

IV. Environmental Impact Analysis

L.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. This analysis is based on the Water Supply Assessment (WSA) adopted by the Los Angeles Department of Water and Power (LADWP) Board of Water and Power Commissioners on May 12, 2020, and the *Angels Landing Mixed-Use Project Utility Infrastructure Technical Report: Water, Wastewater, and Energy* (Utility Report), December 2020, included as Appendices M and L, respectively, of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) State

(a) *California Urban Water Management Planning 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 five years.¹

¹ LADWP, *2015 Urban Water Management Plan*, April 2016.

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: (1) 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; (2) a standard methodology for calculating system water loss; (3) a voluntary reporting of passive conservation savings, energy intensity, and climate change; and (4) an analysis of water features that are artificially supplied with water.²

(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, compared to 2009 levels, by 20 percent by December 31, 2020. The state was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Monthly statewide potable water savings reached 13.3 percent in January 2019 as compared to production in January 2013.³

(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 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.⁴ 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;

² LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

³ SWRCB, *Fact Sheet, February 2019 Statewide Conservation Data*.

⁴ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing 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 below, the Project would meet two of the above thresholds for requiring the preparation of a WSA, including: (1) a mixed-use project with more than 500 hotel rooms; and (2) 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. Therefore, a WSA has been prepared for the Project by LADWP. The WSA, which was approved by the LADWP Board on May 12, 2020, is included as Appendix M of this Draft EIR.

(d) Senate Bill 606 and Assembly Bill 1668

On May 31, 2018, Governor Edmund G. “Jerry” Brown (Governor Brown) signed SB 606 and Assembly Bill (AB) 1668 into law.⁵ 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 Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB) will recommend standards for outdoor use by October 2021.

⁵ Office of Edmund G. Brown, Jr., “Governor Brown Signs Legislation Establishing Statewide Water Efficiency Goals,” May 31, 2018.

(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 current 2016 California Plumbing Code, which is based on the 2015 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2017. In addition, the California Building Standards Commission approved an Emergency Supplement to the 2013 California Plumbing Code in 2016, in order to establish new or replacement standards on an emergency basis for insertion in the 2013 California Plumbing Code.⁶ This Emergency Supplement is also applicable to the now-effective 2016 California Building Code.⁷

(f) *Sustainable Groundwater Management Act of 2014*

The Sustainable Groundwater Management Act of 2014,^{8,9} passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities. The Sustainable Groundwater Management Act requires the formation of local groundwater sustainability agencies to assess local water basin conditions and adopt locally based management plans. Local groundwater sustainability agencies were required to be formed by June 30, 2017. The 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 sub-basins.

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:

⁶ *California Building Standards Commission, Revision Record for the State of California, Emergency Supplement, 2013 Title 24, Part 5, California Plumbing Code.*

⁷ *California Building Standards Commission, Revision Record for the State of California, Errata, 2016 Title 24, Part 5, California Plumbing Code, History Note Appendix.*

⁸ *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.*

⁹ *California Department of Water Resources, SGM Sustainable Groundwater Management, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management, accessed May 18, 2020.*

- 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.¹⁰

In November 2017, BMP 6 for Sustainable Management Criteria was released for public comments to be received by January 8, 2018. As of January 2020, BMP 6 is still in draft form.¹¹ Furthermore, under Section 10720.7 of the Sustainable Groundwater Management Act, groundwater sustainability agencies responsible for high- and medium-priority basins must adopt groundwater sustainability plans by January 31, 2020, or January 31, 2022, depending on whether the basin is in critical overdraft.

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

In response to California's drought conditions, 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 DWR and the 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.

Due to improved hydrologic conditions statewide, on April 7, 2017, Governor Brown issued Executive Order B-40-17 lifting the drought emergency in all but four California counties.¹² Executive Order B-40-17 also rescinds the Drought Emergency Proclamations

¹⁰ California Department of Water Resources, *Best Management Practices*, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents, accessed May 18, 2020.

¹¹ California Department of Water Resources, *Best Management Practices*, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents, accessed May 18, 2020.

¹² *The Counties of Fresno, Kings, Tulare, and Tuolumne remain under a drought state of emergency, per Executive Order B-40-17.*

issued in January and April 2014 as well as four drought-related Executive Orders issued in 2014 and 2015. However, Executive Order B-40-17 also directs the SWRCB to maintain urban water use reporting requirements and prohibitions on wasteful practices. Water agencies will continue to strengthen drought readiness and water use efficiency.¹³ The regulatory requirements resulting from the existing Executive Orders have been codified in Article 22.5, Drought Emergency Water Conservation, of the CCR.

(h) 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 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. In addition, while the California Water Plan Update 2013 represents the latest complete update, the California Water Plan Update 2018 is in development and will work in tandem with Governor Brown's California Water Action Plan, as discussed further below.

(i) California Water Action Plan

The first California Water Action Plan (Action Plan) was published in January 2014 to provide a roadmap for the State's path toward sustainable water management.¹⁴ The Action Plan discusses the challenges for managing the State's water resources supply,

¹³ *Governor Brown Lifts Drought Emergency, Retains Prohibition on Wasteful Practices, Executive Order B-40-17.*

¹⁴ *California Department of Natural Resources, California Water Action Plan, http://resources.ca.gov/california_water_action_plan/, accessed May 18, 2020.*

scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods. The following ten actions were presented:¹⁵

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.

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 with focuses on policy, funding, and coordinated projects. The Action Plan will continue to be implemented simultaneously with the California Water Plan Update 2018 as it is completed.

(2) Regional

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

¹⁵ *California Department of Natural Resources, California Water Action Plan 2014.*

(a) MWD's Integrated Water Resources Plan

MWD first adopted its Integrated Water Resources Plan (IRP) in 1996. MWD's IRP is updated every five years. The goal of MWD's IRP is for Southern California to have a reliable water system that extends to the future. MWD's 2015 IRP Update, adopted in January 2016, provides MWD's strategy for water resource reliability through the year 2040. MWD's 2015 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 risks and drought; and preparing for uncertainty with Future Supply Actions. Overall, the strategies presented in MWD's 2015 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.¹⁶

(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 2040.¹⁷ 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.

¹⁶ *Metropolitan Water District of Southern California, Integrated Water Resources Plan Draft 2015 Update, January 12, 2016.*

¹⁷ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.*

(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.¹⁸ 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.

¹⁸ *Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan: Report No. 1150, August, 1999.*

(3) Local

(a) *Los Angeles Department of Water and Power's 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 purposes of the 2015 LADWP UWMP are to: (1) achieve full compliance with the requirements of California's Urban Water Management Planning Act; and (2) serve as a master plan for water supply and resource management consistent with the City's goals and objectives.¹⁹

A number of important events have occurred since LADWP prepared its 2010 UWMP:²⁰

- The year 2012 marked the start of the historic 5-year drought in California.
- January 2014—Governor Jerry Brown proclaimed a drought state of emergency.
- July 2014—The State Water Resources Control Board (SWRCB) implemented its Emergency Water Conservation Regulation (Emergency Regulation), as directed by Governor Brown, to take actions to reduce water use by 20 percent Statewide, which was later increased to 25 percent statewide.
- October 2014—Mayor Eric Garcetti issued Executive Directive No. 5 (ED5) Emergency Drought Response which set goals to reduce per capita water use, reduce purchases of imported potable water by 50 percent, and create an integrated water strategy to increase local supplies and improve water security considering climate change and seismic vulnerability.
- April 2019—Mayor Eric Garcetti released the first Sustainable City pLAN (discussed further below), establishing targets for the City that strengthen and promote sustainability throughout the year 2035. The 2019 L.A.'s New Green Deal, also discussed below, expands on the vision of the Sustainable City pLAN. The Green New Deal includes a number of water resources goals by year 2035, including sourcing 70 percent of City's water locally and increasing stormwater capture capacity, recycling 100 percent of all wastewater for beneficial reuse, building at least 100 new multi-benefit stormwater capture projects, and reducing potable water use per capita by 25 percent.

