Appendix L-3
Water Supply Assessment

2311 N. HOLLYWOOD WAY PROJECT

Water Supply Assessment

Prepared for
City of Burbank

July 2021

ESA

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Water Supply Assessment

Prepared for
City of Burbank

July 2021

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SECTION 1
Introduction

In 2001, California adopted Senate Bill (SB) 610[1] and SB 221, thereby amending the California Water Code (Water Code). Under these new laws, certain types of development projects are now required to provide detailed water supply assessments to planning agencies. Any proposed project that is subject to CEQA and would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project, is subject to SB 610 and is required to prepare a Water Supply Assessment (WSA).

The primary purpose of a WSA is to determine whether the identified water supply or water supplier will be able to meet projected demands for the Project, in addition to existing and planned future uses, over a 20-year planning period in normal, single-dry, and multiple-dry water years. Secondarily, a WSA provides decision-makers a regional framework on which to base a decision about the sufficiency of water supplies for the proposed project.

The proposed Project is subject to CEQA and is a mixed-use development that includes more than 500 dwelling units. Therefore, this WSA was prepared in accordance with SB 610 and the Water Code. The SB 610 requirements and their applicability to the Project are addressed in detail in Section 3, Water Supply Planning.

This WSA assesses the availability of identified water supplies under normal-, single-dry-, and multiple-dry-year conditions, accounting for the projected water demand of the Project in addition to other existing and planned future uses of the identified water supply. This WSA examines, the regional water providers and their supplies (Section 4.2), the reliability of these sources (Section 4.4), the projected short-term and long-term water demand of the Project (Section 5), and Section 6 is the comparison of supply and demand as required in a WSA.

The Project Site is located in the City of Burbank (City), within the service area of Burbank Water and Power (BWP). Therefore, BWP is the water supplier responsible for preparing WSAs for projects within the City.

[1] An act to amend Public Resources Code Section 21151.9; to amend Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915; to repeal Water Code Section 10913; and to add and repeal Water Code Section 10657 relating to water.

1.1 Project Overview

1.1.1 Project Location

The Project Site, consists of one parcel of 10.43 acres (454,286 square feet [sf]) is located at 2311 N. Hollywood Way. The Project Site is bound by Vanowen Street to the north, N. Hollywood Way to the east, Valhalla Drive to the south, and commercial uses and Valhalla Memorial Park to the west. Regional access to the Project Site is provided by Interstate 5 (I-5), which runs north-south, and is located approximately 1.14 miles east and 1.4 miles north of the Project Site; State Route (SR) 134, which runs east-west, and is located approximately 2.61 miles south of the Project Site; and SR 170, which runs north–south, and is located approximately 3.02 miles west of the Project Site. The general vicinity and relationship of the Project Site to surrounding streets is illustrated in **Figure 1-1**.

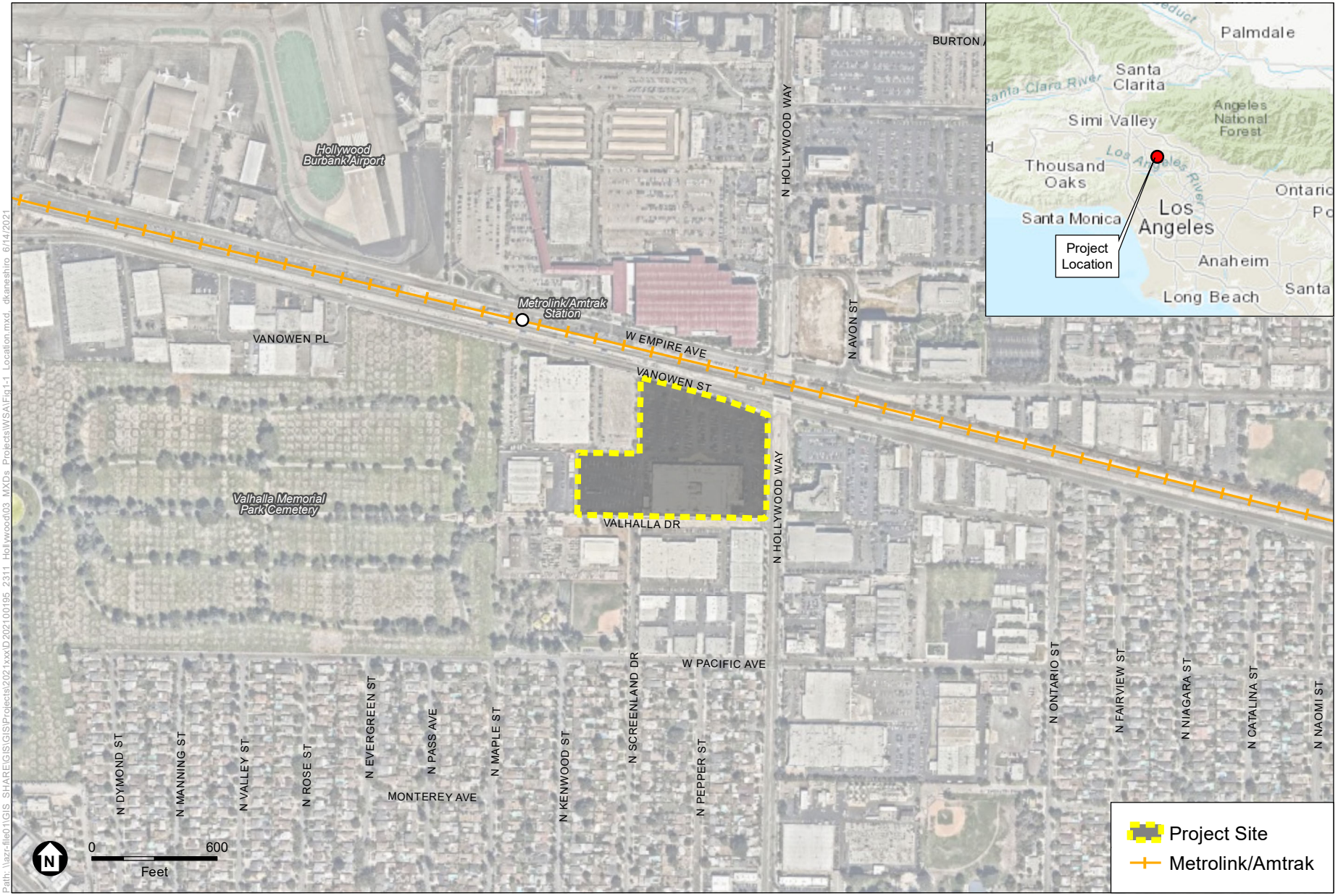
1.1.2 Project Description

The proposed project would construct a mixed-use development with office, commercial, and residential uses within four proposed buildings (Project). **Figure 1-2** and **Figure 1-3** show the proposed layout of the Project Site. As detailed in , the Project would develop a total of approximately 937,613 sf of office, commercial, and residential uses across the Project Site, as well as open publicly accessible areas.

1.2 Document Structure

This report is organized following a basic hierarchy to describe each issue: regional context (MWD, BWP service area and the underlying groundwater basin); local context (City service area), Project-level analysis for the proposed Project; and the assessment as a comparison of water supply and demand for the Project, existing and future demand in all water year types. The report organization is as follows:

1. Introduction; project overview, location, and description; and document structure
2. City background information and land use planning
3. General information on water supply planning under SB 610
4. Water supply setting – including local climate, surface and groundwater supplies, capacities, and reliability
5. Regional, City, and project water demands – historical, projected, and projected dry-year demands
6. Supply-demand comparisons on a regional, City, and project-level basis
7. Conclusions



SOURCE: Mapbox; Los Angeles County, 2020.

