IV. Environmental Impact Analysis

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

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts to water supply and the water infrastructure system serving the Project Site. The analysis includes a description of regional water supplies and the existing water infrastructure serving the Project Site, estimates the water demand associated with the Project, and assesses whether there is sufficient water supply and infrastructure capacity to meet that demand. The analysis is based on the *Water Supply Assessment for the 8th, Grand and Hope Project (WSA),* adopted by the Los Angeles Department of Water and Power's (LADWP) Board of Water and Power Commissioners on November 19, 2019, and included as Appendix I of this Draft EIR.[1] In addition, the analysis is based on the *Water Utility Technical Report* (Utility Report) prepared for the Project by KPFF Consulting Engineers on March 19, 2021, and included as Appendix I of this Draft EIR.

[1] *As a note, the Project's WSA had analyzed two development options. The School Option proposed 547 residential dwelling units, up to 7,499 square feet of commercial/retail/restaurant space, and 37,216 square feet dedicated to a charter school. The No School Option proposed 580 residential dwelling units and up to 7,499 square feet of commercial/retail/restaurant space. Following the LADWP Board's approval of the WSA on November 19, 2019, the Project now only proposes the latter option with minor changes to parking and open space. LADWP recalculated the Project's water demand based on the updated scope and concluded that no additional water supply assessment is required for the Project because the Project's revisions do not meet one or more of the water supply assessment conditions of the California Water Code Section 10910(h) . Refer to emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR).*

2. Environmental Setting

a. Regulatory Framework

(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 that adequate supplies are available to meet existing and future demands. 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 every 5 years.[2]

A number of recent requirements regarding preparation of water management plans have been added to the Urban Water Management Planning Act. These additional requirements include: (i) a narrative description of water demand measures implemented over the past five years and future measures planned to meet 20 percent demand reduction targets by 2020; (ii) a standard methodology for calculating system water loss; (iii) a voluntary reporting of passive conservation savings, energy intensity, and climate change; and (iv) an analysis of water features that are artificially supplied with water.[3]

(b) Senate Bill X7-7 (California Water Code Section 10608)

Senate Bill (SB) X7-7 (Water Conservation Act of 2009), codified in California Water Code Section 10608, requires all water suppliers to increase water use efficiency. Enacted in 2009, this legislation includes the setting of an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. The State of California was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. The Water Conservation Act of 2009 directs the California Department of Water Resources (DWR) to develop technical methodologies and criteria to ensure the consistent implementation of the Act and to provide guidance to urban retail water suppliers in developing baseline and compliance water use. To meet the

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[2] *LADWP, 2015 Urban Water Management Plan, April 2016.*

[3] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

legislative directives for consistent implementation, DWR has developed and published Methodologies for Calculating Baseline and Compliance Year Per Capita Water Use.[4] Monthly statewide potable water savings reached 25.1 percent in February 2017 as compared to that in February 2013.[5] Cumulative statewide savings from June 2015 through February 2017 were estimated at 22.5 percent.[6] 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.[7] Monthly statewide potable water savings were recorded at 22.4 percent in February 2019 as compared to that in February 2013.[8] As of May 2021, data is not yet available to determine if the 2020 goal has been met.

(c) Senate Bill 610 (California Water Code Sections 10910 et seq.)

SB 610, codified in the California Water Code Sections 10910 et seq., became effective January 1, 2002. SB 610 requires counties and cities to consider the availability of adequate water supplies for certain new large development projects as part of the California Environmental Quality Act (CEQA) process. Specifically, SB 610 requires that for certain projects subject to CEQA, the urban water supplier must prepare a Water Supply Assessment (WSA) that determines whether the projected water demand associated with a project is included as part of the most recently adopted urban water management plan. The WSA shall identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. In addition, it must address water supplies over a 20-year future period and consider average, single-dry, and multiple-dry years. In accordance with Water Code Section 10912, projects subject to CEQA requiring preparation of a WSA include the following:

- Residential developments of more than 500 dwelling units;
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;

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[4] *CA DWR, Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (For the Consistent Implementation of the Water Conservation Act of 2009), February 2016.*

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

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

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

[8] *State Water Resources Control Board, Staff Presentation to the Board, Informational Item 7—Urban Water Conservation (February 2019), April 2, 2019.*

- 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 plant, or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;
- Mixed-use projects that include one or more of the above-identified categories; or
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.

The WSA must be approved by the public water system 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.

As described in Section II, Project Description, of this Draft EIR, the Project proposes 580 residential units and up to 7,499 square feet of commercial/retail/restaurant uses. As such, the Project is subject to the requirements of SB 610, and a WSA is required for the Project.

(d) Senate Bill 606 and Assembly Bill 1668

On May 31, 2018, then-Governor Edmund G. "Jerry" Brown (Governor Brown) signed SB 606 and Assembly Bill (AB) 1668 into law.[9] The pair of bills sets permanent overall targets for indoor and outdoor water consumption. The bills set an initial limit for indoor water use of 55 gallons per person per day in 2022, dropping to 50 gallons per person per day by 2030. The DWR and the State Water Resources Control Board (SWRCB) will recommend standards for outdoor use.

(e) California Plumbing Code

Title 24, Part 5 of the California Code of Regulations (CCR) establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2019 California Plumbing Code, which is

[9] *Office of Edmund G. Brown, Jr., "Governor Brown Signs Legislation Establishing Statewide Water Efficiency Goals," May 31, 2018.*

based on the 2018 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2019.

(f) Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act 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.[10,11] The Sustainable Groundwater Management Act (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 (GSAs) were required to be formed by June 30, 2017. Over 260 GSAs in over 140 basins were formed by SGMA's initial planning milestone. However, as SGMA continues to be implemented and the priorities and boundaries of some basins change, new GSAs will be formed, and existing GSAs may want to reorganize, consolidate, or withdraw from managing in all or part of a basin.[12]

Under Water Code Section 10720.7, groundwater sustainability agencies responsible for high- and medium-priority basins that are subject to critical conditions of overdraft must adopt groundwater sustainability plans by January 31, 2020. Plans for high- and medium-priority basins that are not in critical overdraft must be adopted by January 31, 2022. The Sustainable Groundwater Management Act 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 Sustainable Groundwater Management Act 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. 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, which is a medium-priority basin. Similarly, areas associated with adjudicated basins, like the northern area of Central Basin, is characterized as very low-priority and does not require a GSA.[13]

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[10] *Sustainable Groundwater Management Act [And Related Statutory Provisions from SB 1168 (Pavley), AB 1739 (Dickinson), and SB 1319 (Pavley) as Chaptered], 2015 Amendments, effective January 1, 2016.*

[11] *CA DWR, SGM Sustainable Groundwater Management, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management, accessed January 4, 2021.*

[12] *CA DWR, Groundwater Sustainability Agencies, https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainable-Agencies, accessed January 4, 2021.*

[13] *CA DWR, Sustainable Groundwater Management Act 2019 Basin Prioritization, May 2020, p. A-11.*

In September 2017, DWR approved the formation of the Santa Monica Basin Groundwater Sustainability Agency (SMBGSA) as the exclusive GSA in the Santa Monica Basin (SMB). The five member agencies include LADWP, the City of Beverly Hills, the City of Santa Monica, the City of Los Angeles, by and through its Department of Water and Power, the City of Culver City, and the County of Los Angeles. In November 2019, the SMBGSA initiated the development of a Groundwater Sustainability Plan (GSP) for the SMB. The final GSP will be submitted to DWR by January 2022.[14]

As required by the Sustainable Groundwater Management Act, in December 2016, DWR published on its website the best management practices (BMPs) for sustainably managing groundwater:

- BMP 1. Monitoring Protocols, Standards, and Sites;
- BMP 2. Monitoring Networks and Identification of Data Gaps;
- BMP 3. Hydrogeologic Conceptual Model;
- BMP 4. Water Budget; and
- BMP 5. Modeling.[15]

In November 2017, BMP 6 for Sustainable Management Criteria was released for public comments to be received by January 8, 2018. As of early 2021, BMP 6 is still in draft form.[16]

(g) Article 22.5 Drought Emergency Water Conservation, California Code of Regulations (Emergency Declaration and Executive Orders)

In response to California's drought conditions, on January 17, 2014, Governor Brown declared a State of Drought Emergency and directed state officials to take numerous necessary actions with local urban water suppliers and municipalities to reduce the impacts of the ongoing drought conditions that had been occurring in California since

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[14] *Santa Monica Basin Groundwater Sustainability Agency, www.santamonica.gov/gsp, accessed March 10, 2021.*

[15] *CA DWR, Best Management Practices, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents, accessed January 4, 2021.*

[16] *CA DWR, Best Management Practices, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents, accessed January 4, 2021.*

approximately 2009.[17] In addition, Governor Brown issued numerous Executive Orders regarding water conservation. Executive Order B-37-16, which was issued in May 2016, extended the mandatory water reduction measures outlined in a previous Executive Order B-29-15 and further directed the DWR and SWRCB to develop long term efficiency targets that go beyond the 20-percent reductions mandated by SB X7-7, discussed above. The executive order also established longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans.

On February 8, 2017, the SWRCB readopted and extended the emergency regulations, continuing the January 2014 drought declaration and Executive Order B-37-16 from May 2016.[18] The SWRCB stated that the reassessment of water supply conditions and the need for continued urban conservation regulations are subject to precipitation, snowpack levels, and other variables to be measured and determined following the end of spring in 2017.[19] The regulatory requirements resulting from these executive orders were codified in California Code of Regulations Title 23, Article 22.5, Drought Emergency Water Conservation.

(h) Executive Order B-40-17 and Making Water Conservation a California Way of Life

On April 7, 2017, following the reassessment of water supply conditions, Governor Brown issued Executive Order B-40-17 and lifted the drought state of emergency for all California counties except for Fresno, Kings, Tulare, and Tuolumne. In addition, Executive Order B-40-17 rescinds the two emergency proclamations from January and April 2014 and four drought-related executive orders issued in 2014 and 2015.[20] California Code of Regulations Title 23, Article 22.5, Drought Emergency Water Conservation was repealed. Executive Order B-40-17 builds on Executive Order B-37-16 efforts to maintain urban water use reporting requirements and prohibitions of wasteful practices, such as watering during rainfall, hosing off sidewalks, and irrigating ornamental turf on public street

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[17] *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.*

[18] *SWRCB, Fact Sheet, Prohibitions, Monthly Reporting, and Stress Tests Continue with Extended Water Conservation Regulations, February 8, 2017.*

[19] *SWRCB, Board Meeting Session—Office of Research, Planning and Performance, Item 9, February 8, 2017.*

[20] *These four executive orders include Executive Order B-26-14 from September 2014, Executive Order B-28-14 from December 2014, Executive Order B-29-15 from April 2015, and Executive Order B-36-15 from November 2015.*

medians. The *Making Water Conservation a California Way of Life* Final Report was also released with the announcement of Executive Order B-40-17. This final report was prepared by the DWR, SWRCB, California Public Utilities Commission, California Department of Food and Agriculture, and California Energy Commission, who will work closely with the State Legislature to implement four objectives: using water more wisely, eliminating water waste, strengthening local drought resilience, and improving agricultural water use efficiency and drought planning.[21]

(i) 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. 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.

