Appendix H

Water Supply Assessment

1000 North La Brea Avenue Project

Water Supply Assessment

prepared for

City of West Hollywood
Community Development Department
8300 Santa Monica Boulevard
West Hollywood, California, 90069
Contact: Antonio Castillo, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
250 1st Street, Suite 1400
Los Angeles, California 90012

July 2024 (Revised December 2024)

RINCON CONSULTANTS, INC. SINCE 1994

Table of Contents

Tables

Figures

1 Introduction

In 2001, California adopted Senate Bill (SB) 610 and SB 221, thereby amending California Water Code. Under these new laws, certain types of development projects are now required to provide detailed water supply assessments to planning agencies. Any proposed project which is subject to the California Environmental Quality Act (CEQA) and would demand more than 75 acre-feet per year (AFY) of water, or an amount of water equivalent to, or greater than, the amount of water required by a 500-unit residential dwelling project, is subject to SB 610 and is required to prepare a Water Supply Assessment (WSA). The purpose of SB 610 is to tie land use planning and approval of development projects to the physical availability of water, and to further consider how drought conditions affect water supply availability.

2 Project Description

The 1000 North La Brea Avenue Project ("project" or "proposed project") would include a merging of three parcels to result in one common address, 1000 North La Brea Avenue, which would be developed as a mixed-use residential and commercial building with 514 residential units and 30,000 square feet of ground floor commercial/retail space. See Section 2.3, *Proposed Project*, for a detailed description of the proposed land uses and project features.

Notably, following completion of the draft Water Supply Assessment in July 2024, CEMEX (tenant at the project site until December 2024) applied for and received a Demolition Permit from the cities of West Hollywood and Los Angeles allowing the disassembly and removal of its concrete batch plant equipment (i.e., plant structure/machinery, water tanks) and demolition of its office building down to its foundation without any ground disturbance or excavation. Between September 2024 and December 2024, CEMEX vacated these structures from the site prior to expiration of their lease by December 2024. To ensure consideration of project site conditions at the time of circulation of the Notice of Preparation and preparation of this Water Supply Assessment, and to provide a representative analysis of project impacts related to water supply, the analysis in this assessment evaluates water supply based on conditions prior to CEMEX vacating the concrete batch plant from the site. As such, project site conditions are described in this Water Supply Assessment in the present tense for consistency with conditions as they existed prior to September 2024 and when the Water Supply Assessment was drafted.

2.1 Location

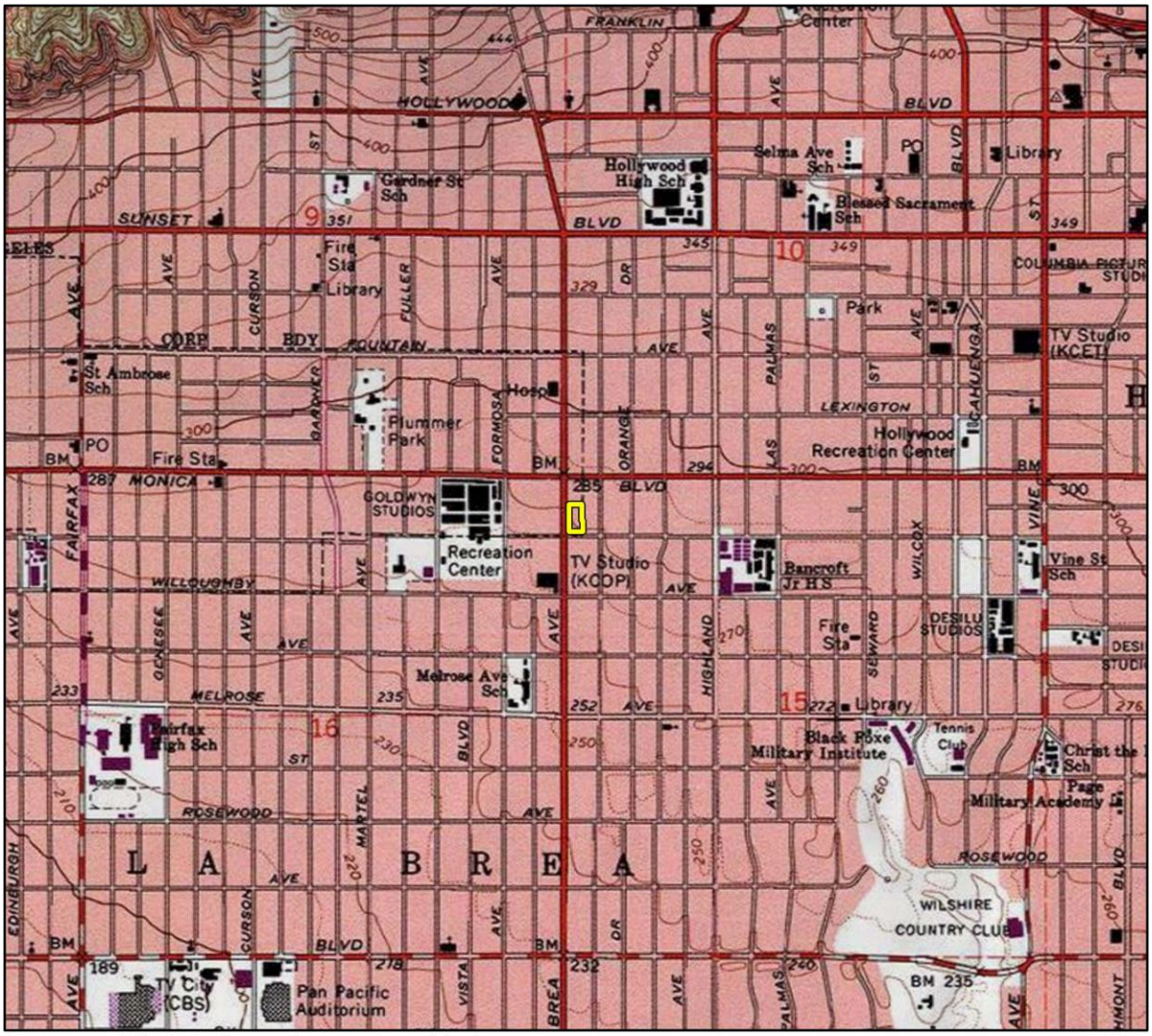
The project site is located in Township 1 South, Range 14 West, Section(s) 10 and 15 on the *Hollywood, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1). Totaling 43,316 square feet, the project site is located between three contiguous parcels ranging in address between 1000 and 1028 North La Brea Avenue (Assessor's Parcel Numbers [APNs] 5531-014-013, -014, and-017) (Figure 2).

Figures provided on the following pages include Figure 1, which portrays the regional location of the proposed project, and Figure 2, which provides an overview of the project site and surrounding land uses. In addition, Figure 3 shows the service territories for the two water supply providers in the project area; as shown, the project site is located within the service territory of the Los Angeles Department of Water and Power (LADWP). See Section 4, *Water Supply Overview*, for discussion of LADWP and water supply service for the proposed project.

2.2 Existing Site Uses

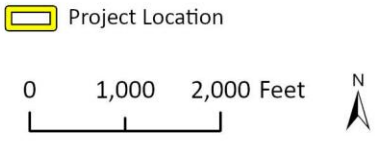
Land uses on the project site include the CEMEX Hollywood Ready-Mix Concrete Plant located at 1000 and 1014 North La Brea Avenue, which produces ready-mix concrete, or concrete that is manufactured in a batch plant and delivered via concrete trucks to work sites for use. The project site is also developed with a vacant warehouse building located at 1020 and 1028 North La Brea Avenue. Water for operation of the concrete batch plant is provided by LADWP, which would continue to provide water to the site for the proposed project. The proposed project would include removal of the CEMEX concrete batch plant and associated water uses as well as the demolition of the vacant warehouse building; see Section 2.4, *Water Demands*.

Figure 1 Project Location



Basemap provided by National Geographic Society, Esri and their licensors © 2023. Hollywood Quadrangle. T01S R14W S10,15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

