure; the Project's Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater drainage; and Section VI, Other CEQA Considerations, of this Draft EIR for a discussion of telecommunications facilities infrastructure.*

require a new water distribution system that would connect to the existing water mainlines adjacent to the Project Site. The design and installation of new service connections would be required to meet applicable City standards. Installation of the new water distribution lines would primarily involve on-site trenching to place the lines below the surface, and minor off-site work to connect to the existing public water mains or meter lateral locations. The limited off-site connection activities could temporarily affect access in adjacent right-of-ways. However, as discussed in Section IV.J, Transportation, of this Draft EIR, a Construction Traffic Management Plan would be implemented during project construction pursuant to Project Design Feature TR-PDF-2 to ensure that adequate and safe access remains available within and near the Project Site during construction activities. The construction management plan would include a worksite traffic control plan and identify the location of any temporary construction activities, durations and hours, street parking or sidewalk closures, warning signs, and access to abutting properties. 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 right-of-ways. In addition, prior to conducting any ground disturbing activities, project contractors would coordinate with LADWP to identify the locations and depths of existing water lines in the Project Site vicinity to avoid disruption of water service.

Overall, construction activities associated with the Project would not require or result in the construction of new water facilities or expansion of existing facilities that could have a significant impact on the environment. In addition, as discussed above, minor off-site construction impacts associated with installation of the new service connections would be temporary in nature and would not result in a substantial interruption in water service or material inconvenience to motorists or pedestrians. **As such, construction-related impacts to water infrastructure 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. Nevertheless, conservative analyses for both fire suppression and domestic water flows have been completed by LADWP for the Project. These analyses are summarized below and described in more detail in the Utility Report included as Appendix F of this Draft EIR.

Fire flow to the proposed buildings of the Project would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3.1, which establishes fire flow standards by development type. The Project falls within the

Industrial and Commercial category, which has a required fire flow of 6,000 to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 psi. This translates to a required flow of 1,500 gpm for each of the six hydrants that were tested within the immediate vicinity of the Project Site. As part of the Utility Report included in F of this Draft EIR, an Information of Fire Flow Availability Request (IFFAR) was submitted to LADWP to determine available fire hydrant flow from these six existing public fire hydrants. Based on the completed IFFAR (see Exhibit 1 of Appendix F of this Draft EIR), the six existing public fire hydrants flowing simultaneously can deliver a combined flow of 8,500 gpm at a minimum residual pressures ranging from 82 to 89 psi. Therefore, based on the IFFAR, the Project has adequate fire flow available to comply with the standards specified in LAMC Section 57.507.3.1.

Furthermore, the Project will incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which will be subject to LAFD review and approval during the design and permitting of the Project. Based on the Service Advisory Request (SAR) (see Exhibit 2 of Appendix F of this Draft EIR) shows a static pressure of 85 psi and that a flow of up to 2,500 gpm can be delivered to the Project Site with a residual pressure of 78 psi, which exceeds the 20 psi inch requirement for a structure's water system. **As such, through compliance with LAFD and LADWP requirements, the Project's impacts with regard to fire flow would be less than significant.**

Based on the above, the Project would not exceed the available capacity within 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. In addition, the water distribution capacity would be adequate to serve the Project. Therefore, the Project's impacts on water infrastructure would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project-level impacts with regard to water infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures were 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

Construction activities for the Project would result in a temporary demand for water associated with soil compaction and earthwork, dust control, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment, testing of water connections and flushing, and other short-term related activities. These activities would occur incrementally throughout construction of the Project (from the start of construction to project buildout). The amount of water used during construction would vary depending on soil conditions, weather, and the specific activities being performed. Based on a review of construction projects of similar size and duration, the Utility Report included as Appendix F of this Draft EIR provides a conservative estimate ranging from 1,000 gpd to 2,000 gpd for daily water usages during construction. Water use during construction would also be offset by the estimated 2,792 gpd of water currently consumed by the existing uses. Given the temporary nature of construction activities, the short-term and intermittent water use during construction of the Project would be significantly less than the net new water consumption at Project buildout. Furthermore, as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2015 through 2040. Project construction is anticipated to be completed by 2027. Therefore, the Project's temporary and 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, project construction activities would result in a limited, temporary demand for water and are not anticipated to have a substantial adverse impact on available water supplies. Therefore, the City would have sufficient water supply available to adequately serve the Project during construction. As such, construction-related impacts to water supply would be less than significant.

(b) Operation

Based on the size of these land uses and the Project's resulting estimated water demand, the Project is subject to the requirements of SB 610 for preparation of a water supply assessment, as described above in Section 2.a.(1)(b). Specifically, the Project would demand an amount of water greater than the amount of water required by a 500-dwelling unit project. Therefore, the Project is subject to the requirements of SB 610 for preparation of a WSA. Accordingly, a WSA was prepared for the Project by LADWP and is provided in Appendix U of this Draft EIR.

Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply is based on a calculation of the Project's water demand by applying the sewage generation rates established by LA Sanitation, which also serve to estimate water

demand to the proposed uses. These rates also serve to estimate water demand of the proposed uses. As provided in Table IV.L.1-5 on page IV.L.1-45, the Residential Option with bungalows as restaurants is estimated to generate a gross average daily water demand of approximately 105,551 gpd, or approximately 118.2 AFY. After the removal of existing uses and with implementation of Project Design Feature WAT-PDF-1, which includes additional water conservation measures beyond those required by the LAMC, and compliance with Ordinance Nos. 184,248 and 186,488, the 2019 Los Angeles Plumbing Code, and the 2019 Los Angeles Green Building Code, the option would result in a net average daily water demand of approximately 79,353 gpd, or approximately 88.9 AFY. For comparison purposes, as shown in Table IV.L.1-6 on page IV.L.1-47, after accounting for design features and conservation measures, the Residential Option with bungalows as residential units would generate a net 63,507 gpd, or approximately 71.2 AFY.

