IV. Environmental Impact Analysis

M. Utility and Service Systems

1. Water Supply

1. Introduction

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

The data and conclusions in this section regarding the availability of water supply to serve the Project are based a Civil Engineering Report, the *1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water* (Infrastructure Technical Report: Water) prepared for the Project and included in **Appendix N.1** of this Draft EIR.

2. Environmental Setting

a) Regulatory Framework

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

- California Urban Water Management Plan Act
- Senate Bill 610, Senate Bill 221 and Senate Bill 7
- Senate Bill X7-7 (Water Conservation Act of 2009)
- Sustainable Groundwater Management Act of 2014
- California Code of Regulations
    - Title 20
    - CALGreen Code
    - Plumbing Code
- Executive Order B-40-17
- Executive Order N-10-21
- Metropolitan Water District
    - 2020 Urban Water Management Plan

    - 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
- City of Los Angeles 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 Act

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 (af/y) of water to customers.

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

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

- Residential developments of more than 500 dwelling units;
- Shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons;
- Commercial office buildings of more than 250,000 square feet of floor space or employing more than 1,000 persons;
- Hotel or motels, or both, having more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;
- Mixed-use projects that falls in one or more of the above-identified categories; or
- A project not falling in one of the above-identified categories but that would demand water equal or greater to 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]

(d) Sustainable Groundwater Management Act of 2014[5]

The Sustainable Groundwater Management Act (SGMA) of 2014, passed in September 2014, is a comprehensive three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities.[6] 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 and 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

1 California State Water Resources Control Board, 20 x 2020 Water Conservation Plan, February 2010, https://www.waterboards.ca.gov/water_issues/hot_topics/20x2020/docs/20x2020plan.pdf. Accessed August 22, 2022.

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

6 California Department of Water Resources. SGMA Groundwater Management. https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management. Accessed August 22, 2022.

pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For the basins that are critically over-drafted, the timeline is 2040. For the remaining high and medium priority basins, the deadline is 2042.

(e) California Code of Regulations

(i) Title 20

Title 20, Section 1605.3 (h) and 1505(i) of the California Code of Regulations (CCR) establishes applicable State efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including fixtures such as showerheads, lavatory faucets and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured on or after July 1, 2018 is 1.8 gpm at 80 psi; and 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.[7]

(ii) CALGreen Code

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

(iii) Plumbing Code

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

[7] California Code of Regulations, Title 20, Section 1605.3(h), page 306, available at: https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I237B3BF0D44E11DEA95CA4428EC25FA0&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)&bhcp=1. Accessed August 22, 2022.

(f) Executive Order B-40-17

On April 7, 2017, Executive Order B-40-17 was issued. Cities and water districts throughout the state are required to report their water use each month and bans wasteful practices, including hosing off sidewalks and running sprinklers when it rains.

(g) Executive Order N-10-21

Title 24, Part 5 of the CCR establishes the California Plumbing Code. The California Plumbing Code sets forth On July 8, 2021 Executive Order N-10-21 (Order) was issued calling for voluntary cutbacks of water usage by 15% from 2020 usage levels. The Order lists commonsense measures Californians can undertake to achieve water usage reduction goals and identifies the State Water Resources Control Board (Water Board) for tracking of monthly reporting on the State's progress.

(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

The Metropolitan Water District's (MWD) 2020 UWMP (MWD UWMP) addresses the future of MWD's water supplies and demand through the year 2045.[8] Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions, i.e. under the most challenging weather conditions such as drought and service interruptions caused by natural disasters, is presented in Table 2-5 of the 2020 RUWMP.[9] The analysis in the 2020 RUWMP concluded that reliable water resources would be available to continuously meet demand through 2045.[10] In the 2020 RUWMP, the projected 2045 demand water 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.[11]

[8] Metropolitan Water District of Southern California, 2020 Regional Urban Water Management Plan, May 2021,
[9] Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19.
[10] Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19,
[11] Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, page 2-19,

MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix, including programs in the Colorado River Aqueduct, SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs.

(ii) 2015 Integrated Resources Plan

The 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 recent IRP (2015 IRP) was adopted in January 2016.[12] It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions.

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

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

[12] Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, Report 1518, January 2016.

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.[13]

The 2020 IRP planning process is currently in development.[14] 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.

(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.[15]

(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

[13] Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, Report 1518, page VIII.
[14] Metropolitan Water District of Southern California, Integrated Water Resources Plan, 2020.
[15] Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan: Report No. 1150, August, 1999.

surcharge, to member agencies during extreme water shortages in MWD's service area conditions (i.e., drought conditions or unforeseen interruptions in water supplies).

The WSAP allows member agencies the flexibility to choose among various local supply and conservation strategies to help ensure that demands on MWD stay in balance with limited supplies. The WSAP formula addresses shortages of MWD supplies, by taking into account growth, local investments, changes in supply conditions and the demand hardening aspects of non-potable recycled water use and the implementation of conservation savings programs.[16] 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, 2016.The 2020 UWMP complies with the Urban Water Management Planning Act, builds upon the goals and progress made in the 2015 UWMP and currently serves as the City's master plan for reliable water supply and resource management consistent with the City goals and objectives. The UWMP details LADWP's efforts to promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide methodology in developing its water demand projections. This methodology does not rely 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 2045. Long range projections are based on Southern California Association of Government (SCAG) growth projections. The 2020 UWMP is based on projections in the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

(b) City of Los Angeles Green New Deal

The City released the first Sustainable City pLAn in April 2015,[17] which has been updated in 2019 as the City's Green New Deal. The Green New Deal includes a multi-faceted approach to developing a locally sustainable water supply to reduce reliance on imported water, reducing water use through conservation, and increasing local water supply and availability.

(c) One Water LA 2040 Plan

In April 2018, the City prepared the One Water LA 2040 Plan (One Water LA Plan), an integrated approach to Citywide recycled water supply, wastewater treatment, and stormwater

16 Metropolitan water District, 2015 Urban Water Management Plan, page 2-21.

17 City of Los Angeles, Sustainable City pLAn, 2015, hhttps://lacity.gov/highlights/sustainable-city-plan. Accessed August 22, 2022.

management.[18] The new plan builds upon the City's Water IRP, which projected needs and set forth improvements and upgrades to wastewater conveyance systems, recycled water systems, and runoff management programs through the year 2020, and extends its planning horizon to 2040. The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for Los Angeles to ensure greater resilience to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive Directive to reduce the City's purchase of imported water by 50 percent by 2024.[19] 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 Citywide General Plan Framework Element (Framework Element) establishes the conceptual basis for the City's General Plan.[20] 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.[21] The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP.

