IV. Environmental Impact Analysis M.1 Utilities and Service Systems—Water Supply and Infrastructure

1. Introduction

This section evaluates potential Project impacts on water supply and whether the Project would require or result in the construction of new water treatment facilities, including conveyance infrastructure, the construction of which would cause significant environmental effects. The Los Angeles Department of Water and Power (LADWP) is the water supplier for the Project Site. This section describes LADWP's available water supplies, current and projected regional water demand, municipal water infrastructure serving the Project Site, and the adequacy of water supplies and infrastructure to meet Project demand. Project consistency with relevant plans and regulations is also assessed.

The data and conclusions in this section regarding the availability of water supply to serve the Project are based on a Water Supply Assessment (WSA) prepared for the Project and adopted by LADWP as well as a supplemental review of Option B conducted by LADWP. The WSA for the Project and LADWP's supplemental review are included in Appendix L of this Draft EIR, along with a copy of Resolution No. 018081 approving the WSA. Additional technical information used in the analysis is based on the *Water and Sewer Infrastructure Assessment Report* (Infrastructure Assessment Report) prepared for the Project and included in Appendix L.

2. Environmental Setting

a. Regulatory Framework

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

- California Urban Water Management Plan Act
- Senate Bill 610, Senate Bill 221 and Senate Bill 7
- Senate Bill X7-7 (Water Conservation Act of 2009)

- Sustainable Groundwater Management Act of 2014
- California Code of Regulations
 - Title 20
 - CALGreen Code
 - Plumbing Code
- Executive Order B-40-17
- Executive Order N-10-21
- Metropolitan Water District
 - 2020 Urban Water Management Plan
 - 2015 Integrated Resources Plan
 - Water Surplus and Drought Management Plan
 - Long-Term Conservation Plan
 - Water Supply Allocation Plan
- Los Angeles Department of Water and Power's 2020 Urban Water Management Plan
- Green New Deal
- One Water LA 2040 Plan
- City of Los Angeles General Plan, including:
 - Framework Element
 - Community Plan
- Los Angeles Municipal Code (Ordinance Nos. 180,822, 181,480, 181,899, 183,833, 182,849, 184,692, and 184,248)
 - (1) State
 - (a) California Urban Water Management Plan

The California Urban Water Management Planning Act (Water Code, Section 10610, et seq.) addresses several state policies regarding water conservation and the

development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires Urban Water Suppliers to develop Urban Water Management Plans (UWMPs) every five years to identify short-term and long-term demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Urban Water Suppliers are defined as water suppliers that either serve more than 3,000 customers or provide more than 3,000 acre feet per year (afy) of water to customers.

(b) Senate Bill 610, Senate Bill 221, and Senate Bill 7

Two of the state laws addressing the assessment of water supply necessary to serve large-scale development projects, Senate Bill (SB) 610 and SB 221, became effective January 1, 2002. SB 610, codified in Water Code Sections 10910-10915, specifies the requirements for water supply assessments (WSAs) and their role in the California Environmental Quality Act (CEQA) process and defines the role UWMPs play in the WSA process. SB 610 requires that, for projects subject to CEQA that meet specific size criteria, the water supplier prepare WSAs that determine whether the water supplier has sufficient water resources to serve the projected water demands associated with the projects. SB 610 provides specific guidance regarding how future supplies are to be calculated in the WSAs, where an applicable UWMP has been prepared. Specifically, a WSA must identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' actual water deliveries received by the public water system. In addition, the WSA must address water supplies over a 20-year period and consider normal, single-dry, and multiple-dry year conditions. In accordance with SB 610, projects for which a WSA must be prepared are those subject to CEQA that meet any of the following criteria:

- Residential developments of more than 500 dwelling units;
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use projects that include one or more of the projects specified in this subdivision; or

• Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling-unit project. (Water Code Section 912, CEQA Guidelines Section 15155(a).

The WSA must be approved by the public water supplier serving the project at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the WSA.

In addition, under SB 610, a water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, the following additional information must be included in the UWMP: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past 5 years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

SB 221 also addresses water supply in the land use approval process for large residential subdivision projects. However, unlike SB 610 WSAs, which are prepared at the beginning of a planning process, SB 221–required Water Supply Verification (WSV) is prepared at the end of the planning process for such projects. Under SB 221, a water supplier must prepare and adopt a WSV, indicating sufficient water supply is available to serve a proposed subdivision, or the local agency must make a specific finding that sufficient water supplies are or will be available prior to completion of a project, as part of the conditions for the approval of a final subdivision map. SB 221 specifically applies to residential subdivisions of 500 units or more. However, Government Code Section 66473.7(i) exempts "…any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses; or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses; or housing projects that are exclusively for very low and low-income households."

SB 7, enacted on November 10, 2009, mandates new water conservation goals for UWMPs, requiring Urban Water Suppliers to achieve a 20-percent-per-capita water consumption reduction by the year 2020 statewide, as described in the "20 x 2020" State Water Conservation Plan.¹ As such, each updated UWMP must now incorporate a description of how each respective urban water supplier will quantitatively implement this

¹ California State Water Resources Control Board, 20 x 2020 Water Conservation Plan, February 2010.

water conservation mandate, which requirements in turn must be taken into consideration in preparing and adopting WSAs under SB 610.

(c) Senate Bill X7-7—Water Conservation Act

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 2013.² Cumulative statewide savings from June 2015 through February 2017 were estimated at 22.5 percent.³ Following a multi-year drought and improvements to hydrologic conditions, statewide potable water savings reached 14.7 percent in August 2017 as compared to August 2013 potable water production.⁴ As provided in LADWP's 2020 Urban Water Management Plan, in accordance with SB X7-7, LADWP developed a final reported 2020 target of 142 gallons per capita per day. LADWP's actual gallons per capita per day in 2020 was 106 gallons per capita per day, less than the 2020 target.⁵

(d) Sustainable Groundwater Management Act of 2014⁶

The Sustainable Groundwater Management Act (SGMA) of 2014, passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.⁷ The SGMA requires the formation of local groundwater sustainability agencies to assess local water basin conditions and adopt locally based management plans. Local groundwater sustainability agencies were required to be formed by June 30, 2017. The SGMA provides 20 years for groundwater sustainability agencies to implement plans, achieve long-term

² State Water Resources Control Board, Fact Sheet, February 2017 Statewide Conservation Data, updated April 4, 2017.

³ 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.

⁴ State Water Resources Control Board, Fact Sheet, August 2017 Statewide Conservation Data, updated October 3, 2017.

⁵ City of Los Angeles, Los Angeles Department of Water and Power, 2020 Urban Water Management Plan for the Los Angeles Department of Water & Power, p. 1-8

⁶ Sustainable Groundwater Management Act [And Related Statutory Provisions from SB1168 (Pavley), AB1739 (Dickinson), and SB1319 (Pavley) as Chaptered], 2015 Amendments, effective January 1, 2016.

⁷ California Department of Water Resources, SGMA Groundwater Management, https://water.ca.gov/ Programs/Groundwater-Management/SGMA-Groundwater-Management, accessed July 6, 2023.

groundwater sustainability, and protect existing surface water and groundwater rights. The SGMA provides local groundwater sustainability agencies with the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. Furthermore, SGMA requires governments and water agencies of high and medium priority basins to stop overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For the basins that are critically over-drafted, the timeline is 2040. For the remaining high and medium priority basins, the deadline is 2042.

(e) California Code of Regulations

(i) Title 20

Title 20, Sections 1605.3(h) and 1505(i) of the California Code of Regulations (CCR) establishes applicable State efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including fixtures, such as showerheads, lavatory faucets, and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured on or after July 1, 2018, is 1.8 gpm at 80 psi and for lavatory faucets manufactured after July 1, 2016, is 1.2 gpm at 60 psi. The standard for toilets sold or offered for sale on or after January 1, 2016, is 1.28 gallons per flush.⁸

(ii) CALGreen Code

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

⁸ California Code of Regulations, Title 20, Sections 1605.3(h) and 1605.3(j), https://energycodeace.com/ site/custom/public/reference-ace-t20/index.html#!Documents/section16053statestandardsfornonfederally regulatedappliances.htm, accessed June 9, 2023.

(iii) Plumbing Code

Title 24, Part 5 of the CCR establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2022 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2019.

(f) Executive Order B-40-17

On April 7, 2017, Executive Order B-40-17 was issued to formally end the drought emergency and lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. In response to Executive Order B-40-17, on April 26, 2017, the SWRCB partially repealed the emergency regulation in regard to water supply stress test requirements and remaining mandatory conservation standards for urban water suppliers. The order also rescinded two drought-related emergency proclamations and four drought-related executive orders. Cities and water districts throughout the State are required to continue reporting their water use each month. Executive Order B-40-17 continued the ban on wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

(g) Executive Order N-10-21

On July 8, 2021, Executive Order N-10-21 (Order) was issued calling for voluntary cutbacks of water usage by 15 percent from 2020 usage levels. The Order lists commonsense measures Californians can undertake to achieve water usage reduction goals and identifies the State Water Resources Control Board (Water Board) for tracking of monthly reporting on the State's progress. The Order also directs State agencies, led by the Department of Water Resources and in coordination with local agencies, to encourage actions by all Californians, in their residential, industrial, commercial, agricultural, or institutional use, to reduce water usage, including through the statewide Save Our Water conservation campaign. Third, the Order directs the Department of Water Resources to monitor hydrologic conditions such as cumulative precipitation, reservoir storage levels, soil moisture and other metrics, and the Water Board to monitor progress on voluntary conservation as ongoing indicators of water supply risk that may inform future drought response actions.

