

IV. Environmental Impact Analysis

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

1. Introduction

This section evaluates the Project’s potential impacts on water supply and determines 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.

The data and conclusions in this section regarding the availability of water supply to serve the Project are based on the Water Supply Assessment prepared for the Project and adopted by LADWP, provided in Appendix K of this Draft EIR, which includes a copy of Resolution No. 024130 approving the WSA. Additional technical information used in the analysis is based on the Utility Technical Report (Utility Report) prepared for the Project by Langan, dated July 2024, and included in Appendix L of this Draft EIR.

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 that apply to the Project. 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
 - Appliance Efficiency Regulations (Title 20)
 - California Green Building Standards Code
 - Plumbing Code
- Executive Order B-40-17
- Executive Order N-10-21
- Executive Order N-7-22
- Executive Order N-5-23
- 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
- L.A.’s 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.

Recent changes to the California Urban Water Management Planning Act further enhance state policies, which promote resilience of the State's water supplies. For example, Senate Bill (SB) 664 requires Urban Water Suppliers to include in their UWMPs a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. SB 606 requires UWMPs to include contingency plans addressing the possibility of prolonged water shortage conditions and further requires consideration of climate change impacts on water supplies. Additionally, SB 606 and Assembly Bill (AB) 1414 require drought risk assessment for a five-year historic drought sequence.

(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, SB 610 and SB 221, became effective January 1, 2002. SB 610, codified in Water Code Sections 10910–10915, specifies the requirements for 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 above; 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 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

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

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.

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 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) Appliance Efficiency Regulations (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 gallons per minute (gpm) at 80 pounds per square inch (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) California Green Building Standards Code

Part 11 of Title 24 of the CCR, 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,

⁷ California Department of Water Resources, SGMA Groundwater Management, <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>, accessed July 10, 2023.

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/section16053statestandardsfornonfederallyregulatedappliances.htm>, accessed July 10, 2023.

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.

(iii) California 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 plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2022 California Plumbing Code, which is based on the 2021 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2023.

(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 State Water Resources Control Board (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 was issued calling for voluntary cutbacks of water usage by 15 percent from 2020 usage levels. Executive Order N-10-21 lists commonsense measures Californians can undertake to achieve water usage reduction goals and identifies the SWRCB for tracking of monthly reporting on the State's progress. The Order also directs State agencies, led by the Department of Water Resources (DWR) 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. Furthermore, Executive Order N-10-21 directs DWR to monitor hydrologic conditions such as cumulative precipitation, reservoir storage levels, soil moisture and other metrics, and the SWRCB to monitor progress on voluntary conservation as ongoing indicators of water supply risk that may inform future drought response actions.

(h) Executive Order N-7-22

On March 28, 2022, Executive Order N-7-22 was issued to the SWRCB to consider adopting regulations by May 25, 2022, that require urban water suppliers with water shortage contingency plans to implement, at a minimum, shortage response actions for a shortage level of up to 20 percent (a “Level 2” shortage). On May 24, 2022, in response to the executive order, the SWRCB adopted a new emergency water conservation regulation. The new regulation bans irrigating turf at commercial, industrial, and institutional properties, such as grass in front of or next to large industrial or commercial buildings. The ban does not include watering turf that is used for recreation or other community purposes, water used at residences or water to maintain trees. The regulation also requires all urban water suppliers to implement conservation actions under Level 2 of their water shortage contingency plans.

(i) Executive Order N-5-23

On March 24, 2023, Executive Order N-5-23 was issued ending the voluntary 15-percent water conservation target. The order ended the requirement that the SWRCB consider requiring local water agencies to implement the demand reduction measures identified in Level 2 of their water shortage contingency plans. Lastly, Executive Order N-5-23 continued the Executive Order B-40-17 ban on wasteful water uses, such as watering ornamental grass on commercial properties.

(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 Urban Water Management Plan (2020 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

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

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 2020 MWD UWMP concluded that reliable water resources would be available to continuously meet demand through 2045.¹¹ In the 2020 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. In addition, MWD is working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Sacramento–San Joaquin Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. Furthermore, 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

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.*

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

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, January 2016.*

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 4,273,000 acre-feet and the total supply reliability target is approximately 4,539,000 acre-feet, representing an excess of 266,000 acre-feet.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}

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

¹⁶ *Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2020, www.mwdh2o.com/how-we-plan/integrated-resource-plan/.*

¹⁷ *Metropolitan Water District of Southern California, Preliminary Gap Analysis of the 2020 Integrated Resources Plan (Presentation), 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 *Preliminary Gap Analysis of the 2020 Integrated Resources Plan.*

(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

(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

¹⁹ *Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan, Report No. 1150, 1999.*

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 2020 UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's 2020 UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely 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). LADWP's water use efficiency goals include reducing per capita water use to 100 gallons per capita per day by 2035 and to maintain this usage through 2050.

(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, 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 L.A.'s Green New Deal augments, expands, and elaborates in more detail the City's vision for a sustainable future and includes a multi-faceted

²⁰ *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, p. 2-21.*

²¹ *City of Los Angeles, Sustainable City pLAN, April 2015.*

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

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 One Water LA 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 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 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.

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

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.K.1-1 on page IV.K.1-15 shows General Plan goals, objectives, and policies related 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 and the locations and characteristics of public service facilities.

The Project Site is located within the Central City North Community Plan area. The Central City North Community Plan does not include objectives or policies related to water supply and infrastructure.

The City of Los Angeles Department of City Planning updated the Central City North Community Plan and the Central City Community Plan, whose areas together make up Downtown Los Angeles (sometimes known as DTLA), in a combined planning process referred to as the DTLA 2040 Plan. On May 3, 2023, the Los Angeles City Council voted unanimously to approve the DTLA 2040 Plan. Following City Council approval, the implementing ordinances will be reviewed and finalized by the City Attorney to ensure clarity of regulations and consistency with state law, a process which is ongoing. When the implementing ordinances are reviewed and finalized, the ordinances will be acted upon by the Council and the DTLA 2040 Plan will be brought into effect at that time.