Updated by DWR every five years, the plan 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 California Water Plan also evaluates coordinated efforts 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 thus help identify effective plan actions and policies for meeting California's resource management objectives in both the short term and long term of future decades. While the California Water Plan cannot mandate actions or authorize itemized spending, policymakers and lawmakers have the ability to authorize specific actions and appropriate necessary funding. Released in July 2019, the California Water Plan Update 2018 recommends 19 priority actions to improve integrated watershed management; strengthen infrastructure resiliency; restore ecosystem functions; empower under-represented communities; improve inter-agency alignment; address regulatory challenges; and support decision-making, adaptive management, and long-term planning.[22] The California Water Plan Update will work in tandem with the California Water Action Plan, as discussed further below.

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[21] *CA DWR, SWRCB, California Public Utilities Commission, California Department of Food and Agriculture, and California Energy Commission, Making Water Conservation a California Way of Life Final Report, April 2017.*

[22] *CA DWR, DWR Released Final California Water Plan Update 2018, published July 16, 2019, https:// water.ca.gov/News/News-Releases/2019/July-19/Final-Water-Plan-Update-2018, accessed January 4, 2021.*

(j) California Water Action Plan

The first California Water Action Plan (Action Plan) was developed by the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture and published in January 2014 and updated in 2016 to provide a roadmap for the State's path toward sustainable water management.[23] The Action Plan discusses the challenges for managing the State's water resources supply, scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods. The following ten actions were presented:[24]

1. Make conservation a California way of life;
2. Increase regional self-reliance and integrated water management across all levels of government;
3. Achieve the co-equal goals for the Delta;
4. Protect and restore important ecosystems;
5. Manage and prepare for dry periods;
6. Expand water storage capacity and improve groundwater management;
7. Provide safe water for all communities;
8. Increase flood protection;
9. Increase operational and regulatory efficiency; and
10. Identify sustainable and integrated financing opportunities.

The Action Plan also identifies the following challenges to water resources management: 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.

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[23] *California Department of Natural Resources, California Environmental Protection Agency, and California Department of Food and Agriculture, California Water Action Plan, https://resources.ca.gov/Newsroom/Page-Content/News-List/State-Agencies-Track-Five-Years-of-Progress-on-California-Water-Action-Plan, accessed May 11, 2021.*

[24] *California Department of Natural Resources, California Environmental Protection Agency, and California Department of Food and Agriculture, California Water Action Plan 2016 Update.*

In complementing local efforts, the Action Plan emphasizes collaboration between different levels of government, water agencies, conservationists, tribes, farmers, and other stakeholders. Since the Action Plan Update for 2016 was released, its implementation progress has also been documented in its Implementation Report released January 2019 with focuses on policy, funding, and coordinated projects.[25] The Action Plan will continue to be implemented simultaneously with the California Water Plan Update 2018.

(2) Regional

The Metropolitan Water District of Southern California (MWD) is a primary source of water supply within 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. LADWP is a member agency and purchases supplemental water from MWD in addition to the supplies from local groundwater and the Los Angeles Aqueduct.

Based on the water supply planning requirements imposed on its 26 member agencies and ultimate customers, MWD has adopted a series of official reports on the state of its water supplies. As described in further detail below, in response to recent developments in the Sacramento Delta, MWD has developed plans 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 LADWP.

(a) MWD's Integrated Water Resources Plan

The Integrated Water Resources Plan (MWD IRP) is MWD's principal water resources planning document. MWD, its member agencies, subagencies, and groundwater basin managers developed the IRP as a long-term planning guideline for resources and capital investments. The purpose of the MWD IRP was the development of a portfolio of preferred resources to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner. The first MWD IRP was adopted in 1996 and has been subsequently updated in 2004, 2010, and 2015.

The 2015 MWD IRP Update, adopted in January 2016, provides MWD's strategy for resource reliability through the year 2040. The 2015 MWD IRP Update calls for stabilizing and maintaining imported water supplies; meeting future growth through increased water conservation and sustaining and developing new local supplies; pursuing a comprehensive transfers and exchanges strategy; building storage in wet and normal years to manage

[25] *California Department of Natural Resources, California Environmental Protection Agency, and California Department of Food and Agriculture, California Water Action Plan Implementation Report, January 2019.*

risks and drought; and preparing for uncertainty with Future Supply Actions. Overall, the strategies presented in the 2015 MWD IRP Update include investments to maintain the reliability of imported water supplies, expansion of local water supplies, and reduction in water demand through a variety of conservation and water use efficiency initiatives.[26] As Implementation Reports for 2018 and 2019 have been released, MWD is in the process of preparing the 2020 MWD IRP, which will incorporate different scenarios for the future.[27]

(b) MWD's 2015 Regional Urban Water Management Plan

MWD's 2015 Urban Water Management Plan (UWMP) addresses the future of MWD's water supplies and demand through the year 2040.[28] Based on its 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under single dry-year and multiple dry-year hydrologic conditions. 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. According to the MWD, the UWMP does not explicitly discuss specific activities undertaken; rather, that is the role of the MWD IRP.[29] The MWD 2020 UWMP is being developed as part of the 2020 IRP planning process.[30]

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[26] *MWD, Integrated Water Resources Plan Draft 2015 Update, January 12, 2016.*

[27] *MWD, Integrated Water Resources Plan, Resources, www.mwdwatertomorrow.com/IRP/index.html, accessed May 11, 2021.*

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

[29] *MWD, Planning Documents, Urban Water Management Plan, www.mwdh2o.com/AboutYourWater/Planning/Planning-Documents/Pages/default.aspx, accessed May 11, 2021.*

[30] *MWD, Planning Documents, Urban Water Management Plan, www.mwdh2o.com/AboutYourWater/Planning/Planning-Documents/Pages/default.aspx, accessed May 11, 2021.*

(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 urban water management plan 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.[31] 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 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 included a set of general actions and considerations for MWD staff to address during shortage conditions, it did not include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted a water supply plan called the Water Supply Allocation Plan in February 2008, which has since been implemented three times, most recently in April 2015. 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 cuts in water 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.

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

(e) MWD's Long-Term Conservation Plan[32]

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 MWD 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.[33]

(3) Local

(a) LADWP 2015 Urban Water Management Plan

The City is required to adopt an UWMP every five years. In June 2016, LADWP adopted its 2015 Urban Water Management Plan (2015 LADWP UWMP). The 2015 LADWP UWMP serves two purposes: (i) achieve full compliance with the requirements of California's Urban Water Management Planning Act (described above); and (ii) serve as a master plan for water supply and resource management consistent with the City's goals and objectives.[34]

A number of important changes have occurred since the LADWP prepared its prior 2010 UWMP. The year 2012 marked the start of a multi-year drought in California, in response to which Governor Brown proclaimed a drought state of emergency in January 2014. In addition, as discussed above, in 2014, the SWRCB implemented its Drought Emergency Water Conservation Regulation, which mandates 25-percent reductions in water use statewide. In October 2014, City of Los Angeles Mayor Eric Garcetti (Mayor

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

[33] *MWD, Long-Term Conservation Plan, Final Draft, July 2011, Executive Summary, p. 4.*

[34] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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, Mayor Garcetti released the first Sustainable City pLAn (discussed further below), establishing targets for the City over the next 20 years to strengthen and promote sustainability. In 2019, an updated plan was released as L.A.'s Green New Deal. The 2015 LADWP UWMP incorporates the objectives of these recent initiatives.

(b) LADWP and Sustainable Groundwater Management

The City of Los Angeles overlies several important groundwater basins. The City has authority within its jurisdiction to set land-use policy decisions and authorize discretionary land use actions, as administered by its Department of City Planning. The City also has exclusive authority to provide municipal and industrial water supply within its jurisdiction as administered by the LADWP. The City is governed by charter, which designates LADWP as having management and control responsibility over Los Angeles' water assets. Accordingly, LADWP is the lead agency representing Los Angeles in matters related to water policy, including compliance with the Sustainable Groundwater Management Act.[35]

As the City overlies both adjudicated and unadjudicated basins, LADWP is working with its regional partners towards compliance with the SGMA for the unadjudicated basins that are located within the City's boundaries. These activities include formation of: (1) an exclusive GSA with other overlaying agencies for the unadjudicated Santa Monica Basin; (2) a GSA for a small area in the eastern San Fernando Basin; and (3) an alternative analysis, approved by DWR, for the unadjudicated northerly area in Central Basin.[36]

(c) Sustainable City pLAn and L.A.'s Green New Deal

The City's first Sustainable City pLAn released by the Mayor's Office in April 2015 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. The Sustainable City pLAn enhances ED 5's goals and incorporates water savings goals of reduction in per capita potable water by 20 percent by 2017, by 22.5 percent by 2025, and by 25 percent by 2035 (all from Fiscal Year 2013/2014 levels). The Sustainable City pLAn also includes a reduction in imported

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[35] *CA DWR, SGMA Portal, Los Angeles Groundwater Sustainability Agency, https://sgma.water.ca.gov/portal/gsa/print/293, accessed January 4, 2021.*

[36] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

water purchases from MWD by 50 percent from Fiscal Year 2013/2014 levels by 2025. In addition, the Sustainable City pLAn aims to expand the use of local sources of water to 50 percent of the total water supply by 2035. Specific strategies and desired outcomes for conservation, recycled water, and stormwater capture are included in the Sustainable City pLAn. These include investments in state-of-the-art technology, rebates and incentives promoting water-efficient appliances, tiered water pricing, a technical assistance program for business and industry, and large landscaped irrigation and efficiency programs. After meeting its 20 percent water reduction target in 2017, the City began working toward its next goal of reducing municipal water use by 22.5 percent by 2025.[37]

In 2019, the first four-year update to the 2015 Sustainable City pLAn was released. This updated document, known as L.A.'s Green New Deal, expands upon the City's vision for a sustainable future and provides accelerated targets and new goals.[38] L.A.'s Green New Deal focuses on environmental justice, renewable energy, local water, clean and healthy buildings, housing and development, mobility and public transit, zero emission vehicles, industrial emissions and air quality monitoring, waste and resource recovery, food systems, urban ecosystems and resilience, and green jobs. In addition, all targets have been aligned with the United Nations Sustainable Development Goals.

L.A.'s Green New Deal provides the following targets related to local water in the City:

- Source 70 percent of L.A.'s water locally and capture 150,000 acre feet per year of stormwater by 2035.
- Recycle 100 percent of all wastewater for beneficial reuse by 2035.
- Build at least 10 new multi-benefit stormwater capture projects by 2025; 100 by 2035; and 200 by 2050.
- Reduce potable water use per capita by 22.5 percent by 2025; and 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Install or refurbish hydration stations at 200 sites, prioritizing municipally owned buildings and public properties such as parks, by 2035.

L.A.'s Green New Deal also provides specific milestones and initiatives to meet such targets.