(2) Regional

(a) Metropolitan Water District

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

(i) 2020 Urban Water Management Plan

MWD's 2020 UWMP (MWD UWMP) addresses the future of MWD's water supplies and demand through the year 2045.⁹ Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions (i.e., under the most challenging weather conditions, such as drought and service interruptions caused by natural disasters) is presented in Table 2-5 of the 2020 MWD UWMP.¹⁰ The analysis in the MWD UWMP concluded that reliable water resources would be available to continuously meet demand through 2045.¹¹ In the MWD UWMP, the projected 2045 water demand during multiple-dry year conditions is 1,564,000 afy, whereas the expected and projected 2045 supply is 2,239,000 afy based on current programs, for a potential surplus in 2045 of 675,000 afy.¹²

MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would

¹² Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, p. 2-19.

⁹ Metropolitan Water District of Southern California, 2020 Regional Urban Water Management Plan, June 2021.

¹⁰ Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, p. 2-19.

¹¹ Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, p. 2-19.

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.¹³.

(ii) 2015 Integrated Resources Plan

MWD prepares an Integrated Water Resources Plan (IRP) that provides a water management framework with plans and programs for meeting future water needs. It addresses issues that can affect future water supply, such as water quality, climate change, and regulatory and operational changes. The most current IRP (2015 IRP) was adopted in January 2016.¹⁴ It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions.

The 2015 IRP reliability targets identify developments in imported and local water supply and in water conservation that, if successful, would provide a future without water shortages and mandatory restrictions under planned conditions. For imported supplies, MWD would make investments to maximize Colorado River Aqueduct deliveries in dry years. MWD would make ecologically-sound infrastructure investments to the SWP so that the water system can capture sufficient supplies to help meet average year demands and to refill the MWD storage network in above-average and wet years.

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

¹³ Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, p. ES-7.

¹⁴ Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2015 Update, Report No. 1518, 2016.

4,273,000 af and the total supply reliability target is approximately 4,539,000 af, representing an excess of 266,000 af.¹⁵

The 2020 IRP planning process is currently in development.¹⁶ The 2020 IRP analyzes multiple scenarios that could plausibly unfold in the future due to climate change, economic growth, legislation and regulations affecting water sources and demands, and other variables. With the variability of these impacts in mind, MWD is developing four scenarios to help understand the challenges of the future and effectively plan to ensure water reliability in the face of those challenges. These four scenarios include (A) low demand, stable imports; (B) high demand, stable imports; (C) low demand, reduced imports; and (D) high demand, reduced imports.^{17,18}

(iii) Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water storage contingency analysis that is required as part of any UWMP into a separate, more detailed plan, called the Water Surplus and Drought Management Plan (WSDM Plan). The overall objective of the WSDM Plan is to ensure that shortage allocation of MWD's imported water supplies is not required. The WSDM Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's IRP. The WSDM Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The WSDM 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 then outside of the region. The Shortage Actions of the WSDM are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories.¹⁹

¹⁵ Metropolitan Water District of Southern California, Integrated Water Resources Plan—2015 Update, Report No. 1518, 2016, p. VIII.

¹⁶ Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2020.

¹⁷ Metropolitan Water District of Southern California, Preliminary Gap Analysis of the 2020 Integrated Resources Plan, December 15, 2020. Low demand = slow economic growth; stable imports = gradual climate change and low regulatory impacts; high demand = high economic growth; and reduced imports = severe climate impacts and high regulatory impacts.

¹⁸ Metropolitan Water District of Southern California, Preliminary Gap Analysis of the 2020 Integrated Resources Plan.

¹⁹ Water Surplus and Drought Management Plan, Report No. 1150, 1999.

(iv) Long-Term Conservation Plan

The Long-Term Conservation Plan (LTCP) provides a framework of goals and strategies to reduce per capita water use through conservation and water use efficiency. The plan recognizes the challenges and uncertainties to achieving the IRP target. As a result, the LTCP uses adaptive management and strategies to adjust implementation approaches.

(v) Water Supply Allocation Plan

While the WSDM 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, in February 2008, MWD adopted a water supply plan called the Water Supply Allocation Plan (WSAP). The WSAP includes a formula for determining equitable, needs-based reductions of water deliveries, with the potential application of a surcharge, to member agencies during extreme water shortages in MWD's service area conditions (i.e., drought conditions or unforeseen interruptions in water supplies).

The WSAP allows member agencies the flexibility to choose among various local supply and conservation strategies to help ensure that demands on MWD stay in balance with limited supplies. The WSAP formula addresses shortages of MWD supplies, by taking 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.²⁰ The allocation period covers 12 consecutive months from July of a given year through the following June.

(3) Local

(a) Los Angeles Department of Water and Power's 2020 Urban Water Management Plan (UWMP)

In accordance with the California Urban Water Management Planning Act, UWMPs are updated at 5-year intervals. LADWP adopted the 2020 UWMP on May 25, 2021. The 2020 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2015 UWMP, and currently serves as the City's master plan for reliable water supply and resource management consistent with the City goals and objectives. The UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely

²⁰ Metropolitan water District, 2015 Urban Water Management Plan, p. 2-21.

on individual development demands to determine area-wide growth. Rather, the projected growth in water use for the entire service area was considered in developing long-term water projections for the City to the year 2050. Long range projections are based on Southern California Association of Government (SCAG) growth projections. The 2020 UWMP is based on projections in the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

(b) City of Los Angeles Green New Deal

On April 8, 2015, Mayor Eric Garcetti released the Sustainable City pLAn, which includes both short-term and long-term aspirations through the year 2035 in various topic areas, including water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.²¹ The Sustainable City pLAn was intended to be updated every four years.

In April 2019, Mayor Eric Garcetti released an update to the Sustainable City pLAn, which has been renamed as L.A.'s Green New Deal, which consists of a program of actions designed to create sustainability-based performance targets through 2050 to advance economic, environmental, and equity objectives.²² The Green New Deal augments, expands, and elaborates in more detail the City's vision for a sustainable future and 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.

(c) One Water LA 2040 Plan

In April 2018, the City prepared the One Water LA 2040 Plan (One Water LA Plan), an integrated approach to Citywide recycled water supply, wastewater treatment, and stormwater management.²³ The new plan builds upon the City's Water IRP, which projected needs and set forth improvements and upgrades to wastewater conveyance systems, recycled water systems, and runoff management programs through the year 2020, and extends its planning horizon to 2040. The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for Los Angeles to ensure greater resilience to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive

²¹ City of Los Angeles, Sustainable City pLAn, 2015.

²² City of Los Angeles, L.A.'s Green New Deal, 2019.

²³ City of Los Angeles, One Water LA 2040 Plan, April 2018, Volume 1, Summary Report.

Directive to reduce the City's purchase of imported water by 50 percent by 2024.²⁴ Major challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes.

(d) City of Los Angeles General Plan

(i) General Plan Framework Element

The General Plan Framework Element (Framework Element) establishes the conceptual basis for the City's General Plan.²⁵ The Framework Element sets forth a comprehensive Citywide long-range growth strategy and defines Citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure and public services. Chapter 9, Infrastructure and Public Services, of the City's Framework Element identifies goals, objectives, and policies for City utilities including water service. Goal 9C is to provide adequate water supply, storage facilities, and delivery system to serve the needs of existing and future water needs.²⁶ The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP.

Table IV.M.1-1 on page IV.M.1-14 shows General Plan goals, objectives and policies relate to water supply.

(ii) Community Plan

The Land Use Element of the City's General Plan includes 35 community plans. Community plans are intended to provide an official guide for future development and propose approximate locations and dimensions for land use. The community plans establish standards and criteria for the development of housing, commercial uses, and industrial uses, as well as circulation and service systems. The community plans implement the Framework Element at the local level and consist of both text and an accompanying generalized land use map. The community plans' texts express goals, objectives, policies, and programs to address growth in the community, including those that relate to utilities and service systems required to support such growth. The community plans' maps depict the desired arrangement of land uses as well as street classifications

²⁴ City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response— Creating a Water Wise City, October 14, 2014.

²⁵ City of Los Angeles Department of City Planning, Citywide General Plan Framework, An Element of the Los Angeles General Plan, July 27, 1995.

²⁶ City of Los Angeles, General Plan Framework Element, Chapter 9: Infrastructure and Public Services— Water Supply.

Table IV.M.1-1 Relevant General Plan Utilities and Service Systems Goals, Objectives, and Policies: Framework Element—Chapter 9, Infrastructure and Public Services

Goal/Objective/Policy	Goal/Objective/Policy Description
Goal 9C	Adequate water supply, storage facilities, and delivery system to serve the needs of existing and future residents and businesses.
Objective 9.1	Monitor and forecast demand based upon actual and predicted growth.
Objective 9.8	Monitor and forecast water demand based upon actual and predicted growth.
Policy 9.8.1	Monitor water usage and population and job forecast to project future water needs.
Objective 9.9	Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.
Policy 9.9.1	Pursue all economically efficient water conservation measures at the local and statewide level.
Policy 9.9.7	Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.
Objective 9.10	Ensure that water supply, storage, and delivery systems are adequate to support planned development.
Policy 9.10.1	Evaluate the water system's capability to meet water demand resulting from the Framework Element's land use patterns.
Policy 9.10.2	Solicit public involvement, when appropriate, in evaluating options for the construction of new and/or expansion of existing water facilities.
Objective 9.11	Ensure, to the maximum extent possible, the continued provision of water capacity, quality and delivery after an earthquake or other emergency.
Policy 9.11.1	Provide for the prompt resumption of water service with adequate quantity and quality of water after an emergency.
Source: City of Los Ang	eles, City of Los Angeles General Plan, Framework Element, re-adopted 2001.

and the locations and characteristics of public service facilities. The Palms–Mar Vista–Del Rey Community Plan does not include policies related to water supply and infrastructure.

(e) 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 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.