2311 N. Hollywood Way Project

Figure 1-1
Regional and Site Location Map

TABLE 1-1
PROPOSED DEVELOPMENT PROGRAM

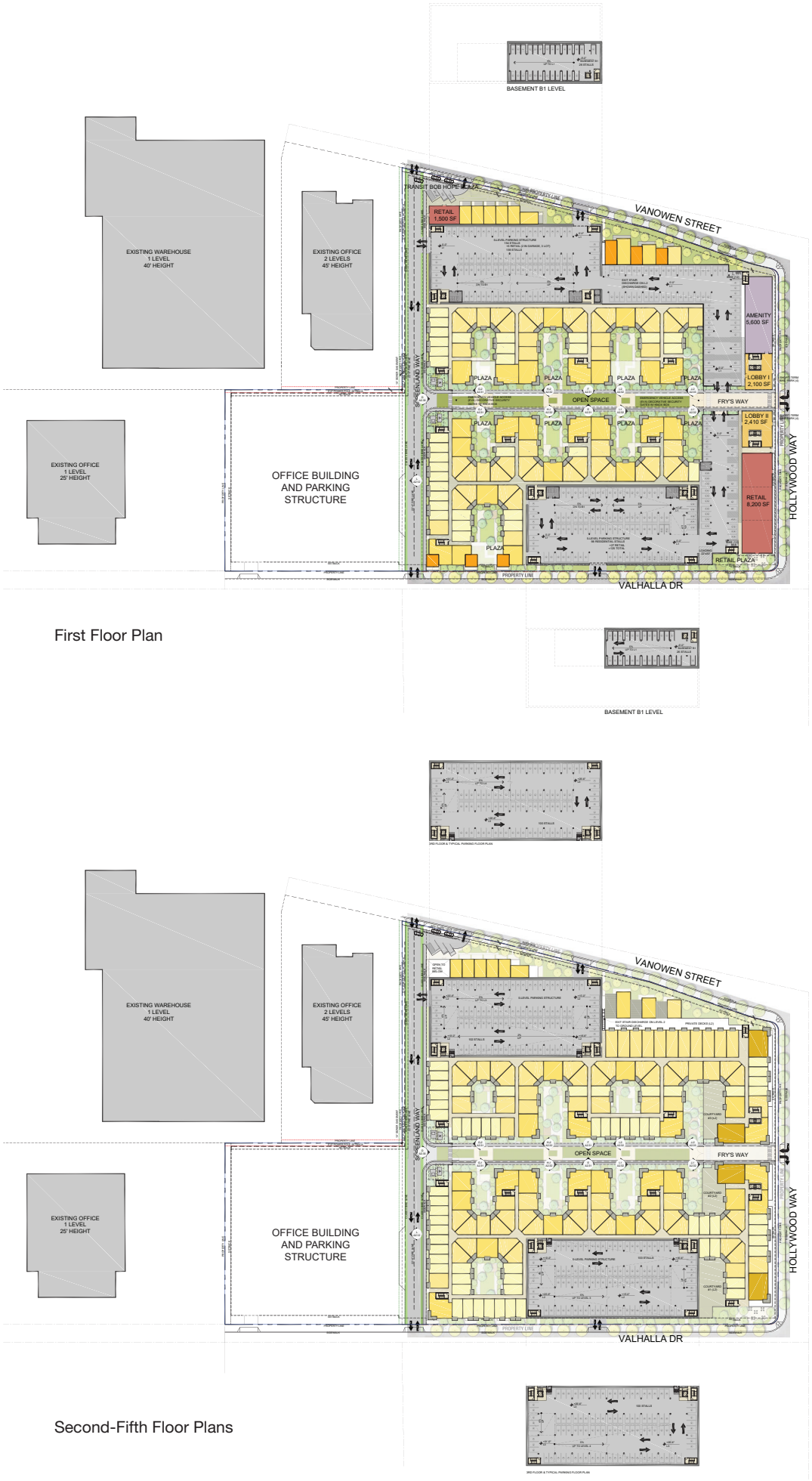
	Square Footage (Across Project Site)
Non-residential Uses	
Office	151,800 sf
Commercial	9,700 sf
Subtotal Non-residential Uses	*161,500 sf*
Residential Uses	
Studio (334 units)	171,450 sf
1-Bedroom (364 units)	280,614 sf
1-Bedroom Live/Work (1 unit)	1,900 sf
2-Bedroom (128 units)	146,178 sf
2-Bedroom Live/Work (5 units)	8,681 sf
3-Bedroom (20 units)	28,000 sf
3-Bedroom Townhouse (6 units)	10,380 sf
Common Amenities	11,000 sf
Residential Lobbies	4,510 sf
Circulation	113,400 sf
Subtotal Residential Uses	*862 units | 776,113 sf*
Total Uses	***937,613 sf***
Vehicle Parking	
Residential Required per BMC	431 vehicle parking spaces
Residential Provided[a]	1,125 vehicle spaces
Restaurant Required per BMC	32 vehicle parking spaces
Restaurant Provided	32 vehicle parking spaces
Office Required	456 vehicle parking spaces
Office Provided	456 vehicle parking spaces
Total Required per BMC	**919 vehicle parking spaces**
Total Vehicle Parking Provided	***1,613 vehicle parking spaces***
Open Space	
East–West Paseo	9,000 square feet
North–South Paseo	8,000 square feet
Three (3) Courtyards on Level 2 Podium and Deck	10,000 square feet
Two (2) Residential Pool Decks on Level 6	34,000 square feet
Plazas on Level 1	27,000 square feet
Private Open Space (Balconies)	43,100 square feet
Total Open Space Provided	***131,100 sf***

SOURCE: Urban Architecture Lab 2021.

NOTES:

sf = square feet

[a] The Project Applicant has elected, pursuant to Assembly Bill [AB] 744, to provide 1,125 residential parking spaces.



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SOURCE: LaTerra Development, LLC, 2021

2311 N. Hollywood Way Project

Figure 1-2
Representative Floor Plan – Residential Buildings

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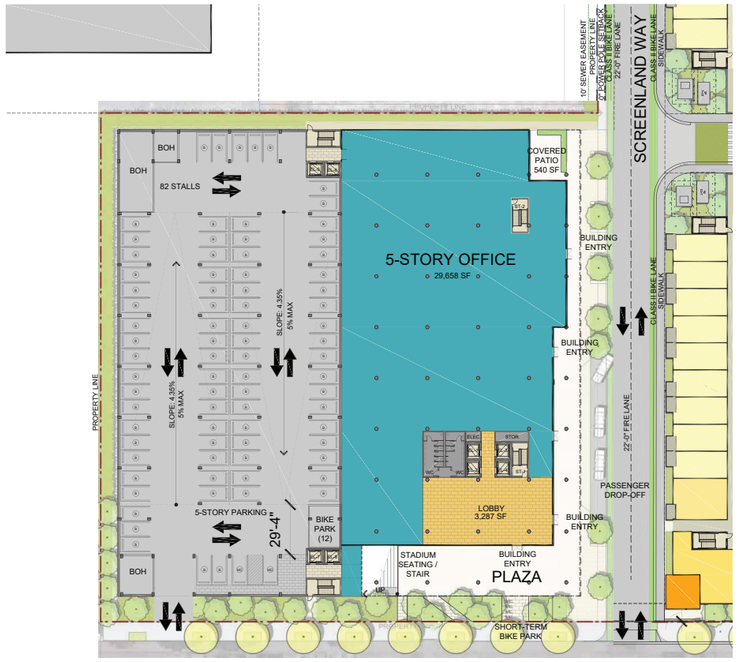
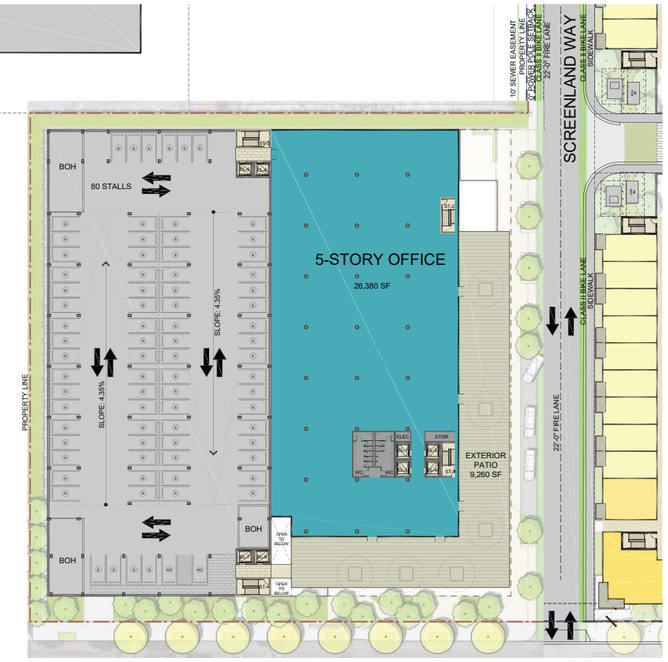


Office Building: First Floor Plan

Office Building: Third Floor Plan



Office Building: Fith Floor Plan

UNITS (STUDIO) | UNITS (1B) | UNITS (2B) | UNITS (3B) | LOBBY | COMMON | OFFICE | CIRCULATION | BOH / BIKE | PARKING | TERRACE | RETAIL

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SOURCE: LaTerra Development, LLC, 2021

2311 N. Hollywood Way Project

Figure 1-3
Representative Floor Plans – Office Building

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SECTION 2
City Information and Proposed Project Land Use Designation

This section describes background information, land use planning for the City.

2.1 City Population and Community

According to its 2015 Urban Water Management Plan (UWMP), in 2015, the City's population was 106,084; current (2020) population was 105,861, which is a reduction of 223 persons but is consistent with California's Department of Finance estimates of population for the City. Projected population includes population projections as provided in the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Demographic & Growth Forecast plus the expected population growth associated with the Housing Element goal, which assumes a population of 2.46 per housing unit based on the persons per household estimated by the California Department of Finance. There are an estimated 45,000 housing units, approximately half single-family and half multi-family, with a 5 percent vacancy rate. The occupied housing units average 2.46 persons per housing unit. Employment is about 100,000 (Burbank 2035 General Plan Housing Element, January 2014). Employment is in a variety of commercial and industrial operations, notably entertainment/media, retail, health care, and manufacturing. BWP's draft 2020 UWMP uses SCAG for its population projections. the City is currently updating its Housing Element, the City's Planning Department estimates population increases will occur over the next 20 years but at higher rates through redevelopment and infill projects, similar to the proposed project. As shown in **Table 2-1**, the City's population is expected to increase over the next 20 years.

TABLE 2-1
BURBANK POPULATION – CURRENT AND PROJECTED

Year	2020	2025	2030	2035	2040	2045
Population (SCAG)	105,861	107,765	109,599	111,531	113,460	115,482
Burbank Housing Element (Estimates)	0	9,840	24,816	29,520	29,520	29,520
Population Total – Estimated	***105,861***	***117,605***	***134,415***	***141,051***	***142,980***	***145,002***

Source: BWP's draft 2020 UWMP, pg. 6

2.2 Local Land Use Designations

2.2.1 Existing General Plan Land Use and Zoning Designations

The Project Site is located within the Commercial General Business Zone (C-3) and has a General Plan Land Use Designation of Regional Commercial.