Currently, LADWP has implemented a Water Loss Task Force to develop strategies to reduce water losses and increase efficiencies in the water distribution system, continue

¹⁹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

²⁰ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

to track the energy intensity of water, update its climate change study, and the daily capita water use is below the 2020 target of 142 gallons per capita per day.²¹

(b) Sustainable City pLAN and L.A.'s Green New Deal

The City's first Sustainable City pLAN, released 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, using a 2014 baseline of 131 gallons per capita per day. The Sustainable City pLAN also includes targets to continue the remediation of the San Fernando Groundwater Basin aquifer, to reduce LADWP purchases of imported water by 50 percent by 2025, and to source 50 percent of water locally by 2035. As the Sustainable City pLAN presents specific strategies and desired outcomes for conservation, recycled water, and stormwater capture, proposed investments will also contribute to the progress and implementation of 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 water-efficiency programs.²²

In April 2018, the Sustainable City pLAN's Third Annual Report for 2017–2018 was released. It reported that the City had reduced per capita water use by 20 percent to achieve both the City's and the pLAN's water use reduction goal.²³

In April 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. 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: (1) source 70 percent of L.A.'s water locally and capture 150,000 AFY of stormwater by 2035; (2) recycle 100 percent of all wastewater for beneficial reuse by 2035; (3) build at

²¹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

²² Mayor's Office of Sustainability, *Sustainable City pLAN*, April 2015.

²³ Mayor's Office of Sustainability, *Sustainable City pLAN, Third Annual Report for 2017–2018*, April 2018.

least 10 new multi-benefit stormwater capture projects by 2025; 100 by 2035; and 200 by 2050; (4) 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; and (5) 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.²⁴

(c) Resilient Los Angeles

In March 2018, the City released its Resilient Los Angeles Plan, which includes strategies to fortify the City's infrastructure, protect its economy, and make Los Angeles safer. 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.²⁵

(d) 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 2020.²⁶

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.²⁷ 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

²⁴ City of Los Angeles, *L.A.'s Green New Deal, Sustainable City pLAN, 2019*.

²⁵ City of Los Angeles, *Resilient Los Angeles, March 2018*.

²⁶ LADWP, *Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019*.

²⁷ LADWP, *Water Supply Assessment—8th, Grand and Hope Project, November 19, 2019*.

environmentally, economically, and socially beneficial manner. One Water LA objectives include the following:²⁸

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

(e) General Plan Framework

The City of Los Angeles General Plan Framework Element (Framework), adopted in December 1996, and readopted in August 2001, sets forth a citywide comprehensive long-range growth strategy and defines citywide policies regarding land use, housing, urban form, neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. Framework land use policies are implemented at the community level through community plans and specific plans. The applicable Framework policies for water supply and infrastructure are listed below²⁹:

²⁸ LASAN, *About One Water LA*, https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au?_adf.ctrl-state=16okwrlh8h_5&_afzLoop=510921480353498#!, accessed December 7, 2020.

²⁹ *City of Los Angeles Department of City Planning, City of Los Angeles General Plan, Citywide General Plan Framework Element, Chapter 9: Infrastructure and Public Services – Water Supply, 1995.*

- 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 9.10.1: 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.

(f) Central City Community Plan

The Land Use Element of the City's General Plan is comprised of 35 Community Plans. The City's Community Plans are intended to provide an official guide for future development and propose approximate locations and dimensions for land use at the community level. 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 City's Community Plans implement the City's Framework Element at the local level. The City's Community Plans express the goals, objectives, policies, and programs to address growth within each of the individual communities and depict the desired arrangement of land uses as well as street classifications and the locations and characteristics of public service facilities. The Project is located within the Central City Community Plan area.³⁰

The Central City Plan, adopted in 2003, is the official guide to future development within the Central City Community plan area. It is to be utilized by all those concerned with

³⁰ *City of Los Angeles Department of City Planning, Central City Community Plan, January 8, 2003.*

the community including the City Council, the Mayor, the City Planning Commission, other concerned government agencies, residents, property owners, business owners, investors, as well as other nonprofit and private agencies. This Plan is subject to periodic reviews and amendments to reflect changes in circumstances and opportunities.³¹

The Central City Plan promotes an arrangement of land use, infrastructure, and services intended to enhance the economic, social, and physical health, safety, welfare, and convenience of the people who live, work and invest in the community. By serving to guide development, the Plan encourages progress and change within the community to meet anticipated needs and circumstances, promotes balanced growth, builds on economic strengths and opportunities while protecting the physical, economic, and social investments in the community to the extent reasonable and feasible.³²

The Central City Community Plan does not provide specific policies for provision of water supply and infrastructure.³³

(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 determining which phase of water conservation shall be implemented, LADWP monitors and evaluates the projected water supply and demand and applies 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.

³¹ City of Los Angeles Department of City Planning, *Central City Community Plan*, January 8, 2003.

³² City of Los Angeles Department of City Planning, *Central City Community Plan*, January 8, 2003.

³³ City of Los Angeles Department of City Planning, *Central City Community Plan*, January 8, 2003.

- 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 adds requirements for plumbing fixtures and fixture fitting.
- Ordinance No. 184,248—amended LAMC Chapter IX, Article 4 (Plumbing Code) and Article 9 (Green Building Code) to establish citywide water efficiency standards and mandate a number of new fixture requirements and methods of construction for plumbing and irrigation systems.

The City of Los Angeles also has adopted numerous requirements related to the provision of water for purposes of fire protection. These requirements are set forth in the Fire Code (LAMC Chapter V, Article 7). 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 from 2,000 gallons per minute (gpm) in low density residential areas to 12,000 gpm in high density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system with the required gpm flowing. As identified by the LAFD in their written correspondence of October 1, 2019, provided in Appendix I.1 of this Draft EIR, the required fire flow for the proposed Project is 6,000 gpm to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a minimum residual water pressure of 20 psi.

(h) Los Angeles Water Rate Ordinance

The City's Water Rate Ordinance was adopted in June 1995 and last amended by the City's Board of Water and Power Commissioners pursuant to Ordinance No. 184,130. Effective since April 15, 2016, this City Water Rate Ordinance restructured water rates to help further promote conservation. Specifically, the goal of the ordinance is to incentivize water conservation while recovering the higher costs of providing water to high volume users and accelerating development of sustainable local water 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.

b. Existing Conditions**(1) Water Supply**

LADWP is responsible for providing water within the City of Los Angeles limits and ensuring that the water quality meets applicable California health standards for drinking water. As the Project Site is located within the City, LADWP is the water provider for the Project Site.

Water is supplied to the City from four primary sources: the Los Angeles Aqueducts (LAA), local groundwater, purchased water from MWD, and recycled water.³⁴ As shown in Table IV.L.1-1 on page IV.L.1-18, LADWP had an available water supply of 480,539 acre-feet in 2019, with the vast majority of this supply from imported sources including the LAA and MWD. LADWP water sources are described in further detail below.

(a) Los Angeles Aqueducts

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

³⁴ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

**Table IV.L.1-1
LADWP Water Supply**

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

af = acre-feet

^a *Supply data for 2019 are preliminary and may change.*

Source: LADWP, Water Supply Assessment for the Angels Landing Project, April 28, 2020.

The City holds water rights in the Eastern Sierra Nevada where the LAA water supplies originate. These supplies originate from both streams and groundwater. As indicated in Table IV.L.1-1, approximately 344,622 acre-feet of LADWP's water supplies were from the LAA in 2019.

Average deliveries from LAA system were approximately 111,293 acre-feet of water annually from Fiscal Year (FY) 2011/12 to 2015/16. During this period, the record low snowpack for LAA watershed in the Eastern Sierra Nevada Mountains was recorded on April 1, 2015. Supply conditions have changed drastically since 2015. On March 20, 2017, Mayor Garcetti had proclaimed a state of local emergency for LAA as a response to the snowpack levels in the Eastern Sierra. The proclamation was issued 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.

However, the snowpack in the Eastern Sierra was at 203 percent of an average year on April 1, 2017.³⁵ On April 1, 2019, the snowpack was 171 percent of an average year.³⁶

Various lawsuits and injunctions, and resulting agreements, affect water supplies from the Los Angeles Aqueduct. 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 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.³⁷

LADWP projects that the average annual long-term Los Angeles Aqueduct delivery between 2020 and 2040 will increase from 275,700 AFY to 286,200 AFY. LADWP anticipates that this increase will be due, in part, to implementation of the Owens Lake Master Plan Project.³⁸

(b) Groundwater

As discussed in the WSA prepared for the Project included in Appendix M of this Draft EIR, LADWP pumps groundwater from three adjudicated basins, including the San Fernando, Sylmar, and Central Basins.