As shown in Table IV.L.1-7 on page IV.L.1-49, the Office Option with bungalows as restaurants is estimated to generate a gross average daily water demand of approximately 132,139 gpd, or approximately 148.1 AFY. After the removal of existing uses and with implementation of Project Design Feature WAT-PDF-1, which includes additional water conservation measures beyond those required by the LAMC, and compliance with Ordinance Nos. 184,248 and 186,488, the 2019 Los Angeles Plumbing Code, and the 2019 Los Angeles Green Building Code, the option would result in a net average daily water demand of approximately 109,637 gpd, or approximately 122.8 AFY. For comparison purposes, as shown in Table IV.L.1-8 on page IV.L.1-51, after accounting for design features and conservation measures, the Office Option with bungalows as residential units would generate a net 95,307 gpd, or approximately 106.8 AFY.

Based on employee generation rates provided by the City of Los Angeles VMT Calculator Documentation, the Residential Option with bungalows as restaurants would generate approximately 266 employees, and the Residential Option with bungalows as residential units would generate approximately 230 employees.[95] According to the 2012–2035 RTP/SCS, the Residential Option would be consistent with growth projections anticipated by SCAG.[96] Specifically, based on SCAG's projections for the City of

[95] *Based on the employee generation rates of the City of Los Angeles VMT Calculator Documentation Guide, Table 1, May 2020, including: 0.004 employee per square foot for "Supermarket" land uses, 0.002 employee per square foot for "General Retail" land uses, and 0.004 employee per square foot for "High-Turnover Sit-Down Restaurant" land uses.*

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

Table IV.L.1-5
Estimated Project Water Consumption—Residential Option with Bungalows as Restaurants

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)
Existing Uses[b]			
Post-Production Facility	17,100 sf	0.12	2,052
Post-Production (in bungalows)	4,494 sf	0.12	539
Commercial	8,044 sf	0.025	201
Total Existing			*2,792*
Proposed Uses[c]			
Residential: 1-bedroom	240 du	110	26,400
Residential: 1-bedroom plus den	56 du	110	6,160
Residential: 2-bedroom	127 du	150	19,050
Residential Apartment: 3-bedroom	6 du	190	1,140
Base Demand Adjustment (Residential)[d]	—	—	5,519
Fitness Center/Club Room	10,250 sf	0.65	6,663
Pool	1,335 sf	—	127
Grocery	55,000 sf	0.05	2,750
Retail	5,000 sf	0.025	125
Restaurant (8,988 sf)[e]	600 seats	30	18,000
Landscaping[f]	22,178 sf	—	2,105
Covered Parking[g]	352,931 sf	0.02	232
Cooling Tower	800 tons	21.60	17,280
Total Proposed by Project			*105,551*
Required Savings[h]			
Residential Units	—	—	(9,986)
Residential Amenities/Commercial	—	—	(6,431)
Landscaping	—	—	(947)
Cooling Tower	—	—	(3,456)
Total Required Savings			*(20,820)*
Additional Conservation[i]			*(2,586)*
Net Water Demand of Residential Option with Bungalows as Restaurants (Proposed – Required Savings – Additional Conservation – Existing to be Removed)			**79,353**

du = dwelling units
gpd = gallons per day
sf = square feet

Table IV.L.1-5 (Continued)
Estimated Project Water Consumption—Residential Option

— = Information is not applicable.

All totals have been rounded and may not sum due to rounding.

[a] *This analysis is based on 100 percent of sewage generation rates provided by LA Sanitation (effective April 6, 2012).*

[b] *As described in Section II, Project Description, of this Draft EIR, three of the six bungalows are occupied by office/post-production uses, while the three remaining bungalows are vacant. The eight-unit multi-family residential building is also vacant.*

[c] *Uses not shown here do not have additional water demand.*

[d] *The Base Demand Adjustment is the estimated savings due to Ordinance No. 180,822 accounted for in the current version of LA Sanitation sewage generation rates.*

[e] *A standard factor of 15 square feet per seat was applied to calculate the number of seats.*

[f] *Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.*

[g] *Auto parking estimates are based on LA Sanitation sewage generation rates and assumption of cleaning 12 times per year.*

[h] *The proposed development land uses will conform to City of Los Angeles Ordinance Nos. 184,248 and 186,488, 2019 Los Angeles Plumbing Code, and 2019 Los Angeles Green Building Code.*

[i] *Water conservation due to additional conservation commitments agreed to by the Applicant as identified in Table II-1 of the WSA.*

Source: LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Table I-1; Eyestone Environmental, 2021.

Table IV.L.1-6
Estimated Project Water Consumption—Residential Option with Bungalows as Residential Units

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)
Existing Uses[b]			
Post-Production Facility	17,100 sf	0.12	2,052
Post-Production (in bungalows)	4,494 sf	0.12	539
Commercial	8,044 sf	0.025	201
Total Existing			*2,792*
Proposed Uses[c]			
Residential: 1-bedroom	240 du	110	26,400
Residential: 1-bedroom plus den	56 du	110	6,160
Residential: 2-bedroom	115 du	150	17,250
Residential Apartment: 3-bedroom	6 du	190	1,140
Residential: 2-bedroom duplex bungalows	12 du	150	1,800
Base Demand Adjustment (Residential)[d]	—	—	5,520
Fitness Center/Club Room	10,250 sf	0.65	6,663
Pool	1,335 sf	—	127
Grocery	55,000 sf	0.05	2,750
Retail	5,000 sf	0.025	125
Landscaping[e]	22,178 sf	—	2,105
Covered Parking[f]	352,931 sf	0.02	232
Cooling Tower	800 tons	21.60	17,280
Total Proposed by Project			*87,552*
Required Savings[g]			
Residential Units	—	—	(9,986)
Residential Amenities/Commercial	—	—	(4,461)
Landscaping	—	—	(947)
Cooling Tower	—	—	(3,456)
Total Required Savings			*(18,850)*
Additional Conservation[h]			*(2,403)*
Net Water Demand of Residential Option with Bungalows as Residential Units (Proposed – Required Savings – Additional Conservation – Existing to be Removed)			**63,507**

du = dwelling units
gpd = gallons per day

Table IV.L.1-6 (Continued)
Estimated Project Water Consumption—Residential Option with Bungalows as Residential Units

sf = square feet

— = Information is not applicable.

All totals have been rounded and may not sum due to rounding.