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[37] *Mayor's Office of Sustainability, Sustainable City pLAn, 2nd Annual Report 2016–2017.*

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

(d) Resilient Los Angeles

In March 2018, the Mayor's Office released the Resilient Los Angeles Plan, which includes strategies to fortify the City's infrastructure, protect its economy, and make Los Angeles safer.[39] Goal 11, *Restore, Rebuild, and Modernize Los Angeles' Infrastructure*, includes measures related to water supply. Specific goals include, but are not limited to, expanding the City's seismic resilient pipe network, replacing aging infrastructure, and expanding and protecting water sources to reduce dependence on imported water and strengthen the City's local water supply.

(e) City of Los Angeles Integrated Resources Plan and One Water LA 2040 Plan

LADWP works closely with MWD, City of Los Angeles Bureau of Sanitation (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 that resulted in the City's own Integrated Resources Plan (City IRP). The City IRP involved technical integration and community participation to guide policy decisions and water resources facilities planning. Initiation of the City 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.[40]

The One Water LA 2040 Plan (One Water LA) is an initiative that builds on the progress of the City IRP. One Water LA extends the City's IRP planning period to year 2040 and takes into consideration an additional emphasis on environmental, social, and sustainability factors.[41] One Water LA is a collaborative approach to develop an integrated framework for managing the City's watersheds, water resources, and water facilities in an environmentally, economically, and socially beneficial manner. One Water LA objectives include the following:[42]

1. Integrate management of water resources and policies by increasing coordination and cooperation between all City departments, partners and stakeholders.

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[39] *City of Los Angeles, Resilient Los Angeles, March 2018.*

[40] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[41] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[42] *LASAN, About One Water LA, www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au?_adf.ctrl-state=16okwrlh8h_5&_afrLoop=510921480353498#!, accessed January 4, 2021.*

2. Balance environmental, economic and societal goals by implementing affordable and equitable projects and programs that provide multiple benefits to all communities.

3. Improve health of local watersheds by reducing impervious cover, restoring ecosystems, decreasing pollutants in our waterways and mitigating local flood impacts.

4. Improve local water supply reliability by increasing capture of stormwater, conserving potable water and expanding water reuse.

5. Implement, monitor and maintain a reliable wastewater system that safely conveys, treats and reuses wastewater while also reducing sewer overflows and odors.

6. Increase climate resilience by planning for climate change mitigation and adaptation strategies in all City actions.

7. Increase community awareness and advocacy for sustainable water by active engagement, public outreach and education.

In April 2018, Volumes 1 through 9 of One Water LA were released: Volume 1—Summary Report; Volume 2—Wastewater Facilities Plan; Volume 3—Stormwater and Urban Runoff Facilities Plan; Volume 4—L.A. River Flow Study; Volume 5—Integration Opportunities Analysis Details; Volume 6—Climate Risk & Resilience; Volume 7—Implementation Strategy and Supporting Documents; Volume 8—Technical Support Materials; and Volume 9—Stakeholder Engagement Materials. The remaining volume, Volume 10, will include the One Water LA Programmatic Environmental Impact Report, which is in development.[43]

(f) City of Los Angeles General Plan

(i) General Plan Framework Element

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

[43] *LASAN, One Water LA, Plan Documents, www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-r?_adf.ctrl-state=bn1cwnllq_5&_afrLoop=9755031479866713#!, accessed January 4, 2021.*

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.[44] The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP. Table IV.I.1-1 on page IV.I.1-19 includes the Framework Element goals, objectives and policies related to water supply.

(ii) Central City 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 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 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.D, Land Use, of this Draft EIR, the Project is located within the Central City Community Plan area. The Central City Community Plan, last updated in 2003, does not include any objectives or policies that specifically relate to water supply and infrastructure.

(g) 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 key regulations regarding water conservation is provided below.

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

[44] *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.I.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 9.8	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 General Plan, Framework Element, 2001.

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 LAMC Chapter XII, Article 5 to establish water efficiency requirements for new development and renovation of existing buildings, and mandate installation of high efficiency plumbing fixtures in residential and commercial buildings.

- 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 LAMC Chapter VI, Article 4.4, Section 64.72 regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.

- Ordinance No. 182,849—amended LAMC Chapter IX, Article 9 (Green Building Code) to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 square feet, separate sub-meters or metering devices shall be installed for outdoor potable water use. This ordinance also required that for new non-residential construction with at least 1,000 square feet of cumulative landscaped area, weather- or soil moisture-based irrigation controllers and sensors be installed.

- 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 also has adopted numerous requirements related to the provision of water for purposes of fire protection. These requirements are set forth in the Fire Code (LAMC Chapter V, Article 7). Fire Code Section 57.507.3.1 establishes fire water flow standards. Fire water flow requirements, as determined by the Los Angeles Fire Department (LAFD), vary by project site as they are dependent on land use (e.g., higher intensity land uses require higher flow from a greater number of hydrants), life hazard, occupancy, and fire hazard level. As set forth in LAMC Section 57.507.3.1, fire water flow requirements vary under four categories ranging from 2,000 gallons per minute (gpm) for Low Density Residential areas up to 12,000 gpm for High Density Industrial and Commercial 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 discussed in Section IV.F.1, Public Services—Fire Protection, of this Draft EIR, as determined by the LAFD, the required fire water flow for the Project has been set at 6,000 to 9,000 gpm from four to six hydrants flowing simultaneously with 20 psi, which corresponds to the Industrial and Commercial category from LAMC Section 57.507.3.1.[45]

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[45] *Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, from the Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, July 25, 2019. See Appendix I of this Draft EIR.*

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 would require one hydrant per 80,000 square feet of land with 300-foot distances between hydrants, and 2.5-inch by 4-inch double fire hydrants or 4-inch by 4-inch double fire hydrants. Regardless of land use, every first story of a residential, commercial, and industrial building must be within 300 feet of an approved hydrant.

(h) Los Angeles Water Rate Ordinance

The City's Water Rate Ordinance was adopted in June 1995 and last amended by the LADWP's Board of Commissioners pursuant to Ordinance No. 184,130. Effective since April 15, 2016, this 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 supplies. 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. Past and current implementation of water rate price signals and ordinances have resulted in reducing the total customer water usage.[46]

b. Existing Conditions

(1) Water Supply

LADWP is responsible for providing water within the City 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.[47] As shown in Table IV.I.1-2 on page IV.I.1-22, in 2018, the most recent year for which estimated data are available, LADWP had an available water supply of 511,517 acre-feet. LADWP water sources are described in further detail below.

[46] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[47] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

Table IV.I.1-2
LADWP 2007–2018 Water Supply

Calendar Year	Los Angeles Aqueducts	Local Groundwater	MWD	Recycled Water	Transfer, Spread, Spills, and Storage	Total
2007	127,392	88,041	439,353	3,595	57	**658,438**
2008	148,407	64,604	427,422	7,048	(1,664)	**645,817**
2009	137,261	66,998	351,959	7,570	(554)	**563,234**
2010	251,126	68,346	205,240	6,900	938	**532,550**
2011	357,752	49,915	119,481	7,708	153	**535,009**
2012	166,858	59,109	326,123	5,965	(1,182)	**556,873**
2013	64,690	66,272	438,534	9,253	2,404	**581,153**
2014	63,960	96,394	391,307	11,307	(2,020)	**560,948**
2015	33,244	80,155	378,539	9,829	(430)	**501,337**
2016	95,573	72,503	314,336	9,095	981	**492,487**
2017	380,329	14,695	113,033	8,509	(5,730)	**510,835**
2018[a]	245,941	43,100	214,940	8,795	(1,259)	**511,517**

Units are in acre-feet.

[a] *2018 water supply data are estimated.*

Source: LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019, Table III.

(a) Los Angeles Aqueducts

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

According to LADWP, average deliveries from the Los Angeles Aqueducts system from Fiscal Year (FY) 2011/12 through 2015/16 were approximately 111,293 acre-feet of water annually. During this period, the record low snowpack for Los Angeles Aqueducts watershed in the Eastern Sierra Nevada Mountains was recorded on April 1, 2015. Supply conditions have changed drastically since 2015. Snowpack in the Eastern Sierra Nevada Mountains was recorded at 203 percent of an average year on April 1, 2017. As such, Mayor Garcetti had proclaimed a state of local emergency for the Los Angeles Aqueducts in 2017 to assist LADWP in taking immediate steps to protect infrastructure and manage

runoff in the Owens Valley including, but not limited to, protection of facilities and diversion of conveyance flows. More recently, snowpack in the Eastern Sierra Nevada Mountains was recorded at 54 percent of an average year on April 1, 2020.[48]

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

Based on historical hydrological conditions from FY 1961/1962 to 2010/2011, LADWP projects that the average annual long-term delivery from the Los Angeles Aqueducts between 2015 and 2040 is expected to be approximately 278,000 AFY and gradually decline to 267,000 AFY due to projected climate change impacts.[49] However, with completion of the Owens Lake Master Project by 2024, the projected Los Angeles Aqueducts delivery may increase to 286,000 AFY due to water conserved at Owens Lake, which would off-set most of the anticipated long-term losses.[50]

(b) Groundwater

LADWP pumps groundwater from three adjudicated basins, including the San Fernando, Sylmar, and Central Basins. LADWP has accumulated 523,529 acre-feet of stored water credits in the San Fernando Basin as of October 1, 2016.[51] This water can be withdrawn from the basin during normal and dry years or in an emergency, in addition to LADWP's approximately 87,000 AFY entitlement in the basin. The City's current annual

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[48] *LADWP, Eastern Sierra Snow Survey Results, April 1, 2020.*

[49] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[50] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[51] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

entitlements also include 3,570 AFY from the Sylmar Basin and 17,236 AFY from the Central Basin.

As shown in Table IV.I.1-3 on page IV.I.1-25, during the FY 2017/18 (July through June), LADWP extracted 22,259 acre-feet from the San Fernando Basin and 0.77 acre-feet from the Central Basin.[52] LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported water supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. Both LADWP and DWR have programs in place to monitor wells to prevent overdrafting. LADWP's groundwater pumping practice is based on a "safe yield" operation. Furthermore, basin management is achieved by collective efforts of a court-appointed Watermaster and the Upper Los Angeles River Area (ULARA) Administrative Committee of representatives from five public water supply agencies overlying the ULARA Committee.[53] 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.

(c) Metropolitan Water District of Southern California

MWD is the largest water wholesaler for domestic and municipal uses in Southern California. MWD imports a portion of its water supplies from Northern California through the State Water Project's California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the Los Angeles Aqueducts and local groundwater. As of June 30, 2017, LADWP has a preferential right to purchase 18.51 percent of MWD's total water supply.[54]

The Sustainable City pLAn, discussed above, calls for a reduction in purchased imported water by 50 percent by 2025 from the FY 2013/14 level, which was approximately 441,870 acre-feet.[55] L.A.'s Green New Deal also reaffirms this initiative.[56] To meet these targets, LADWP plans to increase conservation, enhance the ability for groundwater pumping through increased stormwater capture projects and groundwater replenishment with highly treated recycled water, as well as remediation of contaminated groundwater

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[52] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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

[54] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[55] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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

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

Fiscal Year (July–June)	San Fernando Basin	Sylmar Basin	Central Basin
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
2019–2020[a]	90,000	4,170	18,500
2024–2025[a]	88,000	4,170	18,500
2029–2030[a]	84,000	4,170	18,500
2034–2035[a]	92,000	4,170	18,500
2039–2040[a]	92,000	3,570	18,500

Units are in acre-feet.