The San Fernando Basin (SFB) is the largest of the four basins. LADWP has accumulated 554,500 acre-feet of stored groundwater in the SFB as of October 1, 2017 (the latest year for which data is available).³⁹ This water can be withdrawn from the basin during normal and dry years or in an emergency, in addition to LADWP's approximately

³⁵ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

³⁶ LADWP, *Eastern Sierra Snow Survey Results*, April 1, 2019.

³⁷ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

³⁸ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

³⁹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

87,000 AFY entitlement in the basin. The City's current annual entitlement in the Sylmar Basin is 3,570 acre-feet. LADWP's annual entitlement in the Central Basin is 17,236 acre-feet.⁴⁰

As shown in Table IV.L.1-2 on page IV.L.1-21, the City extracted 36,871 acre-feet, 5 acre-feet, and 1 acre-foot of groundwater from the San Fernando, Central, and Sylmar Basins, respectively, during the 2018–2019 fiscal year. The City plans to continue to develop production from its groundwater basins in the coming years to offset reductions in imported supplies. However, extraction from the basins may be limited by water quality, sustainable pumping practices, and groundwater elevations.⁴¹

Both LADWP and DWR have programs in place to monitor wells to prevent overdrafting. LADWP's groundwater pumping practice is based on a "safe yield" operation. Furthermore, basin management is achieved by collective efforts of a court-appointed Watermaster and the Upper Los Angeles River Area (ULARA) Administrative Committee of representatives from five public water supply agencies overlying the ULARA Committee. These efforts include operation of groundwater remediation systems, use of an extensive network of groundwater monitoring wells, routine reporting on groundwater elevation and water quality, management and mitigation of urban runoff water quality, and development of enhanced stormwater recharge and groundwater replenishment.⁴²

(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 (SWP) California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the LAA and local groundwater. As of June 30, 2019, LADWP has a preferential right to purchase 18.25 percent of MWD's total water supply.⁴³

The Sustainable City pLAN, discussed above, calls for a reduction in purchased imported water by 50 percent by 2025 from the Fiscal Year 2013–2014 level, which was approximately 441,870 acre-feet.⁴⁴ L.A.'s Green New Deal also reaffirms this initiative.⁴⁵

⁴⁰ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁴¹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁴² LADWP, *2015 Urban Water Management Plan*, June 2016.

⁴³ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁴⁴ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

**Table IV.L.1-2
Local Groundwater Basin Supply**

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

af = acre-feet

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

Source: LADWP, Water Supply Assessment for the Angels Landing Project, April 28, 2020.

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 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 2025.⁴⁶

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 Fiscal Years 2010–2011 through 2014–2015 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 2040.⁴⁷

As indicated in Table IV.L.1-1 on page IV.L.1-18, LADWP received approximately 101,722 acre-feet of water from MWD in 2019, which was a substantial reduction from

⁴⁵ *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAN, 2019.*

⁴⁶ *LADWP, Water Supply Assessment for the Angels Landing Project, April 28, 2020.*

⁴⁷ *LADWP, 2015 Urban Water Management Plan, April 2016.*

previous years. Summaries of MWD’s individual supplies, along with each supply’s challenges and specific responsive actions taken by MWD, are presented below.

(i) State Water Project

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

MWD began receiving water from the SWP in 1972. MWD is the largest of the 29 SWP contractors, holding a contract for 1.912 million acre-feet (MAF) per year, or 46 percent of the total contracted amount of the 4.173 MAF ultimate delivery capacity of the project. Variable hydrology, environmental issues, and regulatory restrictions in the San Francisco Bay/Sacramento–San Joaquin River Delta (Bay-Delta) have periodically reduced the quantity of water that the SWP delivers to MWD.⁴⁸

The SWP, under the original contracted amount at 100 percent allocation, provides MWD with 1,911,500 acre-feet of water each calendar year.⁴⁹ However, due to water quality and supply reliability challenges and conflicts due to variable hydrology and environmental standards that limit pumping operations, State Water Project deliveries in the most critically dry years have varied. For 2019, DWR estimated an initial allocation of 10 percent⁵⁰ but increased the allocation to 15 percent⁵¹ by January 25 due to changes in precipitation and available water supplies.

⁴⁸ LADWP, *Water Supply Assessment for the Angels Landing Project, Appendix M, April 28, 2020.*

⁴⁹ LADWP, *Water Supply Assessment for the Angels Landing Project, Appendix M, April 28, 2020.*

⁵⁰ California Department of Water Resources, *Notice to State Water Project Contractors, Number 18-06, 2019 State Water Project Initial Allocation—10 Percent.*

⁵¹ California Department of Water Resources, *Notice to State Water Project Contractors, Number 19-03, 2019 State Water Project Allocation Increase—15 Percent.*

Challenges to State Water Project Supply

Litigation and various regulations have created challenges for the State Water Project.⁵² 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. Based on DWR's 2015 *State Water Project Delivery Capability Report*, future State Water Project deliveries will continue to be impacted by restrictions on State Water Project and Central Valley Project Delta pumping, and climate change, which is altering the hydrologic conditions in the State.⁵³

(ii) The Colorado River

MWD owns and operates the Colorado River Aqueduct, which has delivered water from the Colorado River to Southern California since 1942. The Colorado River currently supplies approximately 17 percent of Southern California's water needs, and on average makes up about 15 percent of LADWP's purchases from MWD. 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. In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada.⁵⁴

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

⁵² LADWP, *Water Supply Assessment for the Angels Landing Project, Appendix M, April 28, 2020.*

⁵³ California Department of Water Resources, *The State Water Project—Final Delivery Capability Report 2015, July 2015.*

⁵⁴ LADWP, *Water Supply Assessment for the Angels Landing Project, April 28, 2020.*

River worked together toward a solution.⁵⁵ MWD's total supply from the Colorado River Aqueduct in 2020 is at approximately 1.5 million acre-feet.⁵⁶

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.⁵⁷ 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.⁵⁸ In addition, in August 2004, MWD and the Palo Verde Irrigation District signed an agreement for a Land Management, Crop Rotation and Water Supply Program, which provides up to 133,000 acre-feet of water to be available to MWD in certain years. Furthermore, in May 2008, MWD joined the Central Arizona Water Conservation District and the Southern Nevada Water Authority in funding the Warren H. Brock Reservoir, which conserves approximately 70,000 AFY of water. MWD is also participating in numerous pilot programs to augment its water supplies. Other agreements and guidelines that continue to affect the management of water supplies from the Colorado River include the Quantification Settlement Agreement, executed in October 2003, and the Transfer Agreement executed in 1998. Additional guidelines and programs that influence management of the Colorado River water supplies include the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, the Intentionally Created Surplus Program, and the Quagga Mussel Control Program.

(iii) Additional MWD Actions to Address Supply

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

⁵⁵ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁵⁶ LADWP, *Water Supply Assessment for the Angels Landing Project*, Table V, April 28, 2020.

⁵⁷ LADWP, *Water Supply Assessment for the Angels Landing Project*, Appendix M, April 28, 2020.

