## IV. Environmental Impact Analysis

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

## 1. Introduction

This section of the Draft EIR analyzes the Project's potential impacts to water supply and the water infrastructure system serving the Project Site. The analysis describes regional water supplies and existing water infrastructure serving the Project Site, estimates the water demand associated with the Project, and assesses whether there is sufficient water supply and infrastructure capacity to meet that demand. The analysis is based, in part, on the *Utility Infrastructure Technical Report: Water, Wastewater, Dry Utilities* (Utility Report), prepared for the Project by Kimley-Horn on February 21, 2019, which is included in Appendix L of this Draft EIR.

## 2. Environmental Setting

## a. Regulatory Framework

- (1) State
  - (a) Senate Bill 610 (California Water Code Sections 10910 et seq.)

Senate Bill (SB) 610, codified in the California Water Code (CWC), Sections 10910 et seq., became effective January 1, 2002. SB 610 requires counties and cities to consider the availability of adequate water supplies for certain new large development projects as part of the California Environmental Quality Act (CEQA) process. Specifically, SB 610 requires that for certain projects subject to CEQA, the urban water supplier must prepare a water supply assessment that determines whether the projected water demand associated with a project is included as part of the most recently adopted urban water management plan.

Specifically, a water supply assessment 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 Section 10912 of the California Water Code,

projects subject to CEQA requiring submittal of a water supply assessment include the following:

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

As discussed in Section II, Project Description, of this Draft EIR, the Project would provide for the development of 276 residential units and approximately 24,000 square feet of neighborhood-serving commercial retail and restaurant uses under Retail/Restaurant Option. Alternatively, under the Grocery Store Option, an approximately 27,000 square-foot grocery store could be constructed in lieu of the proposed retail and restaurant uses. Upon completion, the Project would result in approximately 260,250 square feet of floor area. As discussed further below, the Project would generate a net new demand for approximately 46,172 gallons per day (gpd) under the Retail/Restaurant Option and approximately 29,304 gpd under the Grocery Store Option. Thus, the Project is not subject to the requirements of SB 610 since the Project would not include the development of any of the categories listed above or generate an average demand for domestic water that would be greater than the demand generated by 500 residential units (approximately

Under the grocery store option, the Project's ground floor layout would be slightly reconfigured, but the Project's overall footprint, height, massing, and total floor area would not change.

55,000 gpd assuming all 500 residential units include one bedroom).<sup>2</sup> Therefore, a water supply assessment is not required for the Project.

#### (b) Senate Bill X7-7 (Water Conservation Act of 2009)

SB X7-7 (Water Conservation Act of 2009), codified in California Water Code Section 10608, requires all water suppliers to increase water use efficiency. Enacted in 2009, this legislation sets an overall goal of reducing per capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020. The State of California was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Monthly statewide potable water savings reached 25.1 percent in February 2017 as compared to that in February 2013.<sup>3</sup> Cumulative statewide savings from June 2015 through February 2017 were estimated at 22.5 percent.<sup>4</sup> Following a multi-year drought and improvements to hydrologic conditions, statewide potable water savings reached 14.7 percent in August 2017 as compared to August 2013 potable water production.<sup>5</sup>

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

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

A number of requirements regarding the preparation of water management plans have been added to the Urban Water Management Planning Act. These additional

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<sup>&</sup>lt;sup>2</sup> Based on the City of Los Angeles Bureau of Sanitation's sewage generation factor, a one-bedroom apartment or condominium would consume approximately 110 gpd. Thus, a 500 dwelling-unit project would generate a demand for approximately 55,000 gpd of water.

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

<sup>&</sup>lt;sup>4</sup> State Water Resources Control Board, Media Release, "Statewide Water Savings Exceed 25 Percent in February; Conservation to Remain a California Way of Life," April 4, 2017.

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

requirements include: (i) a narrative description of water demand measures implemented over the past five years and future measures planned to meet 20 percent demand reduction targets by 2020; (ii) a standard methodology for calculating system water loss; (iii) a voluntary reporting of passive conservation savings, energy intensity, and climate change; and (iv) an analysis of water features that are artificially supplied with water.<sup>6</sup>

#### (d) California Plumbing Code

Title 24, Part 5 of the California Code of Regulations establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 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.<sup>7</sup> This Emergency Supplement is also applicable to the now-effective 2016 California Building Code.<sup>8</sup>

#### (e) Sustainable Groundwater Management Act of 2014<sup>9,10</sup>

The Sustainable Groundwater Management Act of 2014, passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities. 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

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>7</sup> California Building Standards Commission, Revision Record for the State of California, Emergency Supplement, 2013 Title 24, Part 5, California Plumbing Code.

<sup>8</sup> California Building Standards Commission, Revision Record for the State of California, Errata, 2016 Title 24, Part 5, California Plumbing Code, History Note Appendix.

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

California Department of Water Resources, SGM Sustainable Groundwater Management, www.water.ca. gov/Programs/Groundwater-Management/SGMA-Groundwater-Management, accessed December 28, 2018.

authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. As required by the Sustainable Groundwater Management Act, in December 2016, the California Department of Water Resources (DWR) published on its website the best management practices (BMPs): 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.<sup>11</sup> In November 2017, BMP 6 for Sustainable Management Criteria was released for public comments to be received by January 8, 2018. BMP 6 is still considered in draft form and has not yet been adopted.<sup>12</sup> 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.

(f) California Code of Regulations Title 23, Article 22.5, Drought Emergency Water Conservation (Emergency Declaration and Executive Orders)

In response to California's drought conditions, Governor Edmund G. "Jerry" Brown, Jr. (Governor Brown) issued numerous Executive Orders regarding water conservation. Executive Order B-37-16, which was issued in May 2016, extends the mandatory water reduction measures outlined in previous Executive Order B-29-15 and further directs DWR and the State Water Resources Control Board (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 establishes longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks, eliminating wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans.

On November 30, 2016, several state agencies including the SWRCB released a public draft of *Making Water Conservation A California Way of Life*, which addresses elements of Executive Order B-37-16 that requires state agencies to develop a framework for using water more wisely, eliminating water waste, strengthening local drought resilience, and improving agricultural water use efficiency and drought planning.<sup>13</sup>

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 December 26, 2018.

California Department of Water Resources, Best Management Practices and Guidance Documents, www.water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents, accessed December 28, 2018.

California State Water Resources Control Board, Water Conservation Portal—Emergency Conservation Regulation, State Plan Seeks to Make Water Conservation A Way of Life, November 30, 2016.

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. Additionally, Executive Order B-40-17 rescinds the Drought Emergency Proclamations 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. The regulatory requirements resulting from the existing Executive Orders have been codified in Title 23, Article 22.5, Drought Emergency Water Conservation, of the California Code of Regulations. 16

#### (g) California Water Plan<sup>17</sup>

Required by the California Water Code Section 10005(a), the California Water Plan (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.

The Water Plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the Water Plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come. While the California Water Plan cannot mandate actions or authorize itemized spending, policy-makers 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

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

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

<sup>&</sup>lt;sup>16</sup> California Department of Water Resources, State Water Resources Control Board, California Public Utilities Commission, California Department of Food and Agriculture, and California Energy Commission, Making Water Conservation a California Way of Life Final Report, April 2017.

<sup>&</sup>lt;sup>17</sup> California Department of Water Resources, About the Water Plan, https://water.ca.gov/Programs/California-Water-Plan, accessed December 28, 2018.

is in development and will work in tandem with Governor Brown's California Water Action Plan, as discussed further below.

#### (h) 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. The Action Plan discusses the challenges for managing the State's water resources supply, scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods. The following ten actions were presented: 19

- 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;
- 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 release of the Action Plan Update for 2016, 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.

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California Department of Natural Resources, California Water Action Plan, http://resources.ca.gov/california water action plan/, accessed December 28, 2018.

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

## (2) Regional

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

#### (a) MWD's Integrated Water Resources Plan

The Integrated Water Resources Plan (IRP) is the long-term water resources strategy for the MWD in Southern California. As it was first adopted in 1996, the goal of the IRP has been to ensure that a reliable water system will extend into the future. The 2015 IRP Update, adopted in January 2016, provides MWD's strategy for water resource reliability through the year 2040 and establishes targets for a diversified portfolio of water supply investments. The 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 the 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.<sup>20</sup>

#### (b) MWD's 2015 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.<sup>21</sup> 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

Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, January 2016.

<sup>21</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix including programs in the Colorado River Aqueduct, SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. As set forth in their 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve the 20 percent per person potable water use reduction by 2020.

#### (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.<sup>22</sup> The Water Surplus and Drought Management Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's IRP. The Water Surplus and Drought Management Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The Water Surplus and Drought Management Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water, first inside and then outside of the region. The Shortage Actions of the Water Surplus and Drought Management Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage 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, that has since been implemented three times, most recently in April 2015.<sup>23</sup> The

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

<sup>23</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

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 months from July of a given year through the following June.

## (3) Local

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

The 2015 UWMP, adopted in June 2016 by the Los Angeles Department of Water and Power (LADWP), serves two purposes: (i) to achieve full compliance with the requirements of California's Urban Water Management Planning Act (described above); and (ii) to serve as a master plan for water supply and resource management consistent with the City's goals and objectives.<sup>24</sup>

A number of important changes have occurred since the LADWP prepared its prior 2010 UWMP. The year 2012 marked the start of the current multi-year drought in California, in response to which Governor Brown proclaimed a drought state of emergency in January 2014. In addition, as discussed above, in 2014, the SWRCB implemented its Drought Emergency Water Conservation Regulation, which mandates 25-percent reductions in water use statewide. In October 2014, City of Los Angeles Mayor Eric Garcetti issued Executive Directive No. 5 (ED 5), which set goals to reduce per capita water use by 20 percent by 2017, reduce purchases of imported potable water by 50 percent, and create an integrated water strategy to increase local supplies and improve water security considering climate change and seismic vulnerability. In addition, in April 2015, Mayor Garcetti's Sustainable City pLAn (discussed below) was released establishing targets for the City over the next 20 years to strengthen and promote sustainability. LADWP's 2015 UWMP incorporates the objectives of these recent initiatives. Overall, LADWP's 2015 UWMP projects a 7-percent lower water demand trend than what was

<sup>&</sup>lt;sup>24</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

projected in the previous 2010 UWMP.<sup>25</sup> On February 2, 2017, the Mayor announced that the City's 20 percent water reduction target had been met.<sup>26</sup>

#### (b) Sustainable City pLAn<sup>27</sup>

In April 2015, the City's first Sustainable City pLAn was released (the pLAn). The pLAn 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 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 by Fiscal Year 2013–2014 levels. The pLAn also includes a reduction in imported water purchases from MWD by 50 percent of the total supply by 2025 and a goal to expand local sources of water to 50 percent of the total water supply by 2035. Specific strategies and desired outcomes for conservation, recycled water, and stormwater capture are included in the pLAn. These include investments in state-of-the art technology, rebates and incentives promoting water-efficient appliances, tiered water pricing, a technical assistance program for business and industry, and large landscaped irrigation and efficiency programs.

In April 2016, the Sustainable City pLAn's First Annual Report for 2015–2016 was released. It was reported that the City had reduced water use by 19 percent to nearly achieve the 20 percent water reduction goal, and that rebates for water efficient appliances have contributed to conservation.<sup>28</sup> As discussed above, as of February 2017, the City has met its 20 percent water reduction target, which also meets the Sustainable City pLAn's goal. As the Sustainable City pLAn's Second Annual Report for 2016–2017 was released in March 2017, the City has begun working toward its next goal of reducing municipal water use by 22.5 percent by 2025.

#### (c) One Water LA 2040 Plan

The One Water LA 2040 Plan (One Water LA) is an initiative that builds on the progress of the IRP. One Water LA extends the IRP planning period to year 2040 and takes into consideration an additional emphasis on environmental, social, and sustainability

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

City of Los Angeles, Mayor Eric Garcetti, Press Release, Los Angeles Achieves Mayor Garcetti's Goal of 20 Percent Water Savings, released February 2, 2017, www.lamayor.org/los-angeles-achieves-mayorgarcetti%E2%80%99s-goal-20-percent-water-savings, accessed December 28, 2018.

<sup>&</sup>lt;sup>27</sup> Mayor's Office of Sustainability, Sustainable City pLAn, April 2015.

<sup>28</sup> Mayor's Office of Sustainability, Sustainable City pLAn, First Annual Report for 2015–2016, April 2016.

factors.<sup>29</sup> One Water LA is a collaborative approach to develop an integrated framework for managing the City's watersheds, water resources, and water facilities in an environmentally, economically, and socially beneficial manner. One Water LA objectives include the following:<sup>30</sup>

- 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.
- 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.

The final draft of One Water LA has been completed, and work on its Programmatic Environmental Impact Report (PEIR) will begin soon.<sup>31</sup>

One Water LA, Stakeholder Meeting & Celebration (presentation), March 5, 2018.

LA Sanitation, About One Water LA, www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au?\_adf.ctrl-state=16okwrlh8h\_5&\_afrLoop=510921480353498#!, accessed August 6, 2018.

One Water LA, Plan Documents, www.lacitysan.org/san/faces/wcnav\_externalId/s-lsh-es-owla-r?\_adf. ctrl-state=rnwk2mfka 5& afrLoop=3595575820503671#!, accessed February 20, 2019.