[a] *This analysis is based on 100 percent of sewage generation rates provided by LA Sanitation (effective April 6, 2012).*

[b] *As described in Section II, Project Description, of this Draft EIR, three of the six bungalows are occupied by office/post-production uses, while the three remaining bungalows are vacant. The eight-unit multi-family residential building is also vacant.*

[c] *Uses not shown here do not have additional water demand.*

[d] *The Base Demand Adjustment is the estimated savings due to Ordinance No. 180,822 accounted for in the current version of LA Sanitation sewage generation rates.*

[e] *Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.*

[f] *Auto parking estimates are based on LA Sanitation sewage generation rates and assumption of cleaning 12 times per year.*

[g] *The proposed development land uses will conform to City of Los Angeles Ordinance Nos. 184,248 and 186,488, 2019 Los Angeles Plumbing Code, and 2019 Los Angeles Green Building Code.*

[h] *Water conservation due to additional conservation commitments agreed to by the Applicant as identified in Table II-1 of the WSA.*

Source: LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Table I-2; Eyestone Environmental, 2021.

Table IV.L.1-7
Estimated Project Water Consumption—Office Option with Bungalows as Restaurants

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)
Existing Uses[b]			
Post-Production Facility	17,100 sf	0.12	2,052
Post-Production (in bungalows)	4,494 sf	0.12	539
Commercial	8,044 sf	0.025	201
Total Existing			*2,792*
Proposed Uses[c]			
Office	463,521 sf	0.12	55,623
Fitness Center	8,243 sf	0.65	5,358
Yoga Room	1,283 sf	0.65	834
Billiard Room	105 persons	3	315[d]
Restaurant (11,914 sf)[e]	795 seats	30	23,850
Restaurant in bungalows (8,988 sf)[e]	600 seats	30	18,000
Landscaping[f]	22,178 sf	—	2,105
Covered Parking[g]	667,608 sf	0.02	439
Cooling Tower	1,200 tons	21.60	25,920
Total Proposed by Project			*132,139*
Required Savings[h]			
Office	—	—	(6,735)
Commercial	—	—	(5,361)
Landscaping	—	—	(1,138)
Cooling Tower	—	—	(5,184)
Total Required Savings			*(18,418)*
Additional Conservation[i]			*(1,292)*
Net Water Demand of Office Option with Bungalows as Restaurants (Proposed – Required Savings – Additional Conservation – Existing to be Removed)			**109,637**

du = dwelling units

gpd = gallons per day

sf = square feet

— = Information is not applicable.

All totals have been rounded and may not sum due to rounding.

[a] *This analysis is based on 100 percent of sewage generation rates provided by LA Sanitation (effective April 6, 2012).*

[b] *As described in Section II, Project Description, of this Draft EIR, three of the six bungalows are occupied by office/post-production uses, while the three remaining bungalows are vacant. The eight-*

Table IV.L.1-7 (Continued)
Estimated Project Water Consumption—Office Option with Bungalows as Restaurants

unit multi-family residential building is also vacant.

[c] *Uses not shown here do not have additional water demand.*

[d] *Per discussion with LADWP on 10/13/21, the value has been revised to 315 gpd. The revised value does not impact the net additional water demand nor the Conclusion in the WSA.*

[e] *A standard factor of 15 square feet per seat was applied to calculate the number of seats.*

[f] *Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.*

[g] *Auto parking estimates are based on LA Sanitation sewage generation rates and assumption of cleaning 12 times per year.*

[h] *The proposed development land uses will conform to City of Los Angeles Ordinance Nos. 184,248 and 186,488, 2019 Los Angeles Plumbing Code, and 2019 Los Angeles Green Building Code.*

[i] *Water conservation due to additional conservation commitments agreed to by the Applicant as identified in Table II-1 of the WSA.*

Source: LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Table I-3; Eyestone Environmental, 2021.

Table IV.L.1-8
Estimated Project Water Consumption—Office Option with Bungalows as Residential Units

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)
Existing Uses[b]			
Post-Production Facility	17,100 sf	0.12	2,052
Post-Production (in bungalows)	4,494 sf	0.12	539
Commercial	8,044 sf	0.025	201
Total Existing			*2,792*
Proposed Uses[c]			
Residential: 2-bedroom	12 du[d]	150	1,800
Base Demand Adjustment (Residential)[e]	—	—	243
Office	463,521 sf	0.12	55,623
Fitness Center	8,243 sf	0.65	5,358
Yoga Room	1,283 sf	0.65	834
Billiard Room	105 persons	3	315[f]
Restaurant (11,914 sf)[g]	795 seats	30	23,850
Landscaping[h]	22,178 sf	—	2,105
Covered Parking[i]	667,608 sf	0.02	439
Cooling Tower	1,200 tons	21.60	25,920
Total Proposed by Project			*116,182*
Required Savings[j]			
Residential Units	—	—	(430)
Office	—	—	(6,735)
Commercial	—	—	(3,392)
Landscaping	—	—	(1,138)
Cooling Tower	—	—	(5,184)
Total Required Savings			*(16,879)*
Additional Conservation[k]			*(1,204)*
Net Water Demand of Office Option with Bungalows as Residential Units (Proposed – Required Savings – Additional Conservation – Existing to be Removed)			**95,307**

du = dwelling units

gpd = gallons per day

sf = square feet

— = Information is not applicable.

All totals have been rounded and may not sum due to rounding.

[a] *This analysis is based on 100 percent of sewage generation rates provided by LA Sanitation*

Table IV.L.1-8 (Continued)
Estimated Project Water Consumption—Office Option with Bungalows as Residential Units

(effective April 6, 2012).

[b] *As described in Section II, Project Description, of this Draft EIR, three of the six bungalows are occupied by office/post-production uses, while the three remaining bungalows are vacant. The eight-unit multi-family residential building is also vacant.*

[c] *Uses not shown here do not have additional water demand.*

[d] *Only nine residential bungalows are currently proposed. However, the WSA prepared for the Project analyzed 12 residential bungalows which is more conservative and included in this analysis.*

[e] *The Base Demand Adjustment is the estimated savings due to Ordinance No. 180,822 accounted for in the current version of LA Sanitation sewage generation rates.*

[f] *Per discussion with LADWP on 10/13/21, the value has been revised to 315 gpd. The revised value does not impact the net additional water demand nor the Conclusion in the WSA.*

[g] *A standard factor of 15 square feet per seat was applied to calculate the number of seats.*

[h] *Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.*

[i] *Auto parking estimates are based on LA Sanitation sewage generation rates and assumption of cleaning 12 times per year.*

[j] *The proposed development land uses will conform to City of Los Angeles Ordinance Nos. 184,248 and 186,488, 2019 Los Angeles Plumbing Code, and 2019 Los Angeles Green Building Code.*

[k] *Water conservation due to additional conservation commitments agreed to by the Applicant as identified in Table II-1 of the WSA.*

Source: LADWP, Water Supply Assessment for the 1360 North Vine Street Project, February 9, 2021, Table I-4; Eyestone Environmental, 2021.