The following General Plan goals, objectives and policies relate to water supply:

Framework Element – Chapter 9 Infrastructure and Public Services	
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.

[18] City of Los Angeles, One Water LA 2040 Plan, Volume 1, Summary Report, April 2018, https://www.lacitysan.org/cs/groups/sg_owla/documents/document/y250/mdi2/~edisp/cnt026188.pdf. Accessed August 22, 2022.

[19] City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response - Creating a Water Wise City, October 14, 2014, https://www.lamayor.org/sites/g/files/wph1781/files/page/file/ED_5_-_Emergency_Drought__Response_-_Creating_a_Water_Wise_City.pdf?1426620015. Accessed August 22, 2022.

[20] City of Los Angeles Department of City Planning, Citywide General Plan Framework, An Element of the Los Angeles General Plan, July 27, 1995, https://planning.lacity.org/odocument/513c3139-81df-4c82-9787-78f677da1561/Framework_Element.pdf. Accessed August 22, 2022.

[21] City of Los Angeles, General Plan Framework Element, Chapter 9: Infrastructure and Public Services – Water Supply.

Framework Element – Chapter 9 Infrastructure and Public Services	
Policy 9.9.1	Pursue all economically efficient water conservation measures at the local and statewide level.
Policy 9.9.7	Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.
Objective 9.10	Ensure that water supply, storage, and delivery systems are adequate to support planned development.
Policy 9.10.1	Evaluate the water system's capability to meet water demand resulting from the Framework Element's land use patterns.
Policy 9.10.2	Solicit public involvement, when appropriate, in evaluating options for the construction of new and/or expansion of existing water facilities.
Objective 9.11	Ensure, to the maximum extent possible, the continued provision of water capacity, quality and delivery after an earthquake or other emergency.
Policy 9.11.1	Provide for the prompt resumption of water service with adequate quantity and quality of water after an emergency.
Source: City of Los Angeles, City of Los Angeles General Plan, Framework Element, re-adopted 2001.	

(ii) Central City North 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 City's General Plan Framework 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 boundary of the Central City North Community Plan. The Central City North Community Plan does not contain water supply objectives and policies applicable to the Project.[22]

(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.

[22] Los Angeles City Department of Planning, Central City North Community Plan.

- Ordinance No. 181,480—amended LAMC Chapter IX by adding Article 9 (Green Building Code) to the LAMC to incorporate various provisions of the CALGreenCode. 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 20percent reduction in baseline water use.

- Ordinance Nos. 181,899 and 183,833—amended LAMC Chapter VI, Article 4.4, Section 64.72 regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.

- Ordinance No. 182,849—amended LAMC Chapter IX, Article 9 (Green Building Code) to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 square feet, separate sub-meters or metering devices shall be installed for outdoor potable water use. This ordinance also required that for new non-residential construction with at least 1,000 square feet of cumulative landscaped area, weather or soil moisture–based irrigation controllers and sensors be installed.

- Ordinance No. 184,692—amended LAMC Chapter IX, Article 4 (Plumbing Code) by adopting by reference various sections of the California Plumbing Code. This ordinance also added requirements for plumbing fixtures and fixture fitting.

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

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

b) Existing Conditions

According to the LADWP 2020 UWMP, the primary LADWP sources of water supplies are water purchased from the Metropolitan Water District, surface water imported via the Los Angeles Aqueduct, and local groundwater. Recycled water projects are progressing and expected to be a greater portion of LADWP water supply in the future. Overall, these sources of water provide the necessary water to meet LADWP's water supply needs. The LADWP 2020 UWMP water demand projection for 2045 is approximately 710,500 acre-feet per year, based on normal weather conditions.[23]

(1) City-Controlled Water Supplies

(a) Los Angeles Aqueduct

The Los Angeles Aqueduct, local groundwater, and recycled water constitute the City-controlled water supplies. The Los Angeles Aqueduct conveys snowmelt runoff from the eastern Sierra Nevada Mountains and has a capacity of holding a flow of 485 cubic feet per second (cfs) of water.[24] Secondarily, the Los Angeles Aqueduct water supplies are supplemented by groundwater pumping. The Los Angeles Aqueduct supplies fluctuate from year to year due to varying annual snowfall and hydrological conditions. In recent years, the Los Angeles Aqueduct supplies have decreased because of environmental obligations to dedicate water resources to mitigate groundwater pumping in the Owens Valley, restore the water level of Mono Lake, and mitigate dust emissions from Owens Lake.

The Los Angeles Aqueduct system extends approximately 340 miles from the Mono Basin to the City. From 1995 through 2004, the Los Angeles Aqueduct supplied about half of the City's water needs. The City owns approximately 312,000 acres of property in the Owens Valley and appropriates groundwater from its lands in the Owens Valley pursuant to a long-term groundwater management plan with Inyo County.[25] The City and Inyo County prepared a long-term groundwater management agreement, known as the *Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County*.[26] This agreement sets forth plans and procedures to prevent overdraft conditions from groundwater pumping as well as to manage vegetation in the Owens Valley. In July 1998, LADWP and the Great Basin Unified Air Pollution

[23] City of Los Angeles, Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page ES-21.

[24] Los Angeles Department of Water and Power, Water, Los Angeles Aqueduct, Facts & History Website, available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-losangelesaqueduct/a-w-laa-factsandhistory?_adf.ctrl-state=frjf8vhwe_17&_afrLoop=225287147720902. Accessed August 22, 2022.

[25] Los Angeles Department of Water and Power, Water, Los Angeles Aqueduct, Facts & History Website, available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-losangelesaqueduct/a-w-laa-factsandhistory?_adf.ctrl-state=frjf8vhwe_17&_afrLoop=225287147720902. Accessed August 22, 2022.

[26] Inyo County and City of Los Angeles, Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County, June 1990.

Control District entered into a Memorandum of Agreement to mitigate dust emissions from Owens Lake.