- Ordinance No. 181,480—amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the CALGreen 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.
- 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.
- 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. 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.

b. Existing Conditions

Much of the existing conditions information provided related to LADWP and MWD water sources and supplies is derived from a Project's WSA. While a Water Supply Assessment was prepared for the Project, due to the time that has passed since LADWP adopted the Project's WSA, a more recent Water Supply Assessment is referenced herein as it includes updated information regarding City plans and existing water supply conditions. This general information is not specific to the Project but rather applies generally to LADWP and MWD water sources.

(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.²⁷ As shown in Table IV.M.1-2 on page IV.M.1-17, in 2022, the most recent full year for which data are available, LADWP had an available water supply of 500,743 acre-feet.²⁸ LADWP water sources are described in further detail below.

(a) Los Angeles Aqueducts

As provided in the WSA for the Project included in Appendix L of this Draft EIR, the City receives surface water and groundwater from the Eastern Sierra Nevada Mountains through the LAA. LADWP constructed the first LAA in 1913 to convey water from the Eastern Sierra to the City. In 1940, the LAA was extended 40 miles north from the Owens River to the Mono Basin. To meet additional water demands from the City, a second barrel of the LAA was constructed and completed in 1970. The second LAA increased the City's

²⁷ LADWP, Water Supply Assessment for the Paseo Marina Project, p. 28, November 7, 2017.

²⁸ LADWP, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 11.

Table IV.M.1-2					
Los Angeles Department of Water and Power Water Supply for Fiscal Years 2017–2018 through					
2021–2022					

Fiscal Year (July through June)	Los Angeles Aqueducts (af)	Local Groundwater (af)	MWD (af)	Recycled Water (af)	Transfer, Spread, Spills, and Storage (af)	Total (af)
2017–2018	307,671	21,760	182,706	9,778	-200	522,116
2018–2019	312,456	32,233	137,775	7,512	1,710	488,266
2019–2020	292,095	34,363	152,647	9,641	1,155	487,591
2020–2021	128,268	51,070	316,627	11,455	-938	508,359
2021–2022	69,183	53,057	366,690	12,022	208	500,743

af = acre-feet

^a The figures presented account for the transfer, spread, spill, and storage of the water supply as determined by LADWP. It should be noted that the figures presented as a negative represent a deficit of water.

Source: LADWP, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, Table III. As previously stated, due to the time that has passed since LADWP adopted the Project's WSA, a more recently adopted Water Supply Assessment (adopted April 25, 2023) is also referenced herein as it includes updated information regarding City plans and existing water supply conditions that is not specific to the Project but rather applies generally.

capacity to deliver water from the Mono Basin and the Owens Valley from 485 cubic feet per second (cfs) to 775 cfs.²⁹

The City's water rights in the Eastern Sierra Nevada comprise riparian rights, pre-1914 appropriations, and post-1914 appropriation licenses held on various streams in the Mono Basin and Owens Valley.

Annual water deliveries from the LAA to the City are impacted by hydrologic variability in the Eastern Sierra Nevada and water set aside for environmental projects. At its peak in the 1983-1984 fiscal year, the LAA delivered 531,729 af to the City. Concerns over environmental impacts have required the City to reallocate approximately one-half of the LAA water supply to other uses within the Owens Valley and Mono Basin. Between 1992 and 2020, LADWP reduced deliveries to the City by approximately 177,000 afy to supply water for a variety of environmental projects throughout the Eastern Sierra Nevada. Environmental enhancement and mitigation projects in the Mono Basin and Owens Valley

²⁹ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 11.

that utilize water from the Eastern Sierra Nevada include Mono Basin releases, Lower Owens River Project, Owens Lake Dust Mitigation Program, as well as other environmental enhancement and mitigation projects and uses. When considering water allocations for these projects, the expected annual long-term LAA delivery from 2020–2045 will range from approximately 184,200 af per year to 192,000 af per year for average years.³⁰

As indicated in Table IV.M.1-2 on page IV.M.1-17, approximately 69,183 af of LADWP's water supplies were from the LAA in 2022. The average deliveries from the LAA from fiscal year 2017–2018 through fiscal year 2021–2022 were approximately 221,935 af of water annually. As of May 2, 2023 (the latest date for which data is available), the snowpack was 254 percent of an average year.³¹

The sole reliance on LAA supply with impacts due to natural variability and water set aside for environmental projects is not sufficient to meet the City's annual water demands. Therefore, as summarized below and described in detail in the WSA, LADWP has implemented, and continues to increase, stormwater capture, local groundwater, water conservation, water use efficiency, and water recycling programs to address the reduction of LAA supplies. Additionally, LADWP can purchase supplemental imported water from MWD to meet the City's remaining water demands.³²

(b) Local Groundwater Supplies

Local groundwater provided approximately eight percent of the total water supply for Los Angeles from fiscal year-end 2018 to fiscal year-end 2022. This amount significantly differs from 50 years ago when local groundwater provided up to 23 percent of total supply during extended dry periods. In recent years, contamination issues have impacted LADWP's ability to fully utilize its local groundwater entitlements and provide groundwater supplies to support annual water demands. In response to this issue and to address the hydrologic variability impacts to imported water supplies, LADWP has focused on the sustainable management of its local groundwater basins. LADWP continues to invest in stormwater recharge projects to restore local groundwater basin levels as well as advanced treatment systems to produce purified recycled water for groundwater replenishment.

³⁰ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 12.

³¹ California Department of Water Resources, DWR Conducts May 1 Snow Survey to Continue to Collect Data on Spring Runoff, https://water.ca.gov/News/News-Releases/2023/May-2023/May-2023-Snow-Survey, accessed May 23, 2023.

³² Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 12.

Furthermore, LADWP has, and will continue to, conjunctively use the large groundwater basin within the City to store wet year LAA flows to supply water during dry periods.³³

The City's total adjudicated groundwater rights are approximately 109,809 afy, which are located within the San Fernando Basin (SFB), Central Basin, Sylmar Basin, and West Coast Basin.³⁴ Of these, LADWP pumps groundwater from the SFB and, to a lesser extent, the Central Basin and Sylmar Basin.

The SFB is the primary source of local groundwater for the City. It is located in the Upper Los Angeles River Area (ULARA) and spans 112,000 acres.³⁵ The City's average groundwater rights in the SFB is approximately 87,000 afy.³⁶ A ULARA Judgment allows groundwater to be stored within the SFB when the City pumps less than its annual water right, and stored water credits may be pumped to supplement the City's water supply. The direct spreading of both imported surface water and recycled water by the City increased the water rights by an equal amount. As of October 1, 2018, the City had accrued 591,460 af of stored water credits.³⁷ LADWP is implementing its SFB Groundwater Remediation Program to help restore the capacity of SFB as a drinking water source and groundwater storage. LADWP also receives additional SFB water through the Los Angeles–Burbank Interim Interconnection Pipeline. In 2015, the City of Los Angeles and the City of Burbank entered into an agreement to construct and operate the Los Angeles–Burbank Interim Interconnection and began delivery of a minimum of 500 af of blended water in August 2019. This connection began service in August 2019 and will operate for five years.³⁸

The Central Basin is located in the southeastern part of the Los Angeles Coastal Plain in Los Angeles County. The City has approximately 17,236 afy of groundwater rights in this basin, which was increased from the 15,000 afy originally awarded through the Central Basin Third Amended Judgment dated December 23, 2013, through three purchase transactions completed between 2014 and 2015.^{39,40} With additional carryover

- ³⁶ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.
- ³⁷ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-7.
- ³⁸ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.
- ³⁹ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-3.

³³ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.

³⁴ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.

³⁵ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.

and storage of unused water rights, the City has accrued a total of 22,943 af of stored water as of fiscal year-end 2020.⁴¹

Aside from the SFB and the Central Basin, the City holds water rights in the Sylmar, Eagle Rock, and West Coast Basins. The City's water rights in the Sylmar Basin is 3,570 afy. The majority of the Sylmar Basin's groundwater production facilities are inoperable due to high levels of contamination and deteriorated facilities. The Mission Wellfield facility has been undergoing continued improvements since the early 2000s to replace the existing deteriorated facilities and restore the Sylmar Basin's groundwater production capacity. The City's water rights in the Eagle Rock Basin are 500 afy. Although the City has the right to produce groundwater from the Eagle Rock Basin, there are no current plans to establish groundwater production facilities there. The West Coast Basin is located in the southwestern part of the Los Angeles Coastal Plain in Los Angeles County. LADWP has the right to pump 1,503 afy from this basin. In 2014, the West Coast Basin Judgment was amended to increase certain parties', such as LADWP's, pumping capacity to 5,000 afy of unused West Coast Basin rights out of the Central Basin. However, the West Coast Basin has groundwater quality problems related to total dissolved solids (TDS), chloride, and hydrocarbon pollutants; therefore, LADWP discontinued the use of West Coast Basin facilities in 1980 until further studies are completed to restore groundwater pumping.42

Table IV.M.1-3 on page IV.M.1-21 provides data regarding the groundwater produced for the City during the fiscal years of 2017–2018 through 2021–2022. As shown therein, during the 2021–2022 fiscal year, 48,408 af were produced from the SFB, 3,018 af were produced from the Sylmar Basin, and 4,562 were produced from the Central Basin.⁴³

The City plans to continue to develop production from its groundwater basins in the coming years to offset reductions in imported supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. LADWP's groundwater pumping practice is based on a "safe yield" operation. Furthermore, basin management is achieved by collective efforts of a court-appointed Watermaster and the ULARA Administrative Committee of representatives from five public water supply agencies

⁴⁰ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. H-56.

⁴¹ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 13.

⁴² Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 14.

⁴³ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 14.

Fiscal Year (July–June)	San Fernando	Sylmar	Central
2017–2018	22,259	0 ^a	1 ^a
2018–2019	36,870	1 ^a	5 ^a
2019–2020	35,949	2 ^a	10 ^a
2020–2021	53,623	1,363	2,247
2021–2022	48,408	3,018	4,562

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

Units are in acre-feet.