23-14457 CR
CRFig 1 Proj Locn Map



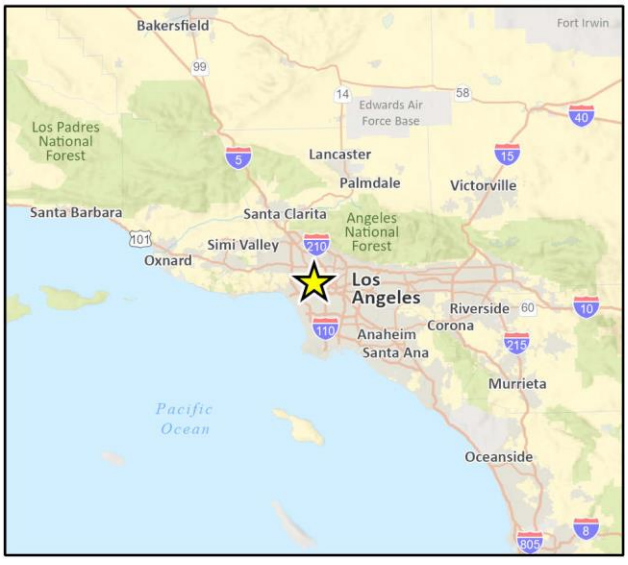
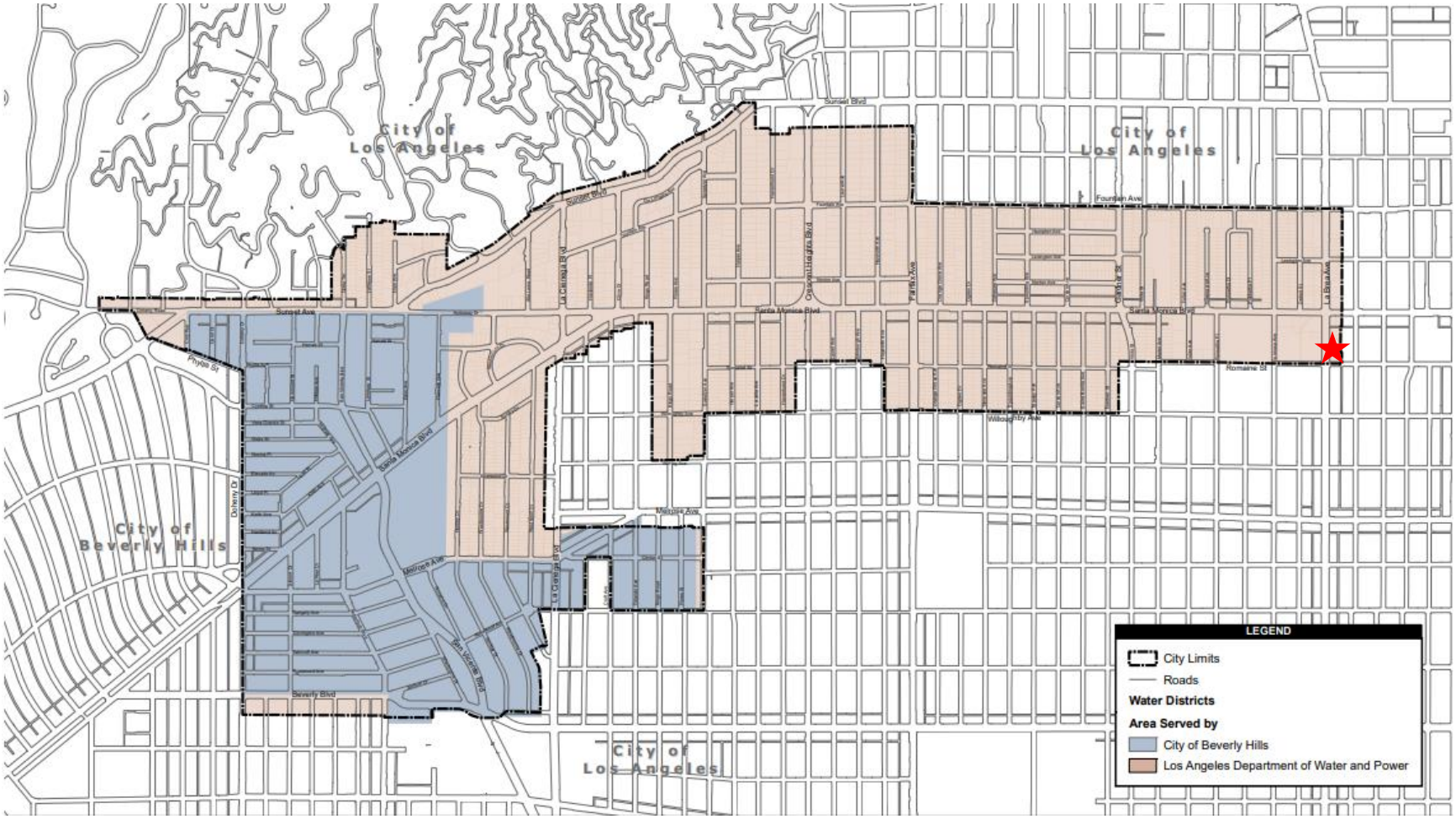


Figure 2 Project Site

Imagery provided by Microsoft Bing and its licensors © 2023.

23-14457 EPS
Fig 2 Project Location

Figure 3 Water District Service Areas



Source: City of West Hollywood 2010, pg. 3.12-9

The red star in Figure 3 indicates the project site is located within the eastern-most portion of LADWP's service territory. Water supply sources delivered by LADWP are discussed in Section 4, *Water Supply Overview.*

2.3 Proposed Project

The proposed project would implement a mixed-use residential and commercial building with 34 floors, up to 352 feet in height. Construction of the project would involve demolition of on-site structures, including the CEMEX concrete batch plant (1000 and 1014 North La Brea Avenue) and a vacant warehouse building (1020 and 1028 North La Brea Avenue). Below is an overview of key features included in the proposed mixed-use building.

- Two subterranean levels would include a parking garage with 153 parking spaces.
- The ground floor would include 30,000 square feet of commercial/retail space, an entry plaza open to the public, a café outdoor seating area, and a residential lobby.
- Floors two through six would consist of a parking garage with 521 parking spaces and 394 bicycle parking stalls for residents and their guests.
- Floors seven through 34 would include the 514 apartment units, consisting of 128 affordable and workforce units and 386 market rate units; floor seven would also include two outdoor gardens with seating and an indoor gathering area for residents within one of the gardens.
- Floor 17 would include a fitness room, recreation room, and outdoor garden with seating.
- Floor 18 would include a yoga room, library, and outdoor swimming pool.
- Floor 19 would include an outdoor garden with seating.
- The rooftop would include an outdoor garden with seating, mechanical rooms, and an emergency helipad; the roof would exceed the 352-foot building height by an additional 25 feet.

The residential units included in the project as 514 apartments would accommodate an estimated 750 residents on-site, based upon the assumption of 1.46 persons per household in the city of West Hollywood (California Department of Finance [DOF] 2024). The proposed project would accommodate planned growth within the City of West Hollywood, based upon Southern California Association of Governments (SCAG) forecast for the City of West Hollywood population to increase to approximately 42,600 by 2050, as reported in SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This would be a total increase of 39,475 persons compared to the City's 2024 population of 35,075 persons (SCAG 2024; California DOF 2024). The addition of up to 750 residents represents approximately 1.9 percent of the city's projected population growth under SCAG's RTP/SCS projections. This figure assumes all of the project's residents would come from outside the city, though some residents of the project may already live in West Hollywood.

2.4 Water Demands

Table 1 on the following page provides an overview of water demands associated with the project's proposed land uses discussed in Section 2.3, *Project Description*. Assumptions have been developed where needed to provide quantified estimates, as detailed in footnotes to the table. Project features that do not contribute to the project's water demand are not listed in the table and include

parking spaces, seating areas, entry plaza, café seating, residential lobby, lounge and recreation rooms, yoga room, library, and mechanical rooms.

Table 1 Proposed Project Water Demands

Project Feature	Quantity	Unit	Demand Factor[1]	Water Demand (GPD)[1]	Water Demand (AFY)[1]
Commercial/retail space (ground floor)[2]	30,000	sf	50 GPD/1,000 sf	1,875.00	1.68
Residential units (floors 7 to 34)[3]	514	Units	183 GPD/unit	117,577.50	131.70
Outdoor garden (floors 7, 17, 19, and roof)[4]	6,994	sf	21.35 GPD/1,000 sf	149.32	0.17
Swimming pool (floor 18)[5]	20,000	gallons	n/a	n/a	0.06
Total Project Water Needs				**119,601.82**	**133.55**
Existing On-site Water Use[6]	48,667	gallons/year	n/a	133.33	0.15
Increased On-site Water Use[7]				**119,468.49**	**133.40**

1) GPD = gallons per day; AFY = acre-feet per year; sf = square feet; n/a = not applicable.

   "Demand factor" refers to a "sewerage generation factor" established for residential and commercial land uses, which are used to design and implement appropriately sized sewer facilities based on approved land uses (BWP 2022). These factors are used to estimate water demands by multiplying the calculated total for the given land use by 1.25, as water use is estimated to be approximately 25 percent greater than the amount of wastewater generated from respective land uses. The "Water Demand" columns show this conversion from the sewage generation factor total to the water demand total. AFY was calculated by multiplying the GPD total by 365 days per year and dividing by 325,851 gallons per acre-foot.

2) This analysis conservatively assumes water demands would occur daily, 365 days/year.

3) This analysis conservatively assumes all 514 residential units would have water demands equivalent to a "Multi-Family Apartment or Condo" in the "Group I – Residential" land use type for sewage generation factors informing this WSA (BWP 2022); this is a conservative approach because the project includes a variety of unit types including studio apartments, which would realistically have lower water demands than one- and two-bedroom units.

4) The project includes approximately 27,976 square feet of public outdoor space; for the purposes of this analysis, it is assumed that outdoor garden areas would comprise approximately one quarter of this space, or 6,994 square feet. The demand factor of 21.35 GPD/1,000 square feet was applied to the project's outdoor gardens, equivalent to the demand factors for "Agricultural/Landscaping Service" and "Nursery or Greenhouse."

5) This analysis assumes the proposed swimming pool would have a capacity of 20,000 gallons and would be re-filled annually; this is a conservative approach, as a 20,000-gallon pool is larger than a standard pool (CP&L 2021), and because pools typically do not require re-filling on an annual basis.

6) Operation of the CEMEX concrete batch plant used 48,667 gallons of water over the 12 months of April 2023 through March 2024; this total annual usage was divided by 365 days for average daily usage of 133.33 gallons.

7) The increased on-site water use reflects the proposed project's new water demands less the on-site water usage of the CEMEX concrete batch plant.

As shown in Table 1, the project's operational water demand is estimated to be approximately 119,602 GPD, or 134 AFY, and on-site water uses at the CEMEX concrete batch plant total approximately 133.33 GPD, or 0.15 AFY. With implementation of the proposed project and removal of the CEMEX concrete batch plant, water demands on the project site would increase by approximately 119,467 GPD, or 133 AFY. As described in footnotes to the table, this is a conservative estimate based upon reasonable asumptions and sewage generation factors.

3 Senate Bill 610 Applicability

SB 610 was passed by the California Senate on January 1, 2002, amending California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water and land use planning by ensuring greater communication between water providers and local planning agencies and ensuring that land use decisions for certain large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. SB 610 requires the preparation of a WSA for a project that is subject to CEQA and that meets certain requirements, each of which is discussed in detail in this chapter.

California Water Code, as amended by SB 610, requires a WSA to address the following questions:

- Is there a public water system that will service the proposed project? (see Section 3.3)
- Is there a current Urban Water Management Plan (UWMP) that accounts for the project demand? (see Section 3.4)
- Is groundwater a component of the supplies for the project? (see Section 3.5)
- Are there sufficient supplies to serve the project over the next 20 years? (see Section 3.6)

The primary question to be answered in a WSA is:

> *Will the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection meet the projected water demand of the proposed project, in addition to existing and planned future uses of the identified water supplies, including agricultural and manufacturing uses?*

The following sections address the SB 610 WSA questions as they relate to the proposed project.

3.1 Is the Proposed Project Subject to CEQA?

California Water Code Section 10910(a), which is the Section of the Water Code that was amended by SB 610, states that any city or county that determines a project (as defined in Section 10912 and discussed further in Section 3.2, *Is the Proposed Project a "project" Under SB 610?*, of this WSA) is subject to CEQA shall comply with California Water Code Section 10910. The proposed project requires discretionary approvals from the City of West Hollywood and is therefore subject to CEQA.