The Project Site is located within the Airport Land Use Plan Noise Contour Zone for the Hollywood-Burbank Airport. The Project Site is also located within a Transit Priority Area (TPA), which is defined by Public Resources Code (PRC) Section 21099 as an area within 0.5 miles of an existing or planned major transit stop, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Code of Federal Regulations Title 23, Section 450.216 or 450.322. As shown in Figure 1-1, the Project Site is located in an urbanized area and the surrounding land uses include airport, commercial, medical, educational, open space, and residential uses.

SECTION 3
Water Supply Planning

California has different processes to plan for development or maintenance of water supplies on a regional level. UWMPs, Groundwater Management Plans (GMPs), Integrated Regional Water Management Plans (IRWMPs), Municipal Service Reviews (MSRs) and water resources components of General Plans all integrate some degree of regional planning of water supply and demand.

To complement these large-scale planning processes, the Governor signed into law SB 610 and SB 221 in 2002, which emphasize the incorporation of water supply and demand analysis at the earliest possible stage in the planning process for projects undergoing more specific or detailed planning level analysis. These legislations primarily apply to the planning of water supplies and sources for individual subdivision projects, and are completed at the time the project is being proposed and permitted. SB 610 amended portions of the Water Code, including Section 10631, which contains the Urban Water Management Planning Act, and added Sections 10910, 10911, 10912, 10913, and 10915, which describe the required elements of a WSA. SB 221, which requires completion of a Water Supply Verification (WSV), amended Section 65867.5 and added Sections 66455.3 and 66473.7 to the Government Code.[2]

3.1 Water Supply Planning under SB 610 and SB 221

As the public water system that will supply water to proposed projects in the area, the City is required to prepare WSAs and WSVs, under the requirements of SB 610 and SB 221, codified in Government Code Sections 65867.5, 66455.3, and 66473.7 if a proposed project meets certain criteria. There are three primary areas to be addressed in a WSA: (1) all relevant water supply entitlements, water rights, and water contracts; (2) a description of the available water supplies and the infrastructure, either existing or proposed, to deliver the water; and (3) an analysis of the demand placed on those supplies, by the project, and relevant existing and planned future uses in the area. In addition to these items, WSVs incorporate more detailed confirmation that the appropriate infrastructure planning and funding are in place to fully commit water supplies to a project. The proposed Project does not include a "subdivision" as defined by Government Code Section 66473.7(a)(1); therefore, a WSV is not required for the proposed project.[3]

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2 Department of Water Resources, *Guidebook for Implementation of SB 610 and SB 221 of 2001*, 2003.

3 Government Code Section 66473.7(a)(2) states:

> 'Sufficient water supply' means the total water supplies variable during a normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand associated with the propose subdivision,

SB 610 is applicable to projects subject to the California Environmental Quality Act (CEQA) or considered a "project" under Water Code Section 10912(a) or (b), builds on the information that is typically contained in a UWMP. The amendments to Water Code Section 10631 were designed to make WSAs and UWMPs consistent. A key difference between the WSAs and UWMPs is that UWMPs are required to be revised every five years, in years ending with either zero or five for those water systems that meet the specific connection criteria, while WSAs are required as part of the environmental review process for each individually qualifying project. As a result, the 20-year planning horizons for each qualifying project may cover slightly different planning periods than other WSAs or the current UWMP. BWP in its draft 2020 UWMP extended the planning horizon to 25 years, to 2045 for applicability over the next five years for WSAs and WSVs that require a 20-year forecast from the year in which they are prepared. Additionally, not all water providers who must prepare a WSA for a qualifying project under SB 610 are required to prepare an UWMP as defined in the Urban Water Management Planning Act.

Especially pertinent to this WSA for the proposed Project, and all projects to be served by BWP, are the provisions under SB 610 that involve documentation of supply if groundwater is to be used as a source. A detailed discussion of the groundwater basin and groundwater production can be found in Sections 4.2 and 4.3.

The SB 610 WSA process involves answering the following questions:

- Is the project subject to CEQA?
- Is it a project under SB 610?
- Is there a public water system?
- Is there a current UWMP that accounts for the project demand?
- Is groundwater a component of the supplies for the project?
- Are there sufficient supplies available to serve the project over the next 20 years?

3.1.1 "Is the Project Subject to CEQA?"

The first step in the SB 610 process is determining whether the project is subject to CEQA. SB 610 amended Public Resources Code Section 21151.9 to read: "Whenever a city or county determines that a project, as defined in Section 10912 of the Water Code, is subject to this division [i.e., CEQA], it shall comply with part 2.10 (commencing with Section 10910) of

in addition to existing and planned future uses, including, but not limited to agricultural and industrial uses. In determining 'sufficient water supply', all of the following factors shall be considered:

(a) The availability of water supplies over a historical record of at least 20 years.

(b) The applicability of an urban water shortage contingency analysis prepared pursuant to Section 10632 of the Water Code that includes actions to be undertaken by the public water system in response to water supply shortages.

(c) The reduction in water supply allocated to specific water use sector pursuant to a resolution or ordinance adopted or a contract entered into, by the public water system, a long as that resolution, ordinance, or contract does not conflict with Section 354 of the Water Code.

(d) The amount of water that the water supplier can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including program identified under federal, state, and local water initiatives such as CALFED and Colorado River tentative agreements, to the extent that these water supplies meet the criteria of subdivision (d).

Division 6 of the Water Code." The Project is currently under environmental review pursuant to the requirements of CEQA; therefore, the information contained in this assessment will be used to support the Environmental Analysis for the Project-level analysis.

3.1.2 "Is It a Project under SB 610?"

The second step in the SB 610 process is to determine if a project meets the definition of a "Project" under Water Code Section 10912(a). Under this section, a "Project" is defined as meeting any of the following criteria:

A proposed residential development of more than 500 dwelling units;

1) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (ft^2) of floor space;
2) A commercial building employing more than 1,000 persons or having more than 250,000 ft^2 of floor space;
3) A hotel or motel with more than 500 rooms;
4) A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 ft^2 of floor area;
5) A mixed-use project that includes one or more of these elements; or
6) A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" also includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system. Because the proposed Project is a mixed-use development that includes 862 residential dwelling units it meets the requirements as a "Project" under the Water Code.

3.1.3 "Is There a Public Water System?"

The third step in the SB 610 process is determining if there is a "public water system" to serve the project. Water Code Section 10912(c) states: "[A] public water system means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections."

The BWP is identified as the public water supplier for the project site. BWP serves approximately 26,000 water service connections through its potable water system that includes approximately 286 miles of pipelines ranging in size from 30 inches to 1.5 inches in diameter, 35 booster pumps, 21 tanks and reservoirs, eight wells, and five connections to the Metropolitan Water District of Southern California (MWD) system.

3.1.4 "Is There a Current UWMP That Accounts for the Project Demand?"

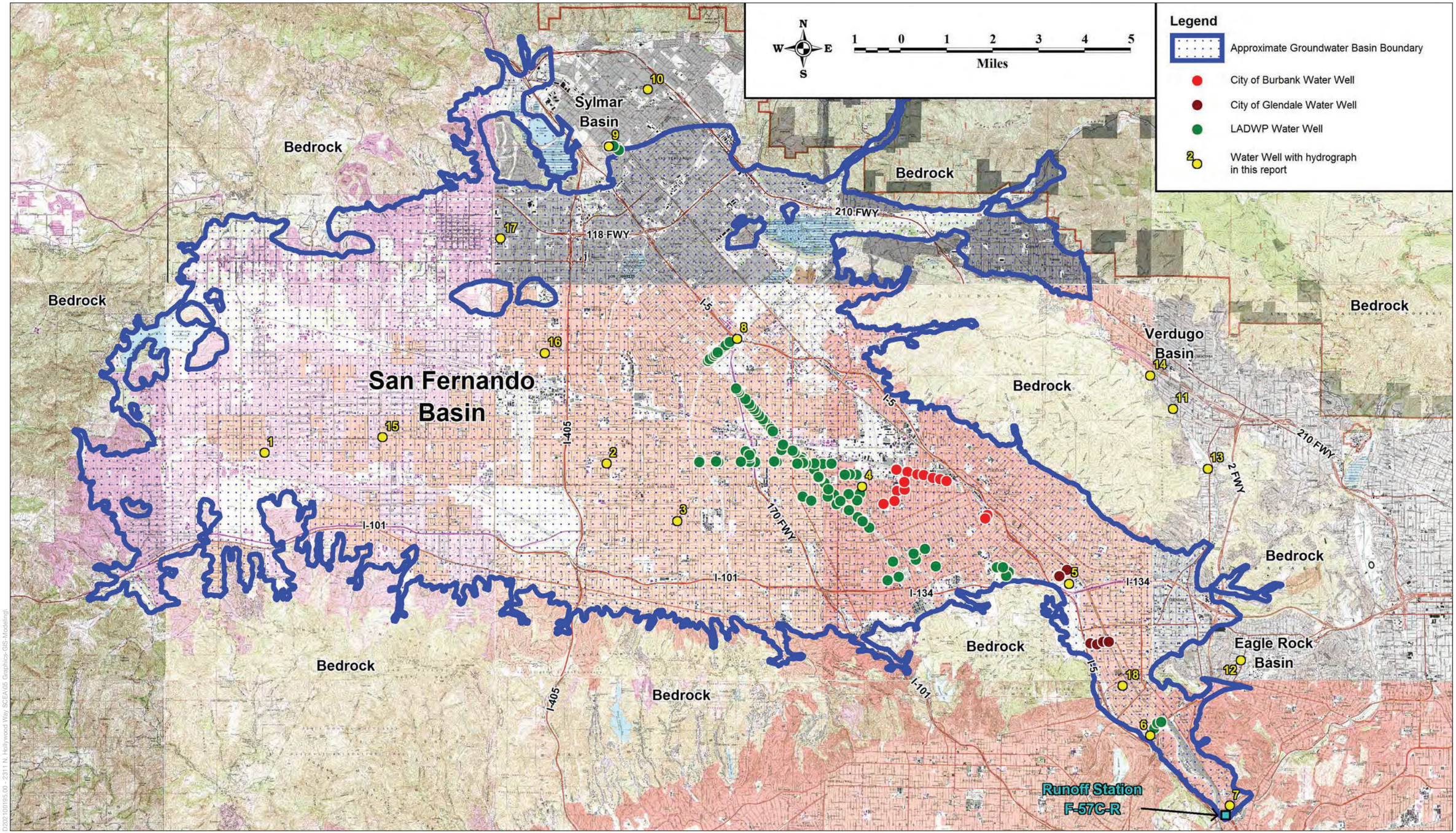
Step four in the SB 610 process involves determining if there is a current UWMP that considers the projected water demand for the project area. The Water Code requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet (af) annually, must prepare an UWMP, and this plan must be updated at least every five years on or before December 31, in years ending in five and zero. Water Code Section 10910(c)(2) states, "If the projected water demand associated with the Project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g) [i.e., the WSA]."