^a Small quantities pumped from the Sylmar and Central Basins were for water quality testing purposes, not water supply.

Source: Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, Table IV.

overlying the ULARA Committee.⁴⁴ These efforts include the operation of groundwater remediation systems, use of an extensive network of groundwater monitoring wells, routine reporting on groundwater elevation and water quality, management and mitigation of urban runoff water quality, and development of enhanced stormwater recharge and groundwater replenishment.⁴⁵ There are additional groundwater basins near and within the Los Angeles area where LADWP is considering and exploring opportunities to develop groundwater resources in a manner that is locally sustainable and in cooperation with its regional partners.⁴⁶ For example, there are 3,975 af of groundwater rights in the Antelope Valley Groundwater Basin, which only allows local use of water rights; however, LADWP would have the ability to store water it imports into the basin for future export. LADWP would be able to recover imported and stored water for export to the City at times when it is necessary to manage seasonal peak demand or augment supplies during dry periods, emergencies, or natural disasters.⁴⁷

⁴⁴ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-4.

⁴⁵ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-4.

⁴⁶ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 15.

⁴⁷ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 14.

(c) Metropolitan Water District of Southern California

MWD is the largest water wholesaler for supplemental domestic and municipal water uses in California. As one of the 26 member agencies of MWD, LADWP purchases water from MWD to supplement LADWP water supplies from the LAA, local groundwater and recycled water.⁴⁸

MWD imports water from two principal sources: northern California via the California Aqueduct and the Colorado River via the Colorado River Aqueduct (CRA). MWD also manages and owns in-basin surface storage facilities, stores groundwater within the basin via contracts, engages in groundwater storage outside the basin, and conducts water transfers to provide additional supplies for its member agencies. All member agencies have preferential rights to purchase water from MWD, pursuant to Section 135 of the Metropolitan Water District Act.^{49,50} As of June 30, 2022, LADWP has a preferential right to purchase 17.69 percent of MWD's total water supply.⁵¹ Between fiscal year 2017–2018 and fiscal year 2021–2022, LADWP purchased an average of 231,289 afy from MWD or approximately 46 percent of the City's total water supply.

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

(i) State Water Project

The SWP is one of MWD's two major sources of water. The SWP is owned by the State and operated by the Department of Water Resources (DWR), delivering municipal and industrial water to approximately 27 million of California's residents and 750,000 acres of farmland.⁵² The SWP watershed encompasses the mountains and waterways around the Feather River in the Sacramento Valley of Northern California. The SWP facilities include a complex system of dams, reservoirs, powerplants, pumping plants, canals and aqueducts to deliver water. Water from rainfall and snowmelt runoff is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to

⁴⁸ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 19.

⁴⁹ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 19.

⁵⁰ Metropolitan Water District Act, Chapter 2, Section 135.

⁵¹ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 19.

⁵² Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, pp. A-16.

water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. MWD receives water from the SWP through the main stem of the aqueduct system, the California Aqueduct, which is 444 miles long.⁵³

MWD is the largest of the 29 SWP contractors, holding a contract for 1.912 million af (maf) per year, or 46 percent of the total contracted amount of the 4.173 maf ultimate delivery capacity of the SWP.⁵⁴ However, in accordance with the State Water Contract with DWR, the contracted amount varies annually due to a number of factors, including existing supplies in storage, forecasted hydrology, water quality, environmental flow obligations, and other operational considerations.⁵⁵ Due to water 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 declined. From calendar year 2012 through 2021, the amount of water received by MWD from the SWP varied from a low of 588,000 af in calendar year 2020 to a high of 1,473,000 af in 2017. In 2021, the DWR's allocation to MWD commenced as 10 percent and then was reduced to 5 percent (95,575 af).⁵⁶ The DWR's allocation to MWD has since increased to 75 percent as of March 24, 2023, due to particularly heavy precipitation in 2023.⁵⁷

Challenges to State Water Project Supply

Numerous factors have created challenges for the SWP. Based on DWR's 2021 Final State Water Project Delivery Capability Report, all but five of the 29 SWP contractors receive SWP deliveries by diversions from the Delta. These diversion facilities are regulated by several state and federal agencies that maintain and enhance the Delta's long-term sustainability. Ongoing regulatory restrictions, such as those aimed at protecting the Delta estuary's resident and migratory fish species, are challenges to a reliable and sustainable water delivery capability for the SWP. In particular, a substantial decrease in SWP Delta exports occurred with new regulations that culminated in the federal Biological Opinions that went into effect in 2008–2009. Complications induced by climate change also pose a threat of increased variability in the frequency and magnitude of both floods

⁵³ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-53.

⁵⁴ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 19.

⁵⁵ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-17.

⁵⁶ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-16.

⁵⁷ California Department of Water Resources, Notice to State Water Project Contractors, Increase of State Water Project 2023 Allocation to 75 percent, March 24, 2023.

and droughts in the Delta. In addition, the projected sea level rise caused by the increase in average temperature also complicates efforts to manage salinity levels in the channels affected by tides in the Delta. Furthermore, higher ocean levels could also result in more frequent water quality degradation in the Delta channels, requiring additional Delta outflow to maintain water quality objectives. Other challenges include the continued subsidence of Delta islands, many of which are already below sea level and supported by relatively unstable levee systems.⁵⁸ In addition to challenges within the Delta, as discussed in detail in MWD's Appendix A, various agreements and litigation regarding the State Water Contract have affected water supplies from the SWP.⁵⁹

(ii) The Colorado River

The Colorado River was MWD's original source of water after MWD's establishment in 1928. MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, resulting in both competition and the need for cooperation among these holders of Colorado River entitlements.⁶⁰

Construction of the CRA, which is owned and operated by MWD, was undertaken by MWD to provide for the transportation of its Colorado River water entitlement to its service area. The CRA originates at Lake Havasu on the Colorado River and extends approximately 242 miles through a series of pump stations and reservoirs to its terminus at Lake Mathews in Riverside County.⁶¹ MWD holds the fourth and fifth priority rights to the Colorado River water supplies. Thus, water diverted by MWD is dependent on unused apportionment from other users.⁶² Up to 1.25 million af of water per year may be conveyed through the CRA to MWD's member agencies, subject to availability of Colorado River water water for delivery to MWD.⁶³ Since 2003, MWD's net diversions of Colorado River water

⁵⁸ California Department of Water Resources, The State Water Project Final State Water Project Delivery Capability Report 2021, September 2022.

⁵⁹ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, pp. A13-21 and A-31-34.

⁶⁰ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-21.

⁶¹ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-21.

⁶² Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-22.

⁶³ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-21.

have ranged from a low of 537,607 af in 2019 to a high of approximately 1,179,000 af in 2015. Preliminary average annual net diversions for 2011 through 2020 were 871,947 af, with annual volumes dependent primarily on programs to augment supplies, including transfers of conserved water from agriculture. In 2020, the preliminary total available Colorado River supply to MWD was just over one million af. A portion of the available supply that was not diverted was stored in Lake Mead for future usage.⁶⁴

As discussed in detail in MWD's Appendix A, conveyance from the Colorado River has also experienced many challenges including persistent drought conditions, litigation, and the presence of endangered species.

(iii) MWD Actions to Address Supply

As summarized above in Subsection 2.a, Regulatory Framework, MWD has been developing plans and making efforts to provide additional water supply reliability for the entire Southern California region. These plans include MWD's Integrated Resource Plan (IRP), Urban Water Management Plan (UWMP), Water Surplus and Drought Management Plan (WSDM Plan), Long-Term Conservation Plan (LTCP) and the Water Supply Allocation Plan (WSAP). These long-term plans have been developed to meet MWD's member agencies' growing reliability needs through improvements to the SWP, 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 planned and prepared for dry conditions by investing in vital infrastructure to increase its storage capacity. MWD's storage as of January 1, 2021, is estimated to be 3.91 million af.

(d) Precipitation Conditions

Precipitation for the year 2023 has been particularly heavy for California and much of the state is no longer classified as abnormally dry or in any state of drought according to the U.S. Drought Monitor. However, substantial portions of the Sacramento Valley—from which SWP water is sourced—are abnormally dry or in a state of moderate drought. Much of the Inland Empire and the Antelope Valley are also abnormally dry or in a state of moderate drought, and areas near the borders of Oregon and Nevada are in a state of

⁶⁴ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-22.

severe drought.⁶⁵ An extended drought period is also ongoing in the Colorado River Basin, which is another source of water for southern California as described above.⁶⁶

The City of Los Angeles receives an average of 14.07 inches of precipitation per year according to the National Weather Service.⁶⁷ As of March 26, 2023, precipitation for the 2023 year to date is 21.28 inches.⁶⁸ In 2022, downtown Los Angeles received 7.18 inches of precipitation, compared with 14.27 inches in 2021, 9.81 inches in 2020, and 21.55 inches in 2019.

(e) Global Warming and Climate Change

As discussed in LADWP's 2020 UWMP, water supplies that are dependent on natural hydrology, such as LADWP's imported supplies and local groundwater, are susceptible to climate risks. Imported sources that originate from mountain snowpack are particularly sensitive to changes in temperatures as small increases in temperature can significantly influence the melting of snowpack. In addition to water supply impacts, shifts in weather conditions can influence water demands by approximately five percent when compared to average conditions. LADWP continues to monitor the latest developments to advance the accuracy of hydrologic forecasts and projections to improve resources planning efforts that better respond to natural hydrologic variability and other potential future climate risks.⁶⁹

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 Plan, described above.⁷⁰

In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning

⁶⁸ National Weather Service, Accumulation Graph for Los Angeles Downtown Area, CA January 1, 2023, through March 26, 2023, www.weather.gov/wrh/Climate?wfo=lox, accessed March 27, 2023

⁶⁵ National Drought Mitigation Center, U.S. Drought Monitor, West, Data valid: March 21, 2023, https:// droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?West, accessed March 27, 2023.