The DTLA 2040 Plan includes the following policy related to water supply and infrastructure: LU 17.5: Support Citywide water use reduction goals by focusing on water management practices, and stormwater capture and treatment in Downtown that can increase local water supply.

**Table IV.K.1-1
Applicable 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.
<hr/> <i>Source: City of Los Angeles, City of Los Angeles General Plan, Framework Element, re-adopted 2001.</i>	

(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 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 gpm in low density residential areas to 12,000 gpm in high density commercial or industrial areas. A minimum residual water pressure of 20 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

(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.K.1-2 on page IV.K.1-18, in 2022, the most recent year for which data is available, LADWP had an available water supply of 500,743 acre-feet. LADWP water sources are described in further detail below.

(a) Los Angeles Aqueducts

The City receives surface water and groundwater from the Eastern Sierra Nevada Mountains through the Los Angeles Aqueducts. Annual water deliveries from the Los Angeles Aqueducts 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 Los Angeles Aqueducts delivered 531,729 acre feet to the City. Concerns over environmental impacts have required the City to reallocate approximately one-half of the Los Angeles Aqueducts 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 acre feet per year 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 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 acre feet per year to 192,000 acre feet per year for average years.²⁸ As indicated in Table IV.K.1-2, approximately 69,183 acre feet of LADWP's water supplies were from the Los Angeles Aqueducts in 2022. The average deliveries from the LAA from fiscal year 2017–2018 through fiscal year 2021–2022 were approximately 221,935 acre feet of water annually.

²⁷ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 11.*

²⁸ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 12.*

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

Calendar Year	Los Angeles Aqueducts	Local Groundwater	MWD	Recycled Water	Transfer, Spread, Spills, and Storage^a	Total
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	152,647	11,455	-938	508,359
2021–2022	69,183	53,057	366,690	12,022	208	500,743

Units are in 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 in parenthesis represent a deficit of water.*

Source: Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, Table III.

The sole reliance on Los Angeles Aqueducts 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, 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 Los Angeles Aqueducts supplies. Additionally, LADWP can purchase supplemental imported water from MWD to meet the City’s remaining water demands.²⁹

(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. Furthermore,

²⁹ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 12.*

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.³⁰

The City's total adjudicated groundwater rights are approximately 109,809 acre feet per year, which are located within the San Fernando Basin, Central Basin, Sylmar Basin, and West Coast Basin.³¹ Of these, LADWP pumps groundwater from the San Fernando Basin and, to a lesser extent, the Central Basin and Sylmar Basin.

The San Fernando Basin 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.³² The City's average groundwater rights in the San Fernando Basin is approximately 87,000 acre feet per year.³³ A ULARA Judgement allows groundwater to be stored within the San Fernando Basin 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 acre feet of stored water credits.³⁴ LADWP is implementing its San Fernando Basin Groundwater Remediation Program to help restore the capacity of San Fernando Basin as a drinking water source and groundwater storage. LADWP also receives additional San Fernando Basin 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 acre feet of blended water in August 2019. This connection began service in August 2019 and will operate for five years.³⁵

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 acre feet per year of groundwater rights in this basin, which was increased from the 15,000 acre feet per year originally awarded through the Central Basin Third Amended Judgment dated December 23, 2013,

³⁰ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 13.*

³¹ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 13.*

³² *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 13.*

³³ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 13.*

³⁴ *Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-7.*

³⁵ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 13.*

through three purchase transactions completed between 2014 and 2015.³⁶ With an additional carryover and storage of unused water rights, the City has accrued a total of 22,943 acre feet of stored water as of fiscal year-end 2020.³⁷

Aside from the San Fernando Basin 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 acre feet per year. 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 acre feet per year. 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 acre feet per year 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 acre feet per year 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.³⁸

Table IV.K.1-3 on page IV.K.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 acre feet were produced from the San Fernando Basin, 3,018 acre feet were produced from the Sylmar Basin, and 4,562 were produced from the Central Basin.³⁹

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

³⁶ Los Angeles Department of Water and Power, *2020 Urban Water Management Plan, May 2021*, p. 5-3.

³⁷ Los Angeles Department of Water and Power, *Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024*, p. 13.

³⁸ Los Angeles Department of Water and Power, *Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024*, p. 14.

³⁹ Los Angeles Department of Water and Power, *Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024*, p. 14.

**Table IV.K.1-3
Local Groundwater Basin Supply**

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

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 East End Studios Arts District Project, adopted January 27, 2024, Table IV.

Administrative Committee of representatives from five public water supply agencies overlying the ULARA Committee.⁴⁰ 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.⁴¹ 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.⁴² For example, there are 3,975 acre feet 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.⁴³

⁴⁰ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-4.

⁴¹ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. 5-4.

⁴² Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 15.

⁴³ Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, 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 Los Angeles Aqueducts, local groundwater and recycled water.⁴⁴

MWD imports water from two principal sources: northern California via the California Aqueduct and the Colorado River via the Colorado River Aqueduct. 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.^{45,46} As of fiscal year ending (FYE) 2023, LADWP has a preferential right to purchase 17.52 percent of MWD's total water supply.⁴⁷

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 State Water Project is one of MWD's two major sources of water. The State Water Project 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.⁴⁸ The State Water Project watershed encompasses the mountains and waterways around the Feather River in the Sacramento Valley of Northern California. The State Water Project 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 State Water Project conservation facilities and then delivered through State Water Project transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. MWD receives water from the State

⁴⁴ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 20.*

⁴⁵ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 20.*

⁴⁶ *Metropolitan Water District Act, Chapter 2, Section 135.*

⁴⁷ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 20.*

⁴⁸ *Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, pp. A-16.*

Water Project through the main stem of the aqueduct system, the California Aqueduct, which is 444 miles long.⁴⁹