#### (d) Los Angeles Municipal Code

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

- Ordinance Nos. 166,080, 181,288, 183,608, and 184,250—amending LAMC Chapter XII, Article 1 to clarify prohibited uses of water and modify certain water conservation requirements of the City's Emergency Water Conservation Plan. The City's Emergency Water Conservation Plan sets forth six different phases of water conservation, which shall be implemented based on water conditions. As part of these requirements, watering is limited to specific days and hours. In determining which phase of water conservation shall be implemented, LADWP monitors and evaluates the projected water supply and demand. In addition, the Emergency Water Conservation Plan includes penalties for those that violate its requirements.
- City Ordinance No. 180,822—amended LAMC Chapter XII, Article 5 to establish water efficiency requirements for new development and renovation of existing buildings, and mandate installation of high efficiency plumbing fixtures in residential and commercial buildings.
- City Ordinance No. 181,480—amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the California Green Building Standards Code. This ordinance added mandatory measures for newly constructed low-rise residential and non-residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20-percent reduction in baseline water use.
- City Ordinance Nos. 181,899 and 183,833—amended LAMC Chapter VI, Article 4.4, Section 64.72 regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.
- Ordinance No. 182,849—amended LAMC Chapter IX, Article 9 (Green Building Code) to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 square feet, separate sub-meters or metering devices shall be installed for outdoor potable water use. This ordinance also required that for new non-residential construction with at least 1,000 square feet of cumulative landscaped area, weather- or soil moisture—based irrigation controllers and sensors be installed.
- City Ordinance No. 184,692—amended LAMC Chapter IX, Article 4 (Plumbing Code) by adopting by reference various sections of the California Plumbing Code. This ordinance also added requirements for plumbing fixtures and fixture fitting.

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

The City of Los Angeles also has adopted numerous requirements related to the provision of water for purposes of fire protection. These requirements are set forth in the Fire Code (LAMC Chapter V, Article 7). LAMC Section 57.507.3.1 establishes fire water flow standards. Fire water flow requirements, as determined by the Los Angeles Fire Department (LAFD), vary by project site as they are dependent on land use (e.g., higher intensity land uses require higher flow from a greater number of hydrants), life hazard, occupancy, and fire hazard level. As set forth in LAMC Section 57.507.3.1, fire water flow requirements vary from 2,000 gallons per minute (gpm) in low density residential areas to 12,000 gpm in high density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system with the required gpm flowing. As set forth in LAMC Section 57.507.3.1, Industrial and Commercial land uses (which the LAFD has classified the Project as) have a minimum required fire flow of 6,000 gpm to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 psi unless otherwise determined by LAFD. LAMC Section 57.507.3.2 also addresses land use-based requirements for fire hydrant spacing and type. Land uses in the Industrial and Commercial category require one hydrant per 80,000 square feet of land with 300-foot distances between hydrants, and 2.5-inch by 4-inch double fire hydrants or 4-inch by 4-inch double fire hydrants. Regardless of land use, every first story of a residential, commercial, and industrial building must be within 300 feet of an approved hydrant.

#### (e) Los Angeles Water Rate Ordinance

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

## b. Existing Conditions

## (1) Water Supply

LADWP is responsible for providing water within the City of Los Angeles limits and ensuring that the water quality meets applicable California health standards for drinking water. As the Project Site is located within the City, LADWP is the water provider for the Project Site. Water is supplied to the City from four primary sources: the Los Angeles Aqueducts, local groundwater, purchased water from MWD, and recycled water.<sup>32</sup> As shown in Table IV.I.1-1 on page IV.I.1-16, in 2016, the LADWP had an available water supply of 488,677 acre-feet, of which approximately 18 percent was from the Los Angeles Aqueducts, approximately 15 percent from local groundwater, approximately 65 percent from the MWD, and approximately 2 percent from recycled water. These water sources are described in further detail below.

#### (a) Los Angeles Aqueducts

Snowmelt runoff from the Eastern Sierra Nevada Mountains is collected and conveyed to the City via the Los Angeles Aqueducts (LAA). The LAA's supplies come primarily from snowmelt and secondarily from groundwater pumping, and can fluctuate yearly due to the varying hydrologic conditions.

The City holds water rights in the Eastern Sierra Nevada where the LAA's water supplies originate. These supplies originate from both streams and groundwater. As indicated in Table IV.I.1-1, approximately 87,892 acre-feet of LADWP's water supplies were from the LAA in 2016. Average deliveries from the LAA system from 2011 through 2016 were approximately 127,685 acre-feet of water annually. In recent years, LAA supplies have been less than the historical average due to environmental restoration obligations in Mono and Inyo Counties, as described below.

Various lawsuits and injunctions, and resulting agreements affect water supplies from the LAA. These include an agreement with the County of Inyo regarding groundwater levels and enhancement and mitigation projects in the Owens Valley, and the imposition of new regulatory requirements by the SWRCB regarding export from Mono Lake and restoration and monitoring programs for the Mono Basin. In addition, in November 2014, an agreement between the City and the Great Basin Unified Air Pollution Control District was reached wherein LADWP will continue to implement measures to address dust

<sup>32</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

Table IV.I.1-1
Los Angeles Department of Water and Power 2007–2016 Water Supply

| Calendar<br>Year | Los Angeles<br>Aqueducts | Local<br>Groundwater | MWD     | Recycled<br>Water | Total <sup>a</sup> |
|------------------|--------------------------|----------------------|---------|-------------------|--------------------|
| 2007             | 127,392                  | 88,041               | 439,353 | 3,595             | 658,438            |
| 2008             | 148,407                  | 64,604               | 427,422 | 7,048             | 645,817            |
| 2009             | 137,261                  | 66,998               | 351,959 | 7,570             | 563,234            |
| 2010             | 251,126                  | 68,346               | 205,240 | 6,900             | 532,550            |
| 2011             | 357,752                  | 49,915               | 119,481 | 7,708             | 535,009            |
| 2012             | 166,858                  | 59,109               | 326,122 | 5,965             | 556,872            |
| 2013             | 64,690                   | 66,272               | 438,534 | 9,253             | 581,153            |
| 2014             | 62,088                   | 94,280               | 391,320 | 11,307            | 556,915            |
| 2015             | 26,828                   | 81,618               | 378,439 | 9,844             | 496,297            |
| 2016             | 87,892                   | 73,304               | 317,767 | 8,730             | 488,677            |

Units are in acre-feet.

Source: Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

emissions at Owens Lake and implement additional water conservation through increasing use of water efficient and waterless dust measures.<sup>33</sup>

Based on modeling results provided in LADWP's 2015 UWMP, LADWP projects that the average annual long-term LAA delivery between 2015 and 2040 is expected to be approximately 278,000 AFY and gradually decline to 267,000 AFY due to projected climate change impacts.<sup>34</sup> However, with completion of the Owens Lake Master Project by 2024, the projected LAA delivery may increase to 286,000 AFY due to water conserved at Owens Lake, which would off-set most of the anticipated long-term losses.<sup>35</sup>

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

Los Angeles Department of Water and Power, LADWP Newsroom, 2014 Archive, City of Los Angeles and Great Basin Unified Air Pollution Control District Reach Historic Comprehensive Agreement on Owens Lake Dust Mitigation, released November 14, 2014, www.ladwpnews.com/city-of-los-angeles-and-great-basin-unified-air-pollution-control-district-reach-historic-comprehensive-agreement-on-owens-lake-dust-mitigation/, accessed December 28, 2018.

<sup>34</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

<sup>35</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

#### (b) Groundwater

LADWP owns water rights in the San Fernando, Sylmar, Eagle Rock, Central and West Coast Basins.<sup>36</sup> All of these basins are adjudicated by judicial decisions of the Superior Court of the State of California.

LADWP currently has combined water rights of approximately 109,809 AFY, of which approximately 87,000 AFY are located in the San Fernando Basin, 500 AFY in the Eagle Rock Basin, 1,503 AFY in the West Coast Basin, 17,236 AFY in the Central Basin and 3,570 AFY in Sylmar Basin.<sup>37</sup> LADWP has accumulated nearly 537,622 acre-feet of stored water credits in the San Fernando Basin as of October 2014.<sup>38</sup> This water can be withdrawn from the basin during normal and dry years or in an emergency, in addition to LADWP's approximately 87,000 AFY entitlement in the basin. Although LADWP holds entitlements of 500 AFY in the Eagle Rock Basin and 1,503 AFY in the West Coast Basin, no groundwater production currently occurs in the Eagle Rock Basin, and no groundwater production has occurred in the West Coast Basin since 1980.<sup>39</sup>

As shown in Table IV.I.1-2 on page IV.I.1-18, during Fiscal Year 2014–2015, LADWP extracted 80,097 acre-feet from the San Fernando Basin and 6,948 acre-feet from the Central Basin.<sup>40</sup> LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported water supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. Both LADWP and DWR have programs in place to monitor wells to prevent overdrafting. LADWP's groundwater pumping practice is based on a "safe yield" operation, which is defined as the attainment and maintenance of a long-term balance between the annual amount of groundwater withdrawn by pumping and the annual amount of recharge. 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 Basins.<sup>41</sup> These efforts include operation of groundwater remediation systems, use of an extensive network of groundwater monitoring wells, routine reporting on groundwater elevation and water

Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

<sup>37</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

Los Angeles Department of Water and Power, Water, Sources of Supply, Groundwater, www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-sourcesofsupply/a-w-sos-localgroundwater?\_adf.ctrl-state=4oxqlpl0m\_4&\_afrLoop=1003345892897830, accessed August 6, 2018.

<sup>40</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>41</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

Table IV.I.1-2
Local Groundwater Basin Supply

| Fiscal Year<br>(July–June) | San Fernando | Sylmar | Central |  |
|----------------------------|--------------|--------|---------|--|
| 2010–2011                  | 44,029       | 225    | 5,099   |  |
| 2011–2012                  | 50,244       | 1,330  | 9,486   |  |
| 2012–2013                  | 50,550       | 1,952  | 6,310   |  |
| 2013–2014                  | 68,784       | 891    | 9,727   |  |
| 2014–2015                  | 80,097       | 0      | 6,948   |  |
| 2019–2020 <sup>a</sup>     | 90,000       | 4,170  | 18,500  |  |
| 2024-2025a                 | 88,000       | 4,170  | 18,500  |  |
| 2029–2030 <sup>a</sup>     | 84,000       | 4,170  | 18,500  |  |
| 2034–2035 <sup>a</sup>     | 92,000       | 4,170  | 18,500  |  |
| 2039–2040 <sup>a</sup>     | 92,000       | 3,570  | 18,500  |  |

Units are in acre-feet.

Source: Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

quality, management and mitigation of urban runoff water quality, and development of enhanced stormwater recharge and groundwater replenishment.

#### (c) Metropolitan Water District of Southern California

MWD is the largest water wholesaler for domestic and municipal uses in Southern California. MWD imports a portion of its water supplies from Northern California through the SWP's California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the LAA and local groundwater. As of June 30, 2016, LADWP has a preferential right to purchase 19.94 percent of MWD's total water supply.<sup>42</sup>

Purchases from MWD have averaged 64 percent of the City's water supply over a five-year period from Fiscal Years 2011–2012 to 2015–2016.<sup>43</sup> The Sustainable pLAn calls for a reduction in purchased imported water by 50 percent by 2025 from the Fiscal Year

<sup>&</sup>lt;sup>a</sup> Projected groundwater production.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>43</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

2013–2014 level, which was approximately 441,870 acre-feet.<sup>44</sup> To meet these targets, LADWP plans to reduce water demand through increased conservation as well as increased local supply development. Local supply development includes enhancing the ability of groundwater pumping through increased stormwater capture projects and groundwater replenishment with highly treated recycled water as well as remediation of contaminated groundwater supplies in the San Fernando Basin. LADWP also plans to increase recycled water use for non-potable purposes. With these initiatives and under average hydrologic conditions, LADWP's 2015 UWMP projects MWD purchases to be approximately 65,930 AFY in 2025.<sup>45</sup>

Over the next 25 years, 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. As indicated in Table IV.I.1-1 on page IV.I.1-16, in 2016, LADWP received approximately 317,767 acrefeet of water from MWD. LADWP will continue to rely on MWD to meet its current and future supplemental water needs. Summaries of MWD's individual supplies, along with the challenges facing each supply and specific actions that MWD is taking to meet each of the challenges facing its water supplies, are presented below.