Los Angeles Subregion between 2017 and 2027, the estimated 966 residents generated by the Residential Option would represent approximately 0.35 percent of the projected population growth, the 429 households would represent approximately 0.37 percent of the projected household growth, and the generation of up to 266 employees would represent approximately 0.43 percent of the projected employment growth.[97] Therefore, the

[97] *Based on a linear interpolation of SCAG's 2008–2020 and 2020–2035 data, as shown in SCAG's 2012–2035 RTP/SCS Growth Forecast Appendix, Table 18. The 2017 values for population, housing, and employment are calculated using SCAG's 2008 and 2020 values to find the average increase between years and then applying that annual increase to each year until 2017. Similarly, the 2027 values for population, housing, and employment are calculated using SCAG's 2020 and 2035 values to find the average increase between years and then applying that annual increase to each year until 2027.*

Population growth between 2017 (3,936,400 persons) and 2027 (4,145,187 persons) is approximately 208,787 persons. The Residential Option's 1,034 residents would represent approximately 0.50% of this growth [(1,034 ÷ 208,787) × 100 = 0.50].

Household growth between 2017 (1,419,250 households) and 2027 (1,535,453 households) is approximately 116,203 households. The Residential Option's 429 households would represent approximately 0.37% of this growth [(429 ÷ 116,203) × 100 = 0.37].

(Footnote continued on next page)

Residential Option would be well within SCAG's 2012–2035 projections for the City of Los Angeles Subregion.

The Office Option with bungalows as restaurants would generate approximately 1,938 employees, and the Office Option with bungalows as residential uses would generate approximately 1,902 employees.[98] According to the 2012–2035 RTP/SCS, the Office Option would be consistent with growth projections anticipated by SCAG.[99] Specifically, based on SCAG's projections for the City of Los Angeles Subregion between 2017 and 2027, the estimated 20 residents that could be generated by the Office Option would represent approximately 0.01 percent of the projected population growth, and up to nine households would represent approximately 0.01 percent of the projected household growth.[100] A generation of up to 1,938 employees would represent approximately 3.1 percent of the projected employment growth[101] Therefore, the Office Option would be well within SCAG's 2012–2035 projections for the City of Los Angeles Subregion.

Based on the above, LADWP determined that the Residential Option's net water demand of up to 79,353 gpd (approximately 88.9 AFY) and the Office Option's net water

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Employment growth between 2017 (1,797,075 employees) and 2027 (1,859,280 employees) is approximately 62,205 employees. The Residential Option's 266 employees would represent approximately 0.43% of this growth [(266 ÷ 62,205) × 100 = 0.43].

[98] *Based on the employee generation rates of the City of Los Angeles VMT Calculator Documentation Guide, Table 1, May 2020, including: 0.004 employee per square foot for "General Office" land uses, and the employee generation rate 0.004 employee per square foot for "Quality Restaurant" land uses.*

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

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

Population growth between 2017 (3,936,400 persons) and 2027 (4,145,187 persons) is approximately 208,787 persons. The Office Option's 20 residents would represent approximately 0.014% of this growth [(20 ÷ 208,787) × 100 = 0.014].

Household growth between 2017 (1,419,250 households) and 2027 (1,535,453 households) is approximately 116,203 households. The Office Option's nine households would represent approximately 0.01% of this growth [(9 ÷ 116,203) × 100 = 0.010].

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

Employment growth between 2017 (1,797,075 employees) and 2027 (1,859,280 employees) is approximately 62,205 employees. The Office Option's 1,938 employees would represent approximately 3.1% of this growth [(1,938 ÷ 62,205) × 100 = 3.1].

demand of up to 109,637 gpd (approximately 122.9 AFY) have been accounted for in the City's overall total demand projections set forth in LADWP's 2015 UWMP. Specifically, the 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City through the year 2040. Therefore, LADWP concluded that the projected water supply available during normal, single-dry, and multiple-dry water years, as included in the 25-year projection of the 2015 UWMP, is sufficient to meet the projected water demand associated with the Project, in addition to the existing and planned future demand on LADWP.[102] As outlined in the 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 UWMP takes into account the realities of climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2015 UWMP also furthers the goals of the City's Executive Directive No. 5 and Sustainable City pLAn, addresses the current and future State Water Project supply shortages, and concludes that MWD's actions in response to the threats to the State Water Project will ensure continued reliability of its water deliveries. By focusing on demand reduction and alternative sources of water supplies, LADWP will further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages. Additionally, as 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.

Based on the above and the estimated operational water demand of the Project, the Project would have sufficient water supplies available as projected by LADWP. According to LADWP, water supplies would also be available to serve reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, the Project's operation-related impacts on water supply would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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

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[102] *LADWP, Water Supply Assessment for 1360 North Vine Street Project, February 9, 2021.*

e. Cumulative Impacts

(1) Impact Analysis

The Project, in conjunction with growth forecasted in the City through 2027 (i.e., the Project's buildout year), would cumulatively increase the demand for water, thus potentially resulting in cumulative impacts on water supplies and water infrastructure. Cumulative growth in the Project Site vicinity through 2027 includes specific known development projects, growth as a result of the Hollywood Community Plan Update, as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this Draft EIR. As described in Section III, Environmental Setting, of this Draft EIR, a total of 102 related development projects are located in the vicinity of the Project Site.

As discussed in Section III, Environmental Setting, of this Draft EIR, the projected growth reflected by Related Project Nos. 1 through 102 is a conservative assumption, as some of the related projects may not be built out by 2027 (i.e., the Project's buildout year), may never be built, or may be approved and built at reduced densities. To provide a conservative forecast, the future baseline forecast assumes that Related Project Nos. 1 through 102 are fully built out by 2027, unless otherwise noted. In addition, Related Project No. 103, the Hollywood Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in Hollywood through 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be completed in 2027, well before the Hollywood Community Plan Update's horizon year. Moreover, 2027 is a similar projected buildout year as many of the 102 related projects that have been identified. Accordingly, it can be assumed that the projected growth reflected by the list of related projects, which itself is a conservative assumption, as discussed above, would account for any overlapping growth that may be assumed by the Hollywood Community Plan Update upon its adoption.