3.2 Is the Proposed Project a "Project" Under SB 610?

California Water Code Section 10912(a) states that any proposed action which meets the definition of "project" under SB 610 is required to prepare a WSA to demonstrate whether sufficient water supplies are available to meet requirements of the proposed project under normal and drought conditions. SB 610 defines a "project" as any one of six different development types, each of which is addressed below with respect to the proposed project.

Residential Development

A proposed residential development of more than 500 dwelling units is defined as a "project" under SB 610. The proposed project includes 514 residential units. Therefore, the proposed project is subject to the requirements of SB 610 due to qualifying as a "project" for being a residential development with more than 500 new residential units.

Shopping Center or Business Establishment

A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space is defined as a "project" under SB 610. The proposed project does include space for commercial and retail uses; however, this feature of the project would be limited to 30,000 square feet of floor space. The proposed project is not a shopping center or business establishment.

Commercial Office Building

A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space is defined as a "project" under SB 610. The proposed project does include space for commercial and retail uses; however, as described above, this feature of the project would be limited to 30,000 square feet of floor space. The proposed project is not a commercial office building.

Hotel or Motel

A proposed hotel or motel, or both, having more than 500 rooms is defined as a "project" under SB 610. The proposed project does not include a hotel or motel.

Industrial, Manufacturing, or Processing Plant or Industrial Park

A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area is defined as a "project" under SB 610. The proposed project does not include the proposed development of an industrial, manufacturing, or processing plant, or industrial park.

3.3 Is There a Public Water System that Will Serve the Proposed Project?

California Water Code Section 10912(c) defines a "public water system" as a system that has 3,000 or more service connections and provides piped water to the public for human consumption. The proposed project site receives water supply from LADWP, which has more than 3,000 connections and is therefore a public water system.

3.4 Is There a Current UWMP that Accounts for the Project Demand?

UWMPs are prepared by California's urban water suppliers to inform long-term water supply planning and ensure adequate water supplies are available to meet projected demands within the service territory of the respective water supplier. UWMPs assess, among other metrics, the

reliability of the supplier's water sources over a 20-year period under normal-, single-dry, and multiple-dry year scenarios; these are the same requirements of a WSA, as specified by SB 610. Every urban water supplier, either publicly or privately owned, that either delivers more than 3,000 AFY of water annually or serves more than 3,000 connections is required to prepare a UWMP, and to update the UWMP every five years. UWMPs are submitted to the California Department of Water Resources (DWR) for review and approval and are publicly available for review on the State's Water Use Efficiency Data (WUEdata) portal.[1]

The proposed project site is in the City of West Hollywood, within LADWP's service territory. LADWP plans for the water demands based upon growth defined in the General Plans of municipalities within its service territory, including the City of West Hollywood. LADWP's 2020 UWMP accounts for the water needs of growth defined in the West Hollywood General Plan 2035 (General Plan). As discussed in detail in Section 5.1, *LADWP Water Supply Projections*, LADWP plans to have sufficient supplies available to meet anticipated demands over a 20-year planning horizon, including under normal year, dry-year, and multiple-dry-year conditions.

The proposed project would accommodate growth defined in the SCAG's 2024-2050 RTP/SCS projections, and would add 750 individuals to the City of West Hollywood's previous growth projections. As discussed in Section 2.3, *Proposed Project*, the proposed project's additional 514 residential units would provide housing for 750 residents. LADWP's 2020 UWMP, which projects water needs associated with anticipated population growth, accounts for some of the project's 750 residents, although it does not account for the precise density proposed by the project. Therefore, to provide a conservative analysis that accounts for the water needs of all new residents accommodated by the proposed project, while addressing increased grown projections between the SCAG's 2024-2050 RTP/SCS projections and those that were used to inform the water demand estimates in LADWP's 2020 UWMP (to be updated in 2025), this WSA assesses water demands of the additional population accommodated by the project. As discussed in Section 2.4, *Water Demands*, the proposed project would introduce a new water demand of 134 AFY; the project would also include the removal of the CEMEX concrete batch plant and associated water use from the project site. The total increased water demand on the project site would be approximately 133 AFY. This WSA assesses the proposed project's new water demand of 133 AFY, using information on existing and planned water sources provided in LADWP's UWMP and other published resources.

3.5 Is Groundwater a Component of the Supplies for the Project?

Water supply for the proposed project would be provided by LADWP, which delivers water from multiple sources including local groundwater from the San Fernando Valley Groundwater Basin ("San Fernando Basin"). The San Fernando Basin is adjudicated, which means it is managed in accordance with a court-ordered Adjudication Judgement administered by a local Watermaster; see Section 4.1, *Local Groundwater*, for further discussion. Groundwater is a component of LADWP's water supply portfolio, and therefore is also a component of supply for the project.

[1] UWMPs submitted to the DWR are available for public review via the State's website for Water Use Efficiency Data, wuedata.water.ca.gov.

3.6 Are There Sufficient Supplies to Serve the Project Over the Next Twenty Years?

The sufficiency of LADWP's water supply to serve the proposed project's new water demands of approximately 133 AFY is assessed in this WSA, including with respect to existing supply and demand projections (Section 5.1, *LADWP Water Supply Projections*), as well as planned future supply sources (Section 5.2, *Additional Future Supply*). See Section 6, *Conclusions,* for conclusions.

4 Water Supply Overview

Water supply service in most of West Hollywood is provided by LADWP, while a small portion of the city receives water supply through the City of Beverly Hills. Figure 3 shows that the project site is in the eastern-most portion of LADWP's service area, indicated by a red star. Water for the project would be provided by LADWP from existing water supply sources, addressed herein, and planned water supply sources, addressed in Section 5, *Water Supply Reliability*.

4.1 Local Groundwater

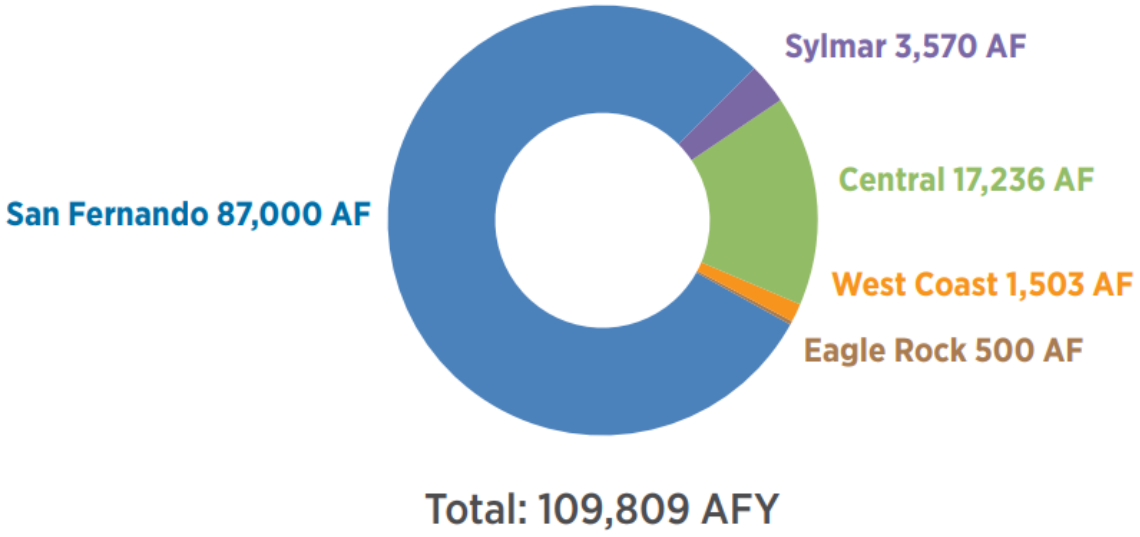
LADWP's service territory overlies multiple groundwater basins and includes the adjudication area for the Upper Los Angeles River Area (ULARA) watershed. The following discussion under "ULARA Adjudication Judgment" summarizes LADWP's groundwater entitlements and uses within the adjudicated area. In addition to those addressed below, the City also has access to and could develop future drinking water supply from several non-adjudicated basins, including the Hollywood, Santa Monica, and northern Central Basins (LADWP 2021).

ULARA Adjudication Judgment

The ULARA watershed and four groundwater basins contained therein has been adjudicated since 1979, in accordance with the judicial decree of the Superior Court of the State of California for the County of Los Angeles in Case No. 650079, *City of Los Angeles v. City of San Fernando, et. al*., dated January 26, 1979 (ULARA Judgment) and subsequent Sylmar Basin Stipulations (Sylmar Stipulation).

Through the ULARA Judgment, the City holds groundwater rights to 109,809 AFY from local basins (LADWP 2021); see Figure 4, which shows the majority of the City's groundwater rights are within the San Fernando Basin and the Central Basin.

Figure 4 LADWP Groundwater Entitlements (AFY)



Source: LADWP 2021, pg. 5-3

The ULARA Judgement identifies all parties with rights to use groundwater from the adjudication area, and requires safe yield operations to ensure groundwater extractions over the long term do not create a condition of overdraft in any basin within the ULARA adjudication area. It is administered by a court-appointed Watermaster, and an Administrative Committee comprised of representatives from the five public water supply agencies overlying the ULARA adjudication area, including: City of Burbank, City of Glendale, City of Los Angeles, City of San Fernando, and Crescenta Valley Water District (LADWP 2021).

The ULARA Watermaster produces an Annual Report that provides current information on the water rights of each party to the adjudication, as well as basin-specific information such as geologic conditions, local supply, groundwater extractions, changes in depth to groundwater or amount in storage, recharge operations, and water quality data. The most recent Annual Report of the ULARA Watermaster available at the time of preparation of this WSA (January 2024) is for the 2017-18 Water Year (October 1, 2017 – September 30, 2018) (ULARA Watermaster 2019). Publication of the Annual Report for the 2019-20 Water Year has been delayed pending approval for publication by the ULARA Administrative Committee; once the report is approved for publication and filed with the Court, it will be uploaded to the online Sustainable Groundwater Management Act (SGMA) portal (ULARA Watermaster 2023).