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

Source: LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.

supplies in the San Fernando Basin. LADWP also plans to increase recycled water use for non-potable purposes. With these initiatives and under average hydrologic conditions, LADWP's 2015 UWMP projects MWD purchases to be approximately 65,930 AFY in 2025.[57]

Through continued and additional local supply development and conservation savings, LADWP's reliance on MWD water supplies may be reduced significantly from the five-year average from FY 2010/11 through 2014/15 of 57 percent of total demand to 11 percent under average weather conditions and to 44 percent under single-dry year conditions by fiscal year 2040.[58] As indicated in Table IV.I.1-2, LADWP received approximately 214,940 acre-feet of water from MWD in 2018, which was an increase from the previous year. Summaries of MWD's individual supplies, along with each supply's challenges and specific responsive actions taken by MWD, are presented below.

(i) State Water Project

MWD imports water from the State Water Project, owned by the State of California and operated by the DWR. The State Water Project is a water storage and delivery system

[57] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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

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

MWD is one of the 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 19 million), the share of the State Water Project that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 49 percent for 2018).[59]

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.[60] However, due to water quality and supply reliability challenges and conflicts associated with variable hydrology and environmental standards that limit pumping operations, State Water Project deliveries have varied in the most critically dry years. Contractual amounts were 5 percent in 2014 and 20 percent in 2015.[61] For 2016, the DWR had provided an estimated an initial allocation of 10 percent but increased the allocation to 60 percent by April, primarily due to changes in hydrologic conditions.[62] Allocation levels were also 60 percent in January 2017 and increased to 85 percent in April 2017.[63] In 2018, however, DWR allocation levels were reduced to 20 percent in January and 35 percent in May.[64] For the 2019 calendar year, DWR allocation levels were further reduced to 15 percent in January, but levels were subsequently increased to 35 percent in February and 75 percent in June.[65] In May 2020, DWR adjusted the allocation to 20 percent.[66]

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[59] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019, Appendix F.*

[60] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019, Appendix F.*

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

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

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

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

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

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

For the 2021 calendar year, DWR allocated 10 percent to SWP contractors consistent with long-term water supply contracts and public policy.[67] DWR approval of allocation levels is also based on precipitation, runoff, and water conditions. Other considerations include the existing storage in State Water Project conservation reservoirs, State Water Project operational constraints (e.g., conditions of the 2019 Biological Opinions for federally listed species), and 2021 contractor demands. Furthermore, DWR may revise the allocation and subsequent allocations if warranted by the year's developing hydrologic and water supply conditions.[68]

Challenges to State Water Project Supply

Litigation and various regulations have created challenges for the State Water Project. In particular, the listing of several fish species in the Delta as threatened or endangered under the federal and/or California Endangered Species Acts (ESA/CESA) has constrained State Water Project operations and created more uncertainty in State Water Project supply reliability. Under direction by Governor Gavin Newsom, DWR is beginning an environmental review and planning process for a single tunnel project to address delta conveyance.[69]

In addition, as discussed in DWR's Bulletin 132-17, Management of the California State Water Project published in January 2019 (which reports on State Water Project planning, construction, finance, management, and operations during calendar year 2016), demands for State Water Project water are expected to increase and change as California's population continues to grow and as the effects of climate change impact the State's water resources. Increasingly, issues such as escalating costs, environmental concerns, and increased non-State Water Project demand for limited water supplies have become important factors affecting the planning and construction of new facilities.[70]

(ii) Colorado River Aqueduct

MWD owns and operates the Colorado River Aqueduct, which has delivered water from the Colorado River to Southern California since 1942. The Colorado River currently supplies approximately 17 percent of Southern California's water needs, and on average

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[67] *California Department of Water Resources, Notice to State Water Project Contractors, Number 20-06, 2021 State Water Project Initial Allocation—10 Percent.*

[68] *CA DWR, Notice to State Water Project Contractors, No. 19-10.*

[69] *CA DWR, State Withdraws WaterFix Approvals, Initiates Planning and Permitting for a Smaller Single Tunnel, published May 2, 2019, https://water.ca.gov/News/News-Releases/2019/May/State-Withdraws-WaterFix-Approvals, accessed January 4, 2021.*

[70] *CA DWR, Bulletin 132-17, Management of the California State Water Project, January 2019.*

makes up about 15 percent of LADWP's purchases from MWD.[71] MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California, and Nevada.[72] In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada. Since 2003, due to increased consumption, no such unused apportioned water has been available to California.

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.[73]

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.[74] The Colorado River Basin also has experienced a prolonged drought, with runoff in 2012 being among the four driest in history.[75] During these drought conditions, Colorado River system storage decreased to 50 percent of capacity.[76] In response, the federal government, states and urban and agricultural water districts that depend on the Colorado River worked together toward a solution. Their efforts resulted in the adoption and enactment of the Drought Contingency Plan in 2019. The Drought Contingency Plan is a collection of agreements within and among the seven western states in the Colorado River Basin to boost reservoir storage levels in Lake Mead and Lake Powell and prevent the reservoirs from reaching critically low levels.[77]

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[71] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[72] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[73] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

[74] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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

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

[77] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

Federal and state environmental laws protecting fish species and other wildlife species also have the potential to affect Colorado River operations. A number of species that are either endangered or threatened are present in the Lower Colorado River. To address this issue, a state/federal/tribal/private regional partnership comprised of water, hydroelectric power, and wildlife management agencies in Arizona, California, and Nevada developed the Lower Colorado River Multi-Species Conservation Program. The program allows MWD to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The Lower Colorado River Multi-Species Conservation Program also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by MWD and other agencies.[78]

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.[79] 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.[80] In addition, in August 2004, MWD and the Palo Verde Irrigation District signed an agreement for a Land Management, Crop Rotation and Water Supply Program, which provides up to 133,000 acre-feet of water to be available to MWD in certain years. Furthermore, in May 2008, MWD joined the Central Arizona Water Conservation District and the Southern Nevada Water Authority in funding the Warren H. Brock Reservoir, which conserves approximately 70,000 AFY of water. MWD is also participating in numerous pilot programs to augment its water supplies. Other agreements and guidelines that continue to affect the management of water supplies from the Colorado River include the Quantification Settlement Agreement, executed in October 2003, and the Transfer Agreement executed in 1998. Additional guidelines and programs that influence management of the Colorado River water supplies include the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, the Intentionally Created Surplus Program, and the Quagga Mussel Control Program.

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[78] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019, Appendix F.*

[79] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019, Appendix F.*

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

(iii) Additional MWD Actions to Address Supply

To improve water supply reliability for the entire Southern California region, MWD has also been pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts, and individuals. Programs include the Arvin-Edison Storage Program; the Semitropic Storage Program; the San Bernardino Storage Program; the San Gabriel Valley MWD Exchange Program; the Antelope Valley–East Kern Water Agency Exchange and Storage Program; the Kern-Delta Water District Storage Program; the Mojave Storage Program; and the Central Valley Transfer Programs.[81]

In addition, MWD continues to develop plans and make efforts to provide additional water supply reliability for the entire Southern California region. LADWP coordinates closely with MWD to ensure implementation of these water resource development plans. As discussed above, MWD's long-term plans to meet its member agencies' reliability needs include improvements to the State Water Project, conjunctive management efforts on the Colorado River, water transfer programs and outdoor conservation measures, and development of additional local resources, such as recycling brackish water desalination and seawater desalination.[82]

Additionally, MWD has more than 5 million acre-feet of storage capacity of available reservoirs and banking/transfer programs, with approximately 2.46 million acre-feet of water in Water Surplus Drought Management storage and an additional 626,000 acre-feet in emergency storage as of January 1, 2018.[83] With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD was able to add storage in 2018 and began 2019 with approximately 2.5 million acre-feet of water in its dry-year storage portfolio. As described in the MWD's 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under average-year, single dry-year, and multiple dry-year hydrologic conditions.

(d) Precipitation Conditions

During the 2018 water year (i.e., October 1, 2017, through September 30, 2018), California experienced dry conditions statewide, with nearly all the state experiencing below precipitation and much of Southern California receiving half or less of its average

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

82 *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

83 *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

annual precipitation. The 2018 water year followed California's second-wettest year of record as measured by statewide runoff, ending a historic five-year drought.[84]

The 2019 water year (i.e., October 1, 2018, to September 30, 2019) ended with significantly more water in storage than the previous year due to above-average snow and precipitation.[85] According to the National Drought Mitigation Center, as of November 5, 2019, approximately 82.3 percent of the California was not experiencing drought conditions, while 15.68 percent was abnormally dry, and about 2.06 percent was experiencing moderate drought.[86] This indicates a shift from the previous year on November 6, 2018, when approximately 48.1 percent of the State was abnormally dry, 33.57 percent was experiencing moderate drought, 15.96 percent was experiencing severe drought, and 2.39 percent was experiencing extreme drought.[87]

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

(e) Climate Change

As discussed in the LADWP's 2015 UWMP, generally speaking, any water supplies that are dependent on natural hydrology are vulnerable to climate change, especially if the water source originates from mountain snowpack. For LADWP, the most vulnerable water sources subject to climate change impacts are imported water supplies from MWD and the Los Angeles Aqueducts, though local sources can also expect to see some changes in the future. In addition to water supply impacts, changes in local temperature and precipitation are expected to alter water demand patterns. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future research for the potential impacts of climate change on its water resources.[88]

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[84] *CA DWR, Water Year 2018: Hot and Dry Conditions Return, September 2018.*

[85] *CA DWR, Water Year 2020 Begins with Robust Reservoir Storage, October 1, 2019, https://water.ca.gov/News/News-Releases/2019/October-19/Water-Year-2020-Begins-with-Robust-Reservoir-Storage, accessed January 4, 2021.*

[86] *United States Drought Monitor, State Drought Monitor, California, November 5, 2019, https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA, accessed November 11, 2019.*

[87] *United States Drought Monitor, State Drought Monitor, California, November 5, 2019, https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA, accessed November 11, 2019.*

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

MWD and DWR also continue to study climate change and address the implications of climate change on water supplies. MWD has established a technical process to identify key vulnerabilities from various sources, including climate change, in order to provide comprehensive analyses within its IRP. In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning for the future.[89] As mentioned above, with updates published every five years, the most recent California Water Plan Update 2018 builds on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability.[90]

DWR has also been in the process of completing its Climate Action Plan since 2012. Phases I and II of the Climate Action Plan include the guidance of DWR in reducing greenhouse gas emission and the expertise of a climate change technical advisory group formed in 2012, respectively. Phase III of the Climate Action Plan includes a vulnerability assessment, which was completed in February 2019 and identifies DWR assets and activities that have vulnerabilities related climate change and the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply. Phase III also includes an adaptation plan, which prioritizes DWR resiliency efforts such as infrastructure improvements, enhanced maintenance and operation procedures, revised health and safety procedures, and improved habitat management.[91] As such, climate change and its impacts on water supplies are key factors of new water supply regulations and urban water management plans.