MWD is the largest of the 29 State Water Project contractors, holding a contract for 1.912 million acre feet per year, or 46 percent of the total contracted amount of the 4.173 million acre feet ultimate delivery capacity of the State Water Project.⁵⁰ 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.⁵¹ Due to water quality and supply reliability challenges and conflicts due to variable hydrology and environmental standards that limit pumping operations, State Water Project deliveries in the most critically dry years have declined. From calendar year 2012 through 2021, the amount of water received by MWD from the State Water Project varied from a low of 588,000 acre feet in calendar year 2020 to a high of 1,473,000 acre feet in 2017. In 2021, the DWR's allocation to MWD commenced as 10 percent and then was reduced to 5 percent (95,575 af).⁵² The DWR's allocation to MWD has since increased to 75 percent as of March 24, 2023, due to particularly heavy precipitation in 2023.⁵³

Challenges to State Water Project Supply

Numerous factors have created challenges for the State Water Project. Based on DWR's 2021 Final State Water Project Delivery Capability Report, all but five of the 29 State Water Project contractors receive State Water Project 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 State Water Project. In particular, a substantial decrease in State Water Project 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 and droughts in the Delta. In addition, the

⁴⁹ *Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-53.*

⁵⁰ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 20.*

⁵¹ *Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-17.*

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

⁵³ *California Department of Water Resources, Notice to State Water Project Contractors, Increase of State Water Project 2023 Allocation to 75 percent, March 24, 2023.*

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.⁵⁴ 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 State Water Project.⁵⁵

(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.⁵⁶

Construction of the Colorado River Aqueduct, 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 Colorado River Aqueduct 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.⁵⁷ 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.⁵⁸ Up to 1.25 million acre feet of water per year may be conveyed through the Colorado River Aqueduct to MWD's member agencies, subject to availability of Colorado River water for delivery to MWD.⁵⁹ Since 2003, MWD's net diversions of Colorado River water have ranged from a low of 537,607 acre feet

⁵⁴ California Department of Water Resources, *The State Water Project Final State Water Project Delivery Capability Report 2021*, September 2022.

⁵⁵ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A*, pp. A-13-21 and A-31-34.

⁵⁶ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A*, p. A-21.

⁵⁷ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A*, p. A-21.

⁵⁸ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A*, p. A-22.

⁵⁹ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A*, p. A-21.

in 2019 to a high of approximately 1,179,000 acre feet in 2015. Preliminary average annual net diversions for 2011 through 2020 were 871,947 acre feet, 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 acre feet. A portion of the available supply that was not diverted was stored in Lake Mead for future usage.⁶⁰

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 State Water Project, 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 acre feet.⁶¹

(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 State Water Project 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

⁶⁰ *Metropolitan Water District of Southern California, Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-22.*

⁶¹ *Metropolitan Water District of Southern California, 2020 Regional Urban Water Management Plan, May 2021.*

severe drought.⁶² An extended drought period is also ongoing in the Colorado River Basin, which is another source of water for southern California as described above.⁶³

The City of Los Angeles receives an average of 14.07 inches of precipitation per year according to the National Weather Service.⁶⁴ As of July 27, 2023, precipitation for the 2023 year to date is 23.22 inches.⁶⁵ 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.⁶⁶

MWD and DWR also continue to study climate change and address the implications of climate change on water supplies. MWD has established a technical process to identify key vulnerabilities from various sources, including climate change, in order to provide comprehensive analyses within its Integrated Water Resources Plan, described above.⁶⁷

In addition, DWR addresses climate change impacts on water supply in its California Water Plan Updates, which also account for uncertainty, risk, and sustainability in planning for the future. California Water Plan Update 2018 provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers,

⁶² National Drought Mitigation Center, *U.S. Drought Monitor, West, Data valid: March 21, 2023*, <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?West>, accessed July 26, 2023.

⁶³ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-9*.

⁶⁴ National Weather Service, *Monthly Summarized Precipitation for Los Angeles Downtown Area, CA 1991–2022*, www.weather.gov/wrh/Climate?wfo=lox, accessed July 27, 2023.

⁶⁵ National Weather Service, *Accumulation Graph for Los Angeles Downtown Area, CA January 1, 2023, through July 27, 2023*, www.weather.gov/wrh/Climate?wfo=lox, accessed March 27, 2023.

⁶⁶ Los Angeles Department of Water and Power, *2020 Urban Water Management Plan, p. 12-1, May 2021*.

⁶⁷ Metropolitan Water District of Southern California, *Water Revenue Refunding Bonds, 2022 Series B, Appendix A, p. A-9*.

planners, and decision-makers to overcome California’s most pressing water resource challenges.⁶⁸ 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.⁶⁹ The DWR completed its Climate Action Plan in 2020.⁷⁰ 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.⁷¹ 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)⁷² 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 2035.⁷³ LADWP will also comply with the State’s water use requirements of Assembly Bill 1668 (2018) and Senate Bill 606 (2018). Following the 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

⁶⁸ California Department of Water Resources, *Update 2018*, <https://water.ca.gov/Programs/California-Water-Plan/Update-2018>, accessed July 26, 2023.

⁶⁹ California Department of Water Resources, *Update 2023*, <https://water.ca.gov/Programs/California-Water-Plan/Update-2023>, accessed July 26, 2023.

⁷⁰ California Department of Water Resources, *DWR Climate Action Plan*, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed July 26, 2023.

⁷¹ California Department of Water Resources, *DWR Climate Action Plan*, www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan, accessed July 26, 2023.

⁷² 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.

⁷³ Los Angeles Department of Water and Power, *2020 Urban Water Management Plan*, May 2021.

2050.⁷⁴ The Green New Deal also has a target to recycle 100 percent of all wastewater for beneficial reuse by 2035.⁷⁵ Beneficial reuse includes, but is not limited to, non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the Los Angeles River.