The 2017-18 Annual Report does not reflect current conditions, as that Water Year was during a period of multiple consecutive dry years and does not reflect the wetter conditions in recent years. This includes the extremely wet 2022-23 Water Year, during which there were surplus surface water flows in the major water project systems including the State Water Project (SWP), Central Valley Project (CVP), and Owens Lake (Los Angeles [LA] Aqueduct) systems. Hydrologic conditions are generally improved compared to the 2017-28 Water Year, including as a result of the recent wet weather of the 2022-23 Water Year.

Groundwater Replenishment

In addition to production of its groundwater rights from the ULARA adjudication area, LADWP also uses portions of the adjudicated area for storage of imported and recycled water for future uses, such as during dry years when imported surface water deliveries are reduced. The San Fernando Basin has an available storage capacity of 500,000 acre-feet (AF) and the West Coast and Central Basins have a combined available storage capacity of 500,000 AF (LADWP 2021, pg. 5-1).

LADWP and Los Angeles Sanitation and Environment (LASAN) are jointly implementing the Los Angeles Groundwater Replenishment Project to convey recycled water from Donald C. Tillman Water Reclamation Plant to the Hansen Spreading Grounds for percolation to the underlying San Fernando Basin. The Initial Phase of the Los Angeles Groundwater Replenishment Project includes spreading recycled water at Hanson Spreading Grounds. Future phases will include advanced treatment to meet or exceed regulatory requirements and may include increasing the supply of recycled water by recapturing flows of recycled water that flow through nearby lakes. Future phases may also include the construction of injection wells and connections to other existing spreading grounds, such as the Pacoima and Tujunga Spreading Grounds (LADWP 2021, pg. ES-17).

4.2 Imported Surface Water

LADWP provides water imported from several different sources, including Owens Valley water via the LA Aqueduct, SWP water via the California Aqueduct, and Colorado River water via the Colorado

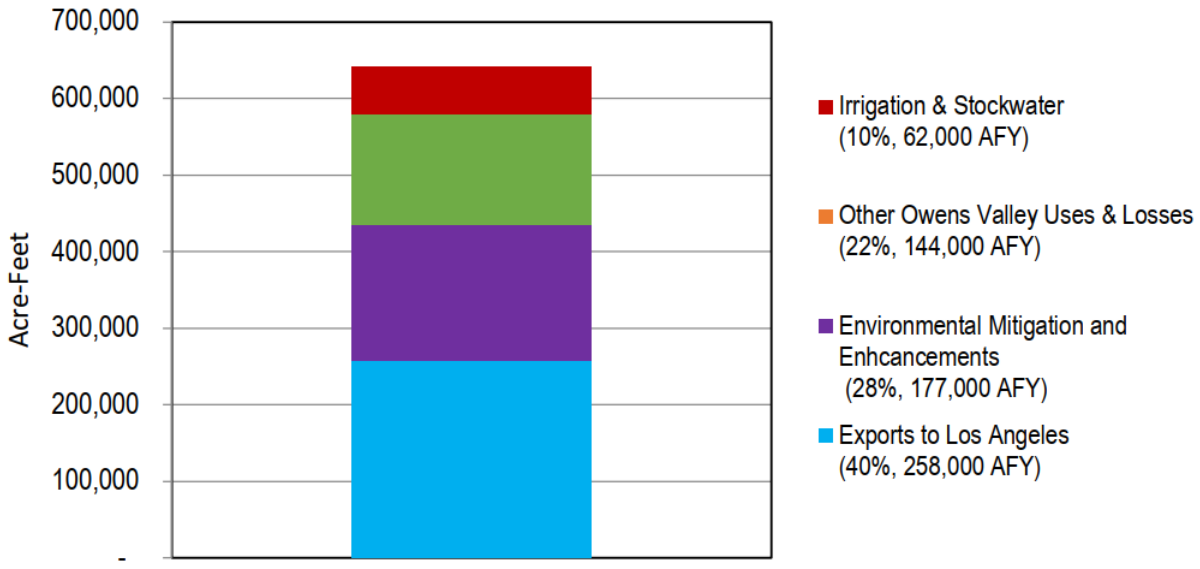
River Aqueduct. The physical availability of imported surface water depends upon climatic (drought) conditions and varies throughout the year.

Owens Valley – Los Angeles Aqueduct (LADWP)

LADWP uses the 233-mile-long LA Aqueduct to convey water from the Owens Valley in the Eastern Sierra Nevada mountains, south to the City of Los Angeles. The City originally filed for water rights on the Owens River in 1905 and completed construction of the LA Aqueduct in 1913. To protect its water rights, Los Angeles began buying land and associated water rights in the Owens Valley and converting cropland to a less water-intensive use: cattle grazing. Irrigated acreage in the valley dropped from about 75,000 acres in 1920 to 23,625 acres in 1940 (Water Education Foundation [WEF] 2024). Los Angeles currently controls nearly all the land on the valley floor, which is characterized by leased rather than owner-occupied farms. Until recent court decisions reduced the amount of exported water, Owens Valley water provided up to 75 percent of Los Angeles' annual supply (WEF 2024).

Since 1992, environmental concerns have required the City to reallocate approximately half of the water it was exporting from the Owens Valley to other uses within the Owens Valley and Mono Basin (LADWP 2021). Figure 5 provides an overview of Mono Basin and Owens Valley water use allocations, demonstrating that 258,000 AFY is allocated to the City of Los Angeles.

Figure 5 Mono Basin and Owens Valley Water Use Allocations



Source: LADWP 2021, pg. 4-2

As shown above, the LA Aqueduct exports approximately 40 percent of Owens Valley water to Los Angeles. Reduced water deliveries from the Owens Valley (via the LA Aqueduct) increase the City's dependence on imported water purchased from Metropolitan Water District of Southern California (Metropolitan), through the SWP and the Colorado River. The expansion of local water projects and programs, and development of additional water supply sources such as described in Section 5.2, *Additional Future Supply*, are increasing LADWP's local water supply reliability so its ability to meet all customer water demands is less influenced by climatic variables including less snowpack in the Eastern Sierras.

State Water Project – California Aqueduct (DWR)

The State of California, via the DWR, owns and operates the SWP system, which conveys water originating as Sierra Nevada snowpack and surface runoff, through the Sacramento-San Joaquin Delta (Delta) to SWP contractors throughout Southern California. The DWR holds long-term water supply contracts with each of the 29 agencies contracted to receive SWP water, referred to as "SWP Contractors," to provide annual delivery of SWP water in amounts up to each contractor's "Table A" allocation. Metropolitan is one of the largest SWP contractors, and LADWP is one of Metropolitan's largest customers for SWP water.

These water supply contracts were created in the 1960s and amended since (DWR 2023d), with Table A in the contracts serving to articulate the agency's contracted allocation. Table A allocations represent the maximum amount of SWP water assigned to each SWP contractor; the actual amount of SWP water available for delivery varies each year, depending on factors including drought conditions and environmental demands on the Bay-Delta (DWR 2023d). The SWP water supply contracts (which expire in 2035) set forth the maximum amount of SWP water a contractor may request annually (DWR 2023d). Each year, SWP contractors submit to DWR a request for all or a portion of their Table A allocation (contractors typically request 100 percent of their allocation); DWR then determines the percentage of requested Table A amounts that may be delivered for the given year, depending upon variables including climatic and hydrologic conditions.

Metropolitan's maximum Table A allocation is 1,911,500 AFY, from which Metropolitan provides SWP water to its member agencies, including LADWP. Metropolitan has made significant investments in storage to ensure Southern California has reliable water supplies regardless of variable precipitation and climatic conditions; since 1990, Metropolitan has increased its storage capacity by 13 times (Metropolitan 2023a). During very wet years when there are flows in excess of contracted amounts available in the SWP or Colorado River systems, Metropolitan contributes water to its storage facilities, including those operated in conjunction with partner agencies, for later use during dry years, when the availability of imported surface water is constrained (Metropolitan 2023a). LADWP is undertaking similar efforts as discussed for Operation NEXT Water Supply Program (see Section 5.2, *Additional Future Supply*) to improve local water supply reliability and be less affected by climatic variations, such as reduced Sierra Nevada snowpack, which reduces flows in the LA Aqueduct as well as the SWP system.

Colorado River – Colorado River Aqueduct (Metropolitan)

The United States Bureau of Reclamation (USBR) operates and maintains the Colorado River for water supply, diverting water in the form of snowmelt from headwaters in the Rocky Mountains in Colorado and Wyoming, along with portions of Utah, Nevada, New Mexico, and Arizona. USBR conveys Colorado River water to entitlement holders in the Upper Basin and Lower Basin of the Colorado River Watershed, including adjacent areas outside of the hydrologic basin. Legal apportionments of Colorado River water were established by Congress in the Boulder Canyon Project Act (BCPA) of 1928 and are fulfilled by the Secretary's water delivery contracts under the BCPA. The Colorado River is operated under the "Law of the River," which refers to the suite of legal actions and agreements related to Colorado River water and its distribution across the Upper and Lower Basins.

The Lower Basin states, which include California, have a total allocation of 7.5 million acre-feet per year (MAFY), of which the State of California holds a 4.4 MAFY normal apportionment. As such, California holds rights to roughly 59 percent of the Lower Basin states' total apportionment of

7.5 MAFY. Similar to the effects of drought on SWP availability, surface water flows in the Colorado River and storage in key reservoirs are reduced in extended drought conditions. Since 2000, historically dry conditions have stressed the Colorado River resources, increasing the risk of reaching critically low elevations at Lake Powell (Upper Basin) and Lake Mead (Lower Basin) (National Irrigated Drought Information System 2023).

Metropolitan's goal for the Colorado River is to maintain current supplies and programs, while also maintaining flexibility through dry-year programs and storage, which involves protecting existing supply and storage programs in the face of risks that could impact Colorado River supplies in the future (Metropolitan 2021, pg. 3-3). Section 5, *Water Supply Reliability,* below, provides discussion of water supply reliability under varying climatic conditions, and demonstrates that improved local water supply availability reduces dependence upon imported water.