#### (i) The Colorado River

MWD owns and operates the Colorado River Aqueduct, which has delivered water from the Colorado River to Southern California since 1942.<sup>47</sup> 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.<sup>48</sup> 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.<sup>49</sup> In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada. Since 2003, due to increased consumption, no such unused

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>46</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, April 2016.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>48</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>49</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

apportioned water has been available to California. Historically, MWD has been able to claim most of its legal entitlement of Colorado River water and could divert over 1.2 million acre-feet in any year, but persistent drought conditions have contributed to a decrease in these claims.<sup>50</sup> MWD's total supply from the Colorado River for Calendar Year 2016 was approximately 985,000 acre-feet.<sup>51</sup>

#### Challenges to Colorado River Supply

As the Colorado River water supplies come from watersheds of the Upper Colorado River Basin, snowpack and runoff can impact storage levels at Lake Powell and Lake Mead, which would then affect the likelihood of surplus or shortage conditions in the future. Although the MWD has two principal sources of water supply and is able to utilize supplies from the Colorado River to offset reductions in SWP supplies and buffer impacts of the California drought, the MWD has also been developing plans and making efforts to provide additional water supply reliability for the Southern California region.<sup>52</sup> The Colorado River Basin has been experiencing a prolonged drought, with runoff in 2012 being among the four driest in history.<sup>53</sup> During these drought conditions, Colorado River system storage decreased to 50 percent of capacity.<sup>54</sup>

MWD has developed a number of supply and conservation programs to increase the amount of supply available from the Colorado River. However, other users along the Colorado River have rights that will allow their water use to increase as their water demands increase. The Colorado River faces long-term challenges of water demands exceeding available supply with additional uncertainties due to climate change. Because MWD holds the lowest priority rights in California during a normal Lake Mead storage condition, the available future supply could decrease.<sup>55</sup>

Federal and state environmental laws protecting fish species and other wildlife species also have the potential to affect Colorado River operations. A number of species that are either endangered or threatened are present in the Lower Colorado River. However, the Lower Colorado River Multi-Species Conservation Program allows MWD to obtain federal and State permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>51</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>52</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>53</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

<sup>&</sup>lt;sup>54</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

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

minimize any uncertainty from additional listings of endangered species.<sup>56</sup> The Lower Colorado River Multi-Species Conservation Program also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by MWD and other agencies.<sup>57</sup>

#### Management of Colorado River Supply

There are various agreements and guidelines that affect the management of Colorado River water supplies, and MWD has taken steps to augment its share of Colorado River water supplies by entering into agreements with other agencies that have rights to use such water. Specifically, under a 1988 water conservation agreement between MWD and the Imperial Irrigation District, MWD provided funding for the Imperial Irrigation District to construct and operate a number of conservation projects that are currently conserving up to 109,460 acre-feet of water per year that is provided to MWD.<sup>58</sup> 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.<sup>59</sup> Furthermore, in May 2008, MWD joined the Central Arizona Water Conservation District and the Southern Nevada Water Authority in funding of the Warren H. Brock Reservoir, which conserves approximately 70,000 AFY of water by capturing and storing water that would otherwise be lost from the system. In return for its funding, MWD received 100,000 acre-feet of water stored in Lake Mead for future use. As of January 1, 2016, MWD received 43,992 acrefeet of the water.60

MWD is also participating in numerous pilot programs to augment its water supplies. Other agreements and guidelines that continue to affect the management of water supplies from the Colorado River include the 2003 Quantification Settlement Agreement, which amended the 1998 Water Conservation and Transfer Agreement.<sup>61</sup> Additional guidelines

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

<sup>&</sup>lt;sup>57</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

The Quantification Settlement Agreement is an agreement that limits California's draw on the Colorado River to 4.4 million acre-feet per year. One component of the agreement represented the largest agricultural-to-urban water transfer in U.S. history at the time. As such, approximately 400,000 acre-feet per year of conserved water from Imperial Valley farms must be transferred to urban water agencies, (Footnote continued on next page)

and programs that influence management of the Colorado River water supplies include the Interim Surplus Guidelines,<sup>62</sup> the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead,<sup>63</sup> and Intentionally Created Surplus Program,<sup>64</sup> and the Quagga Mussel Control Program.<sup>65</sup>

#### (ii) State Water Project

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

MWD is one of the 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 18.8 million), the share of the SWP that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 52 percent for 2016).<sup>66</sup>

The SWP, under the original contracted amount at 100 percent allocation, provides MWD with 1,911,500 acre-feet of water each calendar year.<sup>67</sup> However, due to water

such as the San Diego Water Authority. The agreement also called for the delivery of flows to the Salton Sea until the end of 2017.

The Interim Surplus Guidelines are used to determine the conditions under which certain availability of surplus water could be used within the lower basin states of Arizona, California, and Nevada.

The Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead provide additional guidelines for the management and operation of Colorado River reservoirs, particularly for the lower basin states of Arizona, California, and Nevada.

<sup>&</sup>lt;sup>64</sup> Intentionally Created Surplus water is water that has been conserved through a variety of programs using extraordinary conservation measures, such as land fallowing.

The Quagga Mussel Control Program was developed in 2007 to control the spreading of the invasive quagga mussels in the Colorado River's canals and reservoirs.

<sup>&</sup>lt;sup>66</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

<sup>&</sup>lt;sup>67</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, Appendix F, August 30, 2017.

quality and supply reliability challenges and conflicts due to variable hydrology and environmental standards that limit pumping operations, SWP deliveries in the most critically dry years have varied. Contractual amounts were 5 percent in 2014 and 20 percent in 2015.<sup>68</sup> For 2016, DWR had estimated an initial allocation of 10 percent but increased the allocation to 60 percent by April 2016, primarily due to changes in hydrologic conditions.<sup>69,70</sup> In November 2016, the DWR had estimated an initial allocation of 20 percent for 2017, due to factors including, but not limited to: existing storage in SWP conservation reservoirs, conservation constraints for the delta smelt, and contractor demands.<sup>71,72</sup> Due to the observed changes in hydrologic conditions, DWR subsequently increased 2017 allocation levels to 45 percent,<sup>73</sup> 60 percent in January 2017,<sup>74</sup> and to 85 percent on April 14, 2017.<sup>75</sup>

On November 29, 2017, DWR set an initial SWP allocation of 15 percent for most SWP contractors for the 2018 calendar year. This allocation increased to 20 percent on January 29, 2018, 30 percent on April 24, 2018, and 35 percent on May 21, 2018. The approval by DWR considered several factors, including existing storage in SWP

<sup>&</sup>lt;sup>68</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

<sup>&</sup>lt;sup>69</sup> California Department of Water Resources, Notice to State Water Project Contractors, Number 15-07, 2016 State Water Project Initial Allocation—10 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 16-06, 2016 State Water Project Allocation—60 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 16-09, 2017 State Water Project Initial Allocation—20 Percent.

<sup>&</sup>lt;sup>72</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>73</sup> California Department of Water Resources. Notice to State Water Project Contractors, Number 16-10, 2017 State Water Project Allocation—45 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 17-01, 2017 State Water Project Allocation—60 Percent.

<sup>&</sup>lt;sup>75</sup> California Department of Water Resources, Notice to State Water Project Contractors, Number 17-05, 2017 State Water Project Allocation—85 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 17-10, 2018 State Water Project Initial Allocation—15 Percent.

<sup>&</sup>lt;sup>77</sup> California Department of Water Resources, Notice to State Water Project Contractors, Number 18-02, 2018 State Water Project Allocation Increase—20 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 18-03, 2018 State Water Project Allocation Increase—30 Percent.

California Department of Water Resources, Notice to State Water Project Contractors, Number 18-05, 2018 State Water Project Allocation Increase—35 Percent.

conservation reservoirs, SWP operational regulatory constraints, and the 2018 contractor demands.<sup>80</sup>

#### Challenges to State Water Project Supply<sup>81</sup>

Litigation and various regulations have created challenges for the SWP. In particular, the listing of several fish species in the Delta as threatened or endangered under the federal and/or California Endangered Species Acts has constrained SWP operations and created more uncertainty in SWP supply reliability. Based on DWR's 2015 State Water Project Delivery Capability Report, future SWP deliveries will continue to be impacted by restrictions on SWP and Central Valley Project Delta pumping, and climate change, which is altering the hydrologic conditions in the State.

#### Programs Addressing Challenges within the Delta<sup>82</sup>

In November 2009, Governor Arnold Schwarzenegger passed the 2009 Comprehensive Water Package consisting of four policy bills and a \$11.14 billion bond proposal designed to ensure reliable water supply for California's future and restore the Delta and other ecologically sensitive areas. SB X7-1 of the 2009 Comprehensive Water Package established co-equal goals for the Delta: to provide a reliable water supply for California, and protect, restore, and enhance the Delta ecosystem. SB X7-1 also created a new Delta governing structure to achieve these co-equal goals and established a process for determining the consistency of the Bay Delta Conservation Plan (BDCP) with the co-equal goals. The goal of the BDCP was to provide a basis for the issuance of endangered species permits for the operation of the SWP and Central Valley Project, and for improvements related to the Delta conveyance. The BDCP is intended to help reduce the risk posed by seismic activities to water supplies from the Delta, protect drinking water quality and help to alleviate conflicts between water management and environmental protection.

The draft BDCP and associated EIR/EIS were made available for public review and comment in December 2013. In April 2015, state agencies announced a modified preferred alternative referred to as California WaterFix, which includes design changes and refinements to address impacts to Delta communities and various environmental commitments. A separate ecosystem effort referred to as California EcoRestore was also announced that includes restoration of at least 30,000 acres of Delta habitat. A

<sup>&</sup>lt;sup>80</sup> California Department of Water Resources, Notice to State Water Project Contractors, Number 18-05, 2018 State Water Project Allocation Increase—35 Percent.

<sup>81</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

<sup>82</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

recirculated draft EIR/supplemental draft EIS evaluating California WaterFix and cumulative impacts of California EcoRestore was prepared and released for public review in July 2015.83,84 Together, California WaterFix and California EcoRestore are expected to make significant contributions toward achieving the coequal goals of providing a more reliable water supply in California and protecting, restoring and enhancing the Delta ecosystem established in the Sacramento-San Joaquin Delta Reform Act of 2009. On December 22, 2016, the California Department of Water Resources and the U.S. Bureau of Reclamation completed the Bay Delta Conservation Plan/California WaterFix Final EIR/EIS, which has been submitted to state and federal regulatory agencies for approval and permit authorization.<sup>85</sup> On January 18, 2017, the United States Environmental Protection Agency recommended that the lead agencies for WaterFix carefully consider such reasonably foreseeable operational constraints to ensure appropriate design and operation.86 On July 21, 2017, the California Department of Water Resources certified the Final EIR and approved the California WaterFix (Alternative 4a).87 In addition, on the same day, DWR filed a validation action with the Sacramento County Superior Court to affirm the department's authority to, among other things, issue revenue bonds to finance the planning, design, construction, and other capital costs of California WaterFix. validation action is intended to provide assurances to the financial community for the sale of the revenue bonds for California WaterFix.88 On February 7, 2018, DWR proposed to pursue WaterFix as planned with construction implemented in stages.<sup>89</sup> On April 10, 2018. the MWD Board of Directors voted to provide the additional funding necessary to allow for the construction of the full California WaterFix project. MWD's financing of the full project is expected to cost households on average up to \$4.80 per month, though that average cost would be reduced as Metropolitan recoups some of its investments from the agricultural

Bay Delta Conservation Plan, The Environmental Review Process, http://baydeltaconservationplan.com/ EnvironmentalReview/EnvironmentalReview/EnvironmentalReview.aspx, accessed December 28, 2018.

California Department of Water Resources and U.S. Bureau of Reclamation, Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft EIR/Supplemental Draft EIR Executive Summary, 2015.

<sup>85</sup> California Department of Water Resources and the U.S. Bureau of Reclamation, Final Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan/California WaterFix, December 2016.

<sup>&</sup>lt;sup>86</sup> U.S. Environmental Protection Agency, Director of Enforcement Division, to Bureau of Reclamation, Mid-Pacific Region, Regional Director, January 18, 2017.

<sup>&</sup>lt;sup>87</sup> Bay Delta Conservation Plan, Notice of Determination (NOD), http://baydeltaconservationplan.com/Notice ofDetermination.aspx, accessed December 28, 2018.

<sup>&</sup>lt;sup>88</sup> California Department of Water Resources, News for Immediate Release, California WaterFix Reaches Key Milestone as State Environmental Review is Certified, July 21, 2017.

<sup>&</sup>lt;sup>89</sup> California Department of Water Resources, News for Immediate Release, Statement Regarding California WaterFix, February 7, 2018.

sector. In addition, MWD would sell or lease capacity in the tunnels to allow water deliveries or exchanges for other parties.<sup>90</sup>

After extensive study and analysis of major infrastructure projects, DWR and participating public water agencies have established a formal partnership to staff, design, contract, construct and finance the California WaterFix project. On May 14, 2018, the Delta Conveyance Design and Construction Authority (DCA) was formed as a Joint Powers Authority by the participating public water agencies. It is charged with final design and construction of WaterFix facilities, under the oversight of DWR. This model will allow the State and the public water agencies, including MWD, that are funding the project to assign roles and responsibilities that align around a shared vision to safely and transparently design and build WaterFix. 92

In addition, a primary consideration in the operation of the SWP is avoiding, minimizing, and/or offsetting adverse impacts to species of concern, species listed as threatened or endangered by a State or federal agency, or species proposed for listing. The SWP is operated pursuant to biological opinions issued under the federal Endangered Species Act (ESA), and consistency determinations or incidental take permits issued under the California Endangered Species Act (CESA). As such, in order to avoid and minimize adverse impacts to these species, the SWP is operated with flexibility in operational responses, which can include the Delta Cross Channel gate closure, export curtailments, changes in delivery schedules, increased reservoir releases, preferential use of certain facilities, or a combination of these actions. <sup>93</sup>

#### (iii) Additional MWD Actions to Address Supply

To improve water supply reliability for the entire Southern California region, MWD has also been pursuing voluntary water transfer and exchange programs with state, federal, public and private water districts and individuals. MWD is currently operating several SWP storage programs to increase the reliability of supplies from the California Aqueduct. Programs include the Arvin–Edison Storage Program; the Semitropic Storage Program; the San Bernardino Storage Program; the San Gabriel Valley MWD Exchange Program; the Antelope Valley–East Kern Water Agency Exchange and Storage Program;

Metropolitan Water District of Southern California, News Release, "Metropolitan Approves Additional Funding for Full-Scale, Two-Tunnel California WaterFix," April 10, 2018.

Joint Powers Agreement Forming the Delta Conveyance Design and Construction Joint Powers Authority, Effective May 14, 2018.

<sup>&</sup>lt;sup>92</sup> California Waterfix, Delta Conveyance Design and Construction Authority, www.californiawaterfix.com/ dcdca/, accessed June 29, 2018.

<sup>&</sup>lt;sup>93</sup> California Department of Water Resources, Bulletin 132-16, Management of the California State Water Project, June 2017.

the Kern–Delta Water District Storage Program; the Mojave Storage Program; and the Central Valley Transfer Programs.<sup>94</sup>

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

Additionally, MWD has more than 5 million acre-feet of storage capacity of available reservoirs and banking/transfer programs, with approximately 1.25 million acre-feet, inclusive of Intentionally Created Surplus, in that storage, and 626,000 acre-feet in emergency storage as of January 1, 2017.<sup>97</sup> MWD plans to add to the storage in 2017.<sup>98</sup> As described in the MWD's 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under average-year, single dry-year, and multiple dry-year hydrologic conditions.