(b) Groundwater

In addition to groundwater extraction from nine wellfields throughout the Owens Valley, the LADWP also extracts from three local groundwater basins: San Fernando, Sylmar, and Central. The LADWP plans to continue future pumping from the local basins, with limitations based on water quality and overdraft protection. The LADWP's groundwater pumping strategy is based on a "safe yield" strategy, in which the amount of water removed over a period of time equals the amount of water entering the groundwater basin through native and imported groundwater recharge. Further, protection from potential overdraft conditions is provided by the court-appointed Los Angeles River Area Watermaster for the San Fernando and Sylmar Basins, and a court-appointed Watermaster Panel for the Central Basin. The Watermaster Panel consists of three separate arms; the first arm is the Administrative Body, performed by the Water Replenishment District of Southern California (WRD), which administers the Watermaster accounting and reporting functions; the second arm is the Central Basin Water Rights Panel (CBWRP), which enforces issues related to pumping rights defined in the adjudication; and the third arm is the Storage Panel, which is comprised of the CBWRP and the WRD Board of Directors. Annually, the Watermaster prepares a Watermaster Service Report indicating groundwater extractions, replenishment operations, imported water use, recycled water use, finances of Watermaster services, administration of the water exchange pool, and significant water-related events in the Central Basin.[27] Additionally, a long-term groundwater management agreement between the City and Inyo County ensures the protection of LADWP's groundwater resources within Owens Valley from overdraft conditions.

Local groundwater provides approximately 8 percent of the total water supply to the City and has provided nearly 23 percent of the supply in drought years. On average, about 84 percent of the LADWP's groundwater supply is extracted from the Upper Los Angeles River Area, while the Central Basin provides 16 percent. The Upper Los Angeles River Area has four local groundwater basins, however, only two produce groundwater:

- San Fernando, and
- Sylmar.[28]

LADWP groundwater rights in the basins are adjudicated, meaning they are confirmed and apportioned by judgments of the California Superior Courts. The adjudications are based on maintaining long-term groundwater extractions that will not create an overdraft condition in the basin as well as to manage vegetation in the Owens Valley. The San Fernando and Sylmar basins are subject to the judgment in *The City of Los Angeles vs. the City of San Fernando, et*

[27] Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page 5-3.

[28] Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page 5-15.

al.[29] Pumping is reported to the court-appointed Upper Los Angeles River Area Watermaster. The average LADWP San Fernando and Sylmar basin entitlements under the judgment are 87,000 acre-feet per year and 3,570 acre-feet per year, respectively.[30] In addition, as of October 2018, LADWP accumulated nearly 591,460 acre-feet of stored water credits in the San Fernando Basin. This stored water credit is water that LADWP can withdraw from the basin during normal and dry years or in an emergency.[31]

The Central Basin and West Coast Basin water rights were established through the Central Basin Judgment and West Coast Basin Judgment, respectively. Pumping is reported to a Watermaster Panel, comprised of WRD and CBWR. The Central Basin Judgment entitlement for the LADWP is 17,236 acre-feet per year. The West Coast Basin Judgment entitles LADWP to approximately 5,000 acre-feet per year. LADWP does not currently exercise its water rights in the West Basin.[32]

As shown in **Table IV.M.1-1, Groundwater Production Forecasts**, LADWP plans to continue 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. Both LADWP and the California Department of Water Resources have programs in place to monitor wells to prevent over drafting.

Table IV.M.1-1
Groundwater Production Forecasts

Basin	2019/20 (Actual)	2024/25	2029/30	2034/35	2039/40	2044/45
	AF/Y					
San Fernando[1]	42,913	98,000	106,000	113,000	113,000	113,000
Sylmar[2]	3	4,170	4,170	4,170	3,570	3,570
Central[2]	11	18,245	18,245	18,245	18,245	18,245
Total	42,927	128,415	128,415	135,415	134,815	134,815

[1] SFB remediation facilities are expected to be in operation in FY 2021/22. Use of groundwater storage credits allows for increased pumping above safe yield.

[2] Use of groundwater storage credits in Sylmar Basin and Central Basin allows for temporary increase in pumping above safe yield until stored water credits have been expended.

Source: Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pages 5-24.

In response to contamination issues and declining groundwater levels, the LADWP is working to clean up the San Fernando Basin's groundwater and is making investments to recharge local groundwater basins through stormwater recharge projects, while collaborating on the rehabilitation of aging stormwater capture and spreading facilities, with the long-range goal of increasing the contribution of groundwater to overall City water supplies.

29 City of Los Angeles v. City of San Fernando et al. (1975) 14 Cal.3d 199.

30 Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pages 5-7, 5-13.

31 Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pages 5-7.

32 Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, pages 5-15, 5-18.

(2) Purchased Water

The remainder of the City's water demand is supplied by purchases from Metropolitan Water District. The Metropolitan Water District imports its water supplies from Northern California through the State Water Project's California Aqueduct and from the Colorado River by way of the Metropolitan Water District's Colorado River Aqueduct. LADWP is one of 26 member-agencies that have preferential rights to purchase water from the Metropolitan Water District. LADWP has a preferential right to purchase water from the Metropolitan Water District pursuant to Metropolitan Water District Act Section 135. As a percentage of the City's total water supply, purchases of Metropolitan Water District water have historically varied from 4 percent in 1983-84 to 71 percent in 2008-09, with a five-year average 42 percent between 2015-16 and 2019-20. The City relies on the Metropolitan Water District even more in dry years and has increased its dependence in recent years as Los Angeles Aqueduct supply has been reduced. Although the City plans to reduce its reliance on Metropolitan Water District supply, it has made significant investments in the Metropolitan Water District anticipating that the City will continue to rely on the wholesaler to meet its current and future supplemental water needs.[33]

Accounting for current water supplies, planned future water conservation and planned future water supplies, LADWP projects that it will be able to reliably provide water to its customers through the 25-year planning period covered by the LADWP 2020 UWMP. The LADWP 2020 UWMP currently shows that with its investments in storage, water transfers and improving the reliability of the Delta, water shortages are not expected to occur within the next 25 years.[34]

(3) Fire Flow and Infrastructure

In addition to supplying water for domestic uses, the LADWP also supplies water for fire protection services, in accordance with Fire Code (see discussion in **Section IV.J.1, Public Services - Fire Protection** of this Draft EIR). Fire flow requirements are closely related to land use as the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). City-established fire flow requirements vary from 2,000 gallons per minute (gpm) in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In any instance, a minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system while the required gpm is flowing.