4.3 Recycled Water

Recycled water utilized by LADWP is highly treated and is approved for irrigation of golf courses, cemeteries, street medians, and other large landscapes, as well as other uses including street sweeping, industrial cooling, dust control, and environmental benefits. Recycled water pipelines are required by the State Water Resources Control Board to be purple in color. LADWP's distribution system includes over 70 miles of purple pipe and is currently delivering over 11,000 AFY of recycled water (LADWP 2022a). Existing recycled water facilities include two water reclamation plants operated by LASAN, one operated by West Basin Municipal Water District (West Basin), and one operated by the City of Burbank:

- City of Los Angeles' Donald C. Tillman Water Reclamation Plant
- City of Los Angeles' Terminal Island Water Reclamation Plant
- West Basin's Edward C. Little Water Recycling Facility , which receives secondary effluent from the City of Los Angeles' Hyperion Water Reclamation Plant (Hyperion)
- City of Burbank's Water Reclamation Plant (LADWP 2022a)

The City's goal is to increase the total amount of recycled water to 59,000 AFY by 2035. Currently, LADWP is expanding its recycled water program to include a purple pipe distribution system, as well as groundwater replenishment utilizing advanced treated purified recycled water. Table 2 on the following page provides recycle water use projections for LADWP's service territory between 2020 and 2045.

Table 2 LADWP Recycled Water Use Projections

Category	Projected Use (AFY)				
	FY 24/25	FY 29/30	FY 34/35	FY 39/40	FY 44/45
Municipal and Industrial Uses	17,300	29,200	29,700	29,800	30,000
Indirect Potable Reuse (Groundwater Replenishment)	7,000	11,000	11,000	11,000	11,000
Subtotal	24,300	40,200	40,700	40,800	41,000
Environmental Use	26,600	26,600	26,600	26,600	26,600
Total	50,900	66,800	67,300	67,400	67,600

Source: LADWP 2021, pg. 7-26

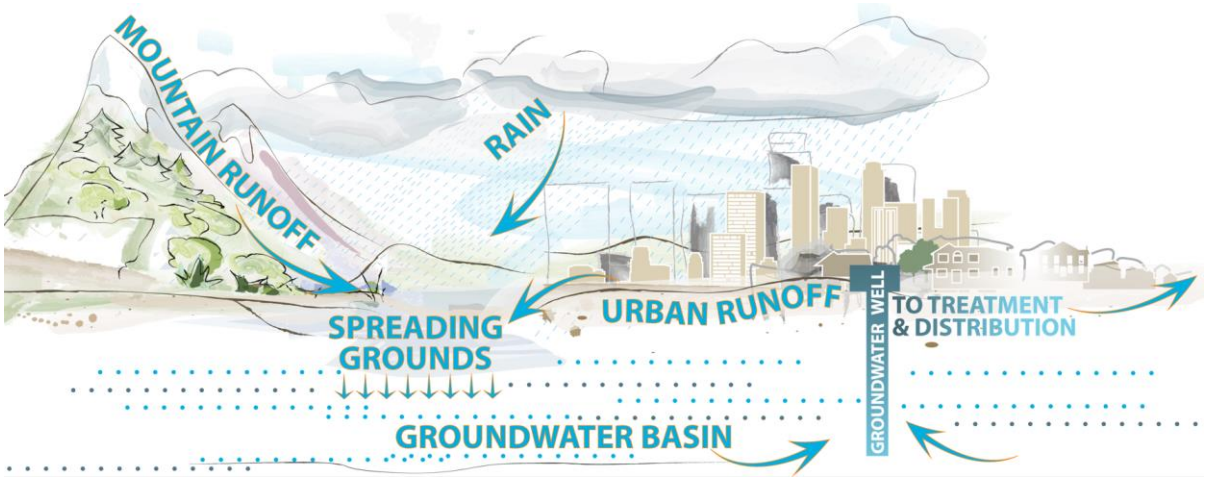
As shown in Table 2, LADWP's recycled water use is projected to increase to approximately 50,900 AFY in 2025, further increasing to 67,600 AFY in 2045. This increase will be accomplished by increasing municipal/industrial use of recycled water by 8,000 AFY, and by increasing groundwater replenishment (indirect potable reuse) by approximately 7,000 AFY (LADWP 2021, pg. 7-26). As described in Section 4.1, *Local Groundwater*, groundwater replenishment is the practice of storing water in the ground for future use as needed, reducing reliance on local groundwater and imported surface water supplies.

In addition, as part of LADWP's effort to maximize water reuse, it has partnered with other agencies to develop and implement the Operation NEXT Water Supply Program (Operation NEXT), which would maximize water reuse from Hyperion; Operation NEXT and Hyperion are discussed under respective headings below.

4.4 Stormwater Capture and Reuse

Projects to capture and conserve stormwater runoff make up an important component of the City's water supply portfolio. The City of Los Angeles and surrounding area is a complex multi-jurisdictional region, and local stormwater capture projects involve a collaborative effort between multiple agencies including: LADWP, the Los Angeles County Flood Control District, the LASAN, the Los Angeles Bureau of Street Services, the Los Angeles Bureau of Engineering, and the United States Army Corps of Engineers. LADWP's strategy to maximize benefit of its stormwater capture and reuse efforts focuses on increasing groundwater recharge by retrofitting the Big Tujunga Dam; reconstructing Hansen, Tujunga, and Pacoima Spreading Grounds and other large-scale projects; and working with other City departments on smaller-scale projects, anticipated to provide up to 20,000 AFY of stormwater capture (LADWP 2024d).

Figure 6 Urban Stormwater Capture Overview



Source: LADWP 2024a

LADWP's Stormwater Capture Master Plan (SCMP) provided data and analysis to determine that, in addition to existing capture rates, an additional 68,000 to 114,000 AFY of water supply could be developed through implementation of a suite of projects, programs, and policies over the next 20 years (LADWP 2015). The SCMP characterized and evaluated the role that increased centralized and distributed stormwater capture could provide to LADWP's water supply portfolio, where "centralized capture projects" are those that capture generally more than 100 AFY and are unique to a specific location, whereas "distributed capture projects" capture generally less than 100 AFY and are smaller but with similar design to centralized projects, allowing them to be implemented programmatically across the City (LADWP 2015, pg. ES-8).

LADWP recently estimated that between October 1, 2022 and January 10, 2023, nearly 32,500 AF of stormwater runoff water was captured, or approximately 10.6 billion gallons (LADWP 2023b). Between 2015 and 2024, LADWP's total stormwater capture capacity increased from about 64,000 AFY to over 82,6000 AFY; this is more than 55 percent of the way to achieving the City's goal of achieving capacity to capture 150,000 AFY (48.9 billion gallons) of stormwater runoff by 2035 (LADWP 2024d).

5 Water Supply Reliability

As described in Section 2.3, *Proposed Project,* the proposed project would accommodate up to 750 more individuals than were planned for in the City's General Plan and LADWP's UWMP. This section presents LADWP's existing supply availability projections and characterizes additional future supply sources contributing to LADWP's water supply portfolio, to inform consideration of water supply reliability for the proposed project.

5.1 LADWP Water Supply Projections

The tables below show LADWP's projections of its service territory demands and available water supply sources under normal water year conditions (Table 3), single-dry year conditions (Table 4), and multiple dry-year conditions (Table 5a through Table 5e).

Table 3 LADWP Water Budget - Average Year

Demand and Supply Projections (in acre-feet)	Average Year Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**642,600**	**660,200**	**678,800**	**697,800**	**710,500**
Post-Conservation Demand	**509,500**	**526,700**	**536,100**	**554,500**	**565,800**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	133,100	133,500	142,700	143,300	144,700
Los Angeles Aqueduct[4]	190,400	188,900	187,300	185,800	184,200
Groundwater					
- Entitlements[5]	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	385,600	406,200	423,200	423,700	425,400
MWD Water Purchases With Existing/Planned Supplies	181,400	180,200	183,700	204,100	216,800
Total Supplies	**642,600**	**660,200**	**678,800**	**697,800**	**710,500**

[1] Total Demand with existing passive conservation prior to FYE 14.

[2] Cumulative hardware savings since late 1980s reached 110,822 AFY by FYE 14.

[3] Additional non-hardware conservation inclusive of retained passive savings from the dry period ending in 2017

[4] Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate impacts.

[5] LADWP Groundwater Remediation projects in the San Fernando Basin are expected to be in operation by FYE 2023. Sylmar Basin production will increase to 4,170 AFY from FYE 2021 to 2036 to avoid the expiration of stored water credits, then revert to entitlement amounts of 3,570 AFY in 2037.

Source: LADWP 2021, pg. ES-21

Table 3 shows that during normal-water year conditions through 2045, LADWP has sufficient water supply to meet all demands. In addition, surplus water supply could be achieved through demand reduction by conservation. Table 4 provides an overview of LADWP's service territory demands and available supplies during a single-dry water year.

Table 4 LADWP Water Budget – Single-Dry Water Year

Demand and Supply Projections (in acre-feet)	Dry Year Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**674,700**	**693,200**	**712,700**	**732,700**	**746,000**
Post-Conservation Demand	**509,500**	**526,700**	**536,100**	**554,500**	**565,800**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	165,200	166,500	176,600	178,200	180,200
Los Angeles Aqueduct[4]	70,800	70,200	69,600	69,000	68,500
Groundwater					
- Entitlements[5]	121,300	121,300	121,300	120,700	120,700
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	385,600	406,200	423,200	423,700	425,400
MWD Water Purchases With Existing/Planned Supplies	289,100	287,000	289,500	309,000	320,600
Total Supplies	**674,700**	**693,200**	**712,700**	**732,700**	**746,000**

[1] Total Demand with existing passive conservation prior to FYE 14.

[2] Cumulative hardware savings since late 1980s reached 110,822 AFY by FYE 14.

[3] Additional non-hardware conservation inclusive of retained passive savings from the dry period ending in 2017

[4] Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate impacts.

[5] LADWP Groundwater Remediation projects in the San Fernando Basin are expected to be in operation by FYE 2023. Sylmar Basin production will increase to 4,170 AFY from FYE 2021 to 2036 to avoid the expiration of stored water credits, then revert to entitlement amounts of 3,570 AFY in 2037.