(f) Water Conservation and Recycling

LADWP's 2015 UWMP details the City's efforts to promote the efficient use and management of its water resources and provides the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for the City of Los Angeles in the next 25 years. To meet multiple water conservation goals established in ED 5, the Sustainable City pLAn, and the Water Conservation Act of 2009, LADWP's 2015 UWMP aims to reduce per capita potable water use by 22.5 percent by 2025 and by 25 percent by 2035, based on Fiscal Year 2013-2014 levels.[92] L.A.'s Green New Deal adds an additional target for the City, following the reduction of potable water use per

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

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

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

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

capita by 25 percent by 2035, to maintain or reduce 2035 per capita water use through 2050.[93] The City intends to build upon the success of Save the Drop and develop additional water conservation campaigns; continue benchmarking customer use and recognizing innovative water reduction initiatives; improve data gathering to identify program effectiveness; expand top performing conservation incentive programs for, landscape transformation, washing machines, etc.; and expand sub-metering and evaluate smart water meter technologies.

Furthermore, based on LADWP's 2015 UWMP, recycled water use is projected to reach 59,000 AFY by 2025 and further increase to 75,400 AFY by 2040.[94] L.A.'s Green New Deal also sets a goal to recycle 100 percent of all wastewater for beneficial use by 2035.[95] To achieve its goals, the LADWP has initiated water recycling projects in the City and is pursuing strategies related to groundwater replenishment and the non-potable reuse of water by irrigation and industrial customers.[96] Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the L.A. River.[97]

(2) Water Demand

(a) City 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).[98] Table IV.I.1-4 on

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

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

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

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

[97] *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAn, 2019, p. 47.*

[98] *As discussed above, the LADWP 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 and extrapolations were conducted to determine current (2020) and future (2040) estimates. As shown below, 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.*

(Footnote continued on next page)

page IV.I.1-35 shows the projected water demand from the year 2020 through 2040 for the City. As shown in Table IV.I.1-4 on page IV.I.1-35, in 2040 during average year hydrological conditions, the City's water demand is forecasted to be approximately 675,700 AFY. LADWP's 2015 UWMP concluded that there are adequate water supplies to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2040.[99,100]

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the Project Site is currently developed with a surface parking lot and a parking structure. Based on the Utility Report, there is no indication on the record drawings as to the location or existence of water service.

(3) Water Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 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.[101] 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 the LADWP's water service area.[102]

Domestic water service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Utility Report, which is included as Appendix I of this Draft EIR, there is an existing 8-inch diameter water main within the Hope Street right-of-way, an existing 12-inch diameter water main within the 8th Street right-of-way, and an existing 12-inch water main in the Grand Avenue right-of-way.

	Population		*Housing*		*Employment*	
	2020	*2040*	*2020*	*2040*	*2020*	*2040*
2012–2035 RTP/SCS	*3,991,700*	*4,430,233*	*1,455,700*	*1,683,567*	*1,817,700*	*1,936,500*
2016–2040 RTP/SCS	*4,063,757*	*4,609,400*	*1,429,729*	*1,690,300*	*1,831,457*	*2,169,100*
2020–2045 RTP/SCS	*4,049,317*	*4,626,903*	*1,425,759*	*1,719,552*	*1,887,969*	*2,086,314*

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

[100] *LADWP, Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019.*

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

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

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

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

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

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

- Northwest corner of 8th Street and Hope Street;
- Northeast corner of 8th Street and Hope Street;
- Southeast corner of 8th Street and Hope Street;
- Southwest corner of 8th Street and Grand Avenue;
- Southeast corner of 8th Street and Grand Avenue; and
- Northeast corner of 8th Street and Grand Avenue.

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 storm water drainage, electric power, natural gas, or telecommunications facilities, the

construction or relocation of which could cause significant environmental effects.[103]

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 used Appendix G as the thresholds of significance. The factors and considerations identified below from the *L.A. CEQA Thresholds Guide* were 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 LASAN wastewater generation rates to the Project's proposed land uses. The WSA also accounts for the implementation of code-required water conservation features and additional water conservation commitments made by the Applicant. In accordance with SB 610, the resulting 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

[103] *Refer to the Project's Initial Study (Appendix A of this Draft EIR) for a discussion of wastewater, stormwater, and telecommunications facilities impacts; and Section IV.I.2, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure.*

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 I of this Draft EIR. The Utility Report includes a comparison of the estimated 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 Project will implement the following project design feature related to water supply:

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

- High-efficiency toilets with flush volume of 1.1 gallons of water per flush or less throughout, or less in amenity and community spaces.
- Showerheads with a flow rate of 1.5 gallons per minute, or less in amenity and community spaces.
- ENERGY STAR–Certified Residential Clothes Washers—Front Loading with Integrated Water Factor of 2.8 or less and capacity of 5.6 cubic feet or less, or Top Loading with Integrated Water Factor of 3.2 or less and capacity of 5.7 cubic feet or less.
- ENERGY STAR–Certified Residential Dishwashers—Standard 3.2 gallons per cycle or less, or Compact 1.96 gallons per cycle or less.
- Water-Saving Pool Filter.
- Pool/Spa recirculating filtration equipment.
- Pool splash troughs around the perimeter that drain back into the pool.
- Leak Detection System for swimming pools and Jacuzzi, including installation of a meter on the pool make-up line.
- Drip/Subsurface Irrigation (Micro-Irrigation) where appropriate.
- Proper Hydro-zoning/Zoned Irrigation (grouping plans with similar water requirements together.

d. Analysis of Project Impacts

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?[104]

(1) Impact Analysis

(a) Construction

As discussed in the Utility Report included as Appendix I of this Draft EIR, the Project would require the construction of new on-site water distribution lines to serve the new buildings. Construction activities for the Project would also result in a temporary demand for water associated with dust control, excavation/export, soil compaction and earthwork, equipment and site cleanup, and other short-term related activities. As there is capacity in the existing water infrastructure as shown in the Service Advisory Report (SAR) for Project operation (Exhibit 2 of the Utility Report), it is anticipated that the existing water infrastructure would meet the limited and temporary water demand associated with construction activities. As such, water needed during construction would not result in the construction of new or expanded water distribution facilities, and the existing off-site LADWP water infrastructure system would be adequate to provide for the water flow necessary to serve the Project during construction.

Construction impacts associated with the installation of the new on-site water distribution lines and potential relocation of existing lines would primarily involve trenching in order to place the lines below surface. Installation of new water infrastructure will be limited to on-site water distribution, and minor off-site work associated with connections to the public main. No upgrades to the public water mains are anticipated. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depths of all lines to avoid water lines and disruption of water service. LADWP would review and approve all appropriate connection requirements, pipe depths, and connection location(s). The limited off-site connection activities could also temporarily affect access in adjacent rights-of-way. However, as discussed Section IV.G, Transportation, of this Draft EIR, pursuant to Project Design Feature TR-PDF-1, a Construction Management Plan and Worksite Traffic Control Plan would be implemented to ensure that adequate and safe

[104] *Refer to the Project's Initial Study (Appendix A of this Draft EIR) for a discussion of wastewater, stormwater, and telecommunications facilities impacts; and Section IV.I.2, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR for a discussion of electric power and natural gas infrastructure.*

access remains available within and near the Project Site during construction activities. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure emergency access to the Project Site and traffic flow is maintained on adjacent rights-of-way.

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

(b) Operation

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

Fire flow to the proposed Project buildings would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3.1, which establishes fire flow standards by development type. As previously described, the Project falls within the Industrial and Commercial category, which has a required fire flow of 6,000 gpm to 9,000 gpm from four adjacent hydrants flowing simultaneously with a residual pressure of 20 psi (i.e., 20 psi remaining in the system while the 6,000 gpm to 9,000 gpm flow is occurring). This translates to a required flow of 1,500 gpm for each hydrant. As discussed above, there are six existing fire hydrants adjacent to the Project Site. As part of the Utility Report, an Information of Fire Flow Availability Request (IFFAR) was submitted to LADWP to determine available fire hydrant flow from the six existing fire hydrants. Based on the completed IFFAR (see Exhibit 1 of the Utility Report), the six existing fire hydrants flowing simultaneously are able to deliver combined flows of 9,000 gpm, which would meet the required range of 6,000 gpm to 9,000 gpm, at residual pressures ranging from 66 to 67 psi. Therefore, based on the IFFAR, there is adequate fire flow available for the Project to comply with the fire flow requirements identified for the Project in accordance with LAMC Section 57.507.3.1. Furthermore, as provided in Section IV.F.1, Public Services—Fire Protection, of this Draft EIR, the Project would also incorporate a fire sprinkler suppression system, which would be subject to LAFD review and approval during the design and permitting of the Project and would reduce public hydrant demands.

In addition, a SAR was submitted to LADWP to determine if the existing domestic water infrastructure would meet the Project's demands for fire and domestic water use. The SAR included as Exhibit 2 of the Utility Report (Appendix I of this Draft EIR) was submitted for the water main in 8th Street and approved for an estimated fire water demand of 1,000 gpm and an estimated domestic demand of 1,300 gpm. As shown by the SAR, LADWP has approved both services and confirmed that sufficient capacity is available for the Project. The Project proposes to connect to the existing water mains with laterals that would be adequately sized to simultaneously accommodate fire demand and domestic demand. In addition, the services would include backflow prevention devices and separate meters in accordance with City requirements.

Based on the above, the Project would not exceed the available capacity of the existing water distribution infrastructure that would serve the Project Site. Accordingly, the Project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Therefore, the Project's operational impacts to water infrastructure would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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

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

(1) Impact Analysis

(a) Construction

Construction activities for the Project would result in a temporary demand for water associated with soil compaction and earthwork, dust control, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment, testing of water connections and flushing, and other short-term related activities. These activities would occur incrementally throughout construction of the Project (from the start of construction to project buildout). The amount of water used during construction would vary

depending on soil conditions, weather, and the specific activities being performed. However, given the temporary nature of construction activities and the short-term and intermittent water use during construction of the Project, the anticipated water demand during construction would be less than the 89,638 gpd of the Project's net new water consumption at buildout, as provided in Table IV.I.1-5 on page IV.I.1-42.[105] As discussed in LADWP's 2015 UWMP, the projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2015 through 2040, in addition to the existing and planned future water demands within LADWP's service area through the year 2040. Therefore, the Project's temporary and intermittent demand for water during construction could be similarly met by the City's available supplies during each year of Project construction.