There is existing fire infrastructure serving the Project Site. There are two existing hydrants adjacent to the Project Site: one on the southeast corner of 5th Street and Seaton Street; and one on the east side of Seaton Street, mid-block between 5th Street and Palmetto Street. There are four additional existing hydrants in the vicinity of the Project Site: one on the north side of 5th Street, east of Alameda Street; one on the west side of Colyton Street, mid-block between 5th Street and Palmetto Street; one at the southeast corner of 5th Street and Colyton Street; and one

[33] Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page 9-1.

[34] Los Angeles Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page ES-19.

on the west side of Seaton Street, north of Palmetto Street. The locations of all hydrants can be seen in Exhibit 2 of the Infrastructure Technical Report: Water (**Appendix N.1**).

(4) Current and Future Water Use

As discussed previously, in accordance with the California Urban Water Management Planning Act of 1984, all urban water suppliers that provide municipal and industrial water to more than 3,000 customers, or supply more than 3,000 acre-feet per year of water, are required to prepare and adopt an UWMP. According to the LADWP 2020 UWMP, water use in the City in 2020 was below the average amount of water use in the 1970s, although the City population has increased by over one million people during this period.[35] The LADWP 2020 UWMP projects yearly water demand to reach approximately 710,500 acre-feet by 2045.[36] California law requires the UWMP to be updated every five years, which includes an update of water supply and demand projections. LADWP's Action Plan strategizes for the implementation of water conservation measures and water recycling to promote a reliable future water supply. The City plans to meet all future increases in water demand through water conservation and recycling efforts, thereby decreasing its reliance on imported water. Further, the MWD's current IRP aims to outline a strategy for reliable future water supplies through 2040. Successful implementation of the IRP has resulted in reliable supplemental water supplies for the City from the MWD. Finally, State Water Code Section 350-354 regulates water distribution during periods of extreme drought, ensuring that when the distributor of a public water supply declares a water shortage emergency within its service area, water will be allocated to meet domestic, sanitation, and fire protection needs.

(5) Local Water Infrastructure and Consumption

The Project Site is currently developed with two single-story vacant warehouses that occupy 31,600 square feet of floor area, two covered shelters, and an at grade concrete parking lot totaling 22,409 square feet. LADWP maintains water infrastructure to the Project Site. Based on available record data provided by the City, there is a 6-inch water main in 5th Street and a 6-inch water main in Seaton Street.[37] In addition, there are two domestic water meters that serve the Project Site. As the existing uses are currently vacant there is no on-site consumption of water.

3. Project Impacts

a) Thresholds of Significance

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

[35] City of Los Angeles, Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page 3-2.

[36] City of Los Angeles, Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page ES-21.

[37] 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, October 19, 2020, **Appendix N.1** of this Draft EIR.

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; or***

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

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

- *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 the project completion; and*
- *The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.*

The potential for the Project to result in impacts to water supply and infrastructure is based on the *State CEQA Guidelines* Appendix G thresholds and criteria identified in the *L.A. CEQA Thresholds Guide* that provide supplemental analysis to the Appendix G thresholds, where applicable. The City's threshold criteria above are considerations that were made as part of the analysis of the Appendix G thresholds for water supply and infrastructure.

b) Methodology

The Project would involve the demolition of the existing warehouses and surface parking lot, and the construction of an up to 249,758-square-foot mixed-use building including up to 220 live/work units, approximately 22,725 square feet of open space for residents, up to 46,548 square feet of commercial uses, and associated parking facilities. The Project also proposes the ability to implement an increased commercial option that would provide the Project the flexibility to replace a certain number of live-work units with an increased commercial square footage provided by the Project within the same building parameters (i.e., 249,758-square-foot) and, in turn, reduce the overall amount of live/work units from 220 live/work units to 200 live/work units. The Project is a mixed-use project that does not exceed the thresholds established above; therefore, a WSA is not required.

The environmental impacts of the Project with respect to water are determined based on the proposed increase in water demand and the capacity of existing and proposed infrastructure. The existing and proposed water demand is based upon available Project Site and Project information,

and utilizes 120 percent of the Bureau of Sanitation (BOS) sewerage generation factors. The future water demand impacts were determined by subtracting the existing uses water demand from the Project's total water demand to determine the Project's water demand. The resulting water demand associated with the Project was then analyzed in relationship to LADWP's existing and planned future water supplies to determine if LADWP would be able to accommodate the Project's water demands.

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 and to determine if available water conveyance exists for future development. 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 based on existing infrastructure.

c) Project Design Features

In addition to regulatory requirements, the Project design would incorporate the following water conservation project design feature to support water conservation in addition to those measures required by the City's current codes and ordinances:

- **PDF WAT-1.** The Project shall include, but not be limited to, the following water conservation features:
    - High Efficiency Toilets with a flush volume of 1.1 gallons or less per flush;
    - Showerheads with a flow rate of 1.5 gallons or less per minute;
    - Residential Lavatory Faucets (manual) with a flow rate of 0.5 gallons or less per minute;
    - ENERGY STAR Certified Residential Clothes Washers – front-loading with an integrated water factor of 2.7 or less and a capacity of 5.6 cubic feet;
    - ENERGY STAR Certified Residential Dishwashers – standard with 3.2 gallons or less per cycle;
    - Domestic Water Heating System located in close proximity of point(s) of use;
    - Individual metering and billing for water use for every residential dwelling unit and commercial unit;
    - Water-Saving Pool Filter or Reuse pool backwash water for irrigation;
    - Pool/Spa recirculating filtration equipment;
    - Pool splash troughs around the perimeter that drain back into the pool;
    - Install a meter on the pool make-up line so water use can be monitored and leaks can be identified and repaired; and
    - Proper Hydro-zoning/Zoned Irrigation - (groups, plants with similar water requirements together).

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The

overall commercial square footage provided would be increased by 17,765 square feet to 64,313 square feet and, in turn, there would be a reduction in the number of live/work units from 220 to 200 units. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

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?