⁵⁸ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan*, June 2016.

and development of additional local resources, such as recycling, brackish water desalination, and seawater desalination.⁵⁹

Additionally, MWD has more than 5.0 million acre-feet of storage capacity available in reservoirs and banking/transfer programs. MWD was estimated to have 3.1 million acre-feet of water in Water Surplus Drought Management storage and additional 750,000 acre-feet in emergency storage as of January 1, 2020. Continued efficiency in the region kept demands low in 2019, resulting in available water supplies far exceeding demands. With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD was able to add to storage in 2019. MWD began CY 2020 with approximately 3.1 million acre-feet of water in its dry-year storage portfolio.⁶⁰

MWD's 2015 IRP builds upon the strong foundation of diversification and adaptation developed in previous IRPs. 2015 IRP reinforces MWD commitment to meeting the region's water supply needs through an evolving long-term strategy that calls for maintaining and stabilizing existing resources along with developing more conservation and new local supplies.⁶¹

MWD's 2015 UWMP reports on water reliability and identifies projected supplies to meet the long-term demand within MWD's service area. Table V in the WSA summarizes MWD's reliability in five-year increments extending to 2040 and is based on information contained in MWD's 2015 UWMP. As reported, 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.⁶²

(d) Precipitation Conditions

As of December 30, 2019, northern Sierra precipitation was 70 percent of the 50-year average for the time of year, and northern Sierra snowpack measured 29 percent of the April 1st peak average. On January 24, 2020, DWR notified State Water Contractors that its calendar year 2020 allocation estimate of State Water Project water was increased to 15 percent of contracted amounts, or 286,725 acre-feet for MWD. Changes to the 2020 allocation may occur and are dependent on the developing hydrologic conditions.⁶³

⁵⁹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁶⁰ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁶¹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁶² LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁶³ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

As of December 30, 2019, the Upper Colorado River Basin snowpack accumulation measured 119 percent of the 30-year average as of this date and the total system storage in the Colorado River Basin was 52 percent of capacity, an increase of 7 percent or 4 million acre-feet at the same time the prior year. Because of the storage increase, no shortage will be declared in Colorado River water supply availability conditions for calendar year 2020, resulting in projected available supply of Colorado River water in calendar year 2020 of 983,000 acre-feet for Metropolitan.⁶⁴

The City of Los Angeles receives an average of 14.77 inches of precipitation per year according to the National Weather Service. As of May 19, 2020, the City had received 14.86 inches of precipitation.⁶⁵

(e) Global Warming and 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 LAA, though local sources can also expect to see some changes in the future. In addition to water supply impacts, changes in local temperature and precipitation are expected to alter water demand patterns. However, there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future research for the potential impacts of climate change on its water resources.⁶⁶

MWD and DWR also continue to study climate change and address the implications of climate change on water supplies. MWD has established a technical process to identify key vulnerabilities from various sources, including climate change, in order to provide comprehensive analyses within its Integrated Water Resources Plans. In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning for the future.⁶⁷ With updates published every five years, the most recent *California Water Plan Update 2018*

⁶⁴ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁶⁵ California Department of Water Resources, *Daily Precipitation Stations, Los Angeles/USC*, <https://cdec.water.ca.gov/dynamicapp/QueryDaily?s=USC>, accessed May 20, 2020.

⁶⁶ Los Angeles Department of Water and Power, *2015 Urban Water Management Plan*, June 2016, p. 12-1.

⁶⁷ California Department of Water Resources, *California Water Plan Update 2013, Investing in Innovation & Infrastructure, Highlights*, October 2014.

built on its predecessor by identifying specific performance tracking metrics, recommending financing methods with stable revenues, and incorporating principles of sustainability.⁶⁸

DWR has also been in the process of completing its Climate Action Plan since 2012. Phases I and II of the Climate Action Plan include the guidance of DWR in reducing greenhouse gas emission and the expertise of a climate change technical advisory group formed in 2012, respectively. Phase III of the plan was completed in 2017 with a vulnerability assessment and adaptation plan DWR assets and activities, as related to the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply.⁶⁹ 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 2035.⁷⁰ Following the target reduction of potable water use per capita by 25 percent by 2035, L.A.'s Green New Deal adds an additional target for the City to maintain or reduce 2035 per capita water use through 2050.⁷¹ The City also intends to build upon the success of Save the Drop and develop additional water conservation campaigns; continue benchmarking customer use and recognizing innovative water reduction initiatives; improve data gathering to identify program effectiveness; expand top performing conservation incentive programs for landscape transformation, washing machines, etc.; and expand sub-metering and evaluate smart water meter technologies.

Further, 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 2040.⁷² Overall, the 2015 LADWP UWMP projects a 7-percent lower water demand trend than what was projected in the previous 2010 UWMP.⁷³ In addition, based on programs and improvements

⁶⁸ California Department of Water Resources, *California Water Plan Update 2018*.

⁶⁹ California Department of Water Resources, *DWR Climate Action Plan*, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed May 20, 2020.

⁷⁰ LADWP, *2015 Urban Water Management Plan*, June 2016.

⁷¹ City of Los Angeles, *L.A.'s Green New Deal, Sustainable City pLAN, 2019*.

⁷² LADWP, *2015 Urban Water Management Plan*, June 2016.

⁷³ LADWP, *2015 Urban Water Management Plan*, June 2016.

contemplated in the 2015 LADWP UWMP, locally developed water supplies will increase from the current 14 percent to 49 percent in dry years, or to 47 percent in average years by 2040.⁷⁴ L.A.'s Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035.⁷⁵ 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.

(2) Water Demand

(a) Regional Water Demand

LADWP's 2015 UWMP provides water supply and demand projections in five-year increments to 2040, based on projected population estimates provided by the Southern California Association of Governments (SCAG) in its 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS).⁷⁶ Table IV.L.1-3 on page IV.L.1-29 shows the projected water demand from the year 2020 through 2040 for the City of Los Angeles.

As shown in Table IV.L.1-3, in 2040 during average year hydrological conditions, the City's water demand is forecasted to be approximately 675,700 AFY (with passive water conservation).⁷⁷ LADWP's 2015 UWMP concludes that adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2040.⁷⁸ Therefore, the City's water supply projections in LADWP's 2015 UWMP are sufficient to meet the water demand for projects (including projects constructed and operational by the year 2040) that are determined by the CEQA lead agency to be consistent with both the 2012 and subsequent 2016 RTPs adopted by SCAG.⁷⁹

⁷⁴ LADWP, *2015 Urban Water Management Plan*, June 2016.

⁷⁵ *Baseline from LASAN: In Fiscal Year 2017–2018, 27 percent of wastewater was recycled.*

⁷⁶ *Since preparation of the 2015 UWMP, new growth forecasts have become available in SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). According to SCAG, the 2016 forecast is lower than the 2012 forecast in terms of current estimates and future projections. Therefore, LADWP's 2015 UWMP is based on a more conservative overall growth scenario.*

⁷⁷ LADWP, *2015 Urban Water Management Plan*, June 2016, and LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁷⁸ LADWP, *2015 Urban Water Management Plan*, June 2016, and LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁷⁹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

**Table IV.L.1-3
City of Los Angeles Water Demand Projections
(thousand AFY)**

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

AFY = acre-feet per year
Source: LADWP, 2015 Urban Water Management Plan, Exhibits 11F, 11G, and 11H.

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the 2.24-acre Project Site is located at 332, 350, and 358 South Olive Street; 351 and 361 South Hill Street; and 417 and 425 West 4th Street within the City's Central City Community Plan area and Bunker Hill Specific Plan area. The site contains the Metro B and D Lines (formerly Red and Purple Lines) Pershing Square Station portal and landscaped vacant land. The existing water demand at the Project Site is currently 0 AFY because the land is vacant and not regularly irrigated.⁸⁰ Thus, the impact analysis below assumes that all new water demand would be a net increase.

(3) Water Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 117 storage tanks and reservoirs, 84 pump stations, 7,326 miles of distribution mains and trunk lines within the City, and a total storage capacity of 311,000 acre-feet according to the estimates for Fiscal Year 2018–2019.⁸¹ Much of the water flows north to south, entering Los Angeles at the LAA Filtration Plant in Sylmar, which is owned and operated by LADWP. Water entering the LAA Filtration Plant undergoes treatment and disinfection before being distributed throughout the LADWP's water service area.⁸²

⁸⁰ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁸¹ LADWP, *2018–2019 Briefing Book*, June 2019.

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

Domestic water service is available in the vicinity of the Project Site via LADWP water lines within the adjacent streets. According to the Utility Report, there is a 12-inch water main in Hill Street, a 12-inch water main in Olive Street, and an 8-inch water line in 4th Street, adjacent to the Project Site. The on-site Metro B/D Line Pershing Square Station portal has water service from the Hill Street main. See Figure 1 in the Utility Report for the existing water main locations.⁸³

In addition to providing domestic water service, LADWP provides water for fire protection services in accordance with the City's Fire Code (LAMC Chapter V, Article 7). According to the Utility Report, there are 6 public hydrants in the vicinity of the Project Site, including: three on-site (FH #15,419, #9522, and #9554); one immediately adjacent to the Project Site (FH #9527); and one each across Hill Street (FH #9525) and Olive Street (FH #9528) from the Project Site. There are also multiple additional fire hydrants within a block of the Project Site. See Figure 1 in the Utility Report for the existing fire hydrant locations.⁸⁴

3. Project Impacts

a. Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G, the applicable thresholds of significance are whether the Project 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.⁸⁵

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

⁸³ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁸⁴ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁸⁵ Refer to Section IV.L.2, *Utilities and Service Systems—Wastewater*, of this Draft EIR for a discussion of wastewater impacts; Section IV.C, *Energy*, of this Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, *Other CEQA Considerations*, of this Draft EIR for a discussion of telecommunications facility impacts. See Section X, *Hydrology and Water Quality*, of the Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater impacts.