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

(b) Operation

As described in Section II, Project Description, of this Draft EIR, the Project would construct 580 residential units and up to 7,499 square feet of commercial/retail/restaurant uses. Development of the Project would result in an increase in long-term water demand for consumption, operational uses, maintenance, and other activities on the Project Site.

Based on the size of these land uses and the Project's resulting estimated water demand, the Project is subject to the requirements of Senate Bill 610 for preparation of a WSA, as described above in Section 2.a.(1)(c). Specifically, the Project would include more than 500 dwelling units. Therefore, the Project is subject to the requirements of Senate Bill 610 for preparation of a water supply assessment. Accordingly, a WSA was prepared for the Project by LADWP and is provided in Appendix I of this Draft EIR.

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[105] *As a note, the Project's WSA had analyzed two development options. The School Option proposed 547 residential dwelling units, up to 7,499 square feet of commercial/retail/restaurant space, and 37,216 square feet dedicated to a charter school. The No School Option proposed 580 residential dwelling units and up to 7,499 square feet of commercial/retail/restaurant space. Following the LADWP Board's approval of the WSA on November 19, 2019, the Project now only proposes the latter option with minor changes to parking and open space. LADWP recalculated the Project's water demand based on the updated scope and concluded that no additional water supply assessment is required for the project because the project's revisions do not meet one or more of the following conditions of the California Water Code Section 10910(h). Refer to emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR).*

Table IV.I.1-5
Estimated Project Water Demand

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)
Existing			
Surface Parking Lot and Structure[b]	36,178 sf	—	0
Total Existing			*0*
Proposed[c]			
Residential Apartment: Studio	108 du	75 gpd/du	8,100
Residential Apartment: 1-bedroom	258 du	110 gpd/du	28,380
Residential Apartment: 1-bedroom	66 du	150 gpd/du	9,900
Residential Apartment: 2-bedroom	143 du	150 gpd/du	21,450
Residential Apartment: 3-bedroom	5 du	190 gpd/du	950
Base Demand Adjustment (Residential)[d]	—	—	7,698
Commercial/Retail/Restaurant[e]	300 seats	30 gpd/seat	9,000
Pool	1,625 sf	—	153
Spa 1	150 sf	—	14
Spa 2	150 sf	—	14
Dog Run and Amenities	2,300 sf	0.10 gpd/sf	230
Pool and Fitness Deck[f]	16,685 sf	0.20 gpd/sf	3,337
Fitness and Amenities[f]	1,208 sf	0.20 gpd/sf	242
Co-work Amenities[g]	10,450 sf	0.12 gpd/sf	1,254
Meeting Room/Maker Space[g]	731 sf	0.12 gpd/sf	88
Amenity Deck[g]	6,766 sf	0.12 gpd/sf	812
Wellness Suite/Fitness[f]	1,253 sf	0.20 gpd/sf	251
Landscaping[h]	8,896 sf	—	831
Covered Parking[i]	251,962 sf	—	166
Cooling Tower[j]	1,400 tons	36 gpd/tons	49,896
Total Proposed by Project			*142,766*
Required Savings[k]			
Residential Units	—	—	(17,000)
Other Uses	—	—	(981)
Landscaping	—	—	(460)
Cooling Tower	—	—	(30,851)
Total Savings			*(49,292)*
Additional Conservation[l]			
Total Conservation Commitments	—	—	*(3,836)*
Project Net Water Demand (Proposed – Required Savings – Additional Conservation – Existing to be Removed)			**89,638**

du = dwelling units

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

Land Use	Units	Water Demand Rate (gpd/unit)[a]	Water Demand (gpd)

gpd = gallons per day

sf = square feet

— = Information is not applicable.

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

[a] *Based on 100 percent of sewage generation rates provided by LASAN (effective April 6, 2012).*

[b] *Based on LADWP billing data.*

[c] *As a note, the Project's WSA analyzed two development options. The School Option proposed 547 residential dwelling units, up to 7,499 square feet of commercial/retail/restaurant space, and 37,216 square feet dedicated to a charter school. The No School Option proposed 580 residential dwelling units and up to 7,499 square feet of commercial/retail/restaurant space. Following the LADWP Board's approval of the WSA on November 19, 2019, the Project now only proposes the latter option with minor changes to parking and open space. LADWP recalculated the Project's water demand based on the updated scope and concluded that no additional water supply assessment is required for the project because the project's revisions do not meet one or more of the following conditions of the California Water Code Section 10910(h). Refer to emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR).*

[d] *Based Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of LASAN sewage generation rates.*

[e] *Conservatively assumes only restaurant uses and that 1 seat = 25 square feet.*

[f] *The LASAN rate for "Gymnasium" is applied.*

[g] *The LASAN rate for "Conference Room" is applied.*

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

[i] *The LASAN rate for "Auto Parking" is applied and based on the assumption that cleaning occurs 12 times per year.*

[j] *Based on the assumption that operation would be 24 hours per day, 7 days per week, and at a 55% chiller capacity.*

[k] *The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2013 California Plumbing Code, 2013 California Green Building Code, 2014 Los Angeles Plumbing Code, and 2015 Los Angeles Green Building Code.*

[l] *Water conservation due to additional conservation commitments as agreed to by the Applicant. See Table II of the WSA.*

Source: LADWP, Water Supply Assessment for the 8th, Grand and Hope Project, November 19, 2019 (Appendix I of this Draft EIR); Emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR; Eyestone Environmental, 2021.

Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply is based on a calculation of the Project's water demand by applying the sewage generation rates established by LASAN, which also serve to estimate water demand. As shown in Table IV.I.1-5, it is estimated that the Project would generate a gross average daily water demand of approximately 142,766 gpd. After the removal of

existing uses, compliance with City Ordinance No. 184,248 and various water conservation code requirements, and with implementation of Project Design Feature WAT-PDF-1 (additional water conservation measures beyond those required by the LAMC), the Project would result in a net average daily water demand of approximately 89,638 gpd, or approximately 100.39 AFY.[106,107]

The 2015 UWMP utilized SCAG's 2012–2035 RTP/SCS data that provide for more reliable water demand forecasts, taking into account changes in population, housing units and employment. The Project would generate approximately 1,398 new residents,[108,109] 580 new households, and 30 new employees.[110] The Project would be consistent with growth projections anticipated by the SCAG and the demographic projection for the City in both the 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.[111] Specifically, based on SCAG's projections for the City of Los Angeles Subregion between 2019 and 2025 (the Project's buildout year), the estimated 1,398 residents generated by the Project would

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[106] *As a note, the Project's WSA had analyzed two development options. The School Option proposed 547 residential dwelling units, up to 7,499 square feet of commercial/retail/restaurant space, and 37,216 square feet dedicated to a charter school. The No School Option proposed 580 residential dwelling units and up to 7,499 square feet of commercial/retail/restaurant space. Following the LADWP Board's approval of the WSA on November 19, 2019, the Project now only proposes the latter option with minor changes to parking and open space. LADWP recalculated the Project's water demand based on the updated scope and concluded that no additional water supply assessment is required for the project because the project's revisions do not meet one or more of the following conditions of the California Water Code Section 10910(h). Refer to emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR).*

[107] *1 million gpd = approximately 1,120 AFY.*

[108] *Based on a 2.41 persons per household rate for multi-family units based on the 2018 American Community Survey 5-Year Average Estimates. Source: Jack Tsao, Data Analyst II, Los Angeles Department of City Planning, June 12, 2020.*

[109] *As a note, the Initial Study for the 8th, Grand and Hope Project (Appendix A of this Draft EIR) applied an estimated rate of 2.43 persons per multi-family unit, which was the available rate provided by the City of Los Angeles at the time of publication of the Initial Study. This Draft EIR now utilizes the updated rate of 2.41 persons per multi-family unit provided by the City of Los Angeles.*

[110] *Based on City of Los Angeles VMT Calculator Documentation, Table 1: Land Use and Trip Generation Base Assumptions. Based on the employee generation rate of 0.004 employee per square foot for "High-Turnover Sit-Down Restaurant" land use, the 7,499 square feet of restaurant uses would generate approximately 30 employees.*

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

represent approximately 1.1 percent of the projected population growth, the estimated 580 households would represent approximately 0.84 percent of the projected household growth, and the estimated 30 employees would represent approximately 0.08 percent of the projected employment growth.[112] Therefore, the Project would be consistent with the demographic projections for the City from the 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.[113]

The Project's water demand of 89,638 gpd has been accounted for in the City's overall total demand projections set forth in LADWP's 2015 UWMP. Specifically, the 2015 LADWP UWMP forecasts adequate water supplies to meet all projected water demands in the City through the year 2040 during average years, single-dry years, and multiple-dry years. Therefore, as concluded by LADWP in the Project's WSA, anticipated water demand for the Project fall within LADWP's 2015 UWMP's projected water supplies for normal, single-dry, and multiple-dry years through the year 2040 and is within the LADWP 2015 UWMP's 25-year water demand growth projection. LADWP approved the WSA based on the fact that the Project's water demand falls within the LADWP 2015 UWMP's projected increase in citywide water demands, while anticipating multi-dry year water supply conditions occurring at the same time. LADWP findings conclude that it will be able to meet the proposed water demand of the Project as well as existing and planned future water demands of its service area.[114]

As outlined in its 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 LADWP UWMP takes into account the realities of climate change and the concerns of drought and dry weather and notes that the City will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2015 LADWP UWMP also furthers the goals of the

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

Population growth between 2019 (3,973,267 persons) and 2025 (4,101,333 persons) is approximately 128,067 persons. The Project's 1,398 residents would represent approximately 1.1 percent of this growth [(1,398 ÷ 128,067) × 100 = 1.1].

Household growth between 2019 (1,443,550 households) and 2025 (1,512,667 households) is approximately 69,117 households. The Project's 580 households would represent approximately 0.84 percent of this growth [(580 ÷ 69,117) × 100 = 0.84].

Employment growth between 2019 (1,810,825 employees) and 2025 (1,847,400 employees) is approximately 36,575 employees. The Project's 30 employees would represent approximately 0.08 percent of this growth [(30 ÷ 36,575) × 100 = 0.08].

[113] *LADWP, Water Supply Assessment for the 8th, Grand and Hope Project, November 19, 2019.*

[114] *LADWP, Water Supply Assessment for the 8th, Grand and Hope Project, November 19, 2019; Emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR; Eyestone Environmental, 2021.*

City's ED 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.[115] By focusing on demand reduction and alternative sources of water supplies, LADWP will further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages. Additionally, as provided in L.A.'s Green New Deal, water conservation and recycling will play an increasing role in meeting future water demands in the City.

Based on the above, LADWP would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. 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 related to water supply were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

The Project, in conjunction with growth forecasted in the City through 2025 (i.e., the Project's buildout year), would increase the demand for water, thus potentially resulting in cumulative impacts on water supplies and water infrastructure. Cumulative growth in the Project Site vicinity through 2025 includes specific known development projects as well as general ambient growth projected to occur. As discussed in Section III, Environmental Setting, of this Draft EIR, the projected growth reflected by Related Project Nos. 1 through 74 is a conservative assumption, as some of the related projects may not be built out by 2025, 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 74 are fully built out by 2025, unless otherwise noted.