The City anticipates an increase in mixed-use developments along transportation corridors in the next several decades and consistent with the City's growth projections as reported in its adopted 2015 UWMP. Moreover, the proposed project is consistent with SCAG's growth forecasts, which were used to calculate service areas water demands in BWP's draft 2020 UWMP and also MWD's 2020 UWMP and its supporting documents. Accordingly, BWP's draft 2020 UWMP accounts for the water demand of the proposed Project. Water supply availability and demand data relevant to this WSA is provided in BWP's draft 2020 UWMP and MWD's 2020 UWMP.

The City's current 2015 UWMP was adopted in June 2016. BWP is currently working on its 2020 UWMP for adoption and release in July 2021. Water demand and growth since 2015 is consistent with the adopted UWMP, and the City continues to implement the recommended water conservation programs outlined in that UWMP. This WSA relied on data and information contained in the draft BWP 2020 UWMP as it includes the most recent and up-to-date water resources planning information, regional water supplies, service area information and potential water demands that would be generated by land uses associated with the proposed Project. With that understanding, this WSA, per the requirements of SB 610 calculates the water demands of the current proposed Project by assigning water demands factors associated with these proposed uses.

3.1.5 "Is Groundwater a Component of the Supplies for the Project?"

The requirements of Water Code Section 10910(f), Parts 1 through 5, apply if groundwater is a source of supply for a Project. BWP extracts groundwater to supplement imported water supply sources. BWP pumps its groundwater from the aquifer in the San Fernando Basin (SFB). The SFB consists of 112,000 acres and comprises over 90 percent of the total San Fernando Valley. A map of the SFB is shown in **Figure 3-1**. The San Rafael Hills, Verdugo Mountains, and San Gabriel Mountains bound the SFB on the east and northeast. The northern border of the basin is defined by the San Gabriel Mountains and the eroded south limb of the Little Tujunga Syncline which separates it from the Sylmar Basin. The basin is bounded on the northwest and west by the Santa Susana Mountains and Simi Hills and on the south by the Santa Monica Mountains.



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SOURCE: ULARA Watermaster, 2021. http://ularawatermaster.com/
Hyperlink: http://ularawatermaster.com/public_resources/SanFernandoGWB.pdf , Accessed June 14 , 2021

2311 N. Hollywood Way Project

Figure 3-1
San Fernando Groundwater Basin

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The ownership or rights to naturally occurring water in the SFB, also known as the Upper Los Angeles River Area (ULARA), was decided in Superior Court Case No. 650079, *City of Los Angeles vs. the City of San Fernando*, et al and are adjudicated in the Final Judgment (Judgment) entered on January 26, 1979.

The Judgment upheld the Pueblo Water Rights of the City of Los Angeles to all groundwater in the SFB derived from precipitation (infiltration of direct rain fall plus surface water runoff) within ULARA. The Judgment included provisions for an Import Return Credit (IRC), storage of imported water, stored water credits, and Physical Solution Water for certain parties. Per the IRC, The City is entitled to an IRC of 20 percent of all water delivered in the City, including recycled water. This provision was incorporated into the Judgment since a portion of the water delivered in the City, which originates from outside ULARA, percolates into the aquifer, becoming part of the groundwater supply.

The City is entitled to an IRC of 20 percent of all water delivered in the City, including recycled water. This provision was incorporated into the Judgment since a portion of the water delivered in the City, which originates from outside ULARA, percolates into the aquifer, becoming part of the groundwater supply. The IRC is calculated on an annual basis by the ULARA Watermaster. For example, total deliveries in the 2017–18 water year were 19,937 af, the 20 percent ICR is calculated to be 3,987 af. The ULARA Watermaster prepares an annual report that describes pumping activities for the basin. Additional information regarding the SFB can be found on the ULARA Watermaster's website at http://ularawatermaster.com/.

The City can use imported water as groundwater recharge through spreading and percolation into the local aquifer, per the IRC, recharged water can be pumped for and used for municipal purposes. As an added benefit, the City is allowed to accumulate these groundwater credits if they are unused in the year they are earned or created.

The provision of a right to Physical Solution Water recognized the investment in wells, pumping equipment, and transmission mains that were made by the City and others prior to the Judgment when the parties in ULARA, other than the City of Los Angeles, were believed to have rights to pump water originating from local precipitation. Physical Solution Water stipulates a right to a specified volume of groundwater "credits" that may be purchased from the City of Los Angeles at the sole discretion of the purchasing party on an annual basis. The cost of this water is set by a formula in the Judgment and is tied to the average cost of water supply to the City of Los Angeles in the preceding year. Per the IRC, the City can purchase 4,200 af of Physical Solution Water annually.

Groundwater Basin Management

Local Groundwater Supplies

The Project Site overlies the SFB, as shown in Figure 3-1. The SFB is located beneath the San Fernando Valley in Southern California, stretching across 112,000 acres. BWP owns and operates eight groundwater wells across the SFB. As previously mentioned, BWP does not have ownership rights to naturally occurring local groundwater supplies (through precipitation), but is

entitled to extract groundwater supplies under terms outlined in the 1979 groundwater adjudication (discussed in detail in Section 4.2.2; the Adjudication Judgment is appended as Appendix A). However, BWP receives groundwater credits for 20 percent of the total water distributed in its service area, including recycled water. Moreover, BWP purchases untreated water from MWD to replenish and augment its groundwater supplies. Untreated water is introduced into the SFB via the Pacoima and Lopez spreading grounds in the north San Fernando Valley. BWP receives 100 percent groundwater credit for these imports (BWP draft 2021 UWMP).

The following sections describe the characteristics of the SFB.

Basin Characteristics

As described in Department of Water Resources (DWR) Bulletin 118, the SFB is bounded by the San Rafael Hills, Verdugo Mountains, and San Gabriel Mountains on the east and northeast, the Santa Susana Mountains on the north and northwest, the Simi Hills on the west, and Santa Monica Mountains and Chalk Hills on the south (DWR 2004). Figure 3-1 shows the boundaries of the basin. The total storage capacity for the basin is 3.2 million af (Langridge et al. 2016).

Water Bearing Formations

The water-bearing sediments consist of the lower Pleistocene Saugus Formation, as well as Pleistocene and Holocene age alluvium. Most groundwater in the basin is unconfined; some confinement exists in the Saugus Formation in the western portion of the basin and in the Sylmar and Eagle Rock areas (DWR 2004).

Restrictive Structures

Several restrictive structures interrupt groundwater flow through the SFB. The Verdugo fault acts as a partial barrier to flow in the north and contributes to a groundwater cascade in the south. The Little Tujunga syncline affects groundwater movement through the northern portion of the basin. Differences in rock type along the Raymond fault block flow from the Eagle Rock area toward the Los Angeles River Narrows. Other barriers to groundwater flow include unnamed faults and subsurface dams (DWR 2004).

Recharge and Connectivity

The San Fernando Valley is drained by the Los Angeles River and its tributaries. The groundwater basin is recharged via spreading of imported water and runoff in the Pacoima, Tujunga, and Hansen Spreading Grounds. Runoff contains water from local precipitation falling on impervious areas, natural streamflow from the surrounding mountains, reclaimed wastewater, and industrial discharges (DWR 2004).

Groundwater Level Trends

Groundwater levels have declined across the basin since the 1940s due to increased pumping (Langridge et al. 2016). Further recent declines have been attributed to increased urbanization and

runoff leaving the basin, reduced artificial recharge, and continued groundwater extractions (ULARA Watermaster 2017b).

Safe Yield/Budget

The "safe yield" of a groundwater basin is the maximum quantity of water that can be continuously withdrawn from a groundwater basin without adverse effect. The groundwater "budget" is an accounting of all inflows into a basin compared to all outflows from the basin. The budget is often used to determine a basin's safe production yields. The groundwater adjudication process defined the safe yield and native safe yield in the SFB.