#### (d) Precipitation Conditions

In the summer of 2016, parts of Northern California remained at below-average precipitation, and Southern California precipitation was well below average. In addition, the Delta, which supplies a substantial portion of Southern California's water, had remained less than half full, while the Colorado River Basin continued to experience drought conditions. The state continued to develop and implement necessary strategies and actions to address California's drought conditions. In particular, on January 15, 2016, DWR and the U.S. Bureau of Reclamation finalized the 2016 Drought Contingency Plan that outlined SWP and Central Valley Project operations for February 2016 through November 2016. In addition, as described above, in May 2016, Governor Brown issued

<sup>&</sup>lt;sup>94</sup> Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.

<sup>95</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>96</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>&</sup>lt;sup>97</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

<sup>99</sup> California Department of Water Resources, Water Conditions Update, June 2016.

California Department of Water Resources and U.S. Bureau of Reclamation, Central Valley Project and State Water Project 2016 Drought Contingency Plan for Water Project Operations, February–November 2016, submitted January 15, 2016.

Executive Order B-37-16 to build on the temporary statewide emergency water restrictions and establish longer-term water conservation measures.

Although water year 2017 (i.e., October 1, 2016, to September 30, 2017) was the second wettest on record, water year 2018 (i.e., October 1, 2017, to September 30, 2018) represented a return to dry conditions statewide, with most of the State experiencing below-average precipitation.<sup>101</sup> The April 1, 2018, reading of snowpack was 58 percent of average, compared to 163 percent of average the previous year. Southern California experienced drier conditions than northern California, with Los Angeles, Riverside, and San Diego receiving 32, 46, and 32 percent of average precipitation, respectively, compared to 79 percent of average in the Sacramento River Basin watershed.

The outlook for the 2019 water year is unclear. Present forecasting capability cannot provide a reliable prediction. Water year 2018 may have been an isolated dry year or could represent a return to drought conditions, interrupted by a wet 2017. This would be similar to conditions in the Colorado River Basin, where a 19-year dry period has included occasional average or wet years.

#### (e) Global Warming and Climate Change

As discussed in 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. Local sources can expect to see some changes in the future as well. In addition to water supply impacts, changes in local temperature and precipitation are expected to alter water demand patterns. However, there is still general uncertainty within the scientific community regarding the potential impacts of climate change within the City of Los Angeles. LADWP continues to monitor the latest developments in scientific knowledge and will continue to assess future research for the potential impacts of climate change on its water resources.

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,

<sup>&</sup>lt;sup>101</sup> California Department of Water Resources, Water Year 2018: Hot and Dry Conditions Return, September, 2018.

which also account for uncertainty, risk, and sustainability in planning for the future. As mentioned above, with updates published every five years, the most recent *California Water Plan Update 2013* will be followed by an update for 2018 that will incorporate the issue of climate change. A 30-day public review period for the draft California Water Plan Update 2018 (Update 2018) concluded on January 21, 2019. Comments received on the draft will be used to inform the final Update 2018 release. DWR has also been in the process of completing its Climate Action Plan since 2012. Phases I and II of the 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 originally expected to be completed in 2018 with a vulnerability assessment and adaptation plan of DWR assets and activities, as related to the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply. 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 Executive Directive 5, the Sustainable City pLAn, and the Water Conservation Act of 2009, LADWP's 2015 UWMP aims to reduce per capita potable water use by 20 percent by 2017, by 22.5 percent by 2025, and by 25 percent by 2035, based on Fiscal Year 2013–2014 levels. Furthermore, the LADWP is projected to increase recycled water use to 59,000 AFY by 2025 through planned municipal/industrial use and indirect potable reuse (i.e., groundwater replenishment). With the potential growth in customer demand, the LADWP projects that recycled water use will reach 75,400 AFY by 2040. 106

Overall, LADWP's 2015 UWMP projects a 7 percent lower water demand trend than what was projected in the previous 2010 UWMP.<sup>107</sup> In addition, based on programs and

<sup>&</sup>lt;sup>102</sup> California Department of Water Resources, California Water Plan Update 2013, Investing in Innovation & Infrastructure, Highlights, October 2014.

<sup>&</sup>lt;sup>103</sup> California Department of Water Resources, California Water Plan, www.water.ca.gov/Programs/California-Water-Plan, accessed February 1, 2019.

<sup>&</sup>lt;sup>104</sup> California Department of Water Resources, DWR Climate Action Plan, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed February 1, 2019.

<sup>&</sup>lt;sup>105</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

<sup>&</sup>lt;sup>106</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

<sup>&</sup>lt;sup>107</sup> Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.

improvements contemplated in LADWP's 2015 UWMP, locally developed water supplies would increase from the current 14 percent to 49 percent in dry years, or to 47 percent in average years by 2040.<sup>108</sup>

#### (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). Table IV.I.1-3 on page IV.I.1-32 shows the projected water demand from the year 2020 through 2040 for the City of Los Angeles.

As shown in Table IV.I.1-3, in 2040 during average year hydrologic conditions, the City's water demand is forecasted to be approximately 675,700 AFY. Use of the current demand per capita within this forecast provides a conservative estimate of projected future water demand to ensure that water supplies are available to meet projected demands. LADWP's 2015 UWMP anticipates adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2040.<sup>110</sup>

As discussed above, as of February 2, 2017, the City has met its goal established by ED 5 and the Sustainable City pLAn to reduce the per capita water use by 20 percent by 2017. The City's potable water consumption has been reduced to 104 gallons per capita per day, which equates to a 20 percent reduction from the 131 gallons per capita per day baseline in Fiscal Year 2013–2014.<sup>111</sup>

<sup>&</sup>lt;sup>108</sup> Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

Since preparation of the 2015 Urban Water Management Plan, new growth forecasts have become available in SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). However, the 2016 forecasts are only marginally higher than the 2012 forecasts, in terms of current (2016) estimates and future (2040) projections and would, therefore, not significantly affect water demand projections.

Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, Exhibits 11E–11K.

<sup>&</sup>lt;sup>111</sup> City of Los Angeles, Mayor Eric Garcetti, Press Release, Los Angeles Achieves Mayor Garcetti's Goal of 20 Percent Water Savings, released February 2, 2017, www.lamayor.org/los-angeles-achieves-mayor-garcetti%E2%80%99s-goal-20-percent-water-savings, accessed December 28, 2018.

#### (b) On-Site Water Demand

The 1.1-acre Project Site is currently developed with six commercial buildings totaling approximately 61,816 square feet of floor area, as well as surface parking. The buildings are currently occupied by a commercial audio/video equipment rental and sales business, offices, and a commercial printing shop. Landscaping within the Project Site is limited, with one lemon gum tree occupying the southeastern portion of the Project Site and three ficus and three evergreen pear street trees located outside property lines. As provided in Table IV.I.1-4 on page IV.I.1-39 in the analysis below, the existing uses on the Project Site have a water demand of approximately 3,151 gpd or approximately 3.53 AFY.

#### (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 118 storage tanks and reservoirs, 96 pump stations, 7,337 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 2015–2016. Much of the water flows north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant (LAAFP) in Sylmar, which is owned and operated by LADWP. Water entering the LAAFP undergoes treatment and disinfection before being distributed throughout the LADWP's water service area. Its

The existing water infrastructure in the Project area includes an 8-inch water line along Argyle Avenue and an 8-inch water line along Selma Avenue. Domestic water service is provided to the Project Site via LADWP water lines within the adjacent streets. According to the Utility Report, based on correspondence with LADWP, there is a 2-inch domestic service located on Argyle Avenue (approximately 178 feet south of Selma Avenue) and a 2-inch domestic service located on Selma Avenue (approximately 168 feet west of El Centro Avenue).

In addition, LADWP also provides water for firefighting services in accordance with the City's Fire Code (LAMC Chapter V, Article 7). According to the Utility Report, based on correspondence with LADWP, there is no existing fire water service serving the Project Site, and there are no public fire hydrants along the property frontage. However, there are three public fire hydrants located near the Project Site. One fire hydrant is located on the west side of Argyle Avenue, approximately mid-way between Selma Avenue and Sunset Boulevard. A second fire hydrant is located on the north side of Selma Avenue near the

<sup>&</sup>lt;sup>112</sup> Los Angeles Department of Water and Power, 2017 Briefing Book, August 2017.

Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.

Table IV.I.1-3
City of Los Angeles Water Demand Projections Based on Hydrologic Conditions (thousand AFY)

|                                    | Year  |       |       |       |       |  |
|------------------------------------|-------|-------|-------|-------|-------|--|
| Hydrologic Conditions <sup>a</sup> | 2020  | 2025  | 2030  | 2035  | 2040  |  |
| Average Year                       | 611.8 | 644.7 | 652.9 | 661.8 | 675.7 |  |
| Single Dry Year                    | 642.4 | 676.9 | 685.5 | 694.9 | 709.5 |  |
| Multi-Dry Year                     | 642.4 | 676.9 | 685.5 | 694.9 | 709.5 |  |

AFY = acre-feet per year

Demands include existing passive conservation.

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

Source: Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, Exhibits 11F, 11G, and 11H.

intersection of Selma Avenue and El Centro Avenue. An additional fire hydrant also located on the north side of Selma Avenue, near the intersection of Selma Avenue and Argyle Avenue.

## 3. Project Impacts

## a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the CEQA Guidelines, a project would have a significant impact related to water if it would:

Threshold (a): Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.<sup>114</sup>

Modera Argyle
Draft Environmental Impact Report

Refer to Section IV.I.2, Utilities and Service Systems—Wastewater of this Draft EIR for a discussion of wastewater impacts; the Project's Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater impacts; Section IV.J, Energy Conservation and Infrastructure of this Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, Other CEQA Considerations for a discussion of telecommunications facility impacts.

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

#### (2) 2006 L.A. CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate water:

- 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.

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

## b. Methodology

The analysis of the Project's impacts relative to water supply is based on a calculation of the Project's anticipated net water demand. Consistent with LADWP's methodology, the estimated net water demand for the Project is calculated by applying the City of Los Angeles Bureau of Sanitation's (LASAN) sewer generation factors to the Project's proposed uses. The water demand of the existing uses to be removed was then subtracted from the Project's total water demand to determine the Project's net water demand. The resulting net demand for water associated with the Project is then analyzed relative to LADWP's existing and planned future water supplies to determine if LADWP would be able to accommodate the Project's water demands during average, single-dry, and multiple-dry years hydrologic conditions.

The analysis with regard to water infrastructure is based on the Utility Report prepared for the Project by Kimley-Horn, which is included in Appendix L of this Draft EIR. The Utility Report includes a comparison of the estimated net water demand for the Project to the available capacity of the existing water infrastructure

## c. Analysis of Project Impacts

(1) Project Design Features

The following Project Design Feature is proposed with regard to water:

**Project Design Feature WAT-PDF-1:** The Project design shall incorporate the following design features to support water conservation in excess of LAMC requirements:

- Residential bathroom faucets with a maximum flow rate of 1.0 gallon per minute. and kitchen faucets with a maximum flow rate of 1.5 gallons per minute. No more than one showerhead per shower stall, with a flow rate no greater than 1.75 gallons per minute.
- Non-residential restroom faucets with a maximum flow rate of 0.5 gallon per minute and non-residential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute. Restaurant kitchen faucets shall have pre-rinse self-closing spray heads with a maximum flow rate of 1.6 gallons per minute.
- Non-residential restroom faucets of a self-closing design (i.e., that would automatically turn off when not in use).
- High-efficiency clothes washers either within individual units (with water factor of 6.0 or less) and/or in common laundry rooms (commercial washers with water factor of 7.5 or less).
- Installation of tankless and on-demand water heaters in commercial kitchens and restrooms.
- Individual metering and billing for water use of all residential uses and exploration of such metering for commercial spaces.
- Installation of a leak detection system for any swimming pool, Jacuzzi, or other comparable spa equipment introduced on-site.
- Use of landscape contouring to minimize precipitation runoff.
- Use of LID flow-through planters within common site areas that are not located above subterranean parking, where required.

In addition, as discussed in Section II, Project Description, of this Draft EIR, the design of the Project will also incorporate features of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program to be capable of meeting the standards of LEED® Certified or equivalent green building standards.

## (2) Project Impacts

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?<sup>115</sup>

#### (a) Construction

As discussed in the Utility Report included as Appendix L of this Draft EIR and as summarized below, the Project would require new construction and upgrades to existing water distribution lines on-site to serve the proposed development. Specifically, the Project proposes a 4-inch domestic water connection and a 6-inch fire water connection to the existing 8-inch water main in Selma Avenue. Construction impacts associated with the installation of water distribution lines would primarily involve trenching to place the lines below surface. In addition, installation of new water infrastructure would include on-site water distribution improvements, off-site work associated with connections to the public main, and upgrades required by LADWP and LAFD. As the design and installation of new service connections would be required to meet applicable City standards, the Project contractors would coordinate with LADWP to identify the locations and depth of all lines prior to ground disturbance. Furthermore, LADWP would be notified in advance of proposed ground disturbance activities in order to avoid water lines and disruption of water service.

The limited off-site connection activities could also temporarily affect access in adjacent right-of-ways. However, as discussed in Section IV.G, Transportation, of this Draft EIR, a Construction Traffic Management Plan would be implemented during Project construction pursuant to Project Design Feature TR-PDF-1 to ensure that adequate and safe access remains available within and near the Project Site during construction activities. The Construction Traffic Management Plan would identify the location of any temporary street parking or sidewalk closures, warning signs, and access to abutting properties. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure emergency access to the Project Site and traffic flow is maintained on adjacent right-of-ways.