Source: LADP 2021, pg. ES-21

Table 4 shows that during single-dry water year conditions, LADWP has sufficient water supply available through 2045 to meet all demands. In addition, surplus water supply could be achieved through demand reduction by conservation. Table 5a through Table 5e on the following pages provide an overview of LADWP's service territory demands and available supplies over multiple consecutive dry water years, representing extended drought conditions.

Table 5a LADWP Water Budget – Multiple Dry Years, Year 1

Demand and Supply Projections (in acre-feet)	Multi-Dry Year: Year 1 (1988) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**657,900**	**675,800**	**694,900**	**714,400**	**727,400**
Post-Conservation Demand	**507,600**	**526,600**	**536,100**	**554,400**	**565,700**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	150,300	149,200	158,800	160,000	161,700
Los Angeles Aqueduct[4]	133,700	132,600	131,500	130,400	129,300
Groundwater					
- Entitlements[5]	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	421,700	439,400	455,400	455,000	455,800
MWD Water Purchases With Existing/Planned Supplies	236,200	236,400	239,500	259,400	271,600
Total Supplies	**657,900**	**675,800**	**694,900**	**714,400**	**727,400**

Source: LADWP 2021, pg. ES-22

Table 5b LADWP Water Budget – Multiple Dry Years, Year 2

Demand and Supply Projections (in acre-feet)	Multi-Dry Year: Year 2 (1989) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**661,700**	**679,700**	**698,900**	**718,500**	**731,500**
Post-Conservation Demand	**507,600**	**526,600**	**536,100**	**554,400**	**565,700**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	154,100	153,100	162,800	164,100	165,800
Los Angeles Aqueduct[4]	119,500	118,600	117,600	116,600	115,700
Groundwater					
- Entitlements[5]	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	531,700	557,700	580,900	580,100	581,100
MWD Water Purchases With Existing/Planned Supplies	130,000	122,000	118,000	138,400	150,400
Total Supplies	**661,700**	**679,700**	**698,900**	**718,500**	**731,500**

Source: LADWP 2021, pg. ES-22

Table 5c LADWP Water Budget – Multiple Dry Years, Year 3

Demand and Supply Projections (in acre-feet)	Multi-Dry Year: Year 3 (1990) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**674,800**	**693,200**	**712,800**	**732,700**	**746,000**
Post-Conservation Demand	**507,600**	**526,600**	**536,100**	**554,400**	**565,700**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	167,200	166,600	176,700	178,300	180,300
Los Angeles Aqueduct[4]	70,800	70,200	69,600	69,000	68,500
Groundwater					
- Entitlements[5]	121,309	121,309	121,309	120,709	120,709
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	387,609	406,309	423,309	423,809	425,509
MWD Water Purchases With Existing/Planned Supplies	287,191	286,891	289,491	308,891	320,491
Total Supplies	**674,800**	**693,200**	**712,800**	**732,700**	**746,000**

Source: LADP 2021, pg. ES-23

Table 5d LADWP Water Budget – Multiple Dry Years, Year 4

Demand and Supply Projections (in acre-feet)	Multi-Dry Year: Year 4 (1991) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**661,600**	**679,600**	**698,900**	**718,400**	**731,500**
Post-Conservation Demand	**507,600**	**526,600**	**536,100**	**554,400**	**565,700**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	154,000	153,000	162,800	164,000	165,800
Los Angeles Aqueduct[4]	119,700	118,800	117,800	116,800	115,800
Groundwater					
- Entitlements[5]	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	411,400	429,400	445,700	445,400	446,400
MWD Water Purchases With Existing/Planned Supplies	250,200	250,200	253,200	273,000	285,100
Total Supplies	**661,600**	**679,600**	**698,900**	**718,400**	**731,500**

Source: LADWP 2021, pg. ES-23

Table 5e LADWP Water Budget – Multiple Dry Years, Year 5

Demand and Supply Projections (in acre-feet)	Multi-Dry Year: Year 5 (1992) Fiscal Year Ending on June 30				
	2025	2030	2035	2040	2045
Total Water Demand[1]	**655,700**	**673,600**	**692,600**	**712,000**	**724,900**
Post-Conservation Demand	**507,600**	**526,600**	**536,100**	**554,400**	**565,700**
Existing / Planned Supplies					
Conservation (Additional Active[2] and Passive[3] after FYE 14)	148,100	147,000	156,500	157,600	159,200
Los Angeles Aqueduct[4]	141,900	140,700	139,500	138,400	137,300
Groundwater[5]					
- Entitlements[5]	109,400	109,400	109,400	108,800	108,800
- Groundwater Replenishment	7,000	11,000	11,000	11,000	11,000
- Stormwater Recharge (Increased Pumping)	4,000	8,000	15,000	15,000	15,000
Recycled Water- Irrigation and Industrial Use	17,300	29,200	29,700	29,800	30,000
Subtotal	427,700	445,300	461,100	460,600	461,300
MWD Water Purchases With Existing/Planned Supplies	228,000	228,300	231,500	251,400	263,600
Total Supplies	**655,700**	**673,600**	**692,600**	**712,000**	**724,900**

[1] Total Demand with existing passive conservation prior to FYE 14.

[2] Cumulative hardware savings since late 1980s reached 110,822 AFY by FYE 14.

[3] Additional non-hardware conservation inclusive of retained passive savings from the dry period ending in 2017

[4] Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate impacts.

[5] LADWP Groundwater Remediation projects in the San Fernando Basin are expected to be in operation by FYE 2023. Sylmar Basin production will increase to 4,170 AFY from FYE 2021 to 2036 to avoid the expiration of stored water credits, then revert to entitlement amounts of 3,570 AFY in 2037.

Source: LADWP 2021, pg. ES-24

The previous tables portray multiple dry water year conditions for LADWP's water supply budget, including Table 5a for Year 1, Table 5b for Year 2, Table 5c for Year 3, Table 5d for Year 4, and Table 5e for Year 5. As shown, LADWP anticipates having sufficient supply to cover its entire service area demand under all years of consecutive drought over five years. These tables, in combination with those above for average and single-dry year conditions, demonstrate that LADWP plans to have sufficient water supply available to accommodate its service territory demands over all climatic scenarios, based upon growth defined in the UWMP.

As shown above, a portion of LADWP's water supply is purchased from Metropolitan, as imported surface water from the SWP system or the Colorado River. The physical availability of imported surface water depends upon climatic (drought) conditions and varies throughout the year; therefore, while LADWP relies on Metropolitan water to varying degrees, depending on climatic conditions, it also is developing additional supply projects and improved local water supply, to reduce reliance on imported sources and improve year-round supply reliability.

Table 3 through Table 5e also quantify how water demands could be reduced through conservation in the "Post-Conservation Demand" row; the difference between the demands after conservation

and the total supply for each year is the amount of surplus water that could be developed through conservation. See Section 5.2, *Additional Future Supply*, under "Conservation," for discussion.

As stated in Section 3.4, *Is There a Current UWMP that Accounts for the Project Demand?*, the proposed project would accommodate growth of up to 750 additional individuals compared to the projections used to inform LADWP's UWMP. Since LADWP's 2020 UWMP does not identify any supply deficiencies, this WSA focuses on supply availability for the increased demand of 133 AFY associated with 750 additional individuals. As mentioned above, LADWP is working the develop additional supply sources and improve local water supply resiliency; Section 5.2, *Additional Future Supply*, below, details key water supply projects being implemented to accommodate continued local growth with sufficient, reliable water supply availability over time.

5.2 Additional Future Supply

LADWP's water supply portfolio is shifting over time, in response to changes in water supply source availability. Local water supply development is a priority investment to improve local supply reliability and reduce dependence on limited groundwater resources and imported surface water supplies. This section provides an overview of additional future supply LADWP is developing, including groundwater remediation, Operation NEXT, and conservation; in addition, LADWP continues to implement groundwater management, recycled water development, and stormwater capture and reuse projects, as detailed in Section 4, *Water Supply Overview*.

Groundwater Remediation

LADWP in conducting groundwater remediation in the San Fernando Basin under an historical settlement agreement with Honeywell to design, fund, and construct groundwater treatment facilities to address historic industrial contamination. When fully operational, the facilities will treat approximately 2.8 billion gallons of groundwater per year (LADWP 2024c), or approximately 8,593 AFY. Honeywell has also agreed to treat up to an additional 2.1 billion gallons of groundwater per year (6,445 AFY) for LADWP, should additional remediation be necessary to achieve certain drinking water standards. In total, the Honeywell settlement could result in 4.9 billion gallons of treated water per year (15,038 AFY), meeting drinking water standards, which would offset the need for LADWP to purchase the equivalent amount in imported water (LADWP 2024c).