As compared to the Project, the Flexibility Option would change a portion of the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 17,765 square feet to 64,313 square feet and, in turn, there would be a reduction in the number of live/work units from 220 to 200 units. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. Furthermore, with regard to water infrastructure, the Flexibility Option would be located on the same Project Site and connect to the same water infrastructure as the Project. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

The following analysis discusses the Project impacts in regards to the relocation or construction of new or expanded water facilities. Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for an impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems – Wastewater, threshold (b)** of this Draft EIR, for an impact analysis discussion on wastewater treatment facilities. Refer to **Section IV.M.4, Utility and Service Systems – Dry Utilities,** of this Draft EIR, for an impact analysis discussion on electric power, natural gas, and telecommunication facilities.

(1) Impact Analysis

(a) Construction

Water demand for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water use ranges from 1,000 to 2,000 gpd.[38] While temporary construction water use would be more than the

[38] 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, October 19, 2020, **Appendix N.1** of this Draft EIR.

current non-existent water consumption at the Project Site, this estimated construction-period demand is significantly less than the Project's estimated operational demand, which, as described below, can be accommodated by the existing infrastructure. Accordingly, the existing water infrastructure would similarly meet the limited and temporary water demand associated with construction of the Project such that no new or expanded water facilities would need to be constructed to meet the Project's construction demands.

The Project would require construction of new, on-site water distribution lines to serve the new building. Construction impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the water distribution lines below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. 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. Activities associated with the installation of the water distribution lines would be in accordance with the actions and procedures outlined in the Project's Construction Staging and Traffic Management Plan (CSTMP) (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR). **Therefore, construction of the Project would not require or result in the relocation or construction of new water facilities or the expansion of existing facilities that could cause a significant environmental effect. As such, construction-related impacts on water infrastructure would be less than significant. No mitigation measures are required.**

(b) Operation

When analyzing the capacity of the water infrastructure system to serve a project, the estimated operational demands of the project for both fire suppression and domestic water are considered. Although domestic water demand would be the Project's main contributor to water demand in the long term, the Project's flow demands have a much greater instantaneous impact on infrastructure and therefore are the primary means for analyzing infrastructure capacity. Conservative analysis for both fire suppression and domestic water flows has been completed for the Project as summarized in the Utility Infrastructure Technical Report: Water included as **Appendix N.1** of this Draft EIR. Specifically, see Exhibit 1 and Exhibit 2 in **Appendix N.1** for the results of the Service Advisory Request (SAR) and Information of Fire Flow Availability Request (IFFAR), respectively, which demonstrate that adequate water infrastructure capacity exists to serve the Project.[39]

(i) Fire Flow

The Project Site land use designation is Industrial and Commercial, and pursuant to the fire flow standards set forth in Section 57.507.3 of the LAMC, the required fire flow is 6,000 to 9,000 gallons per minute (gpm) from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch (psi). Hydrants can typically deliver up to 1,500 gpm, which is consistent with the requirement for 9,000 gpm from six hydrants simultaneously. Therefore, an IFFAR identifying 4 adjacent hydrants was submitted to LADWP to confirm that

[39] KPFF Consulting Engineers, 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, October 19, 2020, (**Appendix N.1** of this Draft EIR).

LADWP's infrastructure is capable of delivering the required flow of 6,000 gpm while maintaining a minimum pressure of 20 psi. The IFFAR shows four hydrants flowing simultaneously for a combined flow of 6,000 gpm at greater than 20 psi. Additional analysis shows that, with 6 hydrants flowing simultaneously, LADWP's infrastructure can deliver a total of 8,326 gpm at greater than 20 psi. As such, adequate fire flow is available to serve the Project in compliance with LAMC Section 57.507.3.[40]

In addition, the Project would incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands. Per LAMC Section 94.2020.0, which adopts by reference NFPA 14-2013 including Section 7.10.1.1.5, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. The SAR in the Infrastructure Technical Report: Water (**Appendix N.1**) indicates that the 6-inch main in Seaton Street can deliver a flow of up to 1,400 gpm to the Project Site with a residual pressure of 60 psi, well above the 20 psi requirement. As such, adequate water pressure is available to operate the proposed fire sprinkler suppression system.

(ii) Domestic Water Demand

Domestic water demand has been estimated for the Project by the Infrastructure Technical Report: Water based on BOS sewage generation factors. As discussed further under Threshold b) below, the Project is estimated to result in a water demand of 47,117 gpd.[41] The Project proposes to connect to the existing 6-inch main in Seaton Street via new on-site laterals that would connect the new on-site water system to the existing water main in the street. As discussed above, the SAR for the 6-inch main in Seaton Street can deliver a flow of up to 1,400 gpm to the Project Site with a residual pressure of 60 psi, well above the 20 psi requirement. The approved SAR confirms that sufficient infrastructure capacity is available for the Project.[42,43] Accordingly, the Project would not exceed the available capacity of the existing water infrastructure that serves the Project Site.

(iii) Conclusion

As detailed above, the existing water infrastructure has been demonstrated to have adequate capacity, flow, and pressure to serve the fire flow, fire suppression, and domestic demands of the Project. **Therefore, operation of the Project and Flexibility Option 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.**

40 KPFF Consulting Engineers, 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, October 19, 2020, (**Appendix N.1** of this Draft EIR), Exhibit 1.

41 KPFF Consulting Engineers, 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, October 19, 2020, (**Appendix N.1** of this Draft EIR), Table 2, page 8.

42 KPFF Consulting Engineers, 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, October 19, 2020, (**Appendix N.1** of this Draft EIR), Exhibit 1.

43 Because the Flexibility Option would result in a lower water demand of 44,383 gpd, sufficient infrastructure capacity would also be available for the Flexibility Option.

Accordingly, the Project's and Flexibility Option's operational impact on water infrastructure would be less than significant. No mitigation measures would be required.

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to water infrastructure would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to water infrastructure would be less than significant without mitigation.

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?

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore this analysis is presented separately.

(1) Impact Analysis

(a) Project

(i) Construction

As discussed under Threshold a), a conservative estimate of construction water use ranges from 1,000 to 2,000 gpd.[44] This water use would vary depending on soil conditions, weather, and the specific activities being performed. Nevertheless, Project construction-related water use would be minimal and temporary. Furthermore, as detailed in the water supply analysis of the Project's operational demand, projected LADWP water supplies during normal, single-dry, and multiple-dry years, as reported in LADWP's 2020 UWMP, would be sufficient to meet the Project's estimated operational water demand in addition to the existing and forecasted water demands within LADWP's service area through the year 2045. While temporary construction water use would be more than the current non-existent water consumption at the Project Site, the Project's construction-related water demand of 2,000 gpd would represent a small fraction (4.2 percent)[45] of the Project's estimated operational water demand of 47,117 gpd. Therefore, LADWP water supplies would be more than adequate to meet the Project's water demand during construction during normal, single-dry, and multiple-dry years. **As such, LADWP would have sufficient water supplies available to serve the Project during construction and reasonably foreseeable future development during normal, dry and multiple dry years. Project construction-related water supply impacts would be less than significant. No mitigation measures are required.**

[44] 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, October 19, 2020, **Appendix N.1** of this Draft EIR.