(a) Water Infrastructure

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the water infrastructure that would serve both the Project and related projects). Development of the Project and future new development in the vicinity of the Project Site would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, other new development projects would be subject to LADWP review to assure that the existing public infrastructure would be adequate to meet the domestic and fire water demands of each project, and individual projects would be subject to LADWP and City requirements regarding infrastructure improvements needed to meet respective water demands, flow and pressure requirements, etc. In addition, LADWP would be able to supply sufficient flow and pressure to satisfy the needs of the fire suppression for the Project. Furthermore, LADWP, the Los Angeles Department of Public Works, and the LAFD would conduct on-going evaluations of its

infrastructure to ensure facilities are adequate. **Therefore, the Project and related projects would not result in significant cumulative impacts related to the construction or expansion of water infrastructure. As such, the Project's contribution would not be cumulatively considerable, and cumulative 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 2015 UWMP accounts for existing development within the LADWP service area, as well as projected growth through the year 2040. Additionally, under the provisions of SB 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The water supply assessment for such projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

As identified in Section III, Environmental Setting, of this Draft EIR, there are 102 related projects located in the Project vicinity. The estimated water demand of the related projects is shown in Table IV.L.1-9 on page IV.L.1-57. As shown therein, the related projects would generate a total average water demand of approximately 4,609,255 gpd (or approximately 5,162.4 AFY). The estimate of the related projects' water demand is conservative as it does not account for removal of existing uses, water conservation measures such as the those required by Ordinance No. 184,248, and mandatory indoor water reduction rates that are required by the City of Los Angeles Green Building Code. The related projects' water demand combined with the Residential Option's net increase in water demand of 79,353 gpd (approximately 88.9 AFY)[103] would result in a cumulative increase in average daily water use of approximately 4,688,608 gpd (or approximately 5,251.3 AFY). The related projects' water demand combined with the Office Option's net

[103] *As discussed above, the Residential Option with bungalows as restaurants would generate a net 79,353 gpd, or approximately 88.9 AFY. For comparison purposes, Residential Option with bungalows as residential units would generate a net 63,507 gpd, or approximately 71.2 AFY. Therefore, the former is considered herein to provide a conservative analysis.*

Table IV.L.1-9
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
1	1610 N. Highland Ave.	Apartments	248 du	190 gpd/du	47,120
		Commercial	12,785 sf	0.05 gpd/sf	639
2	1740 N. Vine St.	Residential	492 du	190 gpd/du	93,480
		Hotel	200 rm	120 gpd/rm	24,000
		Office	100,000 sf	0.12 gpd/sf	12,000
		Fitness Club	35,000 sf	0.2 gpd/sf	7,000
		Retail	15,000 sf	0.025 gpd/sf	375
		Restaurant (34,000 sf)	2,267 seats	30 gpd/seat	68,010
3	5555 W. Melrose Ave.	Office	1,273,600 sf	0.12 gpd/sf	152,832
		Retail	89,200 sf	0.025 gpd/sf	2,230
		Stage	21,000 sf	0.12 gpd/sf	2,520
		Support	1,900 sf	0.12 gpd/sf	228
4	1824 N. Highland Ave.	Apartments	118 du	190 gpd/du	22,420
5	6200 Hollywood Blvd.	Apartments	1,014 du	190 gpd/du	192,660
		Live/Work	28 du	190 gpd/du	5,320
		Retail/Restaurant[c] (175,000 sf)	11,667 seats	30 gpd/seat	350,000
6	5800 W. Sunset Blvd.	Office/Studio Expansion	404,799 sf	0.05 gpd/sf	20,240
7	1800 Argyle Ave.	Hotel	225 rm	120 gpd/rm	27,000
8	956 N. Seward St.	Office	126,980 sf	0.12 gpd/sf	15,238
9	6381 W. Hollywood Blvd.	Hotel	80 rm	120 gpd/rm	9,600
		Restaurant (15,290 sf)	1,020 seats	30 gpd/seat	30,600
10	6300 W. Romaine St.	Office	114,725 sf	0.12 gpd/sf	13,767
		Studio	38,072 sf	0.05 gpd/sf	1,904
		Other	40,927 sf	0.2 gpd/sf	8,185
11	6601 W. Romaine St.	Office	106,125 sf	0.12 gpd/sf	12,735

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
12	6523 W. Hollywood Blvd.	Restaurant (10,402 sf)	694 seats	30 gpd/seat	20,820
		Office	4,074 sf	0.12 gpd/sf	489
		Storage	890 sf	0.03 gpd/sf	27
13	6677 Santa Monica Blvd.	Apartments	695 du	190 gpd/du	132,050
		Commercial	24,900 sf	0.05 gpd/sf	1,245
14	6100 W. Hollywood Blvd.	Apartments	220 du	190 gpd/du	41,800
		Retail/Restaurant[c] (3,270 sf)	218 seats	30 gpd/seat	6,540
15	6230 Yucca St.	Commercial	2,697 sf	0.05 gpd/sf	135
		Apartments	114 du	190 gpd/du	21,660
16	5245 Santa Monica Blvd.	Apartments	49 du	190 gpd/du	9,310
		Retail	32,272 sf	0.025 gpd/sf	807
17	959 Seward St.	Office	241,568 sf	0.12 gpd/sf	28,988
18	5550 Hollywood Blvd.	Apartments	280 du	190 gpd/du	53,200
		Retail	12,030 sf	0.025 gpd/sf	301
19	6417 Selma Ave.	Hotel	180 rm	120 gpd/rm	21,600
		Restaurant/Club[c] (12,840 sf)	856 seats	30 gpd/seat	25,680
20	1601 Vine St.	Office	100,386 sf	0.12 gpd/sf	12,046
		Commercial	2,012 sf	0.025 gpd/sf	50
21	1149 Gower St.	Apartments	57 du	190 gpd/du	10,830
22	5520 Sunset Blvd.	Target	163,862 sf	0.05 gpd/sf	8,193
		Shopping Center	30,887 sf	0.025 gpd/sf	772
23	936 La Brea Ave.	Office	88,750 sf	0.12 gpd/sf	10,650
		Retail	12,000 sf	0.025 gpd/sf	300
24	1133 Vine St.	Hotel	112 rm	120 gpd/rm	13,440
		Café (661 sf)	45 seats	25 gpd/seat	1,125