Operation NEXT

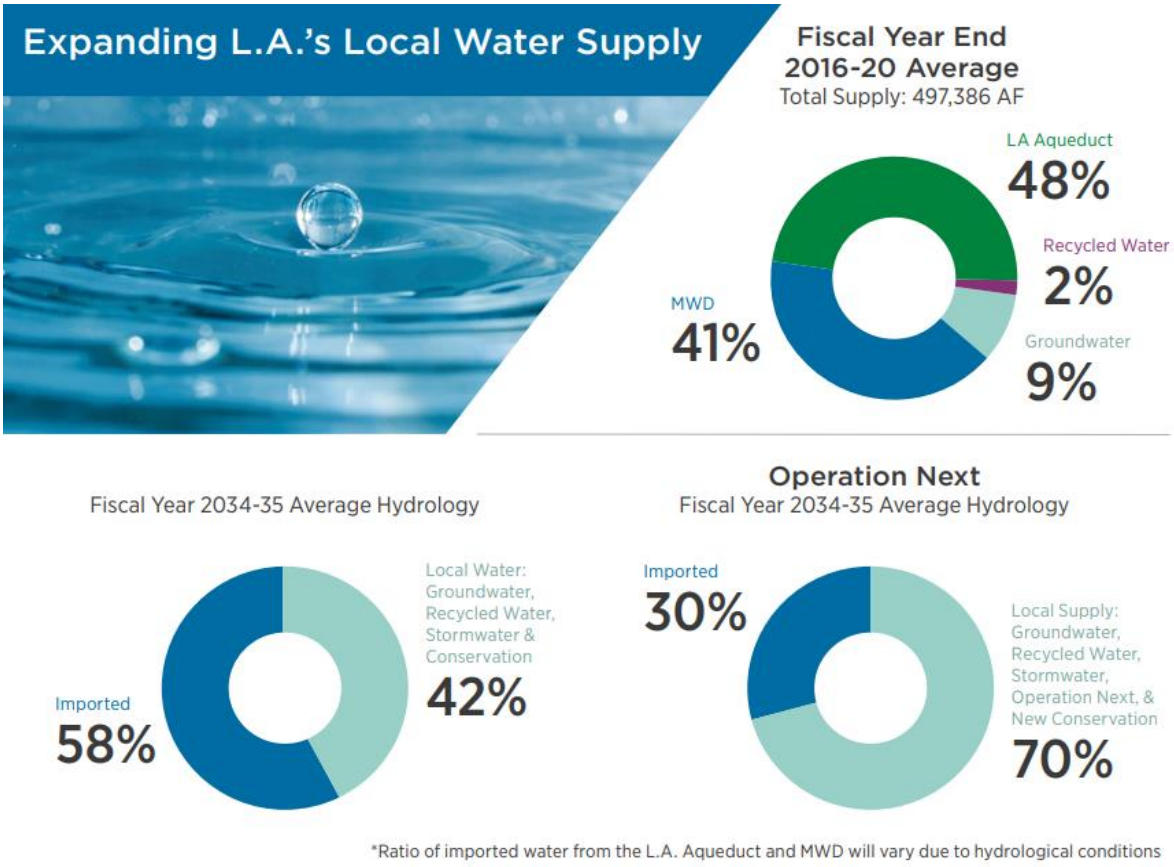
Operation NEXT is an initiative to recycle 100 percent of treated wastewater produced by Hyperion. LADWP is working in partnership with LASAN to retrofit Hyperion to an advanced water purification facility (AWPF), enabling it to produce up to 170 million gallons per day (MGD), or approximately 190,000 AFY, of purified recycled water (LADWP 2024b). Water produced through Operation NEXT would be a "drought proof" supply, as the wastewater inflow to Hyperion would be constant, tied to population. This water will offset LADWP's need to purchase imported water from Metropolitan and will allow the City to be less dependent on Owens Valley water and local groundwater.

In addition to converting Hyperion to an AWPF, Operation NEXT comprises four key concepts to maximize beneficial use of the new supply, particularly by leveraging groundwater storage; those concepts are listed below (LADWP 2024b).

1) LADWP and the Water Replenishment District of Southern California (WRD), Watermaster of the West Coast and Central Groundwater Basins, are collaborating on a Joint Basin Master Plan to identify optimal locations to convey Hyperion water into underlying aquifers.
2) LADWP will extract and treat the groundwater for distribution into the potable water system.
3) LADWP will convey Hyperion water to replenish the San Fernando Groundwater Basin and provide raw water augmentation at the Los Angeles Aqueduct Filtration Plant, the main water treatment plant at the northern end of the City.
4) LADWP will potentially convey Hyperion water to the Jensen Water Filtration Plant and Metropolitan's Regional Recycled Water Program Backbone System, another regional direct potable reuse project in Southern California.

Figure 7 provides an overview of LADWP's water supply portfolio for an "average hydrology" year. As shown, under current conditions (represented by Fiscal Year End 2016-20 Average), LADWP's supply portfolio includes 41 percent imported supply from Metropolitan, and 59 percent local sources including Owens Valley water (via the LA Aqueduct), recycled water, and groundwater. In the future, projecting through Fiscal Year 2034-35 and assuming average hydrology conditions, LADWP's supply portfolio would consist of 58 percent imported water without Operation Next, which reduces to 30 percent imported water with Operation Next. The implementation of Operation Next would reduce LADWP's reliance on imported water by approximately 28 percent, also increasing LADWP's local supply availability by approximately 28 percent.

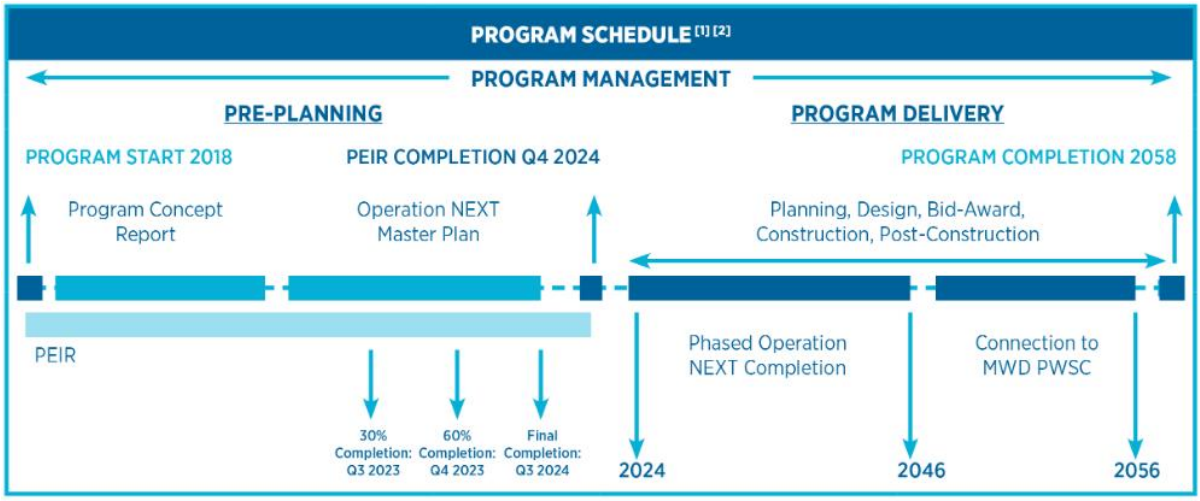
Figure 7 Operation NEXT - Potential Contribution to LADWP's Water Supply Portfolio



Source: LADWP 2022

LADWP and LASAN are currently developing an "Operation NEXT Master Plan," scheduled to be complete by Spring 2024. Figure 8 provides an overview of the Operation NEXT implmentation timeline. As shown, a Programmatic Environmental Impact Report (EIR) is being prepared for Operation NEXT; this is a joint effort between LADWP and LASAN, and is scheduled to be complete by late 2024. In addition, LADWP and WRD recently completed a "Joint Los Angeles Basin Replenishment and Extraction Master Plan" to evaluate the best groundwater locations for injecting and extracting Hyperion purified recycled water. (LADWP 2024a)

Figure 8 Operation NEXT – Project Timeline



Footnotes:

[1] Current estimate per Concept Report. Final budget and schedule are dependent on final Master Plan.
[2] Delivery and cost are a function of risks being mitigated.

Source: LADWP 2024a

LADWP and LASAN are also collaborating on the Hyperion AWPF, a 1.5-MGD project that will provide purified recycled water to nearby Los Angeles International Airport for heating, cooling, and toilet flushing. In addition, LADWP is working with West Basin on a 1-MGD Hyperion Membrane Bioreactor (MBR) Pilot Facility, which will compare three MBR systems side-by-side and provide data for regulatory approval. (LADWP 2024a)

As discussed in Section 5.1, *LADWP Water Supply Projections*, LADWP projects having sufficient water supply available under all drought scenarios through 2045, with additional potential water supply available through conservation. Operation NEXT would increase LADWP's local water supply reliability through increased production of potable water and extensive underground storage of that water, for use as needed. Therefore, while LADWP has sufficient supply available without the benefit of Operation NEXT, it would also have improved reliability with Operation NEXT.

Conservation

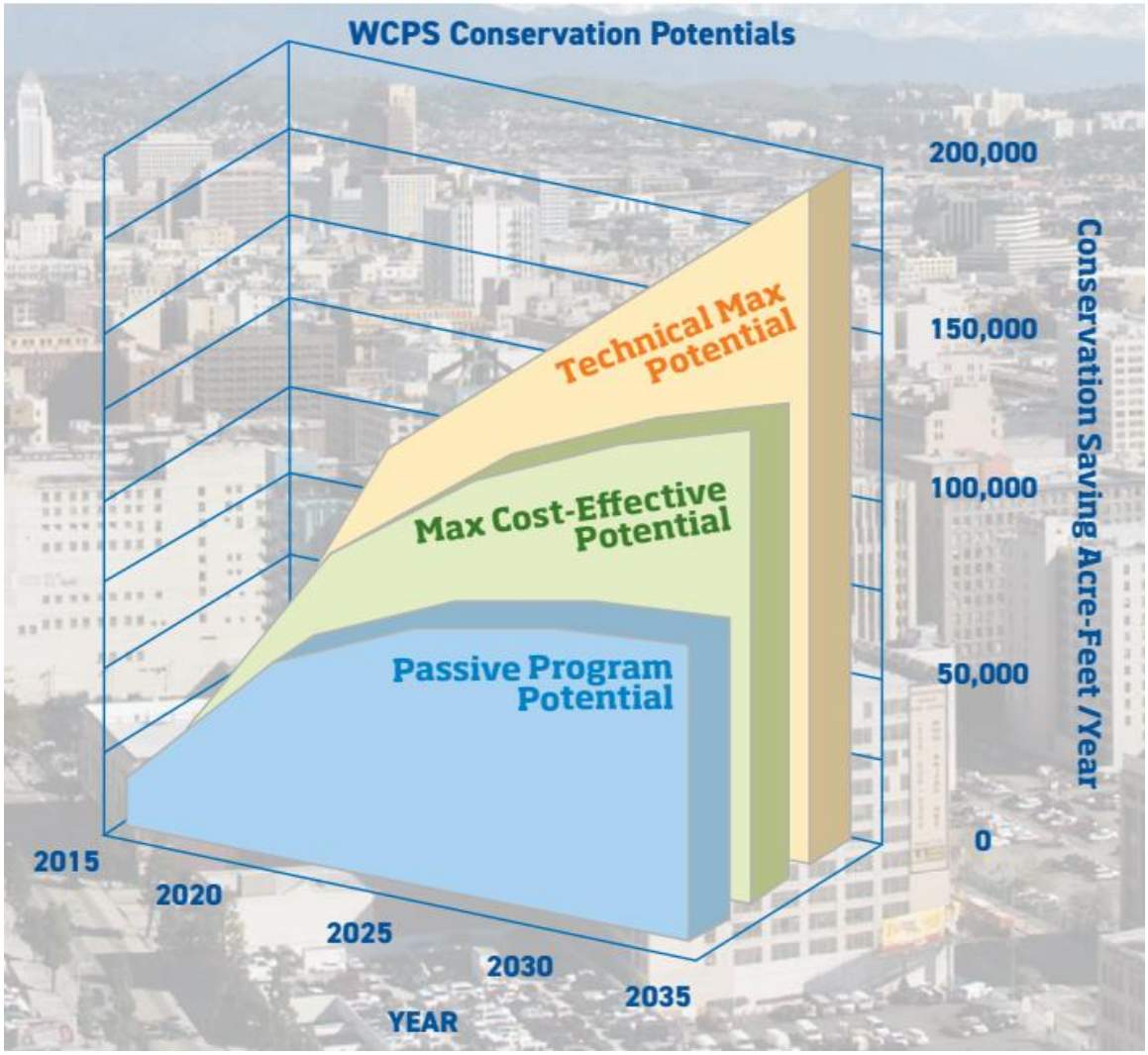
Since the early 1990s, LADWP has made significant investments in infrastructure, technology, and public outreach to improve conservation. Current approaches to increasing water conservation typically target reductions in outdoor water use and enhancing indoor water savings through new technology (LADWP 2024d). Water use today is lower than 40 years ago, despite an increase in population of more than 1.3 million people (LADWP 2024d). The current approach to conservation is largely focused on public outreach, as well as passive and active conservation methods. "Passive conservation" includes plumbing codes, landscape ordinances, and behavioral changes, while