[45] Calculated as: 2,000 gpd / 47,117 gpd = 4.2 percent.

(ii) Operation

Operation of the Project would increase water demands within the LADWP service area. Project water use has been estimated and is presented below in **Table IV.M.1-2, Project Estimated Daily Water Consumption**. As shown in **Table IV.M.1-2**, the Project would consume a total of approximately 47,177 gpd or 52.96 acre-feet per year (af/y) of water.

Table IV.M.1-2
Project Estimated Daily Water Consumption

Land Use	Size	Consumption Rate[a]	Total Consumption (gpd)	Total Consumption (af/y)
Apartment: 1 Bedroom	191 du	185/du[b]	35,335	39.4
Apartment: 3 Bedroom	29 du	265/du[b]	7,685	8.76
Commercial and Art Production Space	46,548	60/1,000 sf	2,793	3.3
Open Space	22,725 sf	60/1,000 sf	1,364	1.5
Total Project Water Consumption			*47,177*	*52.96*
Existing Water Consumption			***0***	***0***
Net Total Water Consumption			**47,177**	**52.96**

Notes: gpd = gallons per day
[a] *The average daily flow based on 120 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
[b] *The consumption rates are comprised of an artist space in addition to living space.*
Source (table): KPFF, 2020, ***Appendix N.1*** *of this Draft EIR.*

The above projections are considered to be conservative as the Bureau of Sanitation generation rates used to calculate the water consumption do not account for any water conservation features required by local and state policies and regulations. Pursuant to PDF WAT-1, the Project would implement water saving features to reduce the amount of water used by the Project including high efficiency water fixtures and appliances, water-saving pool features and design, and zoned irrigation. All fixtures would be required to meet applicable flush volumes and flow rates. Implementation of these water saving features pursuant to PDF WAT-1 and compliance with water conservation regulatory requirements, including Title 20 and 24 of the California Administrative Code, would further reduce the above projected water demand below the sewage generation factors assumed by the City's Bureau of Sanitation.

The LADWP 2020 UWMP water demand projection for 2045 is approximately 710,500 af/y for average years, 746,000 af/y for single-dry years, and 727,400 af/y for the first year in multiple-dry years and 731,500 af/y for the second year in multiple-dry years.[46] As shown in **Table IV.M.1-2, Project Estimated Daily Water Consumption**, the Project is anticipated to consume approximately 52.96 af/y of water. This projected water demand from the Project falls within the LADWP 2020 UWMP's projected water supplies through 2045, representing approximately 0.0075 percent of the projected water supply during average years (710,500 af/y), approximately 0.0071 percent of the projected water supplies during single-dry years (746,000 af/y), and approximately 0.0073 percent of the projected water supplies during the first year in multiple-dry years (727,400 af/y) and approximately 0.0072 percent for the second year in multiple-dry years (731,500 af/y). Therefore, the amount of new annual demand from the Project would be

[46] City of Los Angeles, Department of Water and Power, 2020 Urban Water Management Plan, May 2021, page ES-20 to ES 22.

insignificant relative to available supplies through 2045, projected growth in Los Angeles, and planned water resource development by LADWP, and LADWP would have available supplies to meet all demands under all three hydrologic scenarios (normal, single-dry, and multiple-dry years) through the 25-year planning period covered by the 2020 UWMP.

Furthermore, LADWP has stated that, "in general, projects that conform to the demographic projections from SCAG's RTP/SCS and are currently located in the City's service area are considered to have been included in the LADWP's water supply planning efforts; therefore, projected water supplies would meet projected demands."[47] As discussed in further detail in **Section IV.I, Population and Housing**, of this Draft EIR, the Project would be consistent with the regional growth projections of SCAG's 2016-2040 RTP/SCS and 2020-2045 RTP/SCS. Therefore, the water demand for the Project would be within the LADWP water demand projections for the service area.

Lastly, as outlined in its 2020 UWMP, LADWP is committed to providing a reliable water supply for the City and is making efforts to increase the availability of water supplies, including increasing recycled water use and identification of alternative water supplies, such as water transfer, desalination, and stormwater runoff reuse, as well as implementing management agreements for long-term groundwater use strategies to prevent overdraft.[48] The 2020 UWMP accounts for the realities of climate change and the concerns of drought and dry weather and notes that the City will meet the demand for water under all three hydrologic scenarios (normal, dry, and multi-dry) through the 25-year planning period.[49] The 2020 UWMP also addresses the current and future State Water Project supply shortages affecting MWD's water delivery reliability. MWD's 2020 RUWMP shows that through investments in storage, water transfers, and improving the reliability of the Delta, critical water shortages are not expected to occur within the next 25 years.[50] However, 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.[51]

As such, LADWP would have sufficient water supplies available to serve the Project during operation and reasonably foreseeable future development during normal, dry, and multiple dry years. Project operation-related water supply impacts would be less than significant. No mitigation measures are required.

47 Written correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, July 21, 2017, page 4. See **Appendix K** of this Draft EIR.
48 LADWP, 2020 Urban Water Management Plan, May 2021, page ES-15.
49 LADWP, 2020 Urban Water Management Plan, May 2021, page ES-20.
50 Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, June 2021, page ES-6.
51 LADWP, 2020 Urban Water Management Plan, May 2021, pages 11-4.