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

(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 ensure that the existing public infrastructure would be adequate to meet the domestic and fire water demands of each project, and individual projects would be subject to LADWP and City requirements regarding infrastructure improvements needed to meet respective water demands, flow and pressure requirements, etc. As discussed above, all six existing fire hydrants that serve the Project area meet the 20-psi requirement and the combined capacity of 6,000 to 9,000 gpm fire flow requirement. In addition, LADWP, the Los Angeles Department of Public Works, and the LAFD would conduct on-going evaluations of its infrastructure to ensure facilities are adequate. Furthermore, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement its $6.3 billion five-year water system capital improvement plan, which includes replacement of distribution mainlines, trunk lines, large valves, and water meters, as well as ongoing maintenance and rehabilitation of facilities such as pump stations, pressure regulators, and in-city reservoirs and tanks.[116] Furthermore, in accordance with City requirements, prior to ground disturbance, the related projects would be required to coordinate with LADWP to identify the locations and depths of all lines, and LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service associated with the related projects. LADWP would also review and require approval of appropriate connection requirements, pipe depths, and connection location(s) associated with the related projects. **Therefore, cumulative impacts on the water infrastructure system would be less than significant**.

(b) Water Supply

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

As identified in Section III, Environmental Setting, of this Draft EIR, there are 74 related projects located in the Project vicinity. The estimated water demand of the

[116] *LADWP, 2018-19 Water Infrastructure Plan.*

related projects is shown in Table IV.I.1-6 on page IV.I.1-49. As shown therein, the related projects would generate a total average water demand of approximately 6,239,115 gpd (or approximately 6,987.81 AFY). The estimate of the related projects' water demand is conservative as it does not account for water conservation measures such as the mandatory indoor water reduction rates required by the City of Los Angeles Green Building Code. The related projects' water demand and the Project's water demand of 89,638 gpd (approximately 100.39 AFY) would result in a cumulative increase in average daily water use of approximately 6,328,753 gpd (approximately 7,088.20 AFY), or approximately 1.4 percent of LADWP's water supply in 2018 (511,517 AFY as shown in Table IV.I.1-2 on page IV.I.1-22).

As previously stated, based on water demand projections through 2040 in its 2015 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2040, as well as the intervening years (i.e., 2025, the Project's buildout year) based on demographic growth projections in SCAG's 2012–2035 RTP/SCS, which includes the Project and related projects.

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

Overall, as discussed above, the 2015 LADWP UWMP demonstrates that the City will meet all new water demands from projected population growth, through a combination of water conservation and water recycling. LADWP's 2015 UWMP specifically outlined the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP's 2015 UWMP also incorporates the goals of ED 5 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.[117] To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge.[118] Furthermore, LADWP will continue to update its UWMP every five years to ensure that sufficient water supply continues to be available.

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

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

Table IV.I.1-6
Cumulative Water Demand

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
1	1247 S. Grand Ave.	Apartments	115 du	190 gpd/du	21,850
		Commercial	4,610 sf	0.05 gpd/sf	231
2	820 S. Olive St.	Apartments	589 du	190 gpd/du	111,910
		Retail	4,500 sf	0.025 gpd/sf	113
3	DTLA South Park—Site 1 1120 S. Grand Ave.	High-rise Apartments	536 du	190 gpd/du	101,840
		Commercial/Retail	14,061 sf	0.05 gpd/sf	703
4	Mixed-Use (Herald Examiner) 146 W. 11th St. (11th St./Broadway)	Apartments	391 du	190 gpd/du	74,290
		Office	39,725 sf	0.12 gpd/sf	4,767
		Retail	49,000 sf	0.025 gpd/sf	1,225
5	11th & Hill Project 1111 S. Hill St.	Condominium	528 du	190 gpd/du	100,320
		High-Turnover Restaurant (4,568 sf)	183 seats	30 gpd/seat	5,482
		Fast-Food Restaurant (1,523 sf)	61 seats	30 gpd/seat	1,828
6	Park/Fifth Project 427 W. 5th St.	Apartments	615 du	190 gpd/du	116,850
		Commercial	16,968 sf	0.05 gpd/sf	848
7	955 S. Broadway	Apartments	163 du	190 gpd/du	30,970
		Retail	6,406 sf	0.025 gpd/sf	160
8	SB OMEGA 601 S Main St.	High-rise Condo	452 du	190 gpd/du	85,880
		Retail	25,000 sf	0.025 gpd/sf	625
9	920 S. Hill St.	Apartments	239 du	190 gpd/du	45,410
		Condominiums	4 du	190 gpd/du	760
		Commercial	5,671 sf	0.05 gpd/sf	284
10	8th & Figueroa 744 S. Figueroa St.	Apartments	438 du	190 gpd/du	83,220
		Commercial/Retail	3,750 sf	0.05 gpd/sf	188
		Restaurant (3,750 sf)	150 seats	30 gpd/seat	4,500

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
11	1133 Hope St.	Condominiums	208 du	190 gpd/du	39,520
		Restaurant (5,029 sf)	201 seats	30 gpd/seat	6,035
12	433 S. Main St.	Condominiums	196 du	190 gpd/du	37,240
		Retail	5,300 sf	0.025 gpd/sf	133
		Restaurant (900 sf)	36 sf	30 gpd/seat	1,080
13	Spring St. Hotel 633 S. Spring St.	Hotel	176 rm	120 gpd/rm	21,120
		Conference Space	1,200 sf	0.12 gpd/sf	144
		Restaurant (8,400 sf)	336 sf	30 gpd/seat	10,080
		Bar	5,290 sf	0.72 gpd/sf	3,809
14	928 S. Broadway	Apartments	662 du	190 gpd/du	125,780
		Retail	47,000 sf	0.025 gpd/sf	1,175
		Live/Work[c] (11,000 sf)	11 du	190 gpd/du	2,090
		Office	34,824 sf	0.12 gpd/sf	4,179
15	1100 S. Main St.	Apartments	379 du	190 gpd/du	72,010
		Other[d]	25,810 sf	0.65 gpd/sf	16,777
16	400 S. Broadway Mixed-Use Project 400-416 Broadway	Apartments	450 du	190 gpd/du	85,500
		Retail	7,500 sf	0.025 gpd/sf	188
17	737 S. Spring St.	Apartments	320 du	190 gpd/du	60,800
		Pharmacy	25,000 sf	0.025 gpd/sf	625
18	Foreman and Clark Building 400, 402 W. 7th St.; 701, 715 S. Hill St.	Apartments	165 du	190 gpd/du	31,350
		Bar	11,902 sf	0.72 gpd/sf	8,569
		Restaurant (14,032 sf)	561 seats	30 gpd/seat	16,838
19	649 S. Wall St.	Apartments	55 du	190 gpd/du	10,450
		Clinic	25,000 sf	0.25 gpd/sf	6,250

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
20	732 S. Spring St.	Apartments	400 du	190 gpd/du	76,000
		Pharmacy/Drug Store	15,000 sf	0.025 gpd/sf	375
21	340 S. Hill St.	Apartments	428 du	190 gpd/du	81,320
		Quality Restaurant (2,630 sf)	105 seats	30 gpd/seat	3,156
		Office	2,980 sf	0.12 gpd/sf	358
22	940 S. Hill St.	Apartments	232 du	190 gpd/du	44,080
		Retail	14,000 sf	0.025 gpd/sf	350
23	Apex Phase II 700 W. 9th St.	Condominiums	341 du	190 gpd/du	64,790
		Retail	11,687 sf	0.025 gpd/sf	292
24	Alexan South Broadway 850 S. Hill St.	Apartments	305 du	190 gpd/du	57,950
		Restaurant (3,500 sf)	140 seats	30 gpd/seat	4,200
		Retail	3,499 sf	0.025 gpd/sf	87
25	Grand Residence 1229 S. Grand Ave.	Condominiums	161 du	190 gpd/du	30,590
		Restaurant (3,000 sf)	120 seats	30 gpd/seat	3,600
26	Southern California Flower Market Project 755 S. Wall St.	Apartments	323 du	190 gpd/du	61,370
		Office	64,363 sf	0.12 gpd/sf	7,724
		Retail	4,385 sf	0.025 gpd/sf	110
		Wholesale/Storage	63,785 sf	0.03 gpd/sf	1,914
		Food/Beverage Space (13,420 sf)	537 seats	30 gpd/seat	16,104
		Event Space	10,226 sf	0.35 gpd/seat	3,579
27	Proper Hotel 1106 S. Broadway	Hotel	148 rm	120 gpd/rm	17,760
		Restaurant (17,452 sf)	698 seats	30 gpd/seat	20,942
28	Fashion District Tower 222 E. 7th St., 701 Maple St.	Apartment	452 du	190 gpd/du	85,880
		Retail	6,801 sf	0.025 gpd/sf	170
		Restaurant (6,802 sf)	272 seats	30 gpd/seat	8,162

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
29	5th & Hill Center 333 W. 5th St.	Condominiums	100 du	190 gpd/du	19,000
		Hotel	200 rm	120 gpd/rm	24,000
		Restaurant (27,500 sf)	1,100 seats	30 gpd/seat	33,000
		Meeting Rooms	4,500 sf	0.12 gpd/sf	540
30	845 S. Olive St.	Apartments	208 du	190 gpd/du	39,520
		Retail	810 sf	0.025 gpd/sf	20
		Other[d]	1,620 sf	0.65 gpd/sf	1,053
31	755 S. Los Angeles St.	Retail	16,700 sf	0.025 gpd/sf	418
		Office	60,200 sf	0.12 gpd/sf	7,224
		Restaurant (27,000 sf)	1,080 seats	30 gpd/seat	32,400
32	1000 S. Hill St.	Apartments	700 du	190 gpd/du	133,000
		Retail	7,000 sf	0.025 gpd/sf	175
		Restaurant (8,000 sf)	320 seats	30 gpd/seat	9,600
33	888 S. Hope St.	Apartments	526 du	190 gpd/du	99,940
34	Harris Building Office Conversion 11th St. & Main St.; 110 11th St.	Retail	5,435 sf	0.025 gpd/sf	136
35	Variety Arts Project 940 S. Figueroa St.	Theater	1,942 seats	3 gpd/seat	5,826
		Restaurant (10,056 sf)	402 seats	30 gpd/seat	12,067
		Bar	5,119 sf	0.72 gpd/sf	3,686
36	1201 S. Grand Ave.	Condominium	312 du	190 gpd/du	59,280
		Retail	7,100 sf	0.025 gpd/sf	178
37	Metropolis Mixed-Use 851 and 899 S. Francisco St. (8th St./Francisco St.)	Condominium	698 du	190 gpd/du	132,620
		Retail	65,000 sf	0.025 gpd/sf	1,625
38	1027 W. Wilshire Blvd. (Wilshire St./Paul St.)	Condominium	402 du	190 gpd/du	76,380
		Retail	4,728 sf	0.025 gpd/sf	118