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
25	6121 Sunset Blvd.	Apartments	200 du	190 gpd/du	38,000
		Office	422,610 sf	0.12 gpd/sf	50,713
		Retail/Restaurant[c] (41,300 sf)	2,754 seats	30 gpd/seat	82,620
		Hotel	125 rm	120 gpd/rm	15,000
26	1718 Las Palmas Ave.	Condominiums	29 du	190 gpd/du	5,510
		Apartments	195 du	190 gpd/du	37,050
		Retail	985 sf	0.025 gpd/sf	25
27	1546 Argyle Ave.	Apartments	276 du	190 gpd/du	52,440
		Retail	9,000 sf	0.025 gpd/sf	225
		Restaurant (15,000 sf)	1,000 seats	30 gpd/seat	30,000
28	1541 Wilcox Ave.	Hotel	200 rm	120 gpd/rm	24,000
		Restaurant (9,000 sf)	600 seats	30 gpd/seat	18,000
29	6230 Sunset Blvd.	Apartments	200 du	190 gpd/du	38,000
		Retail	4,700 sf	0.025 gpd/sf	118
30	5901 Sunset Blvd.	Office	274,000 sf	0.12 gpd/sf	32,880
		Retail	26,000 sf	0.025 gpd/sf	650
31	6201 W. Sunset Blvd.	Apartments	731 du	190 gpd/du	138,890
		Retail/Restaurant[c] (24,000 sf)	1,600 seats	30 gpd/seat	48,000
32	5600 W. Hollywood Blvd.	Apartments	33 du	120 gpd/rm	3,960
		Commercial	1,289 sf	0.05 gpd/sf	64
33	904 N. La Brea Ave.	Apartments	169 du	190 gpd/du	32,110
		Retail	37,057 sf	0.025 gpd/sf	926
34	707 N. Cole Ave.	Apartments	84 du	190 gpd/du	15,960
35	1921 N. Wilcox Ave.	Hotel	122 rm	120 gpd/rm	14,640
		Restaurant (4,225 sf)	282 seats	30 gpd/seat	8,460

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
36	7302 Santa Monica Blvd.	Apartments	371 du	190 gpd/du	70,490
		Office	7,800 sf	0.12 gpd/sf	936
		Restaurant (5,000 sf)	334 seats	30 gpd/seat	10,020
		Commercial	19,500 sf	0.05 gpd/sf	975
37	1717 N. Bronson Ave.				
		Apartments	89 du	190 gpd/du	16,910
38	1525 N. Cahuenga Blvd.	Hotel	64 rm	120 gpd/rm	7,680
		Restaurant/Lounge[c] (700 sf)	47 seats	30 gpd/seat	1,410
		Restaurant (3,300 sf)	220 seats	30 gpd/seat	6,600
39	901 N. Vine St.	Apartments	70 du	190 gpd/du	13,300
		Commercial	3,000 sf	0.05 gpd/sf	150
40	525 Wilton Pl.	Apartments	88 du	190 gpd/du	16,720
41	1233 N. Highland Ave,	Apartments	72 du	190 gpd/du	13,680
		Retail	12,160 sf	0.025 gpd/sf	304
42	7107 W. Hollywood Blvd.	Apartments	410 du	190 gpd/du	77,900
		Retail	5,000 sf	0.025 gpd/sf	125
		Restaurant (5,000 sf)	333 seats	30 gpd/seat	10,000
43	1310 N. Cole Ave.	Apartments	369 du	190 gpd/du	70,110
		Office	2,570 sf	0.12 gpd/sf	308
44	5750 W. Hollywood Blvd.	Apartments	161 du	190 gpd/du	30,590
		Commercial	4,747 sf	0.05 gpd/sf	237
45	6421 W. Selma Ave.	Restaurant (1,993 sf)	133 seats	30 gpd/seat	3,990
		Hotel	114 rm	120 gpd/rm	13,680
46	1400 N. Cahuenga Blvd.	Hotel	221 rm	120 gpd/rm	26,520
		Restaurant (3,000 sf)	200 seats	30 gpd/seat	6,000

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
47	1868 N. Western Ave.	Apartments	96 du	190 gpd/du	18,240
		Retail	5,546 sf	0.025 gpd/sf	139
48	7000 W. Melrose Ave.	Apartments	40 du	190 gpd/du	7,600
		Retail	6,634 sf	0.025 gpd/sf	166
49	5460 W. Fountain Ave.	Apartments	75 du	190 gpd/du	14,250
50	6220 W. Yucca St.	Hotel	210 rm	120 gpd/rm	25,200
		Apartments	136 du	190 gpd/du	25,840
		Restaurant (6,980 sf)	466 seats	30 gpd/seat	13,980
51	5525 W. Sunset Blvd.	Apartments	293 du	190 gpd/du	55,670
		Commercial	33,980 sf	0.05 gpd/sf	1,699
52	1657 N. Western Ave.	Apartments	91 du	190 gpd/du	17,290
		Retail	15,300 sf	0.025 gpd/sf	383
53	1118 N. McCadden Pl.	Housing	45 du	70 gpd/du	3,150
		Social Service Support	50,325 sf	0.12 gpd/sf	6,039
		Office	17,040 sf	0.12 gpd/sf	2,045
		Commercial/Restaurant[c] (1,885 sf)	126 seats	30 gpd/seat	3,780
		Temporary Housing	100 bed	70 gpd/du	7,000
54	1717 N. Wilcox Ave.	Hotel	133 rm	120 gpd/rm	15,960
		Retail	3,580 sf	0.025 gpd/sf	90
55	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
56	1749 N. Las Palmas Ave.	Apartments	70 du	190 gpd/du	13,300
		Retail	3,117 sf	0.025 gpd/sf	78