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City’s 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions. The *L.A. CEQA Thresholds Guide* identifies the following factors to evaluate water supply and infrastructure:

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

b. Methodology

The analysis of the Project’s impacts to water supply is based primarily on the WSA for the Project prepared by LADWP pursuant to Senate Bill 610 and included as Appendix M of this Draft EIR. The WSA includes a conservative calculation of the Project’s anticipated water demand by applying City Department of Public Works, Bureau of Sanitation (LASAN) wastewater generation rates to the proposed land uses associated with the Project. The WSA accounts for the reduction in Project water demand associated with the implementation of required and proposed water conservation features. In accordance with Senate Bill 610, the resulting net increase in demand for water associated with the Project is then analyzed relative to LADWP’s existing and planned future water supplies over the next 20 year period as set forth in LADWP’s 2015 UWMP to determine if LADWP would be able to accommodate the Project’s water demands during average, single-dry, and multiple-dry year hydrologic conditions.

The analysis of the Project’s impacts to water infrastructure is based on the Utility Report included as Appendix L of this Draft EIR. The Utility Report includes a comparison of the estimated net domestic and fire flow water demand for the Project to the available capacity of the existing water infrastructure. Specifically, the Utility Report summarizes the results of the following analyses performed by LADWP:

1. A hydraulic analysis of the water system to determine if adequate fire flow (which requires more water volume and pressure than domestic flow) is available from the existing fire hydrants surrounding the Project Site. LADWP’s approach consisted of modeling the portion of their water system in the vicinity of the

Project Site. Based on the results, LADWP determined whether their existing water infrastructure can meet the Project's fire hydrant flow needs. See Exhibit 1 of the Utility Report for the results of the Information of Fire Flow Availability Request (IFFAR).

2. Flow tests to determine if sufficient water conveyance is available for the Project. LADWP's approach provides data ranging from available static pressure (meaning how much pressure is available at the source before applying the Project's demand) to the available pressure at the maximum demand needed for the Project. Based on the results, LADWP determined whether they can meet the Project needs based on existing infrastructure. See Exhibits 2 and 3 of the Utility Report for the results of the Service Advisory Requests (SARs) for the Hill Street and Olive Street water mains, respectively.

c. Project Design Features

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

Project Design Feature WAT-PDF-1: In addition to regulatory requirements, the Project will incorporate the following water conservation features as set forth in the Water Conservation Commitment Letter for the Project included as Appendix B of the WSA:

Fixtures

- Showerheads with a flow rate of 1.5 gpm (does not apply to proposed hotel rooms/uses).

Landscape and Irrigation

- Artificial Turf.
- Drip/ Subsurface Irrigation (Micro-Irrigation).
- Drought Tolerant Plants- 100 percent of total landscaping.
- Micro-Spray.
- Proper Hydro-zoning and Zoned Irrigation-(groups plants with similar water requirements together).

Pools

- Install a meter on each pool's make-up line so water use can be monitored and leaks can be identified and repaired.
- Leak Detection System for swimming pools and Jacuzzi.
- Pool/Spa recirculating filtration equipment.

- Pool splash troughs around the perimeter that drain back into the pool.
- Reuse pool backwash water for irrigation.
- Water-Saving Pool Filter.

Utilities

- Domestic Water Heating System located close proximity to point(s) of use.
- Individual metering and billing for water use for every residential dwelling unit and commercial unit.
- Tankless and on-demand Water Heaters.

LID and Best Management Practices (BMPs) for Groundwater Recharge and Stormwater Use

- Cisterns—captures stormwater runoff as it comes down through the roof gutter system.
- Catch Basin Inserts—a device that can be inserted into an existing catch basin design to provide some level of runoff contaminant removal.
- Catch Basin Screens.
- Infiltration Basins (drainage area of 5-50 acres)- captures first-flush stormwater, removes particulate pollutants and some soluble pollutants, and contributes toward recharging groundwater.
- Infiltration Trenches (drainage area of less than 5 acres)—similar to infiltration basin but used for smaller drainage areas to capture and infiltrate rainwater.
- Pervious Pavements—captures runoff by allowing storm water to pass through the pavement surface and then infiltrate into the groundwater basin.

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Draft EIR, the Project would involve a two-tower mixed-use development consisting of: 180 residential for-sale condominium units; 252 residential apartments; two hotels with a combined total of 515 guest rooms, and including restaurants, ballrooms, meeting rooms, and various amenities (e.g., fitness/spa); and 72,091 square feet of general commercial (retail/restaurant) uses. The proposed uses would be distributed through a series of terraced levels in a podium structure and two towers (Tower A, 63 floors, and Tower B, 42 floors) that would be constructed above a three-level subterranean parking garage. The Project would also provide public and private open space areas totaling 56,881 square feet.

The existing Metro B/D Line Pershing Square Station portal would be retained on-site. The Project would require the removal of existing landscaping and the excavation and export of approximately 334,000 cubic yards of soil. In all, the Project would result in up to 1,269,150 square feet of floor area with a maximum floor-area ratio (FAR) of up to 13:1.

***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?*⁸⁶**

(1) Impact Analysis

(a) Construction

Project construction would require water for dust control, cleaning of equipment, excavation and grading activities. Based on a review of construction projects of similar size and duration, a conservative estimate of Project water use during construction ranges from 1,000 to 2,000 gallons per day (gpd).⁸⁷ Temporary water supply needed for construction activities would be obtained from the existing fire hydrants located on the frontages of the Project Site. On Hill Street and Olive Street, there are existing water mains feeding these hydrants and each have the capacity to provide 5,000 plus gpm (see the SARs, Exhibit 2 and 3 of the Utility Report). Therefore, there is adequate existing water infrastructure to deliver water to the Project Site during construction.⁸⁸

In addition, the Project would construct a new water distribution system to the existing Hill Street and Olive Street water mains. The entirety of the Project Site (except for the existing Metro portal) would be excavated as part of construction activities, and then the new infrastructure (including water facilities) to support the Project would be installed on the Project Site. The fire flow availability information provided by LADWP, and contained in the Utility Report, indicates that the existing water main infrastructure in the surrounding streets is adequate to delivery water to the Project Site during construction activities. Accordingly, the Applicant would not be required to relocate or construct new or

⁸⁶ Refer to Section IV.L.2, *Utilities and Service Systems—Wastewater*, of this Draft EIR for a discussion of wastewater impacts; Section IV.C, *Energy*, of this Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, *Other CEQA Considerations*, of this Draft EIR for a discussion of telecommunications facility impacts. See Section X, *Hydrology and Water Quality*, of the Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater impacts.

⁸⁷ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁸⁸ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

expanded water facilities to construct the Project. In addition, prior to ground disturbance, the project contractors would coordinate with LADWP to identify the locations and depth of any water lines on the Project Site so as to avoid impacting off-site water lines and minimize the potential disruption of water service to surrounding properties.

Therefore, Project construction activities would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Project construction-related water infrastructure impacts would be less than significant.