⁶⁶ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-9.

⁶⁷ National Weather Service, Monthly Summarized Precipitation for Los Angeles Downtown Area, CA 1991– 2022, www.weather.gov/wrh/Climate?wfo=lox, accessed March 27, 2023.

⁶⁹ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, p. 12-1, May 2021.

⁷⁰ Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-9.

for the future. California Water Plan Update 2018 provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome California's most pressing water resource challenges.71 Furthermore, California Water Plan Update 2023 will promote climate resilience across regions and water sectors with a statewide vision, clear goals, watershed planning framework and toolkit, and progress-tracking dashboard of indicators.⁷² The DWR completed its Climate Action Plan in 2020.73 Phases I and II of the Climate Action Plan include the guidance of DWR in reducing greenhouse gas emissions and the expertise of a climate change technical advisory group formed in 2012, respectively. As part of Phase I, DWR's Greenhouse Gas Emissions Reduction Plan was completed in 2012 and updated in 2020. As part of Phase II, DWR completed a Climate Change Analysis Guidance in 2018. Phase III of the Climate Action Plan was completed in 2020 with a Climate Change Vulnerability Assessment in 2019 and Climate Change Adaption Plan in 2020 regarding DWR assets and activities, as related to the projected changes in temperature, wildfire, sea level rise, hydrology, and water supply.⁷⁴ As such, climate change and its impacts on water supplies are key factors of new water supply regulations and UWMPs.

(f) Water Conservation and Recycling

LADWP has developed many progressive water conservation and use efficiency programs in conjunction with state and local conservation ordinances and plumbing codes to achieve water conservation throughout its service area and customer classes (refer to Subsection 2.a, Regulatory Framework, above for a summary of these plans and regulations). Specifically, to meet multiple water conservation goals established in the Sustainable City pLAn (now the Green New Deal) and the Water Conservation Act of 2009, LADWP's 2020 UWMP aims to reduce per capita potable water use by 22.5 percent by 2025 and by 25 percent by 2035.^{75,76} LADWP will also comply with the State's water use requirements of Assembly Bill 1668 (2018) and Senate Bill 606 (2018). Following the

- ⁷⁴ California Department of Water Resources, DWR Climate Action Plan, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed March 30, 2023.
- ⁷⁵ In April 2019, Mayor Eric Garcetti released an update to the Sustainable City pLAn, which has been renamed as L.A.'s Green New Deal I Sustainability Plan 2019 (Green New Deal), which consists of a program of actions designed to create sustainability-based performance targets through 2050 to advance economic, environmental, and equity objectives.
- ⁷⁶ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

⁷¹ California Department of Water Resources, Update 2018, https://water.ca.gov/Programs/California-Water-Plan/Update-2018, accessed July 6, 2023.

⁷² California Department of Water Resources, Update 2023, https://water.ca.gov/Programs/California-Water-Plan/Update-2023, accessed July 6, 2023.

⁷³ California Department of Water Resources, DWR Climate Action Plan, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed March 30, 2023.

target reduction of potable water use per capita by 25 percent by 2035, the Green New Deal adds an additional target for the City to maintain or reduce 2035 per capita water use through 2050.⁷⁷ The Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035.⁷⁸ Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the Los Angeles River.

Since the inception of LADWP's conservation programs, the estimated cumulative annual active savings is over 150,000 afy. In addition, LADWP completed a Stormwater Capture Master Plan in 2015 to comprehensively evaluate stormwater capture potential within the City. Stormwater capture can be achieved by increasing infiltration into groundwater basins and by on-site capture and reuse of stormwater for landscape irrigation (i.e., direct use). The total baseline amount of stormwater captured is 64,000 af. The implementation of additional centralized and distributed stormwater capture projects and programs, in development and in construction, could provide for increased groundwater recharge in the amount of 66,000 afy and increased direct use in the amount of 2,000 afy. Under LADWP's current implementation strategy, the total estimated stormwater capture capture capacity is projected to be 155,000 afy by 2035. LADWP also has numerous programs and strategies in place to recycle water, including the existing production of recycled water for irrigation totaling 37,060 afy in fiscal year-end 2021, and coordination with LASAN to develop non-potable water reuse projects.^{79,80}

In addition, the City is pursuing a groundwater replenishment project to replenish the San Fernando Groundwater Basin with highly treated recycled water. LADWP's recycled water use is projected to reach 50,900 afy by fiscal year ending (FYE) 2025 by adding 8,000 afy of planned municipal/industrial use and 7,000 afy of indirect potable reuse (groundwater replenishment), and further increase to 67,600 afy through FYE 2045. Environmental reuse is expected to remain relatively constant at approximately 26,600 afy.⁸¹

⁷⁷ City of Los Angeles, L.A.'s Green New Deal, 2019.

⁷⁸ Baseline from LASAN: In Fiscal Year 2017–2018, 27 percent of wastewater was recycled.

⁷⁹ The 37,060 afy of recycled water was used for municipal, industrial and environmental uses.

⁸⁰ Los Angeles Department of Water and Power, Water Supply Assessment for the CMNTY Culture Campus Project, adopted April 25, 2023, p. 19.

⁸¹ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

(2) Water Demand

(a) Citywide Water Demand

LADWP's 2020 UWMP provides water demand and supply projections in five-year increments to 2045, based on projected population estimates provided by the Southern California Association of Governments (SCAG) in its 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).⁸² Table IV.M.1-4 on page IV.M.1-30 shows the projected water demand from 2025 through 2045 for the City.

As shown in Table IV.M.1-4, in 2045 during average year hydrologic conditions, the City's water demand is forecasted to be approximately 710,500 acre-feet per year (with passive water conservation). LADWP's water supply would be equal to the water demand within LADWP's service area during average, single-dry and multi-dry years from 2025 through at least 2045.⁸³ LADWP's 2015 UWMP and 2020 UWMP both conclude that adequate water supplies would be available to meet the projected demands of the service areas under normal, single-dry, and multi-dry year conditions through 2040 and 2045, respectively.^{84,85} Therefore, the City's water supply projections in LADWP's 2015 UWMP and 2020 UWMP are sufficient to meet the water demand for projects that are determined by the CEQA lead agency to be consistent with both the 2016 and 2020 RTPs adopted by SCAG.⁸⁶

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Recirculated Draft EIR, the Project Site comprises an approximately six-acre portion of the existing Marina Marketplace shopping center. The Project Site is currently occupied by three shopping center-related buildings, totaling 100,781 square feet and associated surface parking areas. Landscaping within the Project Site includes ornamental landscaping and

⁸² 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.

⁸³ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

⁸⁴ Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, Exhibits 11E–11K.

⁸⁵ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. ES-28.

⁸⁶ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pp. 11-19.

	Year				
Hydrologic Conditions ^a	2025	2030	2035	2040	2045
Average Year	642,600	660,200	678,800	697,800	710,500
Single Dry Year	674,700	693,200	712,700	732,700	746,000
Multi-Dry Year	657,900	675,800	694,900	714,400	727,400

Table IV.M.1-4 LADWP Water Demand and Supply Projections (thousand AFY)

AFY = acre-feet per year

Demands include existing passive conservation.

^a The LADWP defined three hydrologic conditions: average year (50-year average hydrology); 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, 2020 Urban Water Management Plan, Exhibits 11E, 11F, and 11G; May 2021.

hardscape features. Street trees and trees within the Project Site consist of various nonnative species, including palm, pine, fig, gum, fern, cajeput, carrotwood, octopus, strawberry, and olive trees. As provided by LADWP in the Project's WSA and summarized in Table IV.M.1-5 on page IV.M.1-40 later in this section, the existing uses on the Project Site generate a water demand of approximately 5,295 gallons per day or approximately 5.93 acre-feet per year.

(3) Water Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 115 tanks and reservoirs, 85 pump stations, nine ammonization stations, 22 chlorination stations, 329 regulator and relief stations, 7,340 miles of distribution mains and trunk lines, and 61,077 fire hydrants within the City, with a total storage capacity of 323,362 af according to the estimates for fiscal year 2021–2022.⁸⁷ Much of the water flows north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant in Sylmar, which is owned and operated by LADWP. Water entering the Los Angeles Aqueduct Filtration Plant undergoes treatment and disinfection before being distributed throughout the LADWP's water service area.⁸⁸ Domestic water

⁸⁷ Los Angeles Department of Water and Power, 2021–2022 Briefing Book, 2022.

⁸⁸ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 12-13.

service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Infrastructure Assessment Report included as Appendix L of this Recirculated Draft EIR, there is a 12-inch water main located in Maxella Avenue, a 12-inch water main located in Glencoe Avenue, and an 8-inch water main that runs along the southeastern portion of the Project Site.

In addition to providing domestic water service, LADWP provides water for fire protection services in accordance with the City's Fire Code (LAMC Chapter V, Article 7). As discussed in the Infrastructure Assessment Report, there are currently six fire hydrants located within 300 feet of the Project Site, including two hydrants along Maxella Avenue and four hydrants on Glencoe Avenue. All hydrants are served by existing 6-inch water lines.

3. Project Impacts

a. Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G, the Project would have a significant impact related to water supply and infrastructure if it would:

Threshold (a): Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;⁸⁹ or

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

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions.

⁸⁹ Refer to Section IV.M.2, Utilities and Service Systems—Wastewater, of this Recirculated Draft EIR for a discussion of wastewater impacts; Section IV.G, Hydrology and Water Quality of this Recirculated Draft EIR for a discussion of stormwater impacts; Section IV.M.4, Utilities and Service Systems—Energy Infrastructure, of this Recirculated 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.