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
57	6901 W. Santa Monica Blvd.	Apartments	231 du	190 gpd/du	43,890
		Restaurant (5,000 sf)	333 seats	30 gpd/seat	10,000
		Retail	10,000 sf	0.025 gpd/sf	250
58	5632 W. De Longpre Ave.	Apartments	185 du	190 gpd/du	35,150
59	6200 W. Sunset Blvd.	Apartments	270 du	190 gpd/du	51,300
		Restaurant (1,750 sf)	117 seats	30 gpd/seat	3,500
		Pharmacy	2,300 sf	0.025 gpd/sf	58
		Retail	8,070 sf	0.025 gpd/sf	202
60	4914 W. Melrose Ave.	Live/Work	45 du	190 gpd/du	8,550
		Retail	3,760 sf	0.025 gpd/sf	94
61	5939 Sunset Blvd.	Apartments	299 du	190 gpd/du	56,810
		Office	38,440 sf	0.12 gpd/sf	4,613
		Restaurant (5,064 sf)	338 seats	30 gpd/seat	10,140
		Retail	3,739 sf	0.025 gpd/sf	3,739
62	7143 Santa Monica Blvd.	Apartments	145 du	190 gpd/du	27,550
		Retail/Restaurant[c] (7,858 sf)	524 seats	30 gpd/seat	15,720
63	1718 N. Vine St.	Hotel	216 rm	120 gpd/rm	25,920
		Restaurant (4,354 sf)	291 seats	30 gpd/seat	8,730
64	1600 N. Schrader Blvd.	Hotel	168 rm	120 gpd/rm	20,160
		Restaurant (4,028 sf)	269 seats	30 gpd/seat	8,070
65	1350 N. Western Ave.	Apartments	204 du	190 gpd/du	38,760
		Retail/Restaurant[c] (5,500 sf)	367 seats	30 gpd/seat	11,000
66	7510 W. Sunset Blvd.	Apartments	213 du	190 gpd/du	40,470
		Retail	20,000 sf	0.025 gpd/sf	500
		Restaurant (10,000 sf)	667 seats	30 gpd/seat	20,000

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
67	1601 N. Las Palmas Ave.	Apartments	86 du	190 gpd/du	16,340
68	7219 W. Sunset Blvd.	Hotel	93 rm	120 gpd/rm	11,160
		Restaurant (2,800 sf)	187 seats	30 gpd/seat	5,600
69	100 N. Western Ave.	Apartments	187 du	190 gpd/du	35,530
		Retail	76,500 sf	0.025 gpd/sf	1,913
70	1001 N. Orange Dr.	Office	53,537 sf	0.12 gpd/sf	6,424
71	5420 W. Sunset Blvd.	Apartments	735 du	190 gpd/du	139,650
		Commercial	95,820 sf	0.05 gpd/sf	4,791
72	6650 Franklin Ave.	Senior housing	68 du	190 gpd/du	12,920
73	1719 N. Whitley Ave.	Hotel	156 rm	120 gpd/rm	18,720
74	6140 W. Hollywood Blvd.	Hotel	102 rm	120 gpd/rm	12,240
		Condominiums	27 du	190 gpd/du	5,130
		Restaurant (11,460 sf)	764 seats	30 gpd/seat	22,920
75	6400 W. Sunset Blvd.	Residential	232 du	190 gpd/du	44,080
		Commercial	7,000 sf	0.05 gpd/sf	350
76	6430–6440 W. Hollywood Blvd.	Residential	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)	213 seats	30 gpd/seat	6,400
77	6630 W. Sunset Blvd.	Apartments	40 du	190 gpd/du	7,600
		Retail	6,634 sf	0.025 gpd/sf	166
78	747 N. Western Ave.	Residential	44 du	190 gpd/du	8,360
		Retail	7,700 sf	0.025 gpd/sf	193
79	5570 W. Melrose Ave.	Apartments	52 du	190 gpd/du	9,880
		Commercial	5,500 sf	0.05 gpd/sf	275

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
80	1317–1345 N. Vermont/1328 N. New Hampshire/4760 Sunset/1505 N. Edgemont/ 1517 N. Vermont/1424–1430 N. Alexandria	Hospital Expansion	211,992 sf	0.25 gpd/sf	52,998
81	712 N. Wilcox Ave.	Apartments	103 du	190 gpd/du	19,570
82	1540–1552 Highland Ave.	Residential	950 du	190 gpd/du	180,500
		Hotel	308 rm	120 gpd/du	36,960
		Office	95,000 sf	0.12 gpd/sf	11,400
		Commercial Retail	185,000 sf	0.05 gpd/sf	9,250
83	1276 N. Western Ave.	Apartments	75 du	190 gpd/du	14,250
84	1723 N. Wilcox Ave.	Apartments	68 du	190 gpd/du	12,920
		Retail	3,700 sf	0.025 gpd/sf	93
85	1300 N. Vermont Ave.	Office	30,933 sf	0.12 gpd/sf	3,712
86	5651 W. Santa Monica Blvd.	Condominiums	375 du	190 gpd/du	71,250
		Retail	377,900 sf	0.025 gpd/sf	9,448
87	915 N. La Brea Ave.	Supermarket	33,500 sf	0.025 gpd/sf	838
		Apartments	179 du	190 gpd/du	34,010
88	6225 W. Hollywood Blvd.	Office	210,000 sf	0.12 gpd/sf	25,200
89	1411 N. Highland Ave.	Apartments	76 du	190 gpd/du	14,440
		Commercial	2,500 sf	0.05 gpd/sf	125
90	6915 Melrose Ave.	Condominiums	13 du	190 gpd/du	2,470
		Retail	6,250 sf	0.025 gpd/sf	156
91	5663 Melrose Ave.	Condominiums	96 du	190 gpd/du	18,240
		Retail	3,350 sf	0.025 gpd/sf	84
92	2580 Cahuenga Blvd. E.	Theater	311 seats	3 gpd/seat	933
		Restaurant (5,400 sf)	360 seats	30 gpd/seat	10,800
		Office	30 emp	11 gpd/emp	330