(b) Operation

When analyzing the capacity of the water infrastructure system to serve a project, the estimated operational demands of the project for both fire suppression and domestic water are considered. Although domestic water demand would be the Project's main contributor to water demand in the long term, the Project's flow demands have a much greater instantaneous impact on infrastructure and therefore are the primary means for analyzing infrastructure capacity. Conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project as summarized in the Utility Report included as Appendix L of this Draft EIR. Specifically, see Exhibit 1 and Exhibit 2-3 in the Utility Report for the results of the IFFAR and SAR, respectively, which demonstrate that adequate water infrastructure capacity exists to serve the Project.⁸⁹

(i) Fire Flow

The Project Site land use designation is Regional Center Commercial, and pursuant to the fire flow standards in Section 57.507.3 of the LAMC, the required fire flow is 6,000 to 9,000 gpm from four to six fire hydrants flowing simultaneously with a residual water pressure of 20 psi. Similarly, per correspondence contained in the Utility Report LAFD requires 9,000 gpm for the two proposed towers. This demand translates to a required flow of approximately 1,500 gpm each from six hydrants. Because the IFFAR shows that the six closest existing hydrants (e.g., the six hydrants, on, immediately adjacent to, and across the street from the Project Site) flowing simultaneously would have a combined 10,900 gpm with a residual pressure above 20 psi, adequate fire flow is available to serve the Project.⁹⁰

⁸⁹ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁹⁰ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

In addition, the Project would incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands. Per LAMC 94.2020.0, which adopts by reference NFPA 14-2013 including Section 7.10.1.1.5, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building is 1,250 gpm. Because the SARs in the Utility Report indicate that the 12-inch water mains in Hill Street and Olive Street each have a flow of 5,000 gpm, at well above 20 psi, adequate water pressure is available to operate the proposed fire sprinkler suppression system.

(ii) Domestic Water Demand

Domestic water demand has been estimated for the Project by LADWP based on BOS sewage generation factors. As discussed further under Threshold (b) below, LADWP estimates that the Project would generate a net increase in water demand of 373,957 gpd.⁹¹ The Project proposes to connect to the existing 12-inch mains in Hill Street and Olive Street via two new 10-inch water laterals that would connect the new onsite water system to the existing water mains in the surrounding streets. The approved SARs in the Utility Report confirm that there is sufficient capacity in the Hill Street and Olive Street water mains to deliver water to the Project.⁹² Accordingly, the Project would not exceed the available capacity of the existing water infrastructure that serves the Project Site.

(c) Conclusion

Therefore, Project operation 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. Project operations-related water infrastructure impacts would thus be less than significant.

(2) Mitigation Measures

Project-level impacts related 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.

⁹¹ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁹² KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

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

(1) Impact Analysis

(a) Construction

As discussed above, a conservative estimate of water use during Project construction ranges from 1,000 to 2,000 gallons per day (gpd).⁹³ This water use would vary depending on soil conditions, weather, and the specific activities being performed. Nevertheless, Project construction-related water use would be minimal and temporary.

Furthermore, the WSA prepared for the Project by LADWP concludes that projected LADWP water supplies during normal, single-dry, and multiple-dry years, as reported in LADWP's 2015 UWMP, would be sufficient to meet the Project's estimated operational water demand in addition to the existing and forecasted water demands within LADWP's service area through the year 2040.⁹⁴ The Project's construction-related water demand (2,000⁹⁵ gpd) would represent only a small fraction ($2,000 \text{ gpd} / 373,957^{96} \text{ gpd} = 0.005$ or 0.5 percent) of the Project's estimated operational water demand of 373,957 gpd. Hence, LADWP water supplies would be more than adequate to meet Project construction-related water demand during normal, single-dry, and multiple dry years.

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

(b) Operation

Operation 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. In accordance with SB 610, LADWP prepared a WSA for the Project, included as Appendix M of this Draft EIR, as the Project would meet two of the SB 610 thresholds for preparing a WSA: (1) a mixed-use project with more than 500 hotel rooms; and (2) a project that would

⁹³ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁹⁴ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020.

⁹⁵ KPFF Consulting Engineers, *Angels Landing Utility Technical Report: Water, Wastewater, and Energy*, December 2020.

⁹⁶ LADWP, *Water Supply Assessment for the Angels Landing Project*, April 28, 2020

demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project. Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply is based on estimates of the Project's operational water demand as compared to LADWP's existing and forecasted future water supplies and demand over the next 20-year period during normal, single-dry and multiple dry years as set forth in LADWP's 2015 UWMP.

As shown in Table IV.L.1-4 on page IV.L.1-39, assuming constant water use throughout the year, the WSA estimates that Project operation would result in a net increase in average daily water demand of 373,957 gpd that equates to 418.91 AFY.

The WSA found that LADWP has adequate water supplies during normal, single-dry, and multiple-dry years to meet the water demand of the Project in addition to the existing and projected future water demands within LADWP's service area through the year 2040.⁹⁷ Specifically, the WSA concluded that the total water demand of 419 AF annually for the Project has been accounted for in the City's overall total demand projections in the LADWP 2105 UWMP using a service-area approach that does not rely solely on the demands of individual developments.

The LADWP 2015 UWMP is more comprehensive and utilized SCAG's 2012–2035 RTP/SCS data to provide for more reliable water demand forecasts that account for changes in population, housing units, and employment across the service area of LADWP. As analyzed in this Draft EIR, the Project is consistent with the demographic forecast for the City from the 2012 SCAG RTP. Based on that premise, and the quantitative analysis of water demand for the Project, LADWP found that there are adequate water supplies for the Project and that its water demand is included in the LADWP 2015 UWMP. Furthermore, the WSA concluded that the LADWP 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City through the year 2040. Therefore, LADWP concluded expressly that the 419 AFY of water demand associated with the Project can be accounted for during normal, single-dry and multiple-dry years; and that LADWP will be able to meet the proposed water demand of the Project, as well as the existing and planned future water demands of the LADWP service area.

Lastly, as outlined in its 2015 UWMP, LADWP is committed to providing a reliable water supply for the City.⁹⁸ The 2015 LADWP UWMP takes into account the realities of climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a

⁹⁷ LADWP, *Water Supply Assessment for Angels Landing Project*, April 28, 2020.

⁹⁸ LADWP, *2015 Urban Water Management Plan*, June 2016.

**Table IV.L.1-4
Project Water Demand**

Proposed Use ^a	Quantity	Water Use Factor ^c (gpd/unit)	Base Demand (gpd)	Required Ordinances Water Savings ^d (gpd)	Proposed Water Demand	
					(gpd)	(afy)
Residential Units						
1-Bedroom Condominium	51 du	110.00	5,610			
2-Bedroom Condominium	91 du	150.00	13,650			
3-Bedroom Condominium	38 du	190.00	7,220			
Bachelor Apartment	42 du	75.00	3,150			
1-Bedroom Apartment	126 du	110.00	13,860			
2-Bedroom Apartment	60 du	150.00	9,000			
3-Bedroom Apartment	24 du	190.00	4,560			
Base Demand Adjustment (Residential Units) ^e			7,026			
Residential Units Total	432 du		64,076	12,560	51,516	57.71
Hotel Room						
Rooms	515 rm	120.00	61,800			
Base Demand Adjustment (Hotel Room) ^e			5,597			
Hotel Room Total	515 rm	67,397	7,355		60,042	67.26
Residential Amenities						
Lounge/Bar	3,000 sf	0.72	2,160			
Fitness Center	3,800 sf	0.65	2,470			
Community Dining Area	1,475 sf	0.36	527			
Game Room	1,150 sf	0.10	115			
Co-Working Space/Business Center	1,000 sf	0.12	120			
Outdoor Dining Area	2,400 sf	0.36	857			
Dog Washing Area	500 sf	0.425	213			
Pool/Spa	1,057 sf		101			
Hotel Amenities						
Restaurant: Full Service	541 seat	30.00	16,230			
Ballroom	16,950 sf	0.12	2,034			
Meeting Rooms	7,390 sf	0.12	887			
Fitness/Spa	14,780 sf	0.65	9,607			
Pool/Spa	1,882 sf		180			
Commercial						
Retail	30,466 sf	0.025	762			
Restaurant: High Turnover	925 seat	25.00	23,125			
Restaurant: Quality	926 seat	30.00	27,780			
Amenities and Commercial Total			87,168	23,315	63,853	71.53
Landscaping^f	13,308 sf		1,263	688	575	0.64
Covered Parking^g	178,145 sf	0.02	117	0	117	0.13

**Table IV.L.1-4 (Continued)
Project Water Demand**

Proposed Use ^a	Quantity	Water Use Factor ^c (gpd/unit)	Base Demand (gpd)	Required Ordinances Water Savings ^d (gpd)	Proposed Water Demand	
					(gpd)	(afy)
Cooling Tower Total	7,000 ton	35.64	249,480	49,896	199,584	223.58
Proposed Subtotal			469,501	93,814	375,687	420.85
Less Existing to Be Removed Total					0	0.00
Less Additional Conservation ^h					-1,730	-1.94
Net Additional Water Demand					373,957	418.91

afy = acre-feet per year
du = dwelling unit
gpd = gallons per day
rm = rooms
sf = square feet

^a Provided by City of Los Angeles Department of City Planning in the Request for Water Supply Assessment letter and Scope Confirmation e-mail (see Appendix A of the Water Supply Assessment, included as Appendix M of this Draft EIR). Proposed Uses that do not have additional water demands are not shown here.