Since the inception of LADWP's conservation programs, the estimated cumulative annual active savings is over 150,000 acre feet per year. 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 acre feet. 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 acre feet per year and increased direct use in the amount of 2,000 acre feet per year. Under LADWP's current implementation strategy, the total estimated stormwater capture capacity is projected to be 155,000 acre feet per year 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 acre feet per year in fiscal year-end 2021, and coordination with LASAN to develop non-potable water reuse projects.^{76,77}

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 acre feet per year by fiscal year ending (FYE) 2025 by adding 8,000 acre feet per year of planned municipal/industrial use and 7,000 acre feet per year of indirect potable reuse (groundwater replenishment), and further increase to 67,600 acre feet per year through FYE 2045. Environmental reuse is expected to remain relatively constant at approximately 26,600 acre feet per year.⁷⁸

⁷⁴ *City of Los Angeles, L.A.'s Green New Deal, 2019.*

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

⁷⁶ *The 37,060 afy of recycled water was used for municipal, industrial and environmental uses.*

⁷⁷ *Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 19.*

⁷⁸ *Existing water use is based on the average of LADWP's five-year billing records from October 2018 to September 2023.*

(2) Water Demand

(a) Regional 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 SCAG in its 2020–2045 RTP/SCS. Table IV.K.1-4 on page IV.K.1-30 shows LADWP's water demand and supply projections from 2025 through 2045 for the City. In 2045, during average year hydrological conditions, the City's water demand is forecasted to be approximately 710,500 acre feet per year (with existing water conservation).^{79,80}

As shown in Table IV.K.1-4, 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 2045.⁸¹ LADWP's 2020 UWMP, therefore, concludes that adequate water supplies would be available to meet the projected demands within the LADWP service area under average, single-dry, and multi-dry year conditions through 2045.⁸² Therefore, the City's water supply projections in LADWP's 2020 UWMP are sufficient to meet the water demand for projects that are determined by the CEQA lead agency to be consistent with the 2020–2045 RTP/SCS adopted by SCAG.⁸³

(b) On-Site Water Demand

As discussed in Section II, Project Description, of this Draft EIR, the Project Site is currently developed with two single-story warehouse structures consisting of approximately 311,000 square feet of floor area. The existing buildings are currently used for storage and distribution purposes. The Project Site also includes surface parking areas for automobiles and tractor trailer trucks. As provided in the Project's WSA, the existing water demand is approximately 515 gallons per day or 63 acre feet per year.⁸⁴

⁷⁹ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

⁸⁰ Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 27, 2024, p. 21.

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

⁸² Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, p. ES-28.

⁸³ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pp. 11–19.

⁸⁴ Based on LADWP billing data from October 2018 to September 2023. Refer to Table I in the Project's Water Supply Assessment prepared by LADWP, which is included in Appendix L of this Draft EIR.

**Table IV.K.1-4
LADWP Water Demand and Supply Projections**

Hydrologic Conditions	Year (af)				
	2025	2030	2035	2040	2045
Demand^a					
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 ^b	657,900	675,800	694,900	714,400	727,400
Supply					
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 ^b	657,900	675,800	694,900	714,400	727,400
<hr/> <i>af = acre-feet</i> ^a Note that this total demand number is conservative as it only includes passive conservation prior to fiscal year-end 2014. ^b First year of multi-dry year. Source: Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, Exhibits 11E, 11F, and 11G, May 2021.					

(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 2021–2022.⁸⁵

Water service is available to the Project Site via LADWP water lines within the adjacent streets. According to the Utility Report included in Appendix L of this Draft EIR, there is an 8-inch water main in 6th Street, a 12-inch water main in Alameda Street, and an 8-inch water main in Mill Street surrounding the Project Site. In addition, there are eight existing fire hydrants surrounding the Project Site, with four hydrants located on Alameda Street, two hydrants located on 6th Street and two hydrants located on Mill Street.

⁸⁵ Los Angeles Department of Water and Power, 2021–2022 Briefing Book, 2022.

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.⁸⁶

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, including the following:

- 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 impact relative to water supply is based on a calculation of the Project's anticipated net water demand. Consistent with LADWP's methodology, the estimated net water demand for the Project is calculated by applying the City of Los Angeles

⁸⁶ Refer to Section IV.K.1, *Utilities and Service Systems—Water*, of this Draft EIR for a discussion of water impacts; Section IV.K.3, *Utilities and Service Systems—Energy Infrastructure* of this Draft EIR for a discussion of electric power and natural gas impacts; Section VI, *Other CEQA Considerations* for a discussion of telecommunications facility impacts; and the *Initial Study* prepared for the Project included in Appendix A of this Draft EIR for a discussion of stormwater impacts.

Bureau of Sanitation's (LASAN) sewer generation factors to the Project's proposed uses. The water demand of the existing uses to be removed was then subtracted from the Project's total water demand to determine the Project's net water demand. The resulting net demand for water associated with the Project is then analyzed relative to LADWP's existing and future water supplies to determine if LADWP would be able to accommodate the Project's water demands during average, single-dry, and multiple-dry years hydrologic conditions.