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

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

b. Methodology

The analysis of the Project's impacts relative to water supply is based on the WSA for the Project prepared by LADWP pursuant to Senate Bill 610. The WSA includes a conservative calculation of the Project's anticipated net water demand by applying the City of Los Angeles Bureau of Sanitation's (LASAN) wastewater generation rates to the Project's proposed land uses. To determine the Project's net water demand, the water demands of the existing uses were subtracted from the Project's total water demand. The Project's total water demand, as determined in the WSA, also accounted for the water conservation features required by the LAMC and the water conservation features above LAMC requirements to be implemented by the Project. In accordance with Senate Bill 610, the resulting net demand for water associated with the Project is then analyzed relative to LADWP's existing and planned future water supplies to determine if LADWP 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 Infrastructure Assessment Report prepared for the Project by Fuscoe Engineering, originally prepared in March 2017 and last updated September 4, 2020. The Infrastructure Assessment Report is included in Appendix L of this Recirculated Draft EIR. The Infrastructure Assessment Report includes a comparison of the estimated net water demand for the Project to the available capacity of the existing water infrastructure.

c. Project Design Features

The following project design feature, based on the Project's WSA, is applicable to the Project with regard to water supply:

- **WAT-PDF-1:** In addition to regulatory requirements, the Project design will incorporate the following water conservation features to support water conservation in addition to those measures required by the City's current codes and ordinances:
 - High-Efficiency Dual-Flush Toilets for residential units with a flush volume of 0.92 to 1.28 gallons per flush.
 - High-Efficiency Showerheads with a flow rate of 1.5 gallons per minute.
 - Domestic Water Heating System located in close proximity to point(s) of use.
 - Individual metering and billing for water use for every residential dwelling unit.
 - Tankless and on-demand Water Heaters installed in non-residential restrooms
 - Water-Saving Pool Filter.
 - Pool/Spa recirculating filtration equipment.
 - Installation of a meter on the pool make-up line such that water use can be monitored and leaks can be identified and repaired.
 - Leak Detection System for swimming pools and spa.
 - Drip/Subsurface Irrigation (Micro-Irrigation).
 - Artificial turf in dog park areas.
 - Proper Hydro-zoning/Zoned Irrigation (groups plants with similar water requirements together).
 - Drought-Tolerant Plants—minimum of 85 percent of total landscaping.

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Recirculated Draft EIR, the Project proposes two development options—Option A and Option B. Under Option A, the Project proposes the development of 658 multi-family residential units and 27,300 square feet of neighborhood-serving commercial uses, including approximately 13,650 square feet of retail space and approximately 13,650 square feet of restaurant space. Option B proposes the development of 425 multi-family residential units, 90,000 square feet of office space, and 40,000 square feet of neighborhood-serving commercial space and approximately 20,000 square feet of retail space and approximately 20,

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?⁹⁰

- (1) Impact Analysis
 - (a) Construction

As discussed in the Infrastructure Assessment Report included as Appendix L of this Recirculated Draft EIR, water demand for construction of the Project (Option A or Option B) would be required for dust control, cleaning of equipment, excavation/ export, removal and re-compaction, rough grading, etc. Construction water demands vary based on site-specific conditions but are typically significantly less than the long term, operational water demand of new projects. Due to the high groundwater and temporary dewatering associated with the construction of this Project, it is expected that the dewatering practices would allow for re-use of some of the groundwater for dust control, which would partially off-set the construction water demands. In addition, the removal of the existing retail and restaurant land uses would further offset water use during the construction phase. Based on a review of construction projects of similar size, duration and geotechnical conditions, a conservative estimate of construction-related water use is approximately 2,500–3,000 gallons per day per acre. Therefore, the total constructionperiod water use for the Project is estimated to be approximately 18,000 gallons per day. As detailed below, since the existing water infrastructure has enough capacity to meet the proposed operational water demand of 79,236 gallons per day (an increase of 71,837 gallons per day) under Option A, and Option B would demand less water than Option A, it can be concluded that any temporary water usage during construction would also be satisfied by the existing capacity of the water infrastructure serving the Project Site.

The Project (Option A or Option B) would require the installation of new, on-site water distribution lines to serve the new buildings and uses, as well as the potential relocation of existing lines. 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. As the design and installation of new service connections would be

⁹⁰ Refer to Section IV.M.2, Utilities and Service Systems—Wastewater, of this Recirculated Draft EIR for a discussion of wastewater impacts; Section IV.G, Hydrology and Water Quality of this Recirculated Draft EIR for a discussion of stormwater impacts; Section IV.M.4, Utilities and Service Systems—Energy Infrastructure, of this Recirculated 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.

required to meet applicable City standards, the Project contractors would coordinate with the 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 environmental effects associated with on-site construction activities, including the installation of water system improvements, are accounted for in the impact analyses throughout this Draft EIR, as appropriate. In particular, the water system improvements would be limited in scope, temporary, and would occur largely within previously developed and/or previously disturbed areas. In addition, Project construction activities would be subject to the requirements of a Construction Traffic Management Plan required per Project Design Feature TR-PDF-1, as discussed in Section IV.K, Transportation, of this Draft EIR. The Construction Traffic Management Plan would maintain the free flow of traffic and ensure that access to adjacent properties is maintained during construction. Therefore, construction activities associated with the required water infrastructure improvements would not result in significant environmental effects. Overall, when considering impacts resulting from the installation of any required water infrastructure, all impacts are of a relatively short- term duration (i.e., months) and would cease to occur once the installation is complete. Installation of new water infrastructure will be limited to on-site water distribution, and minor off-site work associated with connections to the public main. No upgrades to public water mains are anticipated.

Based on the above, construction activities associated with the Project would not require or result in the relocation or construction of new water facilities or expansion of existing facilities that could have a significant impact on the environment. As such, construction-related impacts related to water infrastructure would be less than significant.

(b) Operation

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

Fire flow to the proposed buildings of the Project would be required to meet City fire flow requirements. Specifically, the Project would comply with LAMC Section 57.507.3.1,

which establishes fire flow standards by development type. As identified by the LAFD in its written correspondence provided in Appendix I of this Recirculated Draft EIR, the Project has a required fire water flow of 6,000 gallons per minute to 9,000 gallons per minute from four to six adjacent fire hydrants flowing simultaneously with a minimum residual water pressure of 20 pounds per square inch remaining in the water system based on the Industrial and Commercial land use category. This translates to a required fire water flow of 1,500 gallons per minute for each hydrant. In addition to LAFD requirements, the on-site building fire sprinkler system is required to have a demand of 2,500 gallons per minute and the required domestic service capacity is 1,500 gallons per minute.

As discussed above, there are six existing fire hydrants adjacent to the Project Site. As part of the Infrastructure Assessment Report included in Appendix L of this Recirculated Draft EIR, two Information of Fire Flow Availability Requests (IFFAR) were submitted to LADWP to determine available fire hydrant flow from the six existing public fire hydrants within 400 feet of the Project Site. Based on the completed IFFARs (see Appendix C of the Infrastructure Assessment Report included as Appendix L of this Recirculated Draft EIR), the six existing public fire hydrants flowing simultaneously can deliver combined flows of 9,000 gallons per minute. In addition, the lowest pressure among the six fire hydrants was 69 pounds per square inch which is above the minimum of 20 pounds per square inch. Therefore, based on the IFFAR, there is adequate fire flow available for the Project to comply with the fire flow requirements identified for the Project in accordance with LAMC Section 57.507.3.1.

With regard to the domestic water infrastructure, new domestic services would be connected from either the 12-inch water line on Maxella Avenue or the 12-inch water line on Glencoe Avenue. To determine if the existing system can provide 1,500 gallons per minute for domestic supply simultaneously with the 2,500 gallons per minute for the building fire sprinkler system, two Service Advisory Requests (SAR) were submitted to LADWP to assess the ability for the 12-inch water lines in Glencoe Avenue and Maxella Avenue to provide these flow requirements. The 12-inch water main in Maxella Avenue and the 12-inch main in Glencoe Avenue were analyzed for capacity to simultaneously provide for the on-site fire suppression system and domestic water service through the proposed 8-inch onsite water connections. The SAR analysis identified that the 12-inch water line in Maxella Avenue has the capacity to provide 2,500 gallons per minute at 51 pounds per square inch for fire suppression requirements while simultaneously providing the peak instantaneous domestic water demand of 1,500 gallons per minute for the Project (See Appendix C of the Infrastructure Assessment Report). The SAR for Glencoe Avenue identified that the 12-inch line in Glencoe Avenue has the capacity to provide 4,000 gallons per minute at 48 pounds per square inch for fire suppression (2,500 gallons per minute) while simultaneously providing domestic service requirements (1,500 gallons per minute). In summary, the SAR results show that both water lines in

Maxella Avenue and Glencoe Avenue satisfy the requirements independently and either could be used as the main water line connection to the Project Site.

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

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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

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

- (1) Impact Analysis
 - (a) Construction

Construction activities for the Project would result in a temporary demand for water associated with 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. As discussed in the Infrastructure Assessment Report, a conservative estimate of construction-related water use would range from 2,500 gallons per day to 3,000 gallons per day per acre. Using this assumption, the total construction-period water use for the Project under both Option A and Option B is estimated to be approximately 18,000 gallons per day. This estimate would be substantially less than the Project's maximum net new water consumption at buildout of 71,837 gallons per day under Option A. In addition, with the removal of the existing uses, which consume approximately

5,295 gallons per day of water, the temporary and incremental construction-related water demand of the Project would be partially offset. Furthermore, as concluded in the WSA, projected water demand for the City would be met by the available supplies during all hydrologic conditions (average year, single-dry year, and multiple-dry year) in each year from 2020 through 2040. Construction of the Project is anticipated to be complete by 2027. Therefore, the Project's temporary and intermittent demand for water during construction could be met by the City's available supplies during each year of Project construction. As such, construction-related impacts to water supply would be less than significant.