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
93	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)	1,076 seats	30 gpd/seat	32,280
94	925 La Brea Ave.	Retail	16,360 sf	0.025 gpd/sf	409
		Office	45,432 sf	0.12 gpd/sf	5,452
95	135 N. Western Ave.	Restaurant (4,066 sf)	272 seats	30 gpd/seat	8,160
96	7445 W. Sunset Blvd.	Specialty Grocery	32,416 sf	0.025 gpd/sf	810
97	7811 Santa Monica Blvd.	Hotel	78 rm	120 gpd/du	9,360
		Apartments	88 du	190 gpd/du	16,720
		Commercial	65,888 sf	0.05 gpd/sf	3,294
98	6421 W. Selma Ave.	Quality Restaurant (17,607 sf)	1,174 seats	30 gpd/seat	35,220
99	Hollywood Central Park Hollywood Freeway (US-101)	Park (14.35 acres)[d]	625,086 sf	0.093 gpd/sf	58,133
		Amphitheater	500 seats	3 gpd/seat	1,500
		Inn	5 rm	120 gpd/rm	600
		Community Center	30,000 sf	0.05 gpd/sf	1,500
		Banquet Space	15,000 sf	0.35 gpd/sf	5,250
		Commercial	29,000 sf	0.05 gpd/sf	1,450
		Apartments	15 du	190 gpd/du	2,850
100	4905 W. Hollywood Blvd.	Retail	36,600 sf	0.025 gpd/sf	915
101	6409 W. Sunset Blvd.	Hotel	275 rm	120 gpd/du	33,000
		Retail	1,900 sf	0.025 gpd/sf	48
102	4900 W. Hollywood Blvd.	Apartments	150 du	190 gpd/du	28,500
		Retail	13,813 sf	0.025 gpd/sf	345

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
103	Hollywood Community Plan Update South of City of Burbank, City of Glendale, and SR-134; west of Interstate 5; north of Melrose Ave.; south of Mulholland Dr., City of West Hollywood, Beverly Hills, including land south of the City of West Hollywood and north of Rosewood Ave. between La Cienega Blvd. and La Brea Ave.[e]	Updates to the existing land use policies and land use diagram in the Hollywood Community Plan would result in future growth through horizon year 2040.			
Total Water Demand from Related Projects					**4,609,255**
Net Water Demand from Residential Option[f]					**79,353**
Total Water Demand from Related Projects and Residential Option					**4,688,608**
Net Water Demand from Office Option[g]					**109,637**
Total Water Demand from Related Projects and Office Option					**4,178,892**

du = dwelling units

emp = employees

gpd = gallons per day

rm = rooms

sf = square feet

stu = students

[a] *This analysis is based on 100 percent of sewage generation rates provided by LA Sanitation (effective April 6, 2012).*

[b] *This analysis conservatively assumes all dwelling units are 3-bedroom units. In addition, consistent with assumptions applied by LADWP, a standard factor of 15 square feet per seat was assumed to calculate the number of seats for restaurant uses.*

[c] *This related project does not distinguish square footage between these uses. Therefore, to provide a conservative analysis, this related project is*

Table IV.L.1-9 (Continued)
Cumulative Water Demand

No.	Project	Description/Land Use	Size	Generation Factor[a,b]	Total Daily Water Demand (gpd)
	assumed to include only restaurant uses.				
[d]	*Sewage generation rates provided by LA Sanitation do not include rates for parks uses per acre. Therefore, the water demand rate for park uses is assumed to be equivalent to that of landscaping needs. The generation rate for landscaping is based on calculations from the Project's WSA.*				
[e]	*The list of related projects includes the City's draft Hollywood Community Plan Update, which is in the initial planning stages. The Hollywood Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in Hollywood until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast for 2027, which is well before the Community Plan Update's horizon year. Moreover, 2027 is a similar projected buildout year as many of the related projects identified in this table. Accordingly, it can be assumed that the projected growth reflected by the list of related projects, which itself is a conservative assumption, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.*				
[f]	*As discussed above, the Residential Option with bungalows as restaurants would generate a net 79,353 gpd, or approximately 88.9 AFY. For comparison purposes, Residential Option with bungalows as residential units would generate a net 63,507 gpd, or approximately 71.2 AFY. Therefore, the former is considered herein to provide a conservative analysis.*				
[g]	*As discussed above, the Office Option with bungalows as restaurants would generate a net 109,637 gpd, or approximately 122.8 AFY. For comparison purposes, Office Option with bungalows as residential units would generate net 95,307 gpd, or approximately 106.8 AFY. Therefore, the former is considered herein to provide a conservative analysis.*				
Source: Eyestone Environmental, 2022.					

increase in water demand of 109,637 gpd (or approximately 122.8 AFY)[104] would result in a cumulative increase in average daily water use of approximately 4,718,892 gpd (or approximately 5,285.2 AFY). As previously stated, based on water demand projections through 2040 in LADWP's 2015 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2040, as well as the intervening years (i.e., 2027, the Project buildout year) based on demographic growth projections in SCAG's 2012–2035 RTP/SCS. The WSA prepared for the Project also concluded that LADWP will be able to meet proposed water demand of the Project together with the existing and planned future water demands of the City. 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. Furthermore, certain large, related projects (as defined by Section 10912 of the Water Code) meeting the thresholds under Senate Bill 610 would be required to prepare and receive LADWP approval of a water supply assessment that demonstrates how the project's water demand will be met. The WSA for such projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

Overall, as discussed above, the LADWP's 2015 UWMP demonstrates that the City will meet all new water demands from projected population growth, through a combination of water conservation and water recycling. LADWP's 2015 UWMP specifically outlined the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP's 2015 UWMP also incorporates the goals of Executive Directive 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. 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 water supply continues to be available.

Based on the related project list and projections provided in adopted plans (e.g., MWD's 2015 UWMP, LADWP's 2015 UWMP, Sustainable City pLAn, and L.A.'s

[104] *As discussed above, the Office Option with bungalows as restaurants would generate a net 109,637 gpd, or approximately 122.8 AFY. For comparison purposes, Office Option with bungalows as residential units would generate net 95,307 gpd, or approximately 106.8 AFY. Therefore, the former is* considered herein *to provide a conservative analysis.*

Green New Deal), it is anticipated that LADWP would be able to meet the water demands of the Project (up to 79,353 gpd or approximately 88.9 AFY for the Residential Option and up to 109,637 gpd or approximately 122.8 AFY for the Office Option) and future growth through 2027 and beyond. The 2015 UWMP forecasts adequate water supplies to meet all project water demands in the City through the year 2040 during average years, single-dry years, and multiple-dry years. Therefore, cumulative significant impacts with respect to water supply are not anticipated from the development of the Project and the related projects. Project impacts to water supply would not be cumulatively considerable, and cumulative impacts on water supply would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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