Refer to Section IV.I.2, Utilities and Service Systems—Wastewater of this Draft EIR for a discussion of wastewater impacts; the Project's Initial Study included as Appendix A of this Draft EIR for a discussion of stormwater impacts; Section IV.J, Energy Conservation and Infrastructure of this Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, Other CEQA Considerations for a discussion of telecommunications facility impacts.

Overall, construction activities associated with the Project would not require or result in the construction of new water facilities or expansion of existing facilities that could have a significant impact on the environment. In addition, the existing water distribution capacity would be adequate to serve the construction of the Project. Furthermore, as discussed above, minor offsite construction impacts associated with installation of the new service connections would be temporary in nature and would not result in a substantial interruption in water service or inconvenience to motorists or pedestrians. As such, construction-related impacts to water infrastructure would be less than significant.

#### (b) Operation

Water service to the Project Site would continue to be supplied by LADWP for domestic and fire protection uses, as discussed further below. While domestic water demand is typically the main contributor to operational water consumption, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore, are the primary means for analyzing infrastructure capacity.

Fire flow to the Project would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3.1, which establishes fire flow standards by development type. The Project falls within the Industrial and Commercial development category, which has a required minimum fire flow of 6,000 gpm to 9,000 gpm from four to six adjacent fire hydrants flowing simultaneously with a minimum pressure of 20 psi at full flow. As described above, according to the Utility Report included as Appendix L of this Draft EIR, there are three public fire hydrants near the Project Site. One fire hydrant is located on the west side of Argyle Avenue (approximately mid-way between Selma Avenue and Sunset Boulevard), and two fire hydrants are located on the north side of Selma Avenue (near the intersection of Selma Avenue and El Centro Avenue and the intersection of Selma Avenue and Argyle Avenue). Based on the Information of Fire Flow Availability test conducted by LADWP for the Project (see Exhibit 5 of the Utility Report) these three fire hydrants would deliver 7,500 gpm flowing simultaneously with residual pressures of 76 psi, 73, psi, and 73 psi, respectively. Based on discussion with the LAFD Hydrants and Access unit, the installation of a new fire hydrant on Argyle Avenue would likely be required since there are currently no existing hydrants along the Project frontage. Installation of the new hydrant would be implemented in compliance with all LAFD and LADWP requirements, in order to comply with LAMC requirements for projects within the Industrial and Commercial land use category.

In addition, a Service Advisory Request (SAR) was submitted to LADWP to determine if the existing public infrastructure could meet the domestic water service demand and fire service demand (i.e., from automatic fire sprinklers) of the Project. As provided in Project Design Feature FIR-PDF-1, in Section IV.F.1, Public Services—Fire Protection, of this Draft EIR, the Project would also include the installation of an automatic

fire sprinkler suppression system in all proposed buildings, which would provide an estimated 750 gpm and reduce or eliminate water demand upon these public fire hydrants. As shown in SAR results (Exhibit 6 of the Utility Report), the proposed 4-inch domestic service and 6-inch fire service combination has been approved by LADWP to provide services to the Project. In addition, the LADWP provided a will-serve letter confirming that water service would be available for the Project (see Exhibit 9 of the Utility Report). Installation of the proposed automatic fire sprinklers would be subject to LAFD review and approval during LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for the Project, as set forth in LAMC Section 57.118.

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

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

### (a) Construction

Construction activities for the Project would result in a temporary demand for water associated with dust control, equipment and site cleanup, excavation and export, soil compaction and earthwork, mixing and placement of concrete, irrigation for plant and landscaping establishment, testing of water connections and flushing, and other short-term related activities. These activities would occur incrementally throughout construction of the Project (from the start of construction to Project buildout). The amount of water used during construction would vary depending on soil conditions, weather, and the specific activities being performed. However, given the temporary nature of construction activities, the short-term and intermittent water use during construction would be anticipated to be less than the net new water consumption of the Project at buildout. In addition, water use during construction would be offset by the reduction of water demand currently consumed by the existing uses, which would be removed as part of the Project.

As discussed in the Utility Report, based on a review of construction projects of similar size and duration, a conservative estimate of construction-period water use would range from 1,000 to 2,000 gpd. This figure would be substantially less than the Project's net new water consumption at buildout of approximately 46,172 gpd under the Retail/Restaurant Option and approximately 29,304 gpd under the Grocery Store Option,

as discussed below. In addition, this figure is less than the existing water consumption of the Project Site's existing improvements, which is approximately 3,151 gpd as described above. Furthermore, as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an all hydrologic conditions (average year, single-dry year, and multiple-dry year) in each year from 2020 through 2040. Construction of the Project would occur over a 30-month period that would commence as early as 2020 and end in 2023. Therefore, the Project's temporary and intermittent demand for water during construction could be met by the City's available supplies during each year of Project construction. As such, the Project would have sufficient water supplies available, and construction-related impacts to water supply would be less than significant.

#### (b) Operation

As described in Section II, Project Description, of this Draft EIR, the Project would remove the existing uses on the Project Site to develop 276 residential units and approximately 24,000 square feet of neighborhood-serving commercial retail and restaurant uses. Alternatively, an approximately 27,000 square-foot grocery store could be constructed in lieu of the proposed retail and restaurant uses. The proposed uses would be located within a seven-story building that would comprise approximately 260,250 square feet of floor area. Based on the size of these land uses and the Project's resulting estimated water demand, the Project is not subject to the requirements of SB 610 (preparation of a water supply assessment, as described above in Section 2.a(1)(a) on page IV.I.1-1).

Development of the Project would result in an increase in long-term water demand for consumption, operational uses, maintenance, and other activities on the Project Site. Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply is based on a calculation of the Project's water demand by applying the sewage generation factors established by LASAN, which also serve to estimate water demand to the proposed uses. As shown in Table IV.I.1-4 on page IV.I.1-39, assuming constant water use throughout the year, the Retail/Restaurant Option is estimated to result in a net increase of 46,172 gpd, and the Grocery Store Option is estimated to result in a net increase of 29,304 gpd.

It should be noted that LASAN's wastewater generation factors do not account for water conservation features and therefore, the Project's estimated water demand is conservative. As discussed above, the City of Los Angeles Green Building Code (LAMC

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<sup>&</sup>lt;sup>116</sup> Under the grocery store option, the Project's ground floor layout would be slightly reconfigured, but the Project's overall footprint, height, massing, and total floor area would not change.

Table IV.I.1-4
Estimated Project Water Demand

| Land Use  | Units                  | Demand Factor <sup>a</sup> | Total Water<br>Demand (gpd) |
|---|------------------------|----------------------------|-----------------------------|
| Existing  |                        |                            |                             |
| Retail  | 14,000 sf              | 0.025 gpd/sf               | 350                         |
| Office  | 15,182 sf              | 0.12 gpd/sf                | 1,822                       |
| Warehouse   | 32,634 sf              | 0.03 gpd/sf                | 979                         |
| Total Existing  |                        |                            | 3,151                       |
| Retail/Restaurant Option  |                        |                            |                             |
| Residential—Studio  | 46 du                  | 75 gpd/du                  | 3,450                       |
| Residential—1-bedroom   | 196 du                 | 110 gpd/du                 | 21,560                      |
| Residential—2-bedroom   | 34 du                  | 150 gpd/du                 | 5,100                       |
| Lounge  | 16,865 sf              | 0.05 gpd/sf                | 843                         |
| Irrigation  | 3,080 sf               | 0.047 gpd/sf               | 145                         |
| Retail  | 9,000 sf               | 0.025 gpd/sf               | 225                         |
| Restaurant  | 600 seats <sup>b</sup> | 30 gpd/seat                | 18,000                      |
| Total for Retail/Restaurant Option                              |                        |                            | 49,323                      |
| Total Net Water Demand<br>(Retail/Restaurant Option – Existing) |                        |                            | 46,172                      |
| <b>Grocery Store Option</b>                                     |                        |                            |                             |
| Residential—Studio  | 46 du                  | 75 gpd/du                  | 3,450                       |
| Residential—1-bedroom   | 196 du                 | 110 gpd/du                 | 21,560                      |
| Residential—2-bedroom   | 34 du                  | 150 gpd/du                 | 5,100                       |
| Lounge  | 16,985 sf              | 0.05 gpd/sf                | 850                         |
| Irrigation  | 3,080 sf               | 0.047 gpd/sf               | 145                         |
| Grocery Store   | 27,000 sf              | 0.05 gpd/sf                | 1,350                       |
| Total for Grocery Store Option                                  |                        |                            | 32,455                      |
| Total Net Water Demand<br>(Grocery Store Option – Existing)     |                        |                            | 29,304                      |

gpd = gallons per day

sf = square feet

du = dwelling unit

Source: Kimley-Horn, 2019.

Chapter IX, Article 9) requires newly constructed low-rise 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. Accordingly, the Project would incorporate sustainability features such as efficient plumbing

<sup>&</sup>lt;sup>a</sup> Indoor water use is based on sewage generation factors provided by LASAN's Sewerage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, effective April 6, 2012.

The estimated number of seats is based on a total of 15,000 square feet of restaurant space, divided by approximately 25 square feet per seat.

features, updated landscaping, modern irrigation, and efficient appliances that would reduce the Project's net increase in water demand by at least 20 percent pursuant to the requirements of the City of Los Angeles Green Building Code and Project Design Feature WAT-PDF-1.

The 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multiple-dry years through the year 2040. Furthermore, as outlined in the 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 UWMP takes into account climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2015 UWMP also furthers the goals of the City's Executive Directive and Sustainable City pLAn. The 2015 UWMP also addresses the current and future SWP supply shortages and concludes that MWD's actions in response to the threats to the SWP would ensure continued reliability of its water deliveries. By focusing on demand reduction and alternative sources of water supplies, LADWP would further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages. Additionally, as described above, water conservation and recycling will play an increasing role in meeting future water demands in the City.

The 2015 UWMP utilized SCAG's 2012–2035 RTP/SCS data that provide for comprehensive water demand forecasts, taking into account changes in population, housing units, and employment. The Project would generate approximately 671 new residents and 276 new households at Project buildout in 2023. In addition, the Project would generate approximately 65 new employees under the Retail/Restaurant Option, and approximately 73 employees under the Grocery Store Option at Project buildout in 2023. As such, these figures would be consistent with SCAG's 2012–2035 RTP/SCS growth projections for the City of Los Angeles. Specifically, based on SCAG's projections for the

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

Based on a 2.43 persons per household rate for multi-family units based on the 2016 American Community Survey 5-Year Average Estimates (2012-2016) per correspondence with Jack Tsao, Research Analyst II, Los Angeles Department of City Planning, March 22, 2018.

Based on the employee generation rate for "Neighborhood Shopping Center" land uses of 0.00271 employees per average square foot provided in the Los Angeles Unified School District, 2016 Developer Fee Justification Study, the 24,000 square feet of commercial retail and restaurant uses for Proposed Option 1 would generate approximately 65 employees. The 27,000 square feet of grocery store uses for Proposed Option 2 would generate approximately 73 employees.

City of Los Angeles between 2017 and 2023, the estimated 671 new residents generated by the Project would represent approximately 0.56 percent of the population growth between 2017 and 2023, and the 276 households would represent approximately 0.39 percent of the projected household growth between 2017 and 2023. The estimated 65 on-site employees under the Retail/Restaurant Option would represent approximately 0.17 percent of employment growth between 2017 and 2023, and the estimated 73 on-site employees under the Grocery Store Option would represent approximately 0.19 percent. Therefore, under both options, the Project would be well within SCAG's 2012–2035 projections for the City of Los Angeles.

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

## 4. Cumulative Impacts

The Project, in conjunction with growth forecasted in the City through 2023 (i.e., the Project's buildout year), would cumulatively increase the demand for water, thus potentially resulting in cumulative impacts on water infrastructure and water supplies. Cumulative growth in the Project Site vicinity through 2023 includes specific known development projects, growth that may be projected as a result of the land use designation and policy changes contained in the Hollywood Community Plan Update, as well as general ambient growth projected to occur. As described in Section III, Environmental Setting, of this Draft EIR, a total of 108 related development projects are located in the vicinity of the Project

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Based on a linear interpolation of SCAG's 2008–2020 and 2020–2035 data, as shown in SCAG's 2012–2035 RTP/SCS Growth Forecast Appendix, Table 18. The 2017 values for population, housing, and employment are calculated using SCAG's 2008 and 2020 values to find the average increase between years and then applying that annual increase to each year until 2017. Similarly, the 2023 values for population, housing, and employment are calculated using SCAG's 2020 and 2035 values to find the average increase between years and then applying that annual increase to each year until 2023.

Population growth between 2017 (3,936,400 persons) and 2023 (4,057,480 persons) is approximately 121,080 persons. The Project's 671 new residents would represent approximately 0.56 percent of this growth  $[(671 \pm 121,080) \times 100 = 0.56]$ .

Household growth between 2017 (1,419,250 households) and 2023 (1,489,880 households) is approximately 70,630 households. The Project's 276 new households would represent approximately 0.39 percent of this growth  $[(276 \pm 70,630) \times 100 = 0.39]$ .

Employment growth between 2017 (1,797,075 employees) and 2023 (1,835,520 employees) is approximately 38,445 employees. Under Proposed Option 1, the 65 new employees would represent approximately 0.17 percent of this growth  $[(65 \div 38,445) \times 100 = 0.17]$ . Under Proposed Option 2, the 73 new employees would represent approximately 0.19 percent of this growth  $[(73 \div 38,445) \times 100 = 0.19]$ .

Site. In addition, Related Project No. 109, the Hollywood Community Plan Update, is identified.