Water Quality and Drainage Considerations

Contaminants of concern in the SFB include trichloroethylene (a common degreaser and cleaning product), perchloroethylene (commonly used in dry cleaning of clothing), hexavalent chromium, nitrate, sulfate, and total dissolved solids (Leadership Committee of the GLAC IRWMP 2014).

There are four United States Environmental Protection Agency (USEPA) superfund sites within the boundaries of the SFB (Langridge et al. 2016). In the 1980s, volatile organic compound (VOC) contamination was discovered in groundwater from the City's production wells. Potential contaminating activities include automobile repair shops, petroleum pipeline, National Pollutant Discharge Elimination System (NPDES) permitted discharges, metal plating, underground storage tanks, and automobile gas stations (BWP draft 2020 UWMP). Groundwater production was halted until treatment plants could be built. The City currently has two treatment plants for VOC removal. All groundwater extracted in the City is treated to remove VOCs prior to entering the distribution system (BWP 2015 UWMP).

3.1.6 "Are There Sufficient[4] Supplies to Serve the Project over the Next Twenty Years?"

The final step in the SB 610 process is to illustrate the available water supplies, including the availability of these supplies in all water-year conditions (normal, single dry year and multiple dry years) over a 20-year planning horizon, and an assessment of how these supplies relate to project-specific and cumulative demands over that same 20-year period. In this case, the period is

[4] Government Code Section 66473.7(a)(2) states:

"Sufficient water supply" means the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including, but not limited to, agricultural and industrial uses. In determining "sufficient water supply," all of the following factors shall be considered:

(A) The availability of water supplies over a historical record of at least 20 years.

(B) The applicability of an urban water shortage contingency analysis prepared pursuant to Section 10632 of the Water Code that includes actions to be undertaken by the public water system in response to water supply shortages.

(C) The reduction in water supply allocated to a specific water use sector pursuant to a resolution or ordinance adopted, or a contract entered into, by the public water system, as long as that resolution, ordinance, or contract does not conflict with Section 354 of the Water Code.

(D) The amount of water that the water supplier can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including programs identified under federal, state, and local water initiatives such as CALFED and Colorado River tentative agreements, to the extent that these water supplies meet the criteria of subdivision (d).

projected to 2040. The water supply and demand comparisons are presented and discussed in Section 6.

The sufficiency of water supply sources to serve the proposed Project is assessed in the following sections, which address surface water as imported and delivered through MWD's water supply systems and local groundwater supplies underlying the City. The BWP 2020 UWMP does not specifically identify the proposed Project; however, it does rely on the overall growth in the City as projected in the Burbank 2035 General Plan and water demand generated by anticipated mixed-use development along transportation corridors and/or similar residential developments. Furthermore, the proposed Project does not include a General Plan Amendment and is consistent with SCAG's growth forecasts, which were used to calculate water demand forecasts in the BWP draft 2020 UWMP and MWD's UWMP. Therefore, through these processes the proposed project's water demand has been accounted for in the BWP draft 2020 UWMP.

Based on the information provided in this WSA, there are sufficient water supplies in the Project area to meet the needs of the proposed Project over the next 20 years (the assessment period required per SB 610). As described in Section 7, Conclusions is the sufficiency of available water supplies to meet existing and proposed project demand in the near-term and over the next 25 years.

SECTION 4
Water Supply Setting

This section presents a discussion of BWP and its service area. BWP would serve the proposed project's domestic water needs. The City's water supplies are provided from two sources: local groundwater from the SFB and water purchased from MWD. MWD is a regional wholesaler in Southern California. MWD provides the City with water imported from the Colorado River Aqueduct (CRA) and the State Water Project (SWP). BWP does not have ownership rights to the naturally occurring groundwater underlying the City's service area. However, BWP receives a right to pump groundwater through groundwater credits, which are described in detail under Section 3.1.5 under *Local Groundwater Supplies*. In addition, BWP uses locally-produced recycled water to meet some of its non-potable water needs such as outdoor irrigation and power plant cooling (BWP draft 2020 UWMP).

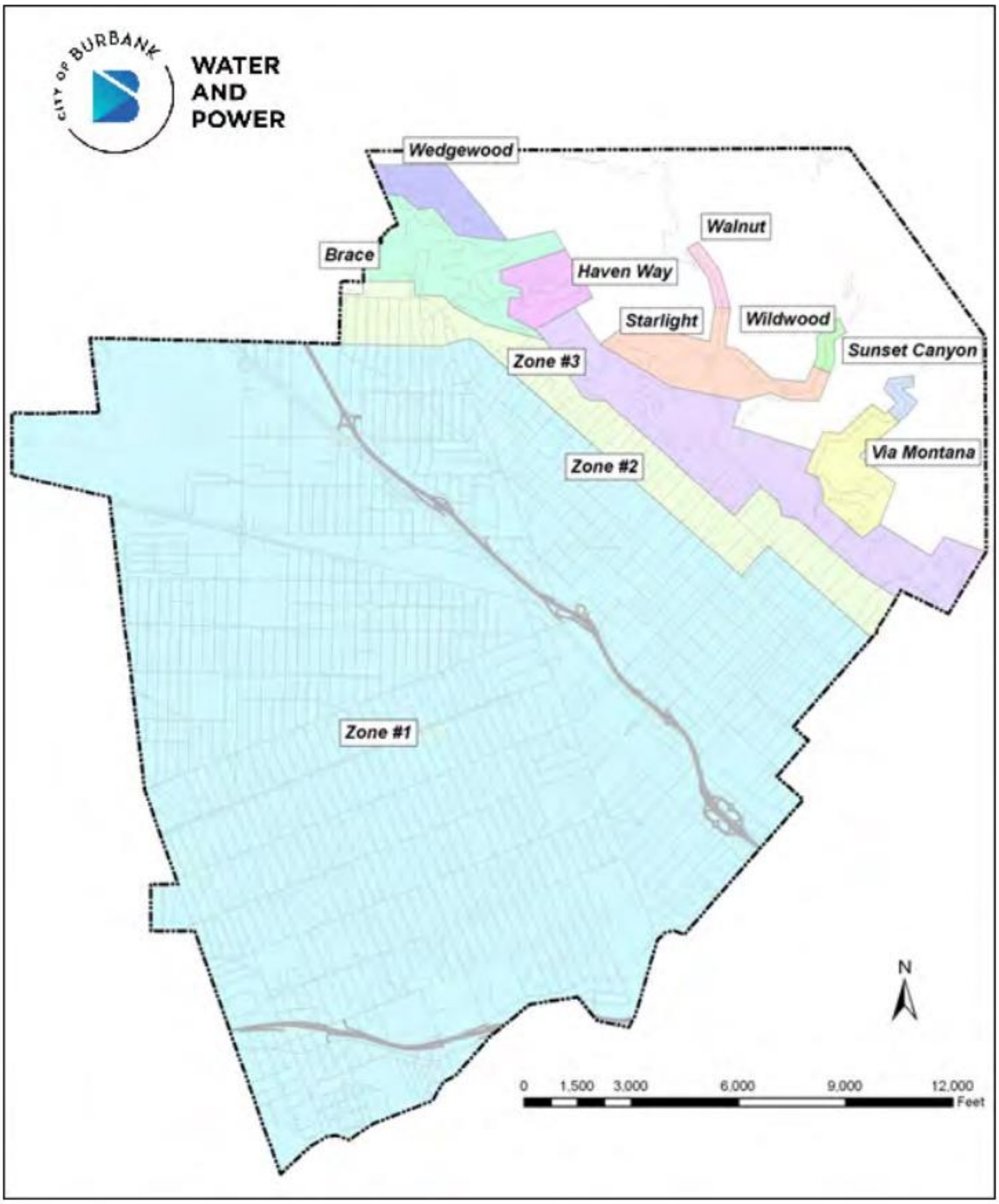

Figure 4-1
Burbank Water Service Area

4.1 Climate

The City's climate is considered Mediterranean, which is warm and dry during summer and cool and wet during winter. A summary of monthly climate data is contained in **Table 4-1**. The warmest month of the year is August with an average high temperature near 90˚ Fahrenheit (F), while the coldest month of the year is December with an average low in the low 40°F. Temperature variations between night and day tend to be moderate during summer and winter.

TABLE 4-1
AVERAGE ANNUAL PRECIPITATION, EVAPOTRANSPIRATION, AND IRRIGATION DEMANDS

Month	ETo (in)[a]	Average Total Precipitation (in)[a]	Irrigation Demand (in)[b]
January	2.20	3.35	0
February	2.45	3.84	0
March	3.64	2.84	0.8
April	4.74	1.17	3.57
May	5.31	0.27	5.04
June	6.06	0.07	5.99
July	6.75	0.01	6.74
August	6.66	0.01	6.56
September	5.01	0.02	4.81
October	3.95	0.6	3.35
November	2.73	1.51	1.22
December	2.31	2.34	0
Annual	***51.81***	***16.3***	***38.08***

NOTES
[a] Western Regional Climate Center. Burbank Valley Pump, California (041194)
[b] 5 percent leaching fraction and 90 percent distribution uniformity.

The historical annual average precipitation in the City is 16.3 inches. Winter months tend to be wetter than summer months. The wettest month of the year is February with an average rainfall of 3.8 inches.

The total average evapotranspiration (ET) deficit, which must be made up with irrigation, is over 38 inches (in)/year (yr). Water meter data indicates that historic irrigation rates between 42 in/yr and 48 in/yr are common for turf areas. Table 4-1 shows the average annual precipitation, evapotranspiration and irrigation demands in and around the Project area.