The analysis with regard to water infrastructure is based on the Utility Report prepared for the Project by Langan Engineering and Environmental Services, Inc., which is included in Appendix L of this Draft EIR. As part of the Utility Report, LADWP performed a hydraulic analysis of their water system to determine if adequate fire flow is available to the fire hydrants surrounding the Project Site. LADWP's approach consists of analyzing their water system model near the Project Site. Based on the results, LADWP determines whether they can meet the Project's fire hydrant flow needs with the existing infrastructure. See Appendix A of the Utility Report for the results of the Information of Fire Flow Availability (IFFAR). In addition, LADWP performed a hydraulic analysis to determine if adequate water supply exists for future development of the Project as part of the Service Advisory Request (SAR). LADWP's hydraulic analysis provides flow and pressure data for the approximate connection locations. Based on the results, LADWP determines whether they can meet the projected needs based on the existing infrastructure. See Appendix B of the Utility Report for the results of the SAR.

c. Project Design Features

The following project design feature, based on the Project's WSA, would be implemented as part of the Project:

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

- ENERGY STAR Certified Residential Dishwashers – standard with 3.0 gallons/cycle or less.
- High Efficiency Toilets with a flush volume of 1.1 gallons per flush, or less.
- California Friendly® plants or native plants.
- Drip/Subsurface Irrigation (Mirco-Irrigation).
- Proper Hydro-Zoning/Zoned Irrigation (groups plants with similar water requirements together).

d. Analysis of Project Impacts

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?⁸⁷

(1) Impact Analysis

(a) Construction

Project construction activities would require water for dust control, cleaning of construction equipment, grading, excavation/export, and re-compaction of soil. As provided in the Utility Report included as Appendix L of this Draft EIR, based on a review of other construction projects of similar size, a conservative estimate of construction water use ranges from approximately 1,000 to 2,000 gallons per day. The Project would include the demolition of the existing on-site uses, which would offset the water demand associated with Project construction activities. Additionally, Project construction water demand would be less than Project operational water demand and, as discussed further below, the existing water infrastructure would be adequate to meet the Project's operational demand. Therefore, the existing water infrastructure would have adequate capacity to meet Project construction-related water demand, and new water mains or upgrades to the existing water mains would not be required.

The Project would require the installation of new, on-site water distribution lines to connect the proposed buildings to the water mains in the streets adjacent to the Project Site, including a proposed 10-inch connection off of the 12-inch main in Alameda Street, which LADWP determined would be necessary to meet the fire flow requirements established by the LAFD, as well as connections to utility mains along 6th Street and Mill Street. Construction activities associated with the installation of these new water distribution lines would primarily involve trenching within the Project Site and along limited portions of adjacent streets where water mains are located in order to place the water distribution lines below ground surface and to connect on-site water distribution lines to the public water main lines. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. LADWP

⁸⁷ Refer to Section IV.K.1, *Utilities and Service Systems—Water*, of this Draft EIR for a discussion of water impacts; Section IV.K.3, *Utilities and Service Systems—Energy Infrastructure* of this Draft EIR for a discussion of electric power and natural gas impacts; Section VI, *Other CEQA Considerations* for a discussion of telecommunications facility impacts; and the *Initial Study* prepared for the Project included in Appendix A of this Draft EIR for a discussion of stormwater impacts.

would also review and approve all appropriate connection requirements, pipe depths, and connection location(s). Lastly, while trenching and water line connection installation activities could temporarily affect traffic flow and access in adjacent rights-of-way, as discussed Section IV.I, Transportation, of this Draft EIR, a Construction Traffic Management Plan would be implemented pursuant to Project Design Feature TR-PDF-2 included in Section IV.I, Transportation, of this Draft EIR, to ensure that adequate and safe vehicular and pedestrian access remains available within and near the Project Site during construction activities. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure that emergency access to the Project Site and traffic flow are maintained on adjacent rights-of-way during the construction period.

Overall, construction activities associated with the Project would not require or result in the relocation or construction of new water facilities or expansion of existing facilities that could cause a significant environmental effect. As such, construction-related impacts to water infrastructure would be less than significant. Also refer to Section IV.A, Air Quality, and Section IV.G, Noise, of this Draft EIR, for a discussion of the Project’s construction-related impacts, including the potential off-site utility improvements described herein.

(b) Operation

When analyzing the Project for infrastructure capacity, the projected demands for both fire suppression and domestic water are considered. Although domestic water demand is the Project’s main contributor of water consumption, fire flow demands have a much greater instantaneous impact on infrastructure. Therefore, fire flow demands are the primary means for analyzing infrastructure capacity. Conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project as summarized in the Utility Report included as Appendix L of this Draft EIR. Specifically, see Appendix A and Appendix B in the Utility Report for the results of the IFFAR and SAR, respectively.

LAMC Section 57.507.3.1 establishes fire flow requirements based on type of land development. Fire water flow requirements vary from 2,000 gallons per minute for low density residential developments to 12,000 gallons per minute for high density industrial and commercial (principal business districts or centers) developments.⁸⁸ Specifically, Low Density Residential developments have a required fire flow of 2,000 gallons per minutes from three adjacent fire hydrants flowing simultaneously; High Density Residential and Neighborhood Commercial developments have a required fire flow of 4,000 gallons per minute from four adjacent fire hydrants flowing simultaneously; Industrial and Commercial developments have a required fire flow of 6,000 gallons per minute to 9,000 gallons per

⁸⁸ American Legal Publishing. *City of Los Angeles Municipal Code*, https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-346882, accessed September 8, 2023.

minute from four to six fire hydrants flowing simultaneously; and High Density Industrial and Commercial (Principal Business Districts or Centers) developments have a required fire flow of 12,000 gallons per minute available to any block.

Fire flow for the Project would comply with LAMC Section 57.507.3.1, which establishes fire flow standards by development type. Based on consultation with the LAFD regarding the Project's potential impacts to LAFD's facilities and services, the LAFD determined that the fire flow requirement for the Project is 12,000 gallons per minute, which corresponds to the High Density Industrial and Commercial or Industrial (Principal Business Districts or Centers) category.

As discussed in the Utility Report, included as Appendix L of this Draft EIR, an Information of Fire Flow Availability (IFFAR) was submitted to LADWP to determine the fire flow available to the fire hydrants surrounding the Project Site. Based on the results of the IFFAR (refer to Appendix A of the Utility Report), of the eight fire hydrants surrounding the Project Site, five fire hydrants can provide a minimum flow of 1,500 gpm at 20 psi, for a combined total flow of 7,500 gpm (refer to Appendix A of the Utility Report for the results of the IFFAR). In addition, based on the hydraulic analysis performed by LADWP as part of the Service Advisory Request (SAR), LADWP determined that a proposed 10-inch connection off of the 12-inch main in Alameda Street will add an additional flow of up to 5,000 gpm at a pressure of 45 psi. This proposed connection would serve additional on-site fire hydrants. As such, the total flow, including the available flow from surrounding public fire hydrants totaling 7,500 gpm in addition to the private onsite fire service totaling 5,000 gpm would exceed the 12,000 gpm fire flow requirement set forth by the LAFD. Therefore, as shown by the IFFAR and the SAR Fire Service Pressure Flow Report, the Project would have adequate fire flow available to demonstrate compliance with LAMC Section 57.507.3.