As discussed in Section III, Environmental Setting, of this Draft EIR, the projected growth reflected by Related Project Nos. 1 through 108 is a conservative assumption, as some of the related projects may not be built out by 2023 (i.e., the Project's buildout year), may never be built, or may be approved and built at reduced densities. To provide a conservative forecast, the future baseline forecast assumes that Related Project Nos. 1 through 108 are fully built out by 2023, unless otherwise noted. Related Project No. 109 is the Hollywood Community Plan Update, which once adopted, will be a long-range plan designed to accommodate growth in Hollywood until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be completed in 2023, well before the Hollywood Community Plan Update's horizon year. Moreover, 2023 is a similar projected buildout year as many of the 108 related projects that have been identified. Accordingly, it can be assumed that the projected growth reflected by the list of related projects, which itself is a conservative assumption, as discussed above, would account for any overlapping growth that may be assumed by the Hollywood Community Plan Update upon its adoption.

### a. Water Infrastructure

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the water infrastructure that would serve the Project). Development of the Project and future new development in the vicinity of the Project Site would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, other new development projects would be subject to LADWP review to assure that the existing public infrastructure would be adequate to meet the domestic and fire service water demands of each project, and individual projects would be subject to LADWP and City requirements regarding infrastructure improvements needed to meet respective water demands, flow and pressure requirements, etc. Furthermore, LADWP, Los Angeles Department of Public Works, and the LAFD would conduct ongoing evaluations of its infrastructure to ensure facilities are adequate. Therefore, Project impacts on water infrastructure would not be cumulatively considerable, and cumulative impacts on the water infrastructure system would be less than significant.

### b. Water Supply

The geographic context for the cumulative impact analysis on water supply is the LADWP service area (i.e., the City and portions of the cities of West Hollywood, Culver City, South Pasadena, and the Owens Valley). As discussed above, LADWP, as a public water service provider, is required to prepare and periodically update its urban water

management plan to plan and provide for water supplies to serve existing and projected demands. LADWP's 2015 UWMP accounts for existing development within the LADWP service area, as well as projected growth through the year 2040. Additionally, under the provisions of SB 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the California Water Code) within its service area that reaches certain thresholds. The water supply assessment for such projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

As identified in Section III, Environmental Setting, of this Draft EIR, there are 108 related development projects located in the project vicinity, as well as the Hollywood Community Plan Update (Related Project No. 109). As shown in Table IV.I.1-5 on page IV.I.1-44, the related projects would generate a total average water demand of approximately 4,662,646 gpd. The estimate of the related projects' water demand is conservative as it does not account for water conservation measures such as the mandatory indoor water reduction rates required by the City of Los Angeles Green Building Code or the water demand of the existing uses on project sites that the related projects may remove. The net water demand of the Project would be 46,172 gpd under the Retail/Restaurant Option or 29,304 gpd under the Grocery Store Option. Accordingly, the Project in conjunction with the related projects would yield a cumulative average water demand of approximately 4,708,818 gpd under the Retail/Restaurant Option or 4,691,950 gpd under the Grocery Store Option.

As previously stated, based on water demand projections through 2040 in LADWP's 2015 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2040, as well as the intervening years (i.e., 2023, the Project's buildout year) based on the growth projections in SCAG's RTP/SCS. In addition, compliance of the Project and other future development projects with the numerous regulatory requirements that promote water conservation described above would also reduce water demand on a cumulative basis. For example, similar to the Project, certain related projects would also 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.

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

Table IV.I.1-5
Cumulative Water Demand

| No. | Project  | Description                         | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|--|-------------------------------------|------------|-------------------------------------|--------------------------------------|
| 1   | Paseo Plaza Mixed-Use  | Condominiums                        | 375 du     | 190 gpd/du                          | 71,250                               |
|     | 5651 W. Santa Monica Blvd.                                       | Retail                              | 377,900 sf | 0.050 gpd/sf                        | 18,895                               |
| 2   | BLVD 6200 Mixed-Use  | Live/Work Units                     | 28 du      | 190 gpd/du                          | 5,320                                |
|     | 6200 W. Hollywood Blvd.  | Apartments                          | 1,014 du   | 190 gpd/du                          | 192,660                              |
|     |  | Retail                              | 175,000 sf | 0.050 gpd/sf                        | 8,750                                |
| 3   | Sunset Bronson Studios<br>5800 W. Sunset Blvd.                   | Office                              | 404,799 sf | 0.120 gpd/sf                        | 48,576                               |
| 4   | Yucca Street Condos  | Apartments                          | 114 du     | 190 gpd/du                          | 21,660                               |
|     | 6230 W. Yucca St.  | Commercial                          | 2,697 sf   | 0.050 gpd/sf                        | 135                                  |
| 5   | Hollywood 959<br>959 N. Seward St.                               | Office                              | 241,568 sf | 0.120 gpd/sf                        | 28,988                               |
| 6   | Archstone Hollywood Mixed-Use Project 6911 W. Santa Monica Blvd. | Apartments                          | 231 du     | 190 gpd/du                          | 43,890                               |
|     |  | High-Turnover Restaurant (5,000 sf) | 200 seats  | 30 gpd/seat                         | 6,000                                |
|     |  | General Retail                      | 10,000 sf  | 0.025 gpd/sf                        | 250                                  |
| 7   | Temple Israel of Hollywood<br>7300 W. Hollywood Blvd.            | Temple Renovation <sup>c</sup>      |            |                                     | 0                                    |
| 8   | Mixed-Use  | Apartments                          | 49 du      | 190 gpd/du                          | 9,310                                |
|     | 5245 W. Santa Monica Blvd.                                       | Retail                              | 32,272 sf  | 0.025 gpd/sf                        | 807                                  |
| 9   | Selma Hotel  | Hotel                               | 180 rm     | 120 gpd/rm                          | 21,600                               |
|     | 6417 W. Selma Ave.   | Restaurant (12,840 sf)              | 514 seats  | 30 gpd/seat                         | 15,408                               |
| 10  | Hollywood Production Center<br>1149 N. Gower St.                 | Apartments                          | 57 du      | 190 gpd/du                          | 10,830                               |
| 11  | Hollywood Gower Mixed-Use  | Apartments                          | 220 du     | 190 gpd/du                          | 41,800                               |
|     | 6100 W. Hollywood Blvd.  | Restaurant (3,270 sf)               | 131 seats  | 30 gpd/seat                         | 3,924                                |
| 12  | Mixed-Use Office/Retail  | Office                              | 88,750 sf  | 0.120 gpd/sf                        | 10,650                               |
|     | 936 N. La Brea Ave.  | Retail                              | 12,000 sf  | 0.025 gpd/sf                        | 300                                  |

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

| No. | Project  | Description            | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|--|------------------------|------------|-------------------------------------|--------------------------------------|
| 13  | Pantages Theater Office<br>6225 W. Hollywood Blvd.                 | Office                 | 210,000 sf | 0.120 gpd/sf                        | 25,200                               |
| 14  | Selma & Vine Office Project  | Office                 | 100,386 sf | 0.120 gpd/sf                        | 12,046                               |
|     | 1601 N. Vine St.   | Commercial             | 2,012 sf   | 0.050 gpd/sf                        | 101                                  |
| 15  | Argyle Hotel Project<br>1800 N. Argyle Ave.                        | Hotel                  | 225 rm     | 120 gpd/rm                          | 27,000                               |
| 16  | Seward Street Office Project<br>956 N. Seward St.                  | Office                 | 126,980 sf | 0.120 gpd/sf                        | 15,238                               |
| 17  | Hotel & Restaurant Project   | Hotel                  | 80 rm      | 120 gpd/rm                          | 9,600                                |
|     | 6381 W. Hollywood Blvd.  | Restaurant (15,290 sf) | 612 seats  | 30 gpd/seat                         | 18,348                               |
| 18  | Emerson College Project<br>(Student Housing)<br>1460 N. Gordon St. | Student Housing        | 224 du     | 190 gpd/du                          | 42,560                               |
|     |  | Faculty/Staff Housing  | 16 du      | 190 gpd/du                          | 3,040                                |
|     |  | Retail                 | 6,400 sf   | 0.025 gpd/sf                        | 160                                  |
| 19  | Television Center (TVC Expansion)                                  | Office                 | 114,725 sf | 0.120 gpd/sf                        | 13,767                               |
|     | 6300 W. Romaine St.  | Gym                    | 40,927 sf  | 0.200 gpd/sf                        | 8,185                                |
|     |  | Dance Studio           | 38,072 sf  | 0.050 gpd/sf                        | 1,904                                |
| 20  | Hollywood Center Studios Office 6601 W. Romaine St.                | Office                 | 106,125 sf | 0.120 gpd/sf                        | 12,735                               |
| 21  | Selma Community Housing<br>1603 N. Cherokee Ave.                   | Affordable Apartments  | 66 du      | 190 gpd/du                          | 12,540                               |
| 22  | Hudson Building  | Restaurant (10,402 sf) | 416 seats  | 30 gpd/seat                         | 12,482                               |
|     | 6523 W. Hollywood Blvd.  | Office                 | 4,074 sf   | 0.120 gpd/sf                        | 489                                  |
|     |  | Storage                | 890 sf     | 0.030 gpd/sf                        | 27                                   |
| 23  | La Brea Gateway  | Supermarket            | 33,500 sf  | 0.025 gpd/sf                        | 838                                  |
|     | 915 N. La Brea Ave.  | Apartments             | 179 du     | 190 gpd/du                          | 34,010                               |
| 24  | Target Retail Shopping Center Project                              | Discount Store         | 163,862 sf | 0.050 gpd/sf                        | 8,193                                |
|     | 5520 W. Sunset Blvd.   | Shopping Center        | 30,887 sf  | 0.025 gpd/sf                        | 772                                  |

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

| No. | Project                                    | Description                    | Size        | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|--|--------------------------------|-------------|-------------------------------------|--------------------------------------|
| 25  | Residential<br>712 N. Wilcox Ave.          | Apartments                     | 103 du      | 190 gpd/du                          | 19,570                               |
| 26  | Mixed-Use                                  | Apartments                     | 248 du      | 190 gpd/du                          | 47,120                               |
|     | 1600-1610 N. Highland Ave.                 | Retail                         | 12,785 sf   | 0.025 gpd/sf                        | 320                                  |
| 27  | Millennium Hollywood Mixed-Use             | Apartments                     | 492 du      | 190 gpd/du                          | 93,480                               |
|     | Project                                    | Hotel                          | 200 rm      | 120 gpd/rm                          | 24,000                               |
|     | 1740 N. Vine St.                           | Office                         | 100,000 sf  | 0.120 gpd/sf                        | 12,000                               |
|     |  | Fitness Club                   | 35,000 sf   | 0.650 gpd/sf                        | 22,750                               |
|     |  | Retail                         | 15,000 sf   | 0.025 gpd/sf                        | 375                                  |
|     |  | Restaurant (34,000 sf)         | 1,360 seats | 30 gpd/seat                         | 40,800                               |
| 28  | Paramount Pictures<br>5555 W. Melrose Ave. | Production Office              | 635,500 sf  | 0.120 gpd/sf                        | 76,260                               |
|     |  | Office                         | 638,100 sf  | 0.120 gpd/sf                        | 76,572                               |
|     |  | Retail                         | 89,200 sf   | 0.025 gpd/sf                        | 2,230                                |
|     |  | Stage <sup>d</sup>             | 21,000 sf   | 0.050 gpd/sf                        | 1,050                                |
|     |  | Support Uses <sup>d</sup>      | 1,900 sf    | 0.050 gpd/sf                        | 95                                   |
| 29  | Apartments                                 | Apartments                     | 76 du       | 190 gpd/du                          | 14,440                               |
|     | 1411 N. Highland Ave.                      | Commercial                     | 2,500 sf    | 0.050 gpd/sf                        | 125                                  |
| 30  | Apartment Project<br>1824 N. Highland Ave. | Apartments                     | 118 du      | 190 gpd/du                          | 22,420                               |
| 31  | Hotel                                      | Hotel                          | 112 rm      | 120 gpd/rm                          | 13,440                               |
|     | 1133 N. Vine St.                           | Café                           | 661 sf      | 0.720 gpd/sf                        | 476                                  |
| 32  | The Lexington Mixed-Use                    | Apartments                     | 695 du      | 190 gpd/du                          | 132,050                              |
|     | 6677 W. Santa Monica Blvd.                 | Commercial                     | 24,900 sf   | 0.050 gpd/sf                        | 1,245                                |
| 33  | Columbia Square Mixed-Use                  | Apartments                     | 200 du      | 190 gpd/du                          | 38,000                               |
|     | 6121 W. Sunset Blvd.                       | Office                         | 422,610 sf  | 0.120 gpd/sf                        | 50,713                               |
|     |  | Retail/Restaurante (41,300 sf) | 1,652 seats | 30 gpd/seat                         | 49,560                               |
|     |  | Hotel                          | 125 rm      | 120 gpd/rm                          | 15,000                               |