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

(b) Operation

As described in Section II, Project Description, of this Recirculated Draft EIR, the Project would replace three buildings within the existing Marina Marketplace shopping center that together comprise approximately 100,781 square feet of floor area and associated surface parking areas with a new mixed-use development. The Project proposes two development options referred to as Option A and Option B. Option A consists of 658 multi-family residential units and up to 27,300 square feet of neighborhood-serving commercial uses, including up to 13,650 square feet of retail space and up to 13,650 square feet of restaurant space. Option B would include 425 multi-family residential units, 90,000 square feet of office space, and up to 40,000 square feet of neighborhood-serving commercial uses, including up to 20,000 square feet of retail space and up to 20,000 square feet of restaurant space. Development of the Project under either of the development options would result in an increase in long-term water demand for consumption, operational uses, maintenance, and other activities on the Project Site.

As previously discussed, based on the proposed land uses and the Project's resulting estimated water demand, the Project is subject to the requirements of SB 610 (preparation of a WSA, as described above in Section 2.a(1)(a). Accordingly, a WSA was prepared for the Project by LADWP and is provided in Appendix L of this Recirculated Draft EIR. Furthermore, LADWP concluded that a new WSA would not be required to analyze Option B as part of this Recirculated Draft EIR.⁹¹ Consistent with LADWP's methodology, the analysis of the Project's impacts relative to water supply provided in the WSA is based

⁹¹ Written Communication from Theresa Kim, Los Angeles Department of Water and Power, August 14, 2020.

on a calculation of the Project's water demand by applying the sewage generation rates established by LASAN, which also serve to estimate water demand, to the proposed uses.

As shown in Table IV.M.1-5 on page IV.M.1-40, assuming constant water use throughout the year, it is estimated that Option A would result in an average daily water demand of approximately 110,400 gallons per day. When accounting for the existing uses to be removed as well as water saving features required by the LAMC and additional water saving features as set forth in Project Design Feature WAT-PDF-1, above, the Project would result in a net increase in the Project Site's average daily water demand of approximately 71,837 gallons per day, or approximately 80.47 acre-feet per year.

As shown in Table IV.M.1-6 on page IV.M.1-42, assuming constant water use throughout the year, it is estimated that Option B would result in an average daily water demand of approximately 102,486 gallons per day. When accounting for the existing uses to be removed as well as water saving features required by the LAMC and additional water saving features as set forth in Project Design Feature WAT-PDF-1, above, the Project would result in a net increase in the Project Site's average daily water demand of approximately 69,297 gallons per day, or approximately 77.6 acre-feet per year. Therefore, as summarized in Table IV.M.1-6, Option B would generate a lower water demand compared to Option A.

As provided in the WSA for the Project, LADWP concluded that the projected water supplies for normal, single-dry, and multiple-dry years reported in LADWP's 2015 UWMP would be sufficient to meet the Project's estimated water demand, in addition to the existing and planned future water demands within LADWP's service area through the year 2040. In addition, based on LADWP's review of Option B, LADWP concluded that Option B would not result in a substantial increase to the previous water demand (Option A), as approved by the Board of Water and Power on November 7, 2017. As such, per Water Code Section 10910(h), no additional water supply assessment is required for Option B because Option B would not result in a substantial increase in water demand for the Project.

Based on the above, LADWP determined that the net water demand generated by Option A of 71,837 gallons per day (approximately 80.47 acre-feet per year) has been accounted for in the City's overall total demand projections set forth in its 2015 UWMP. As summarized in Table IV.M.1-6, prior to incorporation of water savings in accordance with LAMC requirements and water conservation measures agreed to by the Applicant, Option B would result in a reduced average daily water demand compared to Option A. As such, as concluded by LADWP in their supplemental review of Option B included in Appendix L of this Recirculated Draft EIR, Option B would not result in a substantial increase in water demand compared to Option A and Option B would be within the previous water demand approved by the Board of Water and Power on November 7, 2017, for Option A. Overall, the WSA for the Project and LADWP's 2015 UWMP forecasts adequate water supplies to

Table IV.M.1-5 Estimated Project Water Demand—Option A

Land Use	No. of Units/ Floor Area	Water Demand Rate (qpd/unit) ^a	Demand (gpd)
FXISTING			
Commercial	100 781 sf		5 295 ^b
Total Existing	100,101 01		5 295
PROPOSED	I		0,200
Residential			
Studio	97 du	75	7,275
1-Bedroom	386 du	110	42,460
2-Bedroom	175 du	150	26,250
Base Demand Adjustment ^d			8,050
Gym/Fitness Center	1,000 sf	0.65	650
Lobby	2,250 sf	0.05	113
Pool/Spa	2,000 sf		166
Indoor Lounge/Clubhouse	3,150 sf	0.05	158
Outdoor Lounge	1,670 sf	0.05	84
Roof Deck ^e	5,288 sf	0.05	264
Conference Rooms	2,400 sf	0.12	288
Theater Space ⁹	18 seats	3	53
Game/Rec Room ^h	650 sf	0.05	33
Total Residential ^t			85,844
Commercial	· · · · ·		
Restaurant: Full Service	683 seats	30	20,475
Retail	13,650 sf	0.025	341
Total Commercial			20,816
Landscaping ⁱ	41,400 sf		3,413
Covered Parking Structure ^j	497,096 sf	0.02	327
Subtotal Water Demand			110,400
Less Required Ordinances Water Savings			(31,164)
Proposed Water Demand			79,236
Less Existing to be Removed			(5,295)
Less Additional Conservation ^k			(2,104)
Net Additional Water Demand (Proposed – Existing – Additional Conservation)			71,837

du = dwelling units

sf = square feet

gpd = gallons per day

Note: Some numbers may not add up perfectly due to rounding.

Table IV.M.1-5 (Continued) Estimated Project Water Demand—Option A

	Land Use	No. of Units/ Floor Area	Water Demand Rate (gpd/unit) ^a	Demand (gpd)	
а	Based on sewage generation rates provided by th	e City of Los Ange	eles Bureau of Sanita	ation (2012).	
b	Existing water demand is based on LADWP billing	g data (annual ave	rage from 2011 to 20	017).	
с	The proposed development land uses will conform Code, 2013 California Green Building Code, 2014 Green Building Code.	m to Ordinance No 4 Los Angeles Plu	o. 184248, 2013 Cal mbing Code, and 20	ifornia Plumbing)14 Los Angeles	
d	Base Demand Adjustment is the estimated savings due to Ordinance No. 180,822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates.				
е	Roof Deck in totality is assumed to have similar w	ater use to outdoo	r lounge.		
f	Common and private open space and amenities for residents not shown here do not have additional water demand.				
g	Theater Space is assumed to have 1 seat per 40	sf.			
h	^b Game/Recreation Room is assumed to have similar water use to indoor lounge.				
i	Landscaping water use is estimated per California Model Water Efficient Landscape Ordinance.	a Code of Regulati	ons Title 23, Divisior	n 2, Chapter 2.7,	
j	Auto parking water uses are based on City of Los and 12 times/year cleaning assumption.	s Angeles Bureau	of Sanitation Genera	ntion Rates table	
k	Water conservation due to additional conservation WSA provides a detailed breakdown of these con of this Recirculated Draft EIR.	n commitments ag nservation commit	reed by the Applican ments and is include	nt. Table II of the ed in Appendix L	
Sc	purce: LADWP, Water Supply Assessment—Pased	o Marina Project; E	Eyestone Environmen	ntal, 2017.	

meet all projected water demands in the City through the year 2040 during average years, single-dry years, and multiple-dry years. LADWP, therefore, concluded that the increase in water demand for both development scenarios falls within the available and projected water supplies during an average year, single-dry year, and multiple-dry year through the year 2040, as well as the intervening years (i.e., 2027), as described in its 2015 UWMP.

Furthermore, as outlined in the 2015 UWMP and in its 2020 UWMP, LADWP is committed to providing a reliable water supply for the City. LADWP's 2015 UWMP and 2020 UWMP take into account the realities of climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2015 UWMP and 2020 UWMP also further the goals of the Green New Deal (also discussed above), address the current and future State Water Project supply shortages, and conclude that MWD's actions in response to the threats to the State Water Project 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

Table IV.M.1-6 Estimated Project Water Demand—Option B

Land Use	No. of Units/ Floor Area	Water Demand Rate (gpd/unit)ª	Demand (gpd)
EXISTING			
Commercial	100,781 sf		5,295 ^b
Total Existing			5,295
PROPOSED°			
Residential			
Studio	62 du	75	4,650
1-Bedroom	231 du	110	25,410
2-Bedroom	132 du	150	19,800
Base Demand Adjustment ^d			5,274
Amenities	18,426 sf	0.12 ^e	2,211
Total Residential			57,345
Commercial			
Restaurant: Full Service	1,000 seats	30	30,000
Retail	20,000 sf	0.025	500
Office	90,000 sf	0.12	10,800
Total Commercial			41,300
Landscaping ^f	42,627 sf		3,514
Covered Parking Structure ^g	497,096 sf	0.02	327
Subtotal Water Demand			102,486
Less Required Ordinances Water Savings			(25,790)
Proposed Water Demand			76,696
Less Existing to be Removed			(5,295)
Less Additional Conservation ^h			(2,104)
Net Additional Water Demand (Proposed – Existing – Additional Conservation)			69,297

du = dwelling units

sf = square feet

gpd = gallons per day

Note: Some numbers may not add up perfectly due to rounding.