^b The project site is mostly vacant and landscaped, and there is no water billing record past 2013. Existing water demand is assumed to be 0.

^c Proposed indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table.

^d The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code.

^e Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates.

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

^g Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption.

^h Water conservation due to additional conservation commitments agreed by the Applicant. See Table II of the Water Supply Assessment, included as Appendix M of this Draft EIR.

Source: LADWP, Water Supply Assessment for the Angels Landing Project, April 28, 2020. See Table I-B in the WSA, included as Appendix M of this Draft EIR, for water demand associated with Project.

combination of water conservation and water recycling.⁹⁹ The 2015 LADWP UWMP also furthers the goals of the City's ED 5 and L.A.'s Green New Deal, 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.¹⁰⁰ By focusing on demand reduction and alternative sources of water

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

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

supplies, LADWP will further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages.¹⁰¹ Additionally, as reaffirmed by L.A.'s Green New Deal, the City is committed to conserving and recycling water to help meet future water demands in the City.¹⁰²

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

(2) Mitigation Measures

Project-level impacts related 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 the impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) *Water Infrastructure*

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the area served by the same water infrastructure as the Project). Development of the Project and the related projects within this geographic area (for example, Related Project Nos. 1 through 5 which are located within two blocks of the Project Site and could potentially obtain their water from the same local water mains as the Project) would cumulatively increase demands on the existing water infrastructure system. Similar to the Project, the related projects would be subject to LADWP review (e.g., preparation of a SAR and IFFAR) to ensure that the existing water infrastructure is adequate to meet the domestic and fire water demands. Each project would be required to demonstrate that water infrastructure to serve its project site is adequate. As discussed above, the Project completed that process, and the City has determined that there is

¹⁰¹ LADWP, *2015 Urban Water Management Plan, June 2016*.

¹⁰² *City of Los Angeles, L.A.'s Green New Deal, Sustainable City pLAN, 2019*.

adequate existing water infrastructure in the streets surrounding the Project Site. In addition, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement and update its Water Infrastructure Plan (WIP), with the current (2018–2019) WIP containing a five-year water system capital improvement plan that includes \$6.3 billion for needed water system infrastructure improvements and maintenance.¹⁰³ Furthermore, in accordance with City requirements, prior to ground disturbance, the related projects would be required to coordinate with LADWP to identify the locations and depths of all lines, and LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service associated with the related projects. LADWP would also review and approve all appropriate connection requirements, pipe depths, and connection location(s) associated with the related projects.

Therefore, the Project together with the related projects would not result in significant cumulative water infrastructure impacts related to the construction or expansion water facilities, nor would the Project contribute considerably to cumulative water infrastructure impacts. As such, cumulative water infrastructure impacts would be less than significant.

(b) Water Supply

The geographic context for the cumulative impact analysis on water supply is the LADWP service area. 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 the water supplies required to serve existing and projected demands within its service area. LADWP's 2015 UWMP accounts for existing development within the City, as well as projected growth through the year 2040.¹⁰⁴

As identified in Section III, Environmental Setting, of this Draft EIR, there are 50 related projects located in the vicinity of the Project Site, all of which are located within the LADWP service area. The estimated water demand of these related projects is shown in Table IV.L.1-5 on page IV.L.1-43. As indicated therein, the related projects would generate a total average water demand of approximately 5,107 AFY. Together with the approximately 419 AFY from the Project, total cumulative water demand would be approximately 5,526 AFY. These estimates are conservative because, while the water demand estimates for the Project take into account required and proposed water conservation measures, the estimates for the related projects do not.

¹⁰³ LADWP, 2018–2019 Water Infrastructure Plan.

¹⁰⁴ LADWP, 2015 Urban Water Management Plan, June 2016.

**Table IV.L.1-5
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
1	Equity Residential Mixed-Use 340 S. Hill St.	Apartments	406 du	190/du	77,140
		Affordable Apartments	22 du	190/du	4,180
		Office	2,980 sf	0.12/sf	358
		Retail	2,630 sf	0.025/sf	66
2	5th & Olive (formerly Park Fifth Project) 437 S. Hill St.	Condominiums	660 du	190/du	125,400
		Restaurant	13,742 sf	30/seat ^b	13,742
3	Mixed-Use 400 S. Broadway	Apartments	450 du	190/du	85,500
		Retail	6,904 sf	0.025/sf	173
		Bar	5,000 sf	0.72/sf	3,600
4	4th & Spring Hotel 361 S. Spring St.	Hotel	315 rm	120/rm	37,800
		Meeting Space	2,000 sf	0.12/sf	240
5	5th & Hill 323 W. 5th St.	Hotel	190 rm	120/rm	22,800
		Meeting Room	6,100 sf	0.12/sf	732
		Apartments	31 du	190 /du	5,890
		Restaurant	29,200 sf	30/seat ^b	29,200
6	Grand Avenue Project 100 S. Grand Ave.	Apartments	412 du	190/du	78,280
		Condominiums	1,648 du	190/du	313,120
		Retail	225,300 sf	0.025/sf	5,633
		Supermarket	53,000 sf	0.025/sf	1,325
		Restaurant	67,000 sf	30/seat ^b	67,000
		Health Club	50,000 sf	0.65/sf	32,500
		Event Facility	250 seats	3/seat	750
		Hotel	275 rm	120/rm	33,000
7	Hellman/Banco Building 354 S. Spring St.	Office	681,000 sf	0.12/sf	81,720
		Apartments	212 du	190/du	40,280

**Table IV.L.1-5 (Continued)
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
8	Tribune (LA Times) South Tower Project 222 E. 2nd St.	Condominiums	107 du	190/du	20,330
		Office	534,044 sf	0.12/sf	64,085
		Retail	7,200 sf	0.025/sf	180
9	433 South Main Street 433 S. Main St.	Condominiums	196 du	190/du	37,240
		Retail	5,300 sf	0.025/sf	133
		Restaurant	900 sf	30/seat ^b	900
10	Medallion Phase 2 300 S. Main St.	Apartments	471 du	190/du	89,490
		Restaurant	27,780 sf	30/seat ^b	27,780
		Retail	5,190 sf	0.025/sf	130
11	Mixed-Use (Times Mirror Square) 100 S. Broadway	Apartments	1,127 du	190/du	214,130
		Office	285,088 sf	0.12/sf	34,211
		Supermarket	50,000 sf	0.025/sf	1,250
		Restaurant	75,589 sf	30/seat ^b	75,589
12	Budokan of Los Angeles 237 S. Los Angeles St.	Sports Complex	43,453 sf	0.200/sf	8,691
13	Mixed-Use 601 S. Main St.	Apartments	452 du	190/du	85,880
		Retail	25,000 sf	0.025/sf	625
14	Spring Street Hotel 633 S. Spring St.	Hotel	176 rm	120/rm	21,120
		Bar	5,290 sf	0.72/sf	3,809
		Restaurant	8,430 sf	30/seat ^b	8,430
15	Broadway Mixed-Use 955 S. Broadway	Apartments	163 du	190/du	30,970
		Retail	6,406 sf	0.025/sf	160
16	Wilshire Grand Project 900 W. Wilshire Blvd	Hotel	560 rm	120/rm	67,200
		Apartments	100 du	190/du	19,000
		Office	150,000 sf	0.12/sf	18,000
		Retail/Restaurant	275,000 sf	0.025/sf 30/seat	73,907 ^c