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

| No. | Project   | Description                     | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|---|---------------------------------|------------|-------------------------------------|--------------------------------------|
| 34  | Mixed-Use (High Line West)                        | Apartments                      | 280 du     | 190 gpd/du                          | 53,200                               |
|     | 5550 W. Hollywood Blvd.                           | Retail                          | 12,030 sf  | 0.025 gpd/sf                        | 301                                  |
| 35  | Tutoring Center                                   | School <sup>f</sup>             | 100 stu    | 11 gpd/stu                          | 1,100                                |
|     | 927 N. Highland Ave.                              |                                 | 18 emp     | 11 gpd/emp                          | 198                                  |
| 36  | Las Palmas Residential                            | Apartments                      | 224 du     | 190 gpd/du                          | 42,560                               |
|     | (Hollywood Cherokee)<br>1718 N. Las Palmas Ave.   | Retail                          | 985 sf     | 0.025 gpd/sf                        | 25                                   |
| 37  | Mixed-Use   | Condominiums                    | 13 du      | 190 gpd/du                          | 2,470                                |
|     | 6915 Melrose Ave.                                 | Retail                          | 6,250 sf   | 0.025 gpd/sf                        | 156                                  |
| 38  | Sunset & Vine Mixed-Use                           | Apartments                      | 306 du     | 190 gpd/du                          | 58,140                               |
|     | 1538 N. Vine St.                                  | Retail                          | 68,000 sf  | 0.025 gpd/sf                        | 1,700                                |
| 39  | Condos & Retail<br>5663 Melrose Ave.              | Condominiums                    | 96 du      | 190 gpd/du                          | 18,240                               |
|     |   | Retail                          | 3,350 sf   | 0.025 gpd/sf                        | 84                                   |
| 40  | 6250 Sunset (Nickelodeon)<br>6250 W. Sunset Blvd. | Apartments                      | 200 du     | 190 gpd/du                          | 38,000                               |
|     |   | Retail                          | 4,700 sf   | 0.025 gpd/sf                        | 118                                  |
| 41  | Hollywood Central Park                            | Park <sup>g</sup> (14.35 acres) | 625,086 sf | 0.098 gpd/sf                        | 60,972                               |
|     | Hollywood Freeway (US-101)                        | Amphitheater                    | 500 seats  | 3 gpd/seat                          | 1,500                                |
|     |   | Inn                             | 5 rm       | 120 gpd/rm                          | 600                                  |
|     |   | Community Centerh               | 30,000 sf  | 0.350 gpd/sf                        | 10,500                               |
|     |   | Banquet Space                   | 15,000 sf  | 0.350 gpd/sf                        | 5,250                                |
|     |   | Commercial                      | 29,000 sf  | 0.050 gpd/sf                        | 1,450                                |
|     |   | Apartments (Low Income)         | 15 du      | 190 gpd/du                          | 2,850                                |
| 42  | Movietown   | Apartments                      | 371 du     | 190 gpd/du                          | 70,490                               |
|     | 7302 W. Santa Monica Blvd.                        | Office                          | 7,800 sf   | 0.120 gpd/sf                        | 936                                  |
|     |   | Restaurant (5,000 sf)           | 200 seats  | 30 gpd/seat                         | 6,000                                |
|     |   | Commercial                      | 19,500 sf  | 0.050 gpd/sf                        | 975                                  |

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

| No. | Project                                     | Description                    | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|---|--------------------------------|------------|-------------------------------------|--------------------------------------|
| 43  | Mixed-Use                                   | Office                         | 274,000 sf | 0.120 gpd/sf                        | 32,880                               |
|     | 5901 Sunset Blvd.                           | Supermarket                    | 26,000 sf  | 0.025 gpd/sf                        | 650                                  |
| 44  | Mixed-Use                                   | Apartments                     | 410 du     | 190 gpd/du                          | 77,900                               |
|     | 7107 Hollywood Blvd.                        | Restaurant (5,000 sf)          | 200 seats  | 30 gpd/seat                         | 6,000                                |
|     |   | Retail                         | 5,000 sf   | 0.025 gpd/sf                        | 125                                  |
| 45  | John Anson Ford Theater                     | Theater                        | 311 seats  | 3 gpd/seat                          | 933                                  |
|     | 2580 Cahuenga Blvd. East                    | Restaurant (5,400 sf)          | 216 seats  | 30 gpd/seat                         | 6,480                                |
|     |   | Office <sup>i</sup> (30 emp)   | 7,500 sf   | 0.120 gpd/sf                        | 900                                  |
| 46  | 1717 Bronson Avenue<br>1717 N. Bronson Ave. | Apartments                     | 89 du      | 190 gpd/du                          | 16,910                               |
| 47  | Sunset + Wilcox<br>1541 N. Wilcox Ave.      | Hotel                          | 200 rm     | 120 gpd/rm                          | 24,000                               |
|     |   | Restaurant (9,000 sf)          | 360 seats  | 30 gpd/seat                         | 10,800                               |
| 48  | Mixed-Use<br>1350 N. Western Ave.           | Apartments                     | 200 du     | 190 gpd/du                          | 38,000                               |
|     |   | Guest Rooms <sup>j</sup>       | 4 du       | 75 gpd/du                           | 300                                  |
|     |   | Retail/Restaurante (5,500 sf)  | 220 seats  | 30 gpd/seat                         | 6,600                                |
| 49  | Palladium Residences                        | Apartments (37 Affordable)     | 731 du     | 190 gpd/du                          | 138,890                              |
|     | 6201 W. Sunset Blvd.                        | Retail/Restaurante (24,000 sf) | 960 seats  | 30 gpd/seat                         | 28,800                               |
| 50  | 5600 West Hollywood Boulevard               | Apartments                     | 33 du      | 190 gpd/du                          | 6,270                                |
|     | 5600 W. Hollywood Blvd.                     | Commercial                     | 1,289 sf   | 0.050 gpd/sf                        | 64                                   |
| 51  | 5750 Hollywood                              | Apartments                     | 161 du     | 190 gpd/du                          | 30,590                               |
|     | 5750 Hollywood Blvd.                        | Commercial                     | 4,747 sf   | 0.050 gpd/sf                        | 237                                  |
| 52  | 925 La Brea Avenue                          | Retail                         | 16,360 sf  | 0.025 gpd/sf                        | 409                                  |
|     | 925 La Brea Ave.                            | Office                         | 45,432 sf  | 0.120 gpd/sf                        | 5,452                                |
| 53  | 904 La Brea Avenue                          | Apartments                     | 169 du     | 190 gpd/du                          | 32,110                               |
|     | 904 La Brea Ave.                            | Retail                         | 37,057 sf  | 0.025 gpd/sf                        | 926                                  |
| 54  | 2014 Residential<br>707 N. Cole Ave.        | Apartments                     | 84 du      | 190 gpd/du                          | 15,960                               |

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

| No. | Project   | Description                                     | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|---|---|------------|-------------------------------------|--------------------------------------|
| 55  | Cahuenga Boulevard Hotel  | Hotel   | 64 rm      | 120 gpd/rm                          | 7,680                                |
|     | 1525 N. Cahuenga Blvd.  | Rooftop Restaurant/Lounge <sup>e</sup> (700 sf) | 28 seats   | 30 gpd/seat                         | 840                                  |
|     |   | Restaurant (3,300 sf)                           | 132 seats  | 30 gpd/seat                         | 3,960                                |
| 56  | Academy Square  | Office  | 285,719 sf | 0.120 gpd/sf                        | 34,286                               |
|     | 1341 Vine St.   | Apartments                                      | 200 du     | 190 gpd/du                          | 38,000                               |
|     |   | Restaurant (16,135 sf)                          | 645 seats  | 30 gpd/seat                         | 19,362                               |
| 57  | Hotel   | Hotel   | 70 rm      | 120 gpd/rm                          | 8,400                                |
|     | 6500 Selma Ave.   | Restaurant (4,320 sf)                           | 173 seats  | 30 gpd/seat                         | 5,184                                |
| 58  | Hotel   | Hotel   | 122 rm     | 120 gpd/rm                          | 14,640                               |
|     | 1921 Wilcox Ave.  | Restaurant (4,225 sf)                           | 169 seats  | 30 gpd/seat                         | 5,070                                |
| 59  | Sunset Mixed-Use<br>7500–7510 W. Sunset Blvd.                             | Apartments                                      | 213 du     | 190 gpd/du                          | 40,470                               |
|     |   | Restaurant (10,000 sf)                          | 400 seats  | 30 gpd/seat                         | 12,000                               |
|     |   | Retail  | 20,000 sf  | 0.025 gpd/sf                        | 500                                  |
| 60  | Mixed-Use   | Apartments                                      | 70 du      | 190 gpd/du                          | 13,300                               |
|     | 901 N. Vine St.   | Commercial                                      | 3,000 sf   | 0.050 gpd/sf                        | 150                                  |
| 61  | Apartments<br>525 N. Wilton Pl.   | Apartments                                      | 88 du      | 190 gpd/du                          | 16,720                               |
| 62  | Hardware Store<br>4905 W. Hollywood Blvd.                                 | Retail  | 36,600 sf  | 0.025 gpd/sf                        | 915                                  |
| 63  | Mixed-Use   | Apartments                                      | 72 du      | 190 gpd/du                          | 13,680                               |
|     | 1233 N. Highland Ave.   | Commercial                                      | 12,160 sf  | 0.050 gpd/sf                        | 608                                  |
| 64  | Mixed-Use   | Apartments                                      | 369 du     | 190 gpd/du                          | 70,110                               |
|     | 1310 N. Cole Ave.   | Office  | 2,570 sf   | 0.120 gpd/sf                        | 308                                  |
| 65  | Restaurant Addition (to existing 7,838-sf restaurant) 135 N. Western Ave. | Restaurant (4,066 sf)                           | 163 seats  | 30 gpd/seat                         | 4,879                                |

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

| No. | Project  | Description                    | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|--|--------------------------------|------------|-------------------------------------|--------------------------------------|
| 66  | TAO Restaurant<br>6421 W. Selma Ave.                 | Quality Restaurant (17,607 sf) | 704 seats  | 30 gpd/seat                         | 21,128                               |
| 67  | Hollywood Crossroads                                 | Residential                    | 950 du     | 190 gpd/du                          | 180,500                              |
|     | 1540-1552 Highland Ave.                              | Hotel                          | 308 rm     | 120 gpd/rm                          | 36,960                               |
|     |  | Office                         | 95,000 sf  | 0.120 gpd/sf                        | 11,400                               |
|     |  | Commercial Retail              | 185,000 sf | 0.050 gpd/sf                        | 9,250                                |
| 68  | Wilcox Hotel   | Hotel                          | 133 rm     | 120 gpd/rm                          | 15,960                               |
|     | 1717 N. Wilcox Ave.                                  | Retail                         | 3,580 sf   | 0.025 gpd/sf                        | 90                                   |
| 69  | Faith Plating<br>7143 Santa Monica Blvd.             | Residential                    | 145 du     | 190 gpd/du                          | 27,550                               |
|     |  | Retail/Restaurante (7,858 sf)  | 314 seats  | 30 gpd/seat                         | 9,430                                |
| 70  | Apartments<br>5460 W. Fountain Ave.                  | Apartments                     | 75 du      | 190 gpd/du                          | 14,250                               |
| 71  | Mixed-Use<br>6220 W. Yucca St.                       | Hotel                          | 210 rm     | 120 gpd/rm                          | 25,200                               |
|     |  | Apartments                     | 136 du     | 190 gpd/du                          | 25,840                               |
|     |  | Restaurant (6,980 sf)          | 279 seats  | 30 gpd/seat                         | 8,376                                |
| 72  | SunWest Project (Mixed-Use)                          | Apartments                     | 293 du     | 190 gpd/du                          | 55,670                               |
|     | 5525 W. Sunset Blvd.                                 | Commercial                     | 33,980 sf  | 0.050 gpd/sf                        | 1,699                                |
| 73  | Hollywood De Longpre Apartments 5632 De Longpre Ave. | Apartments                     | 185 du     | 190 gpd/du                          | 35,150                               |
| 74  | Ivar Gardens Hotel                                   | Hotel                          | 275 rm     | 120 gpd/rm                          | 33,000                               |
|     | 6409 W. Sunset Blvd.                                 | Retail                         | 1,900 sf   | 0.025 gpd/sf                        | 48                                   |
| 75  | Selma Hotel  | Hotel                          | 212 rm     | 120 gpd/rm                          | 25,440                               |
|     | 6516 W. Selma Ave.                                   | Bar/Lounge <sup>k</sup>        | 3,855 sf   | 0.720 gpd/sf                        | 2,776                                |
|     |  | Rooftop Bar/Event Spacek       | 8,500 sf   | 0.720 gpd/sf                        | 6,120                                |
| 76  | Melrose Crossing Mixed-Use                           | Apartments                     | 40 du      | 190 gpd/du                          | 7,600                                |
|     | 7000 Melrose Ave.                                    | Retail                         | 6,634 sf   | 0.025 gpd/sf                        | 166                                  |

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

| No. | Project   | Description                         | Size      | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|---|-------------------------------------|-----------|-------------------------------------|--------------------------------------|
| 77  | Mixed-Use   | Apartments                          | 91 du     | 190 gpd/du                          | 17,290                               |
|     | 1657 N. Western Ave.                                | Retail                              | 15,300 sf | 0.025 gpd/sf                        | 383                                  |
| 78  | McCadden Campus (LGBT)                              | Youth/Senior Housing                | 45 du     | 190 gpd/du                          | 8,550                                |
|     | 1118 N. McCadden Pl.                                | Social Service Support <sup>l</sup> | 50,325 sf | 0.120 gpd/sf                        | 6,039                                |
|     |   | Office                              | 17,040 sf | 0.120 gpd/sf                        | 2,045                                |
|     |   | Retail/Restaurante (1,885 sf)       | 75 seats  | 30 gpd/seat                         | 2,262                                |
|     |   | Emergency Housing                   | 40 beds   | 70 gpd/bed                          | 2,800                                |
|     |   | Transitional Living                 | 60 beds   | 70 gpd/bed                          | 4,200                                |
| 79  | 4900 Hollywood Mixed-Use<br>4900 W. Hollywood Blvd. | Apartments                          | 150 du    | 190 gpd/du                          | 28,500                               |
|     |   | Retail                              | 13,813 sf | 0.025 gpd/sf                        | 345                                  |
| 80  | citizenM Hotel<br>1718 Vine St.                     | Hotel                               | 216 rm    | 120 gpd/rm                          | 25,920                               |
|     |   | Restaurant (4,354 sf)               | 174 seats | 30 gpd/seat                         | 5,225                                |
| 81  | Apartments  | Apartments                          | 70 du     | 190 gpd/du                          | 13,300                               |
|     | 1749 Las Palmas Ave.                                | Retail                              | 3,117 sf  | 0.025 gpd/sf                        | 78                                   |
| 82  | Mixed-Use   | Apartments                          | 96 du     | 190 gpd/du                          | 18,240                               |
|     | 1868 N Western Ave.                                 | Retail                              | 5,546 sf  | 0.025 gpd/sf                        | 139                                  |
| 83  | 6400 Sunset Mixed-Use                               | Apartments                          | 232 du    | 190 gpd/du                          | 44,080                               |
|     | 6400 Sunset Blvd.                                   | Restaurant (7,000 sf)               | 280 seats | 30 gpd/seat                         | 8,400                                |
| 84  | 6200 West Sunset Boulevard                          | Apartments                          | 270 du    | 190 gpd/du                          | 51,300                               |
|     | 6200 W. Sunset Blvd.                                | Quality Restaurant (1,750 sf)       | 70 seats  | 30 gpd/seat                         | 2,100                                |
|     |   | Pharmacy                            | 2,300 sf  | 0.025 gpd/sf                        | 58                                   |
|     |   | Retail                              | 8,070 sf  | 0.025 gpd/sf                        | 202                                  |
| 85  | 747 North Western Avenue                            | Apartments                          | 44 du     | 190 gpd/du                          | 8,360                                |
|     | 747 N. Western Ave.                                 | Retail                              | 7,700 sf  | 0.025 gpd/sf                        | 193                                  |
| 86  | 6630 West Sunset Boulevard<br>6630 W. Sunset Blvd.  | Apartments                          | 40 du     | 190 gpd/du                          | 7,600                                |