(b) Flexibility Option

(i) Construction

As discussed under Threshold a), a conservative estimate of construction water use ranges from 1,000 to 2,000 gpd.[52] As with the Project, while temporary construction water use would be more than the current non-existent water consumption at the Project Site, the Flexibility Option's construction-related water demand of 2,000 gpd would represent a small fraction (4.5 percent)[53] of the its estimated operational water demand of 44,383 gpd, which, as detailed below, would be within the supply projections for LADWP. Therefore, LADWP water supplies would be more than adequate to meet the Flexibility Option's water demand during construction during normal, single-dry, and multiple-dry years. **As such, LADWP would have sufficient water supplies available to serve the Flexibility Option during construction and reasonably foreseeable future development during normal, dry and multiple dry years. Project construction-related water supply impacts would be less than significant. No mitigation measures are required.**

(ii) Operation

As with the Project, Operation of the Flexibility Option would increase water demands within the LADWP service area. The Flexibility Option water use has been estimated and is presented below in **Table IV.M.1-3, Flexibility Option Estimated Daily Water Consumption**. As shown in **Table IV.M.1-3**, the Flexibility Option would consume a total of approximately 44,383 gpd or 50.1 af/y of water. As with the Project, Flexibility Option would implement the water conservation features of PDF WAT-1 and comply with the efficiency requirements of Title 20 and 24 and the California Administrative Code, further reducing the projected water demand beyond the conservative BOS-based estimate.

Table IV.M.1-3
Flexibility Option Estimated Daily Water Consumption

Land Use	Size	Consumption Rate[a]	Total Consumption (gpd)	Total Consumption (af/y)
Apartment: 1 Bedroom	173 du	185/du[b]	32,005	35.8
Apartment: 3 Bedroom	27 du	265/du[b]	7,155	8.4
Commercial and Art Production Space	64,313 sf	60/1,000 sf	3,859	4.4
Open Space	22,725 sf	60/1,000 sf	1,364	1.5
Total Flexibility Option Water Consumption			44,383	*50.1*
Existing Water Consumption			***0***	***0***
Net Total Water Consumption			**44,383**	**50.1**

Notes: gpd = gallons per day; af/y = acre-feet per year; sf = square feet; du = dwelling unit
[a] *The average daily flow based on 120 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
[b] *The consumption rates are comprised of an artist space in addition to living space.*
Source (table): KPFF, 2020, ***Appendix N.1*** *of this Draft EIR.*

[52] 1100 East 5th Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, October 19, 2020, **Appendix N.1** of this Draft EIR.
[53] Calculated as: 2,000 gpd / 44,383 gpd = 4.5 percent.

Similar to the Project, this projected water demand from the Flexibility Option (50.1 af/y) falls within the LADWP 2020 UWMP's projected water supplies, representing approximately 0.0071 percent of the projected water supply during average years (710,500 af/y), approximately 0.0067 percent of the projected water supplies during single-dry years (746,000 af/y), and approximately 0.0069 percent of the projected water supplies during the first year in multiple-dry years (727,400 af/y) and approximately 0.0068 percent for the second year in multiple-dry years (731,500 af/y). Therefore, the amount of new annual demand from the Flexibility Option would be insignificant relative to available supplies, projected growth in Los Angeles, and planned water resource development by LADWP, and LADWP would have available supplies to meet all demands under all three hydrologic scenarios (normal, single-dry, and multiple-dry years) through the 25-year planning period covered by the 2020 UWMP. In addition, as discussed in further detail in **Section IV.I, Population and Housing**, of this Draft EIR, the Flexibility Option would be consistent with the regional growth projections of SCAG's 2016-2040 RTP/SCS and 2020-2045 RTP/SCS. Therefore, as with the Project, the water demand for the Flexibility Option would be within the LADWP water demand projections for the service area.

Lastly, as outlined in its 2020 UWMP, LADWP is committed to providing a reliable water supply for the City and is also making efforts to increase the availability of water supplies, including increasing recycled water use and identification of alternative water supplies, such as water transfer, desalination, and stormwater runoff reuse, as well as implementing management agreements for long-term groundwater use strategies to prevent overdraft.[54] The 2020 UWMP accounts for the realities of climate change and the concerns of drought and dry weather and notes that the City will meet all new demand for water due to projected populations growth through a combination of water conservation and water recycling.[55] The 2020 UWMP also addresses the current and future State Water Project supply shortages affecting MWD's water delivery reliability. MWD's 2020 RUWMP shows that through investments in storage, water transfers, and improving the reliability of the Delta, critical water shortages are not expected to occur within the next 25 years.[56] However, 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.[57]

As such, LADWP would have sufficient water supplies available to serve the Flexibility Option during operation and reasonably foreseeable future development during normal, dry, and multiple dry years. Project operation-related water supply impacts would be less than significant. No mitigation measures are required.

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to water supply would be less than significant; no mitigation measures would be required.

54 LADWP, 2020 Urban Water Management Plan, May 2021, page ES-15.
55 LADWP, 2020 Urban Water Management Plan, May 2021, page ES-20.
56 Metropolitan Water District of Southern California, 2020 Urban Water Management Plan, June 2021, page ES-6.
57 LADWP, 2020 Urban Water Management Plan, May 2021, pages 11-4.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to water supply would be less than significant without mitigation.

4. Cumulative Impacts

a) Impact Analysis

(1) Water Infrastructure

The geographic context for the cumulative impact analysis on water infrastructure is the vicinity of the Project Site (i.e., the area served by the same water infrastructure as the Project). Development of the Project and future new development within geographic area (for example, Related Project Nos. 2, 4, and 5, which are located within two blocks of the Project Site and could potentially obtain their water from the same local water mains as the Project) would cumulatively increase demands on the existing water infrastructure system. Similar to the Project, Related Projects would be subject to LADPW review (e.g. preparation of a SAR and IFFAR) to assure the existing public infrastructure would be adequate to meet the domestic and fire water demands. Each project would be required to demonstrate that water infrastructure to serve its project site is adequate. As discussed above, the Project completed that process and LADWP confirmed that six nearby hydrants that serve the Project Site provide sufficient flow and pressure to satisfy the needs of the fire suppression for the Project. In addition, to ensure its infrastructure is sufficient to meet ongoing demand, LADWP will continue to implement and update its Water Infrastructure Plan (WIP), with the current (2018–2019) WIP containing a five-year water system capital improvement plan that includes $6.3 billion for needed water system infrastructure improvements and maintenance.[58]

Furthermore, in accordance with City requirements, prior to ground disturbance, the related projects would be required to coordinate with LADWP to identify the locations and depths of all lines, and LADWP would be notified in advance of proposed ground disturbance activities to avoid disruption of water service associated with the related projects. LADWP would also review and approve all appropriate connection requirements, pipe depths, and connection location(s) associated with the related projects.