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
39	LASED Entertainment District (Excluding development to date) Figueroa St./11th St.	Residential	1,264 du	190 gpd/du	240,160
		Educational[e] (95,706 sf)	1,007 stu	11 gpd/stu	11,082
		Retail	138,583 sf	0.05 gpd/sf	6,929
		Restaurant (70,000 sf)	2,800 seats	30 gpd/seat	84,000
		Health Club	4,062 sf	0.65 gpd/sf	2,640
		Sport Bar/Night Club	14,409 sf	0.72 gpd/sf	10,374
		Hotel	183 rm	120 gpd/rm	21,960
40	1212 S. Flower St.	Apartments	730 du	190 gpd/du	138,700
		Retail/Restaurant (10,500 sf)	420 seats	30 gpd/seat	12,600
		Office	70,465 sf	0.12 gpd/sf	8,456
41	1150 W. Wilshire Blvd.	Condominiums	140 du	190 gpd/du	26,600
		Restaurant (4,830 sf)	193 seats	30 gpd/seat	5,796
		Retail	4,295 sf	0.025 gpd/sf	107
42	1218 W. Ingraham St.	Apartments	121 du	190 gpd/du	22,990
43	1145 W. 7th St.	Condominiums	241 du	190 gpd/du	45,790
		Commercial	7,291 sf	0.05 gpd/sf	365
44	Sapphire 1111 W. 6th St.	Apartments	369 du	190 gpd/du	70,110
		Retail	18,600 sf	0.025 gpd/sf	465
		Quality Restaurant (2,200 sf)	88 seats	30 gpd/seat	2,640
		Coffee Shop	1,200 sf	0.72 gpd/sf	864
45	675 S. Bixel St.	Apartments	425 du	190 gpd/du	80,750
		Hotel	126 rm	120 gpd/rm	15,120
		Retail	4,874 sf	0.025 gpd/sf	122
46	1235 W. 7th St.	Apartments	306 du	190 gpd/du	58,140
		Retail	5,959 sf	0.025 gpd/sf	149

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
47	LUXE Hotel 1020 S. Figueroa St.	Condominiums	650 du	190 gpd/du	123,500
		Hotel	300 rm	120 gpd/rm	36,000
		Restaurant (40,000 sf)	1,600 seats	30 gpd/seat	48,000
		Retail	40,000 sf	0.025 gpd/sf	1,000
48	945 W. 8th St.	Condominiums	781 du	190 gpd/du	148,390
		Retail	6,700 sf	0.025 gpd/sf	168
49	926 W. James M. Wood Blvd.	Hotel	247 rm	120 gpd/rm	29,640
		Restaurant/Bar (1,821 sf)	73 seats	30 gpd/seat	2,185
50	1045 S. Olive St.	Apartments	794 du	190 gpd/du	150,860
		Restaurant (12,504 sf)	500 seats	30 gpd/seat	15,005
51	1001 W. Olympic Blvd., 1015 W. Olympic Blvd.	Apartments	879 du	190 gpd/du	167,010
		Retail	20,000 sf	0.025 gpd/sf	500
		Restaurant (20,000 sf)	800 seats	30 gpd/seat	24,000
		Hotel	1,000 rm	120 gpd/rm	120,000
52	1018 W. Ingraham St.	Apartments	37 du	190 gpd/du	7,030
		Retail	1,890 sf	0.025 gpd/sf	47
53	Olympic Tower Project 815 W. Olympic Blvd.	Hotel	373 rm	120 gpd/rm	44,760
		Condominiums	374 du	190 gpd/du	71,060
		Retail	65,074 sf	0.025 gpd/sf	1,627
		Conference Center	10,801 sf	0.12 gpd/sf	1,296
		Office	33,498 sf	0.12 gpd/sf	4,020
54	361 S. Spring St.	Hotel	315 rm	120 gpd/rm	37,800
		Meeting Rooms	2,000 sf	0.12 gpd/sf	240

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
55	Figueroa Centre 911 S. Figueroa St.	Condominiums	200 du	190 gpd/du	38,000
		Hotel	220 rm	120 gpd/rm	26,400
		Retail	29,080 sf	0.025 gpd/sf	727
		Restaurant (20,000 sf)	800 seats	30 gpd/seat	24,000
		Office	15,000 sf	0.12 gpd/sf	1,800
		Private School	200 stu	11 gpd/stu	2,200
		Meeting Rooms	48,000 sf	0.12 gpd/sf	5,760
56	124 E. Olympic Blvd.	Hotel	149 rm	120 gpd/rm	17,880
		Other[d]	6,716 sf	0.65 gpd/sf	4,365
57	949 S. Hope St.	Apartments	236 du	190 gpd/du	44,840
		Restaurant (10,010 sf)	400 seats	30 gpd/seat	12,012
58	1138 S. Broadway	Hotel	139 rm	120 gpd/rm	16,680
		Restaurant/Bar	125 seats	30 gpd/seat	3,750
		Rooftop Bar	200 seats	15 gpd/seat	3,000
59	Morrison Hotel 1220 S. Hope St.	Apartments	135 du	190 gpd/du	25,650
		Hotel	450 rm	120 gpd/rm	54,000
		Bar/Lounge	3,060 sf	0.72 gpd/sf	2,203
		Restaurant/Retail (15,891 sf)	636 seats	30 gpd/seat	19,069
		Hotel/Residential Lobby	10,415 sf	0.05 gpd/sf	521
		Event/Meeting Space	14,052 sf	0.12 gpd/sf	1,686
		Amenities[d]	39,199 sf	0.65 gpd/sf	25,479
60	350 S. Figueroa St.	Apartments	570 du	190 gpd/du	108,300
61	DTLA South Park—Site 2 1100 S. Olive St.	Apartments	713 du	190 gpd/du	135,470
		Commercial	7,125 sf	0.05 gpd/sf	356
		Restaurant (7,125 sf)	285 seats	30 gpd/seat	8,550

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
62	DTLA South Park—Site 3 1120 S. Olive St.	Apartments	537 du	190 gpd/du	102,030
		Commercial	3,794 sf	0.05 gpd/sf	190
		Restaurant (3,794 sf)	152 seats	30 gpd/seat	4,553
63	1155 S. Olive St.	Hotel	258 rm	120 gpd/rm	30,960
		Retail	1,896 sf	0.025 gpd/sf	47
		Restaurant (2,722 sf)	109 seats	30 gpd/seat	3,266
64	Angels Landing 361 S. Hill St.	Condominiums	180 du	190 gpd/du	34,200
		Apartments	261 du	190 gpd/du	49,590
		Hotel	509 rm	120 gpd/rm	61,080
		Charter School[e] (38,977 sf)	410 stu	11 gpd/stu	4,513
		Commercial	36,551 sf	0.05 gpd/sf	1,828
65	1030 S. Hill St.	High-Rise Residential	700 du	190 gpd/du	133,000
		Retail	7,000 sf	0.025 gpd/sf	175
		Restaurant (8,000 sf)	320 seats	30 gpd/seat	9,600
66	Bunker Hill Tower 333 Figueroa St.	Apartments	224 du	190 gpd/du	42,560
		Hotel	599 rm	120 gpd/rm	71,880
		Condominiums	242 du	190 gpd/du	45,980
		Amenities[d]	37,000 sf	0.65 gpd/sf	24,050
		Commercial	29,000 sf	0.05 gpd/sf	1,450
67	804 S. Garland Ave., 806 S. Garland Ave.	Apartments	118 du	190 gpd/du	22,420
		Office	69,295 sf	0.12 gpd/sf	8,315
		Retail	2,439 sf	0.025 gpd/sf	61
		Restaurant (1,132 sf)	45 seats	30 gpd/seat	1,358
		Gym/Spa	2,684 sf	0.65 gpd/sf	1,745

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)
68	AEG Hotel	Hotel	850 rm	120 gpd/rm	102,000
		Meeting Rooms	245,249 sf	0.12 gpd/sf	29,430
69	Los Angeles Convention Center (LACC) Expansion	LACC Expansion	700,000 sf	0.35 gpd/sf	245,000
70	1036 S. Grand Ave.	Restaurant (7,149 sf)	286 seats	30 gpd/seat	8,579
71	1219 S. Hope St.	Hotel	75 rm	120 gpd/rm	9,000
		Retail	2,650 sf	0.025 gpd/sf	66
72	835 W. Wilshire Blvd.	Drugstore	11,345 sf	0.025 gpd/sf	284
73	321 W. Olympic Blvd.	Apartments	263 du	190 gpd/du	49,970
		Commercial	14,500 sf	0.05 gpd/sf	725
74	408 W. Spring St.	Hotel	140 rm	120 gpd/rm	16,800
Related Projects Water Demand					**6,239,115**
Project Net Water Demand[f]					**89,638**
Total Water Demand for Related Projects and Project					**6,328,753**

du = dwelling units

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 LASAN (effective April 6, 2012).*

[b] *This analysis conservatively assumes that all dwelling units are 3-bedroom units. In addition, a standard factor of 25 square feet per seat was assumed to calculate the number of seats for restaurant uses.*

[c] *Based on the assumption that 1,000 square feet of live/work space provides approximately 1 dwelling unit (i.e., 11,000 square feet = 11 dwelling units).*

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

No.	Project	Land Use	Size	Water Demand Rate[a,b]	Total Daily Water Demand (gpd)

[d] *This related project does not specify "other" and "amenities" uses. Therefore, it is assumed that this related project's other uses and amenities include "Health Club/Spa" uses, which corresponds to a conservative LASAN sewage generation rate (i.e., 650 gpd per 1,000 sf).*

[e] *LASAN sewage generation rates do not include floor area-based rates for educational uses. Therefore, a rate of 95 square feet per student has been applied to estimate the number of students, as provided by the California Department of Education, Report on Complete Schools, www.cde.ca.gov/ls/fa/sf/completesch.asp, accessed November 24, 2019.*

[f] *As a note, the Project's WSA had analyzed two development options. The School Option proposed 547 residential dwelling units, up to 7,499 square feet of commercial/retail/restaurant space, and 37,216 square feet dedicated to a charter school. The No School Option proposed 580 residential dwelling units and up to 7,499 square feet of commercial/retail/restaurant space. Following the LADWP Board's approval of the WSA on November 19, 2019, the Project now only proposes the latter option with minor changes to parking and open space. LADWP recalculated the Project's water demand based on the updated scope and concluded that no additional water supply assessment is required for the project because the project's revisions do not meet one or more of the following conditions of the California Water Code Section 10910(h). Refer to emailed correspondence from Andrei Tcharssov of LADWP to Polonia Majas of Department of City Planning, December 30, 2020, and January 15, 2021 (Appendix I of this Draft EIR).*

Source: Eyestone Environmental, 2021.

Based on the related projects list and projections provided in adopted plans (e.g., MWD's 2015 UWMP, LADWP's 2015 UWMP, Sustainable City pLAn, and L.A.'s Green New Deal), it is anticipated that LADWP would be able to meet the water demands of the Project and future growth through 2025 and through at least 2040. **Therefore, cumulative impacts to 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 or included, and the impact level remains less than significant.