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

| No. | Project   | Description           | Size      | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|---|-----------------------|-----------|-------------------------------------|--------------------------------------|
| 87  | 1001 North Orange Drive<br>1001 N. Orange Dr.     | Office                | 53,537 sf | 0.120 gpd/sf                        | 6,424                                |
| 88  | Sunset & Western                                  | Apartments            | 735 du    | 190 gpd/du                          | 139,650                              |
|     | 5420 W. Sunset Blvd.                              | Commercial            | 95,820 sf | 0.050 gpd/sf                        | 4,791                                |
| 89  | Hollywood & Wilcox                                | Apartments            | 260 du    | 190 gpd/du                          | 49,400                               |
|     | 6430–6440 W. Hollywood Blvd.                      | Office                | 3,580 sf  | 0.120 gpd/sf                        | 430                                  |
|     |   | Retail                | 11,020 sf | 0.025 gpd/sf                        | 276                                  |
|     |   | Restaurant (3,200 sf) | 128 seats | 30 gpd/seat                         | 3,840                                |
| 90  | Mixed-Use   | Live/Work Units       | 45 du     | 190 gpd/du                          | 8,550                                |
|     | 4914 W. Melrose Ave.                              | Retail                | 3,760 sf  | 0.025 gpd/sf                        | 94                                   |
| 91  | Hospital Seismic Retrofit<br>1300 N. Vermont Ave. | Office                | 30,933 sf | 0.120 gpd/sf                        | 3,712                                |
| 92  | Onni Group Mixed-Use Development                  | Condominiums          | 429 du    | 190 gpd/du                          | 81,510                               |
|     | 1360 N. Vine St.                                  | Grocery Store         | 55,000 sf | 0.025 gpd/sf                        | 1,375                                |
|     |   | Retail                | 5,000 sf  | 0.025 gpd/sf                        | 125                                  |
|     |   | Restaurant (8,988 sf) | 360 seats | 30 gpd/seat                         | 10,786                               |
| 93  | 1600 Schrader                                     | Hotel                 | 168 rm    | 120 gpd/rm                          | 20,160                               |
|     | 1600 Schrader Blvd.                               | Restaurant (5,979 sf) | 239 seats | 30 gpd/seat                         | 7,175                                |
| 94  | Mixed-Use   | Apartments            | 299 du    | 190 gpd/du                          | 56,810                               |
|     | 5939 W. Sunset Blvd.                              | Office                | 38,440 sf | 0.120 gpd/sf                        | 4,613                                |
|     |   | Restaurant (5,064 sf) | 203 seats | 30 gpd/seat                         | 6,077                                |
|     |   | Retail                | 3,739 sf  | 0.025 gpd/sf                        | 93                                   |
| 95  | Melrose & Beachwood                               | Apartments            | 52 du     | 190 gpd/du                          | 9,880                                |
|     | 5570 W. Melrose Ave.                              | Commercial            | 5,500 sf  | 0.050 gpd/sf                        | 275                                  |
| 96  | Montecito Senior Housing<br>6650 W. Franklin Ave. | Senior Apartments     | 68 du     | 190 gpd/du                          | 12,920                               |

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

| No. | Project  | Description             | Size       | Generation<br>Factor <sup>a,b</sup> | Total Daily<br>Water Demand<br>(gpd) |
|-----|--|-------------------------|------------|-------------------------------------|--------------------------------------|
| 97  | The Chaplin Hotel Project  | Hotel                   | 93 rm      | 120 gpd/rm                          | 11,160                               |
|     | 7219 W. Sunset Blvd.   | Restaurant (2,800 sf)   | 112 seats  | 30 gpd/seat                         | 3,360                                |
| 98  | Godfrey Hotel  | Hotel                   | 221 rm     | 120 gpd/rm                          | 26,520                               |
|     | 1400 N. Cahuenga Blvd.   | Restaurant (3,000 sf)   | 120 seats  | 30 gpd/seat                         | 3,600                                |
| 99  | 6140 Hollywood   | Hotel                   | 102 rm     | 120 gpd/rm                          | 12,240                               |
|     | 6140 Hollywood Blvd.   | Condominiums            | 27 du      | 190 gpd/du                          | 5,130                                |
|     |  | Restaurant (11,460 sf)  | 458 seats  | 30 gpd/seat                         | 13,752                               |
| 100 | Selma-Wilcox Hotel   | Hotel                   | 114 rm     | 120 gpd/rm                          | 13,680                               |
|     | 6421 W. Selma Ave.   | Restaurant (1,993 sf)   | 80 seats   | 30 gpd/seat                         | 2,392                                |
| 101 | Apartments<br>1601 N. Las Palmas Ave.  | Apartments              | 86 du      | 190 gpd/du                          | 16,340                               |
| 102 | 1723 North Wilcox Residential<br>1723 N. Wilcox Ave.   | Apartments              | 68 du      | 190 gpd/du                          | 12,920                               |
|     |  | Retail                  | 3,700 sf   | 0.025 gpd/sf                        | 93                                   |
| 103 | Select @ Los Feliz (Mixed-Use)   | Apartments              | 101 du     | 190 gpd/du                          | 19,190                               |
|     | 4850 W. Hollywood Blvd.  | Restaurant (10,000 sf)  | 400 seats  | 30 gpd/seat                         | 12,000                               |
| 104 | 7445 Sunset Grocery<br>7445 W. Sunset Blvd.  | Specialty Grocery Store | 32,416 sf  | 0.025 gpd/sf                        | 810                                  |
| 105 | 1719 Whitley Hotel<br>1719 N. Whitley Ave.   | Hotel                   | 156 rm     | 120 gpd/rm                          | 18,720                               |
| 106 | Kaiser Hospital Redevelopment<br>1317–1345 N. Vermont/1328 N. New<br>Hampshire/4760 Sunset/1505 N.<br>Edgemont/1526 N. Edgemont/1517 N.<br>Vermont/1424–1430 N. Alexandria | Hospital Expansion      | 211,992 sf | 0.250 gpd/sf                        | 52,998                               |
| 107 | 1276 North Western Avenue<br>1276 N. Western Ave.  | Apartments              | 75 du      | 190 gpd/du                          | 14,250                               |

# Table IV.I.1-5 (Continued) Cumulative Water Demand

| No.   | Project  | Description                     | Size  | Generation<br>Factor <sup>a,b</sup>                                       | Total Daily<br>Water Demand<br>(gpd)                                    |
|---|--|---------------------------------|---|---|---|
| 108   | NBC Universal Evolution Plan   | Studio                          | 307,949 sf  | 0.050 gpd/sf  | 15,397  |
|   | 100 Universal City Plaza   | Studio Offices                  | 647,320 sf  | 0.120 gpd/sf  | 77,678  |
|   |  | Office                          | 495,406 sf  | 0.120 gpd/sf  | 59,449  |
|   |  | Entertainment <sup>m</sup>      | 337,895 sf  | 0.350 gpd/sf  | 118,263   |
|   |  | Entertainment Retail            | 39,216 sf   | 0.025 gpd/sf  | 980   |
|   |  | Hotel <sup>n</sup> (900,000 sf) | 1,385 rm  | 120 gpd/rm  | 166,154   |
|   | South of City of Burbank, City of Glendale, and SR 134; west of Interstate 5; north of Melrose Avenue; south of Mulholland Drive, City of West Hollywood, Beverly Hills, including land south of the City of West Hollywood and north of Rosewood Ave. between La Cienega Blvd. and La Brea Ave. |                                 | ommercial and resi<br>ortion of the comm<br>es in development p | dential development in<br>unity and along sele<br>potential would be prir | potential in and near<br>cted corridors in the<br>narily focused on low |
| Rela  | ted Projects Water Demand  |                                 |   |   | 4,662,646   |
|   | ect Water Demand for<br>il/Restaurant Option   |                                 |   |   | 46,172  |
|   | Water Demand for Related Projects Retail/Restaurant Option   |                                 |   |   | 4,708,818   |
| Project Water Demand for Grocery Store Option |  |                                 |   |   | 29,304  |
| ~ P ***                                       |  |                                 |   | I .   |   |

du = dwelling units

sf = square feet

stu = students

## Table IV.I.1-5 (Continued) Cumulative Water Demand

|     |         |             |      | Generation            | Total Daily<br>Water Demand |
|-----|---------|-------------|------|-----------------------|-----------------------------|
| No. | Project | Description | Size | Factor <sup>a,b</sup> | (gpd)                       |

emp = employees

per = persons

rm = rooms

N/A = Information is not available

Totals calculated have been rounded to the nearest whole number and may not sum due to rounding.

- <sup>a</sup> This analysis is based on sewage generation rates provided by LASAN's Sewerage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, effective April 6, 2012.
- This analysis conservatively assumes that all dwelling units are 3-bedroom units. In addition, the analysis for restaurant uses is based on the assumption of 1 seat per 25 square feet according to Kimley-Horn.
- Information for this related project is not available. Therefore, water demand is not calculated.
- d Sewage generation rates provided by LASAN do not include rates for stage or support area uses. Therefore, due to the nature of this related project, the most comparable land use rate of 50 gallons per day per 1,000 square feet for "Studio: Film/TV/Recording" is applied.
- <sup>e</sup> This related project does not distinguish square footage between these uses. Therefore, to provide a conservative analysis, this related project is assumed to include only restaurant uses.
- f Sewage generation rates provided by LASAN do not include rates per employee for school uses. Therefore, it is assumed that the most comparable land use rate per employee is equivalent to the rate per student for "School" uses.
- Sewage generation rates provided by LASAN do not include rates for parks uses per acre. Therefore, the water demand rate for park uses is assumed to be equivalent to that of landscaping needs. The water demand rate for landscaping is based on calculations from Los Angeles Department of Water and Power, Water Supply Assessment—6AM Project, August 30, 2017.
- h Sewage generation rates provided by LASAN do not include rates for community center uses per square foot. Therefore, the most comparable land use rate of 350 gallons per day per 1,000 square feet for "Banquet Room" is applied.
- Sewage generation rates provided by LASAN do not include rates per employee. Therefore, the rate of 4 employees per 1,000 square feet is applied, based on Section IV.N.(1) Water Consumption of the Draft EIR for Village at Playa Vista Draft EIR, August 2003.
- This related project's guest room uses are assumed to be equivalent to studio uses. Therefore, the rate of 75 gallons per day per dwelling unit for "Residential: Apt Bachelor" is applied.
- This related project does not distinguish square footage between these uses. Therefore, to provide a conservative analysis, this related project is assumed to include only bar uses.
- Sewage generation rates provided by LASAN do not include rates for social service support uses. Therefore, the most comparable land use rate of 120 gallons per day per 1,000 square feet for "Office Building" is applied.

# Table IV.I.1-5 (Continued) Cumulative Water Demand

|     |         |             |      | Generation            | Total Daily<br>Water Demand |
|-----|---------|-------------|------|-----------------------|-----------------------------|
| No. | Project | Description | Size | Factor <sup>a,b</sup> | (gpd)                       |

Sewage generation rates provided by LASAN do not include rates for entertainment uses. Therefore, the most comparable land use rate of 350 gallons per day per 1,000 square feet for "Banquet Room" is applied.

Source: Eyestone Environmental, 2019 and Kimley Horn, 2019.

<sup>&</sup>lt;sup>n</sup> For hotel uses, a square footage rate of 650 square feet per room is applied. Source: deRoos, J. A. (2011). Planning and programming a hotel [Electronic version]. Retrieved December 28, 2018, from Cornell University, School of Hospitality Administration site, http://scholarship.sha. cornell.edu/articles/310.

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

Based on the above analysis, it is anticipated that LADWP would be able to supply the demands of the Project and future growth through 2023 and beyond during normal, single dry years, and multiple dry years. Therefore, cumulative significant impacts with respect to water supply are not anticipated from the development of the Project and the related projects. Project impacts to water supply would not be cumulatively considerable, and cumulative impacts associated with water supply would be less than significant.

In conclusion, Project impacts on water infrastructure and water supply would not be cumulatively considerable, and cumulative impacts on the water infrastructure system and on water supply would be less than significant.

## 5. Mitigation Measures

Project-level and cumulative impacts with regard to water supply and infrastructure would be less than significant with implementation of the regulatory requirements and project design features. Therefore, no mitigation measures are required.

## 6. Level of Significance After Mitigation

Project-level and cumulative impacts related to water supply and infrastructure would be less than significant without mitigation.