The Project would also incorporate a fire sprinkler suppression system, which would be subject to LAFD review and approval during design and permitting of the Project. As set forth by LAMC Section 94.2020.0, which adopts by reference NFPA 14-2019, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. As previously noted, LADWP performed a hydraulic analysis to determine if adequate water supply exists for future development of the Project as part of the SAR. Based on the results of the SAR, a proposed 10-inch connection off of the 12-inch main in Alameda Street would have a flow of up to 5,000 gpm at a pressure of 45 psi. Accordingly, as concluded in the Utility Report, based on the results of the SAR, the existing water infrastructure would be able to provide the necessary flow and pressure to serve the Project's domestic water demands.

Based on the above, the Project would not exceed the available capacity of the existing water distribution infrastructure that would serve the Project Site. Accordingly, the Project would not require or result in the relocation or construction

of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Therefore, the Project's operational impacts to water infrastructure would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project-level 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.

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

(1) Impact Analysis

(a) Construction

As previously discussed, Project construction activities would require water for dust control, cleaning of equipment, excavation/export, and grading/re-compaction. 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 provided in the Utility Report, based on a review of construction projects of similar size, a conservative estimate of construction water use ranges from 1,000 to 2,000 gallons per day. As previously noted, the Project would include the demolition of existing on-site uses, which would offset the water demand associated with Project construction activities. As such, given the temporary nature of construction activities and the short-term and intermittent water use during construction of the Project, the anticipated water demand during construction would be less than the net new water consumption of the Project at buildout (see Table IV.K.1-5 on page IV.K.1-37). Furthermore, as concluded in LADWP's 2020 UWMP, 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 2025 through 2045, in addition to the existing and planned future water demands within LADWP's service area through the year 2045. 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.

**Table IV.K.1-5
Estimated Project Water Demand**

Facility	No. of Units/Floor Area	Sewer Generation Rate (gpd/unit) ^a	Demand (gpd)
Proposed Uses			
Studios	299,012 sf	0.050 gpd/sf	14,951
Production Support (including Mill Space)	69,192 sf	0.050 gpd/sf	3,460
General Office	299,407 sf ^c	0.120 gpd/sf	35,929
General Retail	4,000 sf	0.025 gpd/sf	100
Restaurant	133 seat	30 gpd/seat	3,990
Basecamp ^d	120,222 sf	0.03 gpd/sf	3,607
Covered Parking ^g	283,667sf	0.02 gpd/sf	187
Landscaping ^f	38,700 sf		3,715
Base Demand Adjustment ^e			887
Subtotal Water Demand			66,826
Less Required Ordinances Water Savings ^h			(9,597)
Proposed Water Demand			57,229
Less Existing to be Removed	311,000 sf	- ^b	(515)
Less Additional Conservation ⁱ			(804)
Net Project Water Demand			55,910
<p><i>sf = square feet</i> <i>gpd = gallons per day</i></p> <p>^a The proposed uses are based on 2012 LASAN Sewer Generation Rates. The “Warehouse” rate of 30 gallons per day / 1,000 square feet was used for the basecamp, the “Commercial Use” rate was used for both the studios and production support uses, the “Office Building” rate was used for the proposed office uses, the “Retail Area (less than 100,000 sf)” rate was used for the potential general retail uses, and the “Coffee House” rate was used for the potential restaurant use.</p> <p>^b The existing water demand is based on LADWP billing data from October 2018 to September 2023.</p> <p>^c As provided in Table II-1 in Section II, Project Description, of this Draft EIR, the proposed office uses comprise a total of 307,407 square feet, inclusive of the potential 8,000 square feet of retail uses. As such, when subtracting the potential 8,000 square feet of retail uses, the office uses would comprise 299,407 square feet.</p> <p>^d While basecamp areas are not included in the Project’s total floor area, but are accounted for in the Project’s water demand.</p> <p>^e Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates, which does not apply to the current uses.</p> <p>^f Landscaping and water features use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7 Model Water Efficient Landscape Ordinance.</p> <p>^g Automobile parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, assuming cleaning 12 times per year.</p> <p>^h The proposed land uses would comply with City of Los Angeles Ordinance No. 186,488, Ordinance No. 184,248, the 2020 Los Angeles Plumbing Code, and 2020 Los Angeles Green Building Code.</p>			

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

Facility	No. of Units/Floor Area	Sewer Generation Rate (gpd/unit) ^a	Demand (gpd)
<p>ⁱ <i>Water conservation due to additional conservation commitments agreed to by the Applicant (refer to Project Design Feature WAT-PDF-1). See Table II of the WSA.</i></p> <p><i>Source: Los Angeles Department of Water and Power, Water Supply Assessment for the East End Studios Arts District Project, adopted January 9, 2024, Table II.</i></p>			

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 discussed in Section II, Project Description, of this Draft EIR, the Project would replace the existing warehouse structures comprising approximately 311,000 square feet with a new 675,611-square-foot production studio campus. As such, development of the Project would result in an increase in long-term water demand on the Project Site. Consistent with LADWP’s methodology, the analysis of the Project’s impacts relative to water supply is based on a calculation of the Project’s water demand by applying the sewage generation factors established by LASAN, which also serve to estimate water demand to the proposed uses.