"active conservation" refers to the City's active conservation projects and programs throughout the City (LADWP 2021).

Figure 9 provides a quantified overview of the amount of water LADWP anticipates being able to save through conservation under various scenarios including passive conservation, cost-effective active conservation, and cost-restrictive active conservation. These projections were provided in LADWP's 2017 Water Conservation Potential Study, the results of which were used to develop LADWP's current water savings goals, including achieving 140,000 AF of cost-effective conservation savings by 2035 (LADWP 2021, pg. ES-14).

Figure 9 Water Conservation Potential Study – Water Savings Projections

	Acre-Feet / Year			
	2020	2025	2030	2035
Technical Maximum Potential	96,000	132,000	168,000	204,000
Maximum Cost-Effective Potential	77,000	107,000	127,000	140,000
Passive Program Potential	55,000	74,000	84,000	88,000



Source: LADWP 2017

6 Conclusions

This WSA identifies and characterizes all known and potential water demands of the proposed project, and compares the estimated water supplies available over a 20-year projection, to assess water supply availability and reliability for the proposed development for compliance with California Water Code as amended by SB 610. Varying drought conditions and ongoing long-term supply management activities were also considered in supply availability discussions. Water supply sources managed by the local purveyor, LADWP, as well as Metropolitan, as LADWP's provider of imported surface water supplies, were considered for the purposes of this WSA.

Section 5.1, *LADWP Water Supply Projections,* presents the supply and demand projections from LADWP's 2020 UWMP, which demonstrate that LADWP has sufficient supply availability to meet anticipated demands, including those associated with the City's General Plan, over a future projection of 20 years and with consideration to varying drought conditions. The supply and demand projections provided in Section 5.1 also detail water conservation savings, and quantify "Post-Conservation Demand" compared to "Total Water Demand" for each of the considered climatic scenarios, including normal water year (Table 3), single-dry water year (Table 4), and multiple-dry water years (Table 5a through Table 5e). The proposed project would accommodate 750 more individuals than were accounted for in the City's General Plan, and would introduce new water demands of approximately 133 AFY, after removal of the CEMEX concrete batch plant. Each of the tables in Section 5.1 identify water conservation savings that are substantially greater than 133 AFY, for every year projected and under all considered climatic scenarios. This demonstrates that sufficient water supply is available for the proposed project over at least 20 years and with consideration varying drought scenarios.

In addition, Section 5.2, *Additional Future Supply*, presents future water supply sources that are being developed to increase LADWP's local supply sources, improve local water supply reliability by reducing reliance on imported surface water from the LA Aqueduct as well as purchased from Metropolitan. As discussed in Section 4, *Water Supply Overview,* the physical availability of imported surface water is determined by climatic and drought conditions; therefore, by increasing local supply sources, LADWP will have greater reliability during periods of reduced availability of imported supply sources. In comparison to the water supply projects discussed in Section 5.2, the proposed project's increased demand of 133 AFY represents less than one percent of the additional supply from each project, including groundwater remediation (0.88 percent of 15,038 AFY), purified recycled water through Operation NEXT (0.07 percent of 190,000 AFY), and cost-effective conservation savings (0.10 percent of 140,000 AFY).

LADWP's UWMP defines a detailed plan for a sustainable water supply portfolio that includes increasing local water supplies and water conservation by 2045, and reducing dependence on purchased imported supplies (LADWP 2021, pg. 56). In addition, LADWP's UWMP defines conservation savings and future planned supply sources that are sufficient in volume and reliable over future projected drought scenarios to provide 133 AFY for the proposed project. Based upon planned supplies available through conservation and future sources, sufficient water supply would be available for the proposed project under normal-year, single-dry year, and multiple dry-year conditions. This WSA was prepared for compliance with California Water Code amended by SB 610.

7 References

BWP (Burbank Water & Power). 2022. Sewage Generation Rates. https://www.burbankca.gov/documents/174714/1196790/Sewage+Generation+Rates.pdf/5a6181e4-4f22-906e-bc32-9c29b18cb417?t=1618365964641 (January 2024).

California DOF (Department of Finance). 2024. Population and Housing Estimates for Cities, Counties, and the State — January 1, 2022 and 2023. E-5 Population and Housing Estimates for Cities, Counties, and the State | Department of Finance (ca.gov) (June 2024).

LADWP (Los Angeles Department of Water and Power). 2024a. Operation NEXT. https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-sourcesofsupply/a-w-sos-operationnext?_afrLoop=14907695106594&_afrWindowMode=0&_afrWindowId=null#%40%3F_afrWindowId%3Dnull%26_afrLoop%3D14907695106594%26_afrWindowMode%3D0%26_adf.ctrl-state%3Db3luffrhv_22 (January 2024).

_____. 2024b. Operation NEXT – LA's New Water Supply Program. Article by Sarah Mouakkad. https://www.cwea.org/news/operation-next-las-new-water-supply-program/ (January 2024).

_____. 2024c. Construction Underway on Groundwater Treatment Facilities as part of Historic Settlement Agreement between LADWP and Honeywell. https://www.ladwpnews.com/construction-underway-on-groundwater-treatment-facilities-as-part-of-historic-settlement-agreement-between-ladwp-and-honeywell/ (January 2024).

_____. 2024d. Developing a Local Water Supply. https://ladwp.com/ladwp/faces/ladwp/aboutus/a-inourcommunity/a-ioc-goinggreen/a-ioc-gg-developingalocalwatersupply?_adf.ctrl-state=xd1a05j14_4&_ad))))&_afrLoop=1022350330290907&_afrWindowMode=0&_afrWindowId=null#%40%3F_afrWindowId%3Dnull%26_afrLoop%3D1022350330290907%26_ad%2529%2529%2529%2529%3D%26_afrWindowMode%3D0%26_adf.ctrl-state%3Ddgu7urirq_4 (January 2024).

_____. 2023a. Operation NEXT Fact Sheet. https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB731559&RevisionSelectionMethod=LatestReleased (January 2024).

_____. 2023b. Stormwater Capture Swells During Season's Biggest Rainstorm, Accumulating 10.6 Billion Gallons – Enough Water to Serve 139,000 Households. January 11. https://www.ladwpnews.com/stormwater-capture-swells-during-seasons-biggest-rainstorm-accumulating-10-6-billion-gallons-enough-water-to-serve-139000-households/ (January 2024).

_____. 2022a. Recycled Water Annual Report 2020-21. https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzmw/~edisp/opladwpccb730153.pdf?_afrLoop=14713628050351 (January 2024).

_____. 2022b. Building a Stronger Los Angeles. Fact Sheet. https://aboutyourwater.ladwp.com/wp-content/uploads/2022/01/Water-Strong-FactSheet.pdf (January 2024).

_____. 2021. Urban Water Management Plan. 2020. https://ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf (January 2024).

_____. 2017. Water Conservation Potential Study. September. https://s3-us-west-2.amazonaws.com/ladwp-jtti/wp-content/uploads/sites/3/2018/05/23094537/LADWP-Water-Conservation-Study-Exec-Report-WebFinal-1.pdf (January 2017).

_____. 2015. Stormwater Capture Master Plan. August. https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB421767&RevisionSelectionMethod=LatestReleased (January 2024).

Metropolitan (Metropolitan Water District of Southern California). 2021. 2020 Urban Water Management Plan. June. wuedata.water.ca.gov/getfile?filename=/public%2Fuwmp_attachments%2F5202375113%2FMWDSC 2020 Urban Water Management Plan - June 2021 WUE Portal.pdf (January 2024).

National Irrigated Drought Information System. 2024. Colorado River Drought Contingency Plan. https://www.drought.gov/colorado-river-drought-contingency-plan (January 2024).

SCAG (Southern California Association of Governments). 2024. Connect SoCal (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal 2024: Demographics & Growth Forecast Technical Report, Adopted, April 4, 2024 (June 2024).

ULARA (Upper Los Angeles River Area) Watermaster. 2024. Directory: Annual ULARA Watermaster Report. http://ularawatermaster.com/public_resources/WY-2017-18-ULARA-WM-Rpt-12-2019.pdf (January 2024).

_____. 2023. ULARA 2019-20 Report Explanation. SGMA Adjudicated Basin Submission for ULARA. Letter from Richard Slade, ULARA Watermaster, to Timothy Ross, DWR Adjudicated Basins Reporting System. January 10. https://sgma.water.ca.gov/adjudbasins/documentservice/download/612 (January 2024).

WEF (Water Education Foundation). 2024. Los Angeles Aqueduct and Owens Valley. https://www.watereducation.org/aquapedia/los-angeles-aqueduct-and-owens-valley (January 2024).

West Hollywood, City of. 2010. Final General Plan Program EIR Part 2. October. https://www.weho.org/home/showpublisheddocument/9822/635240156301830000 (January 2024).