As described in BWP's draft 2020 UWMP climate change adds uncertainties to the projection of water supply planning. The effects of higher temperatures and precipitation changes induced by climate change may impact water supplies in a number of ways including:

- Reduction in Sierra Nevada snowpack
- Changes in runoff pattern and amount
- Increased intensity and frequency of extreme weather events

- Prolonged drought periods
- Water quality issues associated with increase in wildfires
- Rising sea levels resulting in potential pumping cutbacks on the State Water Project
- Effects on the groundwater basin
- Changes in demand levels and patterns
- Increased evapotranspiration from higher temperatures

While it is unknown what the magnitude and timing of these impacts will be, the City is participating in regional planning efforts that incorporate climate change into long range supply planning.

4.2 Supply Sources

The City's water is provided through two sources: local groundwater from the San Fernando Basin and water purchased from MWD. MWD is a regional wholesaler in Southern California. MWD provides the City with water imported from the CRA and the SWP. BWP does not have ownership rights to the naturally occurring groundwater underlying the City. However, BWP receives a right to pump groundwater through groundwater credits, which are described in detail in Section 3.1.5, *Local Groundwater Supplies*. In addition, BWP uses recycled water to meet some of its non-potable water needs specifically, outdoor irrigation and cooling at BWP's power plant cooling (BWP 2021). **Table 4-2** summarizes BWP's water supply sources and estimated volumes available now and over the next 25 years.

TABLE 4-2
BURBANK WATER SUPPLY SOURCES AND QUANTITIES

	2025	2030	2035	2040	2045
Imported Water	7,407	9,722	10,714	11,012	11,310
Groundwater	10,655	10,658	10,672	10,700	10,700
Subtotal Potable Water	*18,062*	*20,380*	*21,386*	*21,712*	*22,010*
Purchased/ Imported Water	6,800	6,800	6,800	6,800	6,800
Recycled Water	3,540	3,540	3,540	3,540	3,540
Subtotal Non-potable Water	*10,340*	*10,340*	*10,340*	*10,340*	*10,340*
Total Supplies	***28,402***	***30,720***	***31,726***	***32,052***	***32,350***

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 25.

The following section discusses the BWP's water supply sources available to meet the needs of the proposed Project.

4.2.1 Imported Water Supplies

The water supply for the City is imported from outside the region through the City's membership in MWD. MWD delivers both treated and untreated water to Southern California via two sources.

Water from Northern California is imported by way of the SWP, and water from the Colorado River reaches the region through the CRA. MWD has five treatment plants, which supply most of Southern California with treated water through their distribution system. The City obtained about 38 percent of its treated potable water from MWD in the Calendar Year 2020.

The City has five treated potable water connections to the MWD system, with a maximum rated capacity of 115 cubic feet per second (cfs), or 51,610 gallons per minute (gpm). The MWD system pressure is high enough to deliver water to the City's Zone 1 and Zone 2 without pumping, but booster pumps are available at MWD connections B-1 and B-2 to increase the capacity for periods of high demand.

The City's service connections to MWD's system are not equipped to accommodate the maximum flows as shown in **Table 4-3**, although if future demands make it necessary, improvements to these connections could be performed to realize their maximum potential. BWP in its draft 2020 UWMP uses the normal range of flow rates for its planning purposes as the maximum capacity of all connections is vastly more than expected demand requirements over the next 25 years (**Table 4-4**).

TABLE 4-3
BURBANK CONNECTIONS TO THE MWD SYSTEM

MWD Connection	Minimum Flow	Normal Range	90% of Maximum	Maximum Flow
B-1	3.0 cfs	15.0–22.0 cfs	27.0 cfs	30.0 cfs
B-2	1.5 cfs	3.0–7.0 cfs	13.5 cfs	15.0 cfs
B-3	1.0 cfs	3.0–4.0 cfs	9.0 cfs	10.0 cfs
B-4	2.0 cfs	11.0–14.0 cfs	18.0 cfs	20.0 cfs
B-5	2.5 cfs	7.0–26.0 cfs	36.0 cfs	40.0 cfs
Total Treated	***n/a***	***39.0–73.0 cfs***	***103.5 cfs***	***115.0 cfs***
B-6 Untreated Water: Connected at Pacoima	3 cfs	25–65 cfs	63 cfs	70 cf

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 15.

NOTES: cfs = cubic feet per second

TABLE 4-4
IMPORTED WATER SUPPLIES

Source	2020 (af) (actual)	2025 (af)	2030 (af)	2035 (af)	2040 (af)	2045 (af)
MWD Treated Potable	6,165	7,407	9,722	10,714	11,012	11,310
MWD Replenishment	152	6,800	6,800	6,800	6,800	6,800

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 16.

NOTES: af = acre-feet

MWD Replenishment supply was especially low in 2020 due to previous recharge of large quantities of surplus water through MWD's cyclic storage program. BWP assumes approximately 6,800 acre-feet per year is required to balance groundwater supplies.

4.2.2 Local Groundwater

The City overlies the SFB. The SFB consists of 112,000 acres and comprises over 90 percent of the total San Fernando Valley. A map of the SFB is shown in Figure 3-1. The SFB is bounded by the San Rafael Hills, Verdugo Mountains, and San Gabriel Mountains on the east and northeast. The northern border of the basin is defined by the San Gabriel Mountains and the eroded south limb of the Little Tujunga Syncline which separates it from the Sylmar Basin. The basin is bounded on the northwest and west by the Santa Susana Mountains and Simi Hills and on the south by the Santa Monica Mountains.

The City has historically utilized its groundwater resources from the SFB. Imported water from MWD in the early years was a supplemental supply. During this time, well and pumping capacity was adequate to serve most of the City's needs with local groundwater. As the City grew, it used more MWD water, but groundwater was still a major source. As shown in Figure 3-1, the City has several groundwater wells for pumping water from the SFB.

The ownership or rights to naturally occurring water in the SFB, also known as ULARA, was decided in the Judgment entered on January 26, 1979 (included as Appendix A). The Judgment upheld the Pueblo Water Rights of the City of Los Angeles to all groundwater in the SFB derived from precipitation (infiltration of direct rain fall plus surface water runoff) within ULARA. The Judgment also included provisions for an IRC, storage of imported water, stored water credits, and Physical Solution Water for certain parties.

The City is entitled to an IRC of 20 percent of all water delivered in the City, including recycled water. The Judgment incorporated this provision as a portion of the water delivered in the City, which originates from outside ULARA, percolates into the aquifer, becoming part of the groundwater supply. The IRC is calculated on an annual basis by the ULARA Watermaster. In 2017–2018, water deliveries were 19,937 af, the City's ICR at 20 percent is calculated to be 3,987 af. The Watermaster prepares an annual report which describes pumping activities for the basin. Additional information regarding the SFB can be found on the ULARA Watermaster's website at http://ularawatermaster.com/.

The provision of a right to Physical Solution Water recognized the investment in wells, pumping equipment, and transmission mains that were made by the City and others prior to the Judgment when the parties in ULARA, other than the City of Los Angeles, were believed to have rights to pump water originating from local precipitation. Physical Solution stipulates a right to a specified volume of groundwater "credits" that may be purchased from the City of Los Angeles at the sole discretion of the purchasing party on an annual basis. The cost of this water is set by a formula in the Judgment and is tied to the average cost of water supply to the City of Los Angeles in the preceding year. The City is entitled to purchase 4,200 af of Physical Solution Water annually.

The City is entitled to use imported water for groundwater recharge. Imported water is spread and percolated into the SFB aquifer to add to the local groundwater supplies. This entitlement also BWP to the right to pump recharged groundwater in any year and to accumulate these groundwater credits year over year if credits go unused in the year created.

Groundwater Adjudication

In 1955, the City of Los Angeles sued the cities of San Fernando, Glendale, Burbank, and other pumpers, asserting a prior right to the San Fernando Valley groundwater basins in the northern portion of the City of Los Angeles and a pueblo right to all the water in the Los Angeles River. This region is referred to as ULARA and includes four groundwater basins: the San Fernando, Eagle Rock, Sylmar, and Verdugo basins. The SFB is the largest of the four basins, and comprises 91.2 percent of the total valley fill in ULARA (Langridge et al. 2016; ULARA Watermaster 2017b).

The court ordered a series of hydrogeological reports documenting the decrease in groundwater levels between the 1920s and 1950s. Subsequent court decisions relied on a 1962 State Water Rights Board Referee Report as the principal basis for technical data. In 1968, the Trial Court ruled against the City of Los Angeles in a decision that was later reversed by the Appeals Court. In 1975, the California Supreme Court agreed with the Appeals Court and remanded the case back to Trial Court. In 1979, the Final Trial Court Judgment mostly upheld the determination of water rights consistent with the opinion of the California Supreme Court (Langridge et al. 2016).

The final Judgment established water rights in the ULARA and set out a separate safe yield and overdraft conditions for each of the four groundwater basins. The Judgment also includes provisions and stipulations regarding imported return water credit, water storage, water storage credit, and arrangements for physical solution water. The court ultimately awarded water rights to 28 of the 214 parties. The cities of Los Angeles, Glendale, Burbank, and San Fernando were given rights to a percentage of surface and groundwater from the ULARA. The Judgment also provides for a Court-appointed Watermaster to enforce the Judgment, as well as an Administrative Committee to collaborate with the Watermaster. The Administrative Committee consists of one voting member from each of the following five municipal water agencies: Los Angeles, Glendale, Burbank, San Fernando, and the Crescenta Valley Water District (Langridge et al. 2016; ULARA Watermaster 2017a).