**Table IV.L.1-5 (Continued)
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
17	LA Civic Center Office 150 N. Los Angeles St.	Office	712,500 sf	0.12/sf	85,500
		Retail	35,000 sf	0.025/sf	875
		Child Care	2,500 sf	30/seat	2,500
18	Mixed-Use 737 S. Spring St.	Apartments	320 du	190/du	60,800
		Pharmacy/Drugstore	25,000 sf	0.025/sf	625
19	Mixed-Use 732 S. Spring St.	Apartments	400 du	190/du	76,000
		Retail	15,000 sf	0.025/sf	375
20	8th/Grand/Hope Project 754 S. Hope St.	Condominiums	409 du	190/du	77,710
		Retail	7,329 sf	0.025/sf	183
21	Beaudry Ave & 2nd St. Mixed-Use Project 130 S. Beaudry Ave.	Apartments	220 du	190/du	41,800
		Other	9,000 sf	0.025/sf ^d	225
22	Mixed-Use 820 S. Olive St.	Apartments	589 du	190/du	111,910
		Retail	4,500 sf	0.025/sf	113
23	Mixed-Use 840 S. Olive St.	Condominiums	303 du	190/du	57,570
		Restaurant	9,680 sf	30/seat ^b	9,680
24	7th & Maple Mixed-Use 701 S. Maple Ave.	Apartments	452 du	190/du	85,880
		Retail	6,800 sf	0.025/sf	170
		Restaurant	6,800 sf	30/seat ^b	6,800
25	Mitsui Fudosan (Eighth and Figueroa Tower) 744 S. Figueroa St.	Apartments	436 du	190/du	82,840
		Restaurant	3,750 sf	30/seat	3,750
		Retail	3,750 sf	0.025/sf ^b	94
26	945 West 8th Street 945 W. 8th St.	Apartments	781 du	190/du	148,390
		Commercial	6,700 sf	0.025/sf	168
27	Mixed-Use 755 S. Los Angeles St.	Office	60,243 sf	0.12/sf	7,229
		Retail	16,694 sf	0.025/sf	417
		Restaurant	26,959 sf	30/seat ^b	26,959

**Table IV.L.1-5 (Continued)
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
28	Alexan South Broadway 850 S. Hill St.	Apartments	305 du	190/du	57,950
		Retail	3,500 sf	0.025/sf	88
		Restaurant	3,500 sf	30/seat ^b	3,500
29	845 Olive & 842 Grand Mixed-Use 845 S. Olive St.	Apartments	208 du	190/du	39,520
		Retail	2,430 sf	0.025/sf	61
30	Embassy Tower 848 S. Grand Ave.	Condominiums	420 du	190/du	79,800
		Retail	38,500 sf	0.025/sf	963
31	Southern California Flower Market Project 755 S. Wall St.	Apartments	323 du	190/du	61,370
		Office	53,200 sf	0.12/sf	6,384
		Commercial	8,820 sf	0.025/sf	221
32	Tenten Wilshire Expansion (the Icon) 1027 W. Wilshire Blvd	Condominiums	402 du	190/du	76,380
		Retail	4,728 sf	0.025/sf	118
33	Weingart Tower—Affordable Housing 554 S. San Pedro St.	Affordable Apartments	378 du	190/du	71,820
		Market-Rate Apartments	4 du	190/du	760
		Retail	1,758 sf	0.025/sf	44
		Office	4,410 sf	0.12/sf	529
		Flex	5,932 sf	0.025/sf	148
34	1018 West Ingraham Street 1018 W. Ingraham St.	Apartments	43 du	190/du	8,170
		Retail	7,400 sf	0.025/sf	185
35	Mixed-Use 609 E. 5th St.	Apartments	151 du	190/du	28,690
36	Sapphire Mixed-Use (Revised) 1111 W. 6th St.	Apartments	362 du	190/du	68,780
		Retail	25,805 sf	0.025/sf	645
37	600 South San Pedro Street 600 S. San Pedro St.	Apartments	303 du	190/du	57,570
		Commercial	19,909 sf	0.025/sf	498
38	Hill Street Mixed-Use 920 S. Hill St.	Apartments	239 du	190/du	45,410
		Retail	5,400 sf	0.025/sf	135

**Table IV.L.1-5 (Continued)
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
39	Ferrante 1000 W. Temple St.	Apartments	1,500 du	190/du	285,000
		Retail	30,000 sf	0.025/sf	750
40	655 South San Pedro Street Residential 655 S. San Pedro St.	Apartments	81 du	190/du	15,390
41	Broadway Palace 928 S. Broadway	Apartments	667 du	190/du	126,730
		Condominiums	17 du	190/du	3,230
		Retail	58,800 sf	0.025/sf	1,470
42	La Plaza Cultura Village 527 N. Spring St.	Apartments	345 du	190/du	65,550
		Retail	23,000 sf	0.025/sf	575
		Specialty Retail	21,000 sf	0.025/sf	525
		Restaurant	11,000 sf	30/seat ^b	11,000
43	Mixed-Use 1322 W. Maryland St.	Apartments	47 du	190/du	8,930
		Retail	760 sf	0.025/sf	19
44	Mixed-Use 700 W. Cesar Chavez Ave.	Apartments	300 du	190/du	57,000
		Retail	8,000 sf	0.025/sf	200
45	Hotel & Apartments 675 S. Bixel St.	Apartments	422 du	190/du	80,180
		Hotel	126 rm	120/rm	15,120
		Retail	4,874 sf	0.025/sf	122
46	949 South Hope Street Mixed-Use Development 949 S. Hope St.	Apartments	236 du	190/du	44,840
		Retail	5,954 sf	0.025/sf	149
47	940 South Hill Mixed-Use 940 S. Hill St.	Apartments	232 du	190/du	44,080
		Retail	14,000 sf	0.025 sf	350
48	Residential 350 S. Figueroa St.	Apartments	570 du	190/du	108,300

**Table IV.L.1-5 (Continued)
Cumulative Water Demand**

No.	Project Name	Description	Size	Demand Factor (gpd) ^a	Water Demand (gpd)
49	333 South Figueroa Street 333 S. Figueroa St.	Apartments	224 du	190/du	42,560
		Condominiums	242 du	190/du	45,980
		Hotel	599 rm	120/rm	71,880
		Commercial	28,705 sf	0.025/sf	718
50	Figueroa Centre 911 S. Figueroa St.	Hotel	220 rm	120/rm	26,400
		Apartments	200 du	190/du	38,000
		Commercial	94,080 sf	0.025/sf	2,427
Total					4,559,416 (5,107 AFY)
Proposed Project (with required/proposed water conservation measures)					373,957 (419 AFY)
Total + Proposed Project					4,933,373 (5,526 AFY)

ac = acres

du = dwelling units

gpd = gallons per day

rm = rooms

^a City of Los Angeles Bureau of Sanitation wastewater generation rates (2012).

^b Restaurant space is assumed to be all full-service restaurant and assumed to be equivalent to 30 sf per seat for a conservative estimate.

^c Assumed to be 75 percent retail, 25 percent restaurant.

^d Assumed to be retail.

Source: Gibson Transportation Consulting, Inc., January 2020; Eyestone Environmental, May 2020.

The total water demand of the Project and related projects of approximately 5,526 AFY would represent approximately 1.15 percent of LADWP's 2019 water supply of 480,539 AF, with the Project's share of 419 AF representing approximately 0.087 percent of LADWP's 2019 water supply. These amounts of water demand are not cumulatively considerable in relation to the available water supply available in the LADWP service area.

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., 2026, the project buildout year) based on demographic growth projections in SCAG's 2012–2035 RTP/SCS. The WSA prepared for the Project and included as Appendix M of this Draft EIR also concludes that LADWP will be able to meet proposed water demand of the Project together with the existing and planned future water demands of the City. In addition, compliance of the Project and other future development projects with the numerous regulatory requirements that promote water conservation described above would also reduce actual 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, like the Project, certain large related projects meeting the thresholds under SB 610 would be required to prepare and receive LADWP approval of a WSA that demonstrates how the project's water demand would be met.

Overall, as discussed above, the 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.¹⁰⁵ To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge. Furthermore, LADWP will continue to update its UWMP every five years to ensure that sufficient water supply continues to be available.

Therefore, LADWP would be able to meet the water demands of the Project and future growth within its service area through at least 2040. The Project together with the related projects would not result in significant cumulative impacts related to

¹⁰⁵ LADWP, *2015 Urban Water Management Plan*, June 2016.

water supply, nor would the Project contribute considerably to cumulative water demand. As such, cumulative water supply impacts would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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