- ^a Based on sewage generation rates provided by the City of Los Angeles Bureau of Sanitation (2012).
- ^b Existing water demand is based on LADWP billing data (annual average from 2011 to 2017).
- ^c The proposed development land uses will conform to Ordinance No. 184248, 2013 California Plumbing Code, 2013 California Green Building Code, 2014 Los Angeles Plumbing Code, and 2014 Los Angeles Green Building Code.
- ^d Base Demand Adjustment is the estimated savings due to Ordinance No. 180,822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates.
- ^e As shown in Table IV.M.1-5 on page IV.M.1-40, the water demand rate for the residential amenities

Table IV.M.1-6 (Continued) Estimated Project Water Demand—Option B

	Land Use	No. of Units/ Floor Area	Water Demand Rate (gpd/unit) ^a	Demand (gpd)
	range from 0.05 to 3 gallons per day per unit. For was used.	or conservative pu	rposes, a water dem	and rate of 0.12
f	^f Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2 Model Water Efficient Landscape Ordinance.			
g	Auto parking water uses are based on City of Los and 12 times/year cleaning assumption.	s Angeles Bureau	of Sanitation Genera	tion Rates table
h	Water conservation due to additional conservation WSA provides a detailed breakdown of these con of this Recirculated Draft EIR.	n commitments ag nservation commiti	reed by the Applican ments and is include	it. Table II of the d in Appendix L
Sc	purce: Fuscoe, Water and Sewer Infrastructure As (Per written correspondence from Theresa was necessary for Option B.)	sessment Report; Vu Kim, LADWP, J	Eyestone Environme August 14, 2020, no	ental, July 2023. additional WSA

shortages. Additionally, as reaffirmed in the Green New Deal, the City is committed to conserving and recycling water to help meet future water demands in the City.^{92,93}

Lastly, the Project would not conflict with the applicable goals, objectives, and policies with regard to utilities set forth in Chapter 9, Infrastructure and Public Services, of the General Plan Framework Element. In particular, the Project would support Goal 9C to ensure an adequate water supply, storage facilities, and delivery system to serve the needs of existing and future residents and businesses, as well as Objective 9.9 to manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses. Additionally, the Project would support Objective 9.10 to ensure that water supply, storage, and delivery systems are adequate to support planned development. The completed IFFAR and approved SAR demonstrate consistency with these goals and objectives, as analyzed above. Therefore, the Project would not conflict with these goals and objectives.

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.

⁹² Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

⁹³ City of Los Angeles, L.A.'s Green New Deal, 2019.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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

e. Cumulative Impacts

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

- (1) Impact Analysis
 - (a) Water Infrastructure

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the water infrastructure that would serve both the Project and related projects). Development of the Project and future new development in the vicinity of the Project Site would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, other new development projects would be subject to LADWP review to ensure that the existing public infrastructure would be adequate to meet the domestic and fire 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, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement its \$5.6 billion five-year water system capital improvement plan, which includes replacement of distribution mainlines, trunk lines, large valves, and water meters, as well as ongoing maintenance and rehabilitation of facilities such as pump stations, pressure regulators, and in-city reservoirs and tanks.⁹⁴

⁹⁴ LADWP, 2022–23 Water Infrastructure Plan.

Additionally, in accordance with City requirements, prior to ground disturbance, related projects would also coordinate with LADWP to identify the locations and depths of all lines. LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service associated with the related projects. LADWP would also review and approve all appropriate connection requirements, pipe depths, and connection location(s) associated with the related projects. While off-site connection activities and infrastructure improvements associated with the related projects could temporarily affect access in adjacent right-of-ways, as with the Project, related projects would also implement a construction management plan to ensure that adequate and safe access remains available within and near the related project sites during construction activities. As part of the construction management plan, appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would be implemented, as necessary, to ensure emergency access to the related project sites and traffic flow is maintained on adjacent Therefore, the Project and related projects would not result in right-of-ways. significant cumulative impacts related to the construction or expansion of water infrastructure. The Project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant.

(b) Water Supply

The geographic context for the cumulative impact analysis on water supply is the LADWP service area (i.e., the City and portions of the cities of West Hollywood, Culver City, South Pasadena, and the Owens Valley). As discussed above, LADWP, as a public water service provider, is required to prepare and periodically update its urban water management plan to plan and provide for water supplies to serve existing and projected demands. LADWP's 2015 UWMP accounts for existing development within the LADWP service area, as well as projected growth through the year 2040 while LADWP's 2020 UWMP accounts for existing development within the LADWP service area, as well as projected growth through the year 2040 service area, as well as projected growth through the year 2045. Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive WSA for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The WSA for such projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

As identified in Section III, Environmental Setting, of this Recirculated Draft EIR, there are 14 related projects located in the vicinity of the Project Site. As shown in Table IV.M.1-7 on page IV.M.1-46, the related projects would generate a total average water demand of approximately 184,649 gallons per day (or approximately 206.8 acre-feet per year). 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

Table IV.M.1-7 Cumulative Water Demand

					Total Water Demand
No.	Project	Land Use	Size	Generation Factor ^{a,b}	(gpd)
City o	of Los Angeles				
1	X67 Lofts	Apartments	67 du	190 gpd/du	12,730
	4140 S. Glencoe Ave.	Office	3,211 gsf	0.12 gpd/sf	385
2	C1 by CLG	Condominiums	136 du	190 gpd/du	25,840
	4210 S. Del Rey Ave.	Office	14,929 gsf	0.12 gpd/sf	1,791
3	R3 by CLG	Condominiums	67 du	190 gpd/du	12,730
	4091 S. Redwood Avenue	Office	7,525 gsf	0.12 gpd/sf	903
4	G8 by CLG	Apartments	230 du	190 gpd/du	43,700
	4040 S. Del Rey Ave.	Office	18,800 gsf	0.12 gpd/sf	2,256
5	Inclave Mixed-Use Project	Creative Office	35,206 gsf	0.12 gpd/sf	4,225
	4065–71 Glencoe Ave.	Specialty Retail	1,500 gsf	0.025 gpd/sf	38
		Apartments	49 du	190 gpd/du	9,310
6	Warehouse to Office	Office	118,352 gsf	0.12 gpd/sf	14,202
7	4721 S. Alla Ru.	Aporteconto		100 and/du	40.050
	13488 W. Maxella Ave.	Apariments	65 du	190 gpa/du	12,350
8	Thatcher Yard	Affordable Senior Housing	68 du	190 gpd/du	12,920
	3233 S. Thatcher Avenue	Affordable Family Housing	30 du	190 gpd/du	5,700
9	Cedars-Sinai Marina del Rey Replacement Hospital 4650 Lincoln Boulevard	Hospital	160 Beds	70 gpd/bed	11,200
Culve	er City				
10	Costco Expansion	Discount Club	31,023 gsf	0.025 gpd/sf	776
	13463 Washington Blvd.	Fueling Station	2 pumps		N/A
11	Baldwin Site	Apartments	37 du	190 gpd/sf	7,030
	12803 Washington Blvd.	Retail	7,206 gsf	0.025 gpd/sf	180

No.	Project	Land Use	Size	Generation Factor ^{a,b}	Total Water Demand (gpd)
12	Kayvon Mixed-Use	Residential	5 du	190 gpd/du	950
	12712–12718 Washington Blvd.	Retail	3,414 gsf	0.025 gpd/sf	85
13	Townhome Development 4118 Wade Street	Townhomes	4 du	190 gpd/du	760
L.A.	County				
14	Pier 44/Pacific Marina Venture	Commercial	91,760 gsf	0.05 gpd/sf	4,588
	4637 Admiralty Way	Marina	141 berths		N/A
Rela	ted Projects Water Demand				184,649

Table IV.M.1-7 (Continued)Cumulative Water Demand

du = dwelling units

sf = square feet

^a Cumulative wastewater generation was calculated using LASAN's sewage generation factors. Uses not listed are estimated by the closest type of use available.

^b Conservatively assumes rate for 3-bedroom units for all dwelling units.

Source: Eyestone Environmental, 2023.

demand of the existing uses on related project sites that the related projects may remove. As discussed above, Option A of the Project would result in a higher water demand compared to Option B. As such, Option A is discussed herein. The net water demand of Option A would be 71,837 gallons per day (approximately 80.47 acre-feet per year). Accordingly, the Project's (Option A) net water demand, in conjunction with the related projects' water demand would yield a cumulative average water demand of approximately 256,486 gallons per day (approximately 287.3 acre-feet per year) or approximately 0.06 percent⁹⁵ of LADWP's water supply in 2022 (500,743 acre-feet per year as shown in Table IV.M.1-2 on page IV.M.1-17). The related projects' demand combined with Option B would be even less.

Based on water demand projections through 2045 in its 2020 UWMP, LADWP determined that it will be able to reliably provide water to its customers through the year 2045, as well as the intervening years (i.e., 2027, the project buildout year) based on demographic growth projections in SCAG's 2020–2045 RTP/SCS, which includes the Project and related projects. In addition, the WSA prepared for the Project and adopted by LADWP concluded that LADWP will be able to meet the proposed water demand of the Project together with the existing and planned future water demands of the City. 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, most related projects would be subject to the City's Green Building Code requirement to reduce indoor water use by at least 20 percent and all projects would be required to use fixtures that conserve water. In addition, like the Project, certain related projects meeting the thresholds under SB 610 would be required to prepare and receive LADWP approval of a WSA that demonstrates how the project's water demand will be met.

Overall, as discussed above, LADWP's 2020 UWMP demonstrates that the City will meet all existing and projected future water demand through 2045 during average, single-dry, and multi-dry years. LADWP's 2020 UWMP specifically outlined the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP's 2020 UWMP also incorporates the goals of 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.⁹⁶ To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for

⁹⁵ (287.3 AFY ÷ 480,539 AFY) x 100 = 0.06 percent

⁹⁶ LADWP, 2020 Urban Water Management Plan, May 2021.

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.

Lastly, as indicated in the Project-level analysis under Threshold (b) above, the Project would result in less-than-significant water supply impacts. Thus, the Project's contribution to cumulative water supply impacts would not be considerable.

Based on the above, it is anticipated that LADWP would be able to meet its existing water demands and the water demand associated with the Project and projected future growth within its service area through at least 2045. Therefore, the Project and related projects would not result in significant cumulative impacts related to water supply. The Project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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