Therefore, neither the Project nor the Flexibility Option together with the Related Projects would not result in significant cumulative water infrastructure impacts related to the construction or expansion water facilities, nor would the Project or the Flexibility Option contribute considerably to cumulative water infrastructure impacts. As such, cumulative water infrastructure impacts would be less than significant.

[58] LADWP, 2018-2019 Water Infrastructure Plan.

(2) Water Supply

Numerical differences exist regarding the impact analysis and impact significance determination presented below because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(a) Project

The geographic context for the cumulative impact analysis on water supply is the LADWP service area, which includes the entirety of the City. LADWP, as a public water service provider, is required to prepare and periodically update an UWMP to plan and provide for water supplies to serve existing and projected demands. The LADWP 2020 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2045.

Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The types of projects that are subject to the requirements of Senate Bill 610 tend to be larger projects that may or may not have been included within the growth projections of the LADWP 2020 UWMP. The water supply assessment for projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

Furthermore, through LADWP's 2020 UWMP process and the City's Securing L.A.'s Water Supply, the City will meet all new demand for water due to projected population growth to the year of 2045, through a combination of water conservation and water recycling. These plans outline the creation of sustainable sources of water for the City to reduce dependence on imported supplies. LADWP is planning to achieve these goals by expanding its 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.

There are 17 Related Projects, which consist of residential, retail, school, restaurant, bar, hotel, office, museum, warehouse, health club, movie theater, and event space land uses. As shown in **Table IV.M.1-4, Estimated Daily Water Consumption of the Related Projects**, the total increase in water demand for the Related Projects is approximately 1.29 million gallons per day (mgd). Combined with the Project, the increase in water demand is approximately 1.33 mgd. The LADWP 2020 UWPM has estimated a water demand of 643 mgd by the year 2025, which means the Project combined with the Related Projects would account for approximately 0.21 percent of the total daily demand.

Table IV.M.1-4
Estimated Daily Water Consumption for the Related Projects

Land Use	Units	Consumption Rate [1]	Total Consumption (gpd)
Residential	4,967 DU	180 gpd/unit [4]	894,060
Retail [2]	264,627 SF	30 gpd/1,000 SF	7,939
School	300 students	14 gpd/student	4,200
Restaurant	4,541 seats [5]	36 gpd/seat	163,476
Bar	13,831 SF	864 gpd/1,000 SF	11,950
Hotel	693 rooms	144 gpd/room	99,792
Office	587,281 SF	144 gpd/1,000 SF	84,568
Museum [3]	42,770 SF	36 gpd/1,000 SF	1,540
Warehouse	316,632 SF	36 gpd/1,000 SF	11,399
Health Club	6,378	780 gpd/1,000 SF	4,975
Theater: Cinema	49 seats	4 gpd/seat	196
Event Space	8,157 SF	420 gpd/1,000 SF [7]	3,426
		Subtotal Consumption (Related Projects)	*1,287,521*
		Subtotal (Project)	*47,177*
		Total Cumulative Consumption (Project)	**1,334,698**
		Subtotal Consumption (Flexibility Option)	*44,383*
		Total Cumulative Consumption (Flexibility Option)	**1,331,904**

Notes: SF = square feet; gpd = gallons per day; DU = dwelling unit
1 Consumption rates based on 120% of the Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories (City of Los Angeles, Bureau of Sanitation, SFC, Sewage Generation Factor for Residential and Commercial Categories, April 16, 2012). One Water LA 2040 Plan includes a Wastewater Facilities Plan and builds upon the IRP.
2 Includes "Production Space" "Design Incubator" "Supermarket" and "Flexible Space."
3 Includes "Art Gallery."
4 Assumes all units as 2-bedroom units.
5 Calculated at 30 SF/seat.
6 Assumes all restaurants are full-service.
7 "Banquet Room" rate used.
Source: EcoTierra Consulting, Inc., 2022.

Based on the above, assuming that all the Related Projects are developed, since Project plus Related Project demand would be less than 1 percent of the demand LADWP has forecasted and planned for, LADWP would be able to supply the water demands of the Project as well as future growth.

Therefore, LADWP would be able to meet the water demands of the Project and future growth within its service area through at least 2045. The Project together with the Related Projects would not result in significant cumulative impacts related to water supply, nor would the Project contribute considerably to cumulative water demand. As such, cumulative impacts on water supply under the Project would be less than significant.

(b) Flexibility Option

Similar to the Project, the geographic context for the cumulative impact analysis on water supply is the LADWP service area, which includes the entirety of the City. LADWP, as a public water

service provider, is required to prepare and periodically update an Urban Water Management Plan to plan and provide for water supplies to serve existing and projected demands. Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. Furthermore, through LADWP's 2020 UWMP process and the City's Securing L.A.'s Water Supply, the City will meet all new demand for water due to projected population growth to the year of 2045.

There are 17 Related Projects, which consist of residential, retail, school, restaurant, bar, hotel, office, museum, warehouse, health club, movie theater, and event space land uses. The total increase in water demand for the Related Projects is approximately 1.29 mgd. As shown in **Table IV.M.1-4, Estimated Daily Water Consumption of the Related Projects**, combined with the Flexibility Option, the increase in water demand would be approximately 1.33 mgd. The LADWP 2020 UWMP has estimated a daily water demand of 643 mgd by the year 2025, which means the Flexibility Option combined with the Related Projects would account for approximately 0.21 percent of the total daily demand.

Based on the above, assuming that all the Related Projects are developed, since Project plus Related Project demand would be less than 1 percent of the demand LADWP has forecasted and planned for, LADWP would be able to supply the water demands of the Flexibility Option as well as future growth.

Therefore, LADWP would be able to meet the water demands of the Flexibility Option and future growth within its service area through at least 2045. The Flexibility Option together with the Related Projects would not result in significant cumulative impacts related to water supply, nor would the Flexibility Option contribute considerably to cumulative water demand. As such, cumulative impacts on water supply under the Flexibility Option would be less than significant.

b) Mitigation Measures

Cumulative impacts related to water supply and infrastructure for both the Project and Flexibility Option would be less than significant; no mitigation measures would be required.

c) Level of Significance After Mitigation

Cumulative impacts related to water supply and infrastructure for both the Project and Flexibility Option were determined to be less than significant without mitigation.