In the SFB, the Judgment granted the City of Los Angeles an exclusive right to extract and utilize the entire native safe yield of the basin. The court determined the native safe yield of the SFB to be 43,660 acre-feet per year (AFY), and the safe yield (which includes return flows from imported water) to be 90,680 AFY (Langridge et al. 2016). Of the imported return water, the cities of Los Angeles, Burbank, and Glendale each have a right to extract defined percentages of imported return water from the SFB. Additionally, the cities of Los Angeles, Burbank, and Glendale each have a right to store groundwater in the basin and to extract equivalent amounts (ULARA Watermaster 2017b).

Table 4-5 summarizes the SFB extraction rights established to different parties by the Judgment.

TABLE 4-5
SAN FERNANDO BASIN EXTRACTION RIGHTS

Party	Native Water	Import Return Water	Stored Water
Los Angeles	43,660 AFY	20.8% of all delivered water to valley fill lands of the basin	Can store groundwater via artificial spreading or by in-lieu activities, and can extract equivalent amounts
Burbank	None	20% of all delivered water to the basin and its tributary hill and mountain areas	Can store groundwater via artificial spreading or by in-lieu activities, and can extract equivalent amounts
Glendale	None	20% of all delivered water to the basin and its tributary hill and mountain areas	Can store groundwater via artificial spreading or by in-lieu activities, and can extract equivalent amounts

SOURCE: ULARA Watermaster 2017b.

NOTES:

AFY = acre-feet per year

Physical solution water is also available to several additional smaller, but private, parties. These parties are granted a limited entitlement to extract groundwater chargeable to the rights of others upon payment of specified charges.

Sustainable Groundwater Management Act

In 2015, Sustainable Groundwater Management Act (SGMA) 2019 was enacted to provide for the sustainable management of groundwater basins in California. SGMA planning requirements are mandatory for the high- and medium-priority groundwater basins identified by DWR. In these basins, qualifying local agencies are required to create a Groundwater Sustainability Agency (GSA) and adopt a SGMA-compliant Groundwater Sustainability Plan (GSP). Under SGMA, groundwater basin boundaries are as identified in DWR Bulletin 118.

The SGMA 2019 Basin Prioritization process was conducted to reassess the priority of the groundwater basins following the 2016 basin boundary modifications, as required by the Water Code. For the SGMA 2019 Basin Prioritization, DWR followed the process and methodology developed for the CASGEM 2014 Basin Prioritization, adjusted as required by SGMA and related legislation. DWR used the following list of components to re-evaluate prioritization:

1) The population overlying the basin or subbasin.
2) The rate of current and projected growth of the population overlying the basin or subbasin.
3) The number of public supply wells that draw from the basin or subbasin.
4) The total number of wells that draw from the basin or subbasin.
5) The irrigated acreage overlying the basin or subbasin.
6) The degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water.
7) Any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation.
8) Any other information determined to be relevant by the department, including adverse impacts on local habitat and local streamflows.

The SFB (DWR Basin No. 4-011.04) has been classified as a very low-priority basin, and is not required to form a GSA and adopt a GSP or submit an alternative to a GSP. DWR determined that as a "Basin with Adjudication & Non-Adjudicated GW Use <9,500 af," under Component 8C&D of DWR's review, the Basin is a "very low-priority basin." The ULARA Watermaster continues to submit information to the State's SGMA website to help verify that ULARA maintains its compliance with SGMA.

Recycled Water Collection and Treatment

Wastewater generated within the City is collected and conveyed by approximately 230 miles of pipelines ranging in diameter from 6" to 30", two pump stations, and 19 diversion manholes. The Los Angeles 48" North Outfall Sewer (NOS) line runs from west to east through the southern portion of the City. Wastewater flows to the Burbank Water Reclamation Plant (BWRP) which currently treats 8.5 million gallons per day (mgd) with a design capacity of 12.5 mgd. BWRP produces a disinfected tertiary effluent which meets discharge limitations contained in its NPDES permit issued by the Los Angeles Regional Water Quality Control Board (RWQCB-LA). BWRP's effluent also meets the most stringent criteria for recycled water defined in the California Code of Regulations Title 22, Division 4, Chapter 3, requirement as Disinfected Tertiary Recycled Water in that it is approved for all uses, including full body contact, with the exception of human consumption. As shown in **Table 4-6**, of this treatment capacity, BWRP can produce 7,138 af of recycled water for specific applications in the City.

TABLE 4-6
BWRP RECYCLED WATER COLLECTION AND TREATMENT CAPACITY

Name of Wastewater Collection Agency	Volume of Wastewater Collected from UWMP Service Area in 2020 (AF)	Treatment Plant Name
Burbank	7,138	Burbank Water Reclamation Plant
Total Wastewater Collected from Service Area in 2020	***7,138***	

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 28.

Recycled Water Availability and Uses

As shown in **Table 4-7**, of the 7,138 af of recycled water collected and treated, 6,940 af is available for recycled water uses. Per its NPDES permit, the City discharges 3,790 af to the Burbank Western Channel that flows to the LA River and eventually to the Pacific Ocean. The balance of the recycled water (3,105 af) is currently used for:

- Power plant production water
- Landscape irrigation
- Evaporative cooling uses

According to BWP, recycled is readily available as recycled water main traverses the project site. With this understanding, the proposed Project can connect to the existing recycled water system and use recycled water for construction activities and for outdoor irrigation and cooling towers, if

applicable.[5] The recycled water produced at BWRP is considered highly reliable and accessible at the Project. Based on this existing infrastructure, recycled water can be used for outdoor irrigation purposes. As discussed in Section 5.5, the proposed Project water demand includes all indoor and outdoor water uses in all water year types.

TABLE 4-7
RECYCLED WATER AVAILABILITY AND USES

Recycled Water Availability and Uses	Tertiary
Wastewater Treated (af)	6,940
Discharged Treated Wastewater (af)	3,790
Recycled within Service Area (af)	3,105

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 29.

Transfer Agreements and Opportunities

The City has two system interconnections with the City of Glendale. These have been used on several occasions to solve short-term operational problems, such as a need for extra water because an MWD connection or pump station is out of service. However, unless a short-term operational problem occurs, the City is not currently planning any long-term exchanges or transfers of water.

4.3 Summary of Existing and Planned Sources of Water

The total water supplies produced or purchased by the City in 2020 are shown in **Table 4-8**. As indicated in Table 4-8, the water supply types available for use by the City are projected to remain unchanged between now and 2045, and increases in demands are largely expected to be met using treated, imported water.

4.3.1 Water Management Plans and Programs

The Metropolitan Water District of Southern California Urban Water Management Plan

The Water Code requires any municipal water supplier serving over 3,000 connections or 3,000 AFY to prepare an UWMP. MWD is a regional wholesaler with no retail customers; it provides treated and untreated water directly to its 26 member agencies. Member agencies include 14 cities, 11 municipal water districts, and one county water authority. MWD's service area covers the Southern California coastal plain, including the City (MWD 2020).

[5] BWP Comment on the Draft Water Supply Assessment for the 2311 N. Hollywood Way Project. June 22, 2021

TABLE 4-8
TOTAL WATER SUPPLIES PRODUCED OR PURCHASED BY BURBANK IN 2020

Water Supplies (af)	2020	2025	2030	2035	2040	2045
Potable						
MWD imported	6,165	7,407	9,722	10,714	11,012	11,310
Supplier-Produced Groundwater	9,997	10,655	10,658	10,672	10,700	10,700
Subtotal Potable	*16,162*	*18,062*	*20,380*	*21,386*	*21,712*	*22,010*
Non-Potable						
MWD Replenishment	152	6,800	6,800	6,800	6,800	6,800
Recycled Water	3,149	3,540	3,540	3,540	3,540	3,540
Subtotal Non-potable	*3,301*	*10,340*	*10,340*	*10,340*	*10,340*	*10,340*
Totals	***19,463***	***28,402***	***30,720***	***31,726***	***32,052***	***32,350***

Note: af = acre-feet

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 25.

Each of MWD's qualifying member agencies is also responsible for submitting its own UWMP. MWD's 2015 UWMP therefore does not explicitly discuss specific activities undertaken by its member agencies unless they relate to one of MWD's programs.

MWD's 2020 UWMP describes and evaluates sources of supply, efficient uses, water recycling, and conservation activities across the Southern California region (MWD 2020).

Burbank Water and Power 2020 Urban Water Management Plan

The UWMP for BWP forecasts future water demands within the service area under average and dry year conditions, identifies future water supply projects, and evaluates future supply reliability. The UWMP discusses the provider's supply portfolio, including current and planned water conservation and recycling activities (BWP draft UWMP 2020).