As shown in Table IV.K.1-5 on page IV.K.1-37, assuming constant water use throughout the year, the Project would result in a net increase of approximately 55,910 gallons per day, or approximately 63 acre feet per year.

Based on the projected water demand estimates for LADWP’s service area from the 2020 UWMP identified previously in Table IV.K.1-4 on page IV.K.1-30, the Project’s estimated net operational domestic water demand of 55,910 gallons per day (63 acre feet per year) would represent approximately 0.009 percent, 0.009 percent, and 0.009 percent of LADWP’s projected 2030 average (660,200 acre feet), single-dry (693,200 acre feet), and multi-dry year (675,800 acre feet) water demand and supply, respectively.⁸⁹ Hence, the

⁸⁹ *The Project is compared to LADWP’s projected 2030 water demand and supply because this is the closest of the 2020 UWMP’s five-year projections to the Project’s anticipated buildout year of 2026.*

Project's domestic operational water demand would represent a miniscule proportion of LADWP's projected water demand and supply in 2030.

As outlined in its 2020 UWMP and discussed above, LADWP is committed to providing a reliable water supply for the City. The 2020 LADWP UWMP takes into account the realities of climate change and the concerns of drought and dry weather and notes that the City of Los Angeles will meet all new demand for water due to projected population growth through a combination of water conservation and water recycling. The 2020 LADWP UWMP also furthers the goals of the Green New Deal (also discussed above), addresses the current and future State Water Project supply shortages, and concludes that MWD's actions in response to the threats to the State Water Project would ensure continued reliability of its water deliveries. By focusing on demand reduction and alternative sources of water supplies, LADWP will further ensure that long-term dependence on MWD supplies will not be exacerbated by potential future shortages. Additionally, as reaffirmed in the Green New Deal, the City is committed to conserving and recycling water to help meet future water demands in the City.^{90,91} **Based on the above, LADWP would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, the Project's operation-related impacts on water supply would be less than significant.**

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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

e. Cumulative Impacts

(1) Impact Analysis

(a) *Water Infrastructure*

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the area served by the same water infrastructure as the

⁹⁰ Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.

⁹¹ City of Los Angeles, L.A.'s Green New Deal, 2019.

Project). Development of the Project and the related projects within this geographic area would cumulatively increase demands on the existing water infrastructure system. However, as with the Project, the related projects would be subject to LADWP review (e.g., preparation of a SAR and an IFFAR, where applicable) to ensure that the existing water infrastructure is adequate to meet the domestic and fire water demands of each related project and would be required to provide water infrastructure improvements if existing infrastructure is determined to be inadequate. In addition, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement and update its Water Infrastructure Plan, with the current/latest (2018–2019) plan containing a five-year water system capital improvement plan that includes \$5.6 billion for needed water system infrastructure improvements and maintenance.⁹² In addition, in accordance with City requirements, prior to ground disturbance, related projects would coordinate with LADWP to identify the locations and depths of all lines. Furthermore, 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.

As with the Project, off-site connection activities and infrastructure improvements associated with the related projects could temporarily affect access in adjacent rights-of-way. However, as with the Project, related projects would 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 also be implemented, as necessary, to ensure emergency access to the related project sites and traffic flow is maintained on adjacent right-of-ways.

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

Based on the above, the Project, together with the related projects, would not result in significant cumulative water infrastructure impacts related to the construction or expansion of water facilities or contribute considerably to cumulative water infrastructure impacts. As such, cumulative water infrastructure impacts would be less than significant. Also refer to Section IV.A, Air Quality, and Section IV.G, Noise, of this Draft EIR, for a discussion of the cumulative construction-related impacts, including the potential off-site utility improvements described herein.

⁹² *Los Angeles Department of Water and Power, 2022–2023 Water Infrastructure Plan.*

(b) Water Supply

The geographic context for the cumulative impact analysis of water supply is the LADWP service area. As discussed previously, LADWP, as a public water service provider, is required to prepare and periodically update its UWMP to plan and provide for the water supplies required to serve existing and projected demands within its service area. LADWP's 2020 UWMP accounts for existing development within the City, as well as projected growth through the year 2045.⁹³

As identified in Section III, Environmental Setting, of this Draft EIR, there are 21 related projects located in the vicinity of the Project Site, all of which are located within the LADWP service area. The estimated water demand of the related projects is shown in Table IV.K.1-6 on page IV.K.1-42. As provided therein, the related projects would generate a total estimated water demand of approximately 1,250,231 gallons per day (1,400 acre feet per year). Together with the estimated 55,910 gallons per day (63 acre feet per year) of net water demand from the Project, the total cumulative water demand would be 1,306,141 gallons per day (1,463 acre feet per year). These estimates are conservative because they do not take into account code-required water conservation measures or additional water conservation measures proposed by each related project. Additionally, the estimates do not account for the removal of existing uses and, thus, represent total water demand rather than the net increase over existing conditions.

As previously stated, based on water demand projections in its 2020 UWMP, LADWP has determined that it will be able to reliably provide water to meet the existing and forecasted future demand through the year 2045. In addition, the Project and the related projects would comply with the numerous regulatory requirements that promote water conservation described in the Regulatory Framework subsection above, which would reduce water demand on a cumulative basis. For example, certain related projects would be subject to the City's Green Building Code requirement to reduce indoor water use by at least 20 percent, and all related projects would be required to use fixtures that conserve water. In addition, certain large, related projects meeting the thresholds under SB 610 would be required to prepare and receive LADWP approval of a WSA that demonstrates how the project's water demand would 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. The 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 (Green

⁹³ *Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021.*

**Table IV.K.1-6
Cumulative Water Demand**

No.	Project	Land Use	Size	Generation Factor ^{a,b}	Total Daily Water Demand (gpd)
1	1525 E. Industrial St.	Mixed Use	336,304 sf	N/A	N/A
		Live/Work	344 du	190 gpd/du	65,360
		Leasing/Amenity Area	7,458 sf	0.05 gpd/sf	373
		Creative Office Uses	24,774 sf	0.12 gpd/sf	2,973
		Restaurant	4,042 sf (135 seats)	30 gpd/seat	4,050
2	1340 E 6th Street	Apartments	170 du	190 gpd/du	32,300
		Retail	16,518 sf	0.025 gpd/sf	413
3	668 S. Alameda St.	Live/Work	475 du	190 gpd/du	90,250
		Grocery Store	15,105 sf	0.025 gpd/sf	378
		Retail and Studio Space	27,063 sf	0.025 gpd/sf	677
		Restaurant	27,063 sf (902 seats)	30 gpd/seat	27,060
		Gallery	700 sf	0.03 gpd/sf	21
4	527 S. Colyton St.	Live/Work	475 du	190 gpd/du	90,250
		Retail/Restaurant	12,396 sf (413 seats)	30 gpd/seat	12,390
		Leasable Arts/Production Space	12,396 sf	0.12 gpd/sf	1,488
		Production Space	512 sf	0.12 gpd/sf	61
5	1800 E. 7th St	Residential	122 du	190 gpd/du	23,180
		Commercial	9,500 sf	0.05 gpd/sf	475
		Amenity Space	5,885 sf	0.05 gpd/sf	294
6	1100 E. 5th St.	Live/Work	220 du	190 gpd/du	41,800
		Open Space	22,275 sf		
7	676 S. Mateo St.	Live/Work	185 du	190 gpd/du	35,150
		Commercial	23,380 sf	0.05 gpd/sf	1,169

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

No.	Project	Land Use	Size	Generation Factor ^{a,b}	Total Daily Water Demand (gpd)
8	520 S. Mateo St.	Live/Work	475 du	190 gpd/du	90,250
		Restaurant	10,000 sf (333 seats)	30 gpd/seat	9,990
		Retail	10,000 sf	0.025 gpd/sf	250
		Office	105,000 sf	0.12 gpd/sf	12,600
9	1129 & 1101 E. 5th Street, 445-457 S. Colyton St., 450-456 S. Seaton St.	Live/Work Condominiums	129 du	190 gpd/sf	24,510
		Hotel	113 rm	120 gpd/rm	13,560
		Commercial	81,326 sf	0.05 gpd/sf	4,066
10	400 S. Alameda St.	Hotel	66 rm	120 gpd/rm	7,920
		Restaurant	3,800 sf (127 seats)	30 gpd/seat	3,810
		Specialty Retail	840 sf	0.025 gpd/sf	21
		Screening Room	890 sf	0.12 gpd/sf	107
11	2053 E. 7th St.	Hotel	103 rm	120 gpd/rm	12,360
12	655 S. Mesquit St.	Office	188,954 sf	0.12 gpd/sf	22,674
		Commercial	4,325 sf	0.05 gpd/sf	216
13	405 S. Hewitt St.	Commercial Office	311,682 sf	0.12 gpd/sf	37,402
		Ground Floor Restaurant	8,149 sf (272 seats)	30 gpd/seat	8,160
		Museum	7,800 sf	0.03 gpd/sf	234
14	656 Stanford Ave.	Apartments	82 du	190 gpd/du	15,580

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

No.	Project	Land Use	Size	Generation Factor ^{a,b}	Total Daily Water Demand (gpd)
15	670 S. Mesquit St.	Hotel	236 rm	120 gpd/rm	28,320
		Multi-Family Residential Housing	208 du	190 gpd/du	39,520
		Arts District Central Market (food hall)/Grocery/Retail	136,152 sf	0.05 gpd/sf	6,808
		Restaurant	89,577 sf (2,986 seats)	30 gpd/seat	89,580
		Studio/Event/Gallery/Space/Museum	93,617 sf	0.03 gpd/sf	2,809
		Gym	62,148 sf	0.2 gpd/sf	12,430
16	719 E. 5th St.	Re-Establish Hotel	42 rm	120 gpd/rm	5,040
17	713 E. 5th St.	Apartments	51 du	190 gpd/du	9,690
18	1000 S. Mateo St.	Live/Work	106 du	190 gpd/du	20,140
		Commercial Space	119,845 sf	0.05 gpd/sf	5,992
19	2000 E. 8th St.	Film Production Studio	832,750 sf	0.12 gpd/sf	99,930
20	400 S. Central Avenue	Hotel	68 rm	120 gpd/rm	8,160
		Office	411,113 sf	0.12 gpd/sf	49,334
		Commercial Retail and Restaurant	101,088 sf (3,370 seats)	30 gpd/seat	101,100
21	2045 E. Violet St.	Office	435,100 sf	0.12 gpd/sf	52,212
		Office (Future Expansion Phase)	211,201 sf	0.12 gpd/sf	25,344
Related Total Water Demand					1,250,231
Project Total Water Demand					55,910
Related + Project Total Water Demand					1,306,141
<p>_____</p> <p><i>du = dwelling units</i></p> <p><i>rm = rooms</i></p> <p><i>sf = square feet</i></p>					

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

No.	Project	Land Use	Size	Generation Factor ^{a,b}	Total Daily Water Demand (gpd)
<p>^a This analysis is based on sewage generation rates provided by LASAN’s Sewerage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, effective April 6, 2012.</p> <p>^b This analysis conservatively assumes that all dwelling units are 3-bedroom units. The number of seats for the restaurant uses are estimated based on 1 seat/30 sf.</p> <p>Source: Eyestone Environmental, 2023.</p>					

New Deal). LADWP is planning to achieve these goals by expanding its water conservation efforts through public education, installing high-efficiency water fixtures, providing incentives, and expanding the City’s outdoor water conservation program. To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge. Furthermore, LADWP will continue to update its UWMP every five years to ensure that sufficient 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, 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, together with the related projects, would not result in significant cumulative impacts related to water supply or contribute considerably to cumulative water demand. As such, cumulative water supply impacts would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

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