The Greater Los Angeles County Region Integrated Regional Water Management Plan

The mission of the Greater Los Angeles County Integrated Regional Water Management Plan (IRWMP) is to address the water needs of the Region in an integrated and collaborative manner. BWP sits on the Steering Committee for ULARA. The first IRWMP for the Greater Los Angeles County Region was published in 2006, following a multi-year collaborative effort between water retailers, wastewater agencies, stormwater and flood managers, watershed groups, businesses, tribes, the agriculture community, and non-profits. It provided a mechanism for improving water resources planning in the Los Angeles Basin. In 2014, the Integrated Regional Water Management (IRWM) group updated the IRWMP to comply with new State integrated planning requirements and update the content. (Leadership Committee of the GLAC IRWMP 2014)

MWD's Integrated Water Resources Plan – 2015 Water Tomorrow Update

MWD's Integrated Water Resources Plan (IRP) was first developed in 1996 to establish targets for a diversified portfolio of supply investments. The 2015 Update is a plan to provide water supplies under a wide range of potential future conditions and risks. It identifies supply actions including recycled water, seawater desalination, stormwater capture, conservation, and groundwater cleanup to ensure local water supply reliability. The 2015 Update was adopted by MWD's board of directors in January 2016 (MWD 2016b).

4.4 Water Supply Reliability

Sustainable water supply is the aggregated quantities of the aforementioned sources; briefly, these include: imported water purchased from MWD; groundwater from the SFB, and recycled water.

4.4.1 MWD Supply Reliability

The City relies on MWD for its water supply since the City does not have the right to pump native groundwater in the SFB, as the City of Los Angeles owns all naturally occurring groundwater. The City maximizes local resources and minimizes the need to import water from other regions through aggressive use of recycled water, spreading and storing imported water when feasible, and promoting potable water conservation.

The City's location in MWD's distribution system allows it to be supplied by two separate MWD treatment plants, Weymouth and Jensen. The Weymouth plant can treat water from the CRA and the SWP. The Jensen plant can only treat water from the SWP. MWD's multiple supplies allow operational flexibility in case of a treatment plant shutdown or temporary problem within the distribution system. The City also purchases untreated MWD water for groundwater replenishment. Untreated water delivered through the city's MWD B-6 connection is spread at Pacoima or Lopez spreading grounds in order to add to its stored groundwater credits.

MWD discusses regional water supply reliability in its 2020 UWMP. The MWD UWMP uses lessons learned from their previous planning efforts to inform how uncertainty and reliability are evaluated. These plans include the previous and 2020 IRP, the 1999 Water Surplus and Drought Management (WSDM) Plan, and Water Supply Allocation Plan (WSAP). The 2020 IRP is different than previous IRPs in that scenario planning components are being implemented to capture a broader range of possible futures both on the demand and supply side. The reliability assessments included in MWD's UWMP, including the Water Shortage Contingency Planning and Drought Risk Assessments, mirror a similar approach. The assumptions in their UWMP fall within the plausible future scenarios analyzed in the 2020 IRP to ensure the two efforts complement each other. To develop average year supply and demand estimates, MWD used the historic hydrology for 1922 through 2017. This 96-year period was selected based on the historical hydrology period reported in the 2019 SWP Delivery Capability Report, which represents MWD's largest and most variable supply. During that period, the driest one-year period occurred in 1977. A five-consecutive year (1988–1992) dry period was additionally used

for MWD's water service reliability and drought risk assessments, representing the driest five-year consecutive period during that time frame.

MWD strives for a "diverse water portfolio" that allows it to meet demands even in years when its primary supplies would not be enough. Part of MWD's 2020 UWMP is to have water storage capacity to draw on when supplies are short. Using surplus water from normal and wet years, MWD's large storage portfolio contains both dry-year storage and emergency storage that can be used to meet demand in case of a shortage. MWD has completed extensive modeling to create management options that will handle future variations in supply and demand.

As discussed in the draft 2020 UWMP, if MWD has a sufficient water supply, then through existing agreements and delivery systems BWP has sufficient supplies as well. In the 2015 IRP update, MWD describes unprecedented challenges on both the SWP and the CRA imported water supplies. The 2020 IRP looks beyond these experienced challenges and recognizes that the future is not predicable. Expanding the range of planning scenarios that MWD considers in their supply and demand modeling will only increase the reliability of this resource for BWP. MWD does not anticipate any reductions in water supply availability from SWP and CRA supplies due to water quality concerns over the study period.

4.4.2 Groundwater Supply Reliability

Groundwater helps BWP's overall supply reliability by providing a reserve during emergencies or droughts. The capacity and reliability of BWP's groundwater supply requires consideration of many issues including:

- Water rights
- Aquifer storage capacity
- Physical well and pump capacity
- Treatment capacity
- Water quality issues

City of Los Angeles owns the native groundwater rights to the SFB as detailed in the Judgment described in Section 4.2. The Judgment gives the City the right to store water in the aquifer under the administration of the ULARA Watermaster.

BWP can purchase MWD water for groundwater replenishment through spreading in order to add to its stored water credits. To maintain and optimize groundwater pumping, BWP needs to acquire about 7,000 af of groundwater per year, on average, through replenishment or a combination of replenishment and "physical solution" purchases.

Unavailable replenishment water during a long drought could limit the City's ability to add to its groundwater "bank". However, the City plans to keep a reserve of 10,000 af in groundwater credits. This would allow normal extractions to continue for about three years without replenishment, assuming the purchase of 4,200 AFY of physical solution water annually from the Los Angeles Department of Water and Power (LADWP) (see Section 4.2). After that, assuming

the groundwater basin still held enough water, BWP would have to negotiate the purchase of additional groundwater from LADWP. For more information on BWP's groundwater treatment to ensure reliability, please refer to Section 6.2 of the draft 2020 UWMP.

4.4.3 Recycled Water Supply Reliability

All of the City's recycled water is supplied by BWRP. According to BWP's 2020 UWMP, the City plans for contingencies in the event recycled water outages occur. The existing recycled water distribution system includes potable water makeup facilities at the BWRP, Stough Tank, and the Golf Course Tank. A recycled water system interconnect with the City of Glendale was completed in 2010 that provides backup recycled water supply from the LA-Glendale Water Reclamation Plant. Magnolia Power Project has the ability to supplement or replace the recycled water supply with water from the City's well, which normally feeds the Lake Street Granular Activated Carbon (GAC).

SECTION 5
Water Demands

Analysis of water demand, both historical and projected, is based on the same regional, local, areas as the analysis for supplies. The regional demand analysis addresses the greater regional demand which includes MWD demands; the local demand analysis addresses the the City's water system specifically, and the Project-specific analysis demand calculations are based on the most recent land-use map and information from the Project Applicant.

5.1 Recent, Historical, and Projected Demands

5.1.1 City 2020 Demand

BWP provides potable and non-potable water for a mix of urban uses that includes residential, commercial, and governmental uses. There are no agricultural water services in the BWP's service area; however, a portion of water delivered is provided exclusively for landscape irrigation purposes.

The total water demands are based on water use sectors by starting with 2020 records of water sales by customer class, then using projected growth numbers for housing units and employment. Demands incorporate passive conservation (code-based and price-effect savings) and active conservation (for installed active devices through 2020). Losses are assumed to be equal to the five-year average of losses from 2015 to 2019, which is approximately 4 percent of potable direct use demand. It is assumed that existing codes and ordinances will remain in place, which include those codes related to water conservation in the City's Title 9 Building Regulations, and the City's Sustainable Water Use Ordinance passed in June 2008.

In calendar year 2020, water deliveries were comprised of residential and commercial, percentages of deliveries to customers are as follows:

- 50 percent single-family residential
- 27 percent multi-family residential
- 17 percent commercial
- 1 percent City departments
- 0.1 percent fire protection

Water losses in calendar year 2020 are estimated as 3.8 percent of water delivered and is based on unaccounted-for water from 2015 to 2019 (which is equivalent to 4 percent of metered potable

use). Unaccounted-for water is calculated as the difference between water delivered to the system and metered sales to customers, accounting for changes in reservoir storage. Unaccounted-for water is lost through unmetered use (flow testing, reservoir cleaning, main flushing, firefighting, etc.), faulty meters, evaporation, sheared hydrants, and system leaks. The industry average for unaccounted-for water is 7 percent, the City's unaccounted-for water is substantially less than unaccounted-for water losses for a municipal utility. Actual demands in BWP service area are shown in **Table 5-1**.

TABLE 5-1
BURBANK'S 2020 WATER DEMANDS

Water Use Category	Total Volume (af)
Single-family residential	7,940
Multi-family residential	4,275
Other Potable	0
Commercial	2,738
Institutional/Governmental	155
Other Potable	11
Losses	614
Total Direct Use Demand	***15,733***
Groundwater Recharge Demand (Raw Water)	152
Total	***15,885***

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 11.

NOTE: af = acre-feet
Total demand in this table differs by 9 af from the total demand in BWP's draft 2020 UWMP, which shows a total direct use demand of 15,724 af.

In 2009, the California Water Conservation Act (also known as Senate Bill X7-7 or SBX7-7) was passed into law and requires urban water suppliers to reduce per capita water use 20 percent by 2020 (20x2020). To assist water purveyors, DWR provides a guidance manual with methodologies for calculating water use targets to reduce water demands and meet the 20X2020 goals. The water use target calculation was recalculated in the 2015 UWMP using 2010 census population data. Based on this recalculation, in BWP service area, the 2020 target changed from 156 gallons per capita per day (gpcd) to 157 gpcd. Notably, based on the City's 2020 population of 105,861 and associated demand of 15,885 in all water use categories including groundwater recharge, actual daily per capita water use was 133 gpcd, which is significantly lower than its 156 gpcd target. A minor difference between water supply production and actual water deliveries to customers as BWP's 2020 potable supply production was 16,162 af, which equates to 138 gpcd, which is still well below the BWP's 2020 target of 157 gpcd (BWP draft 2020 UWMP).

The City's service area water demands have decreased in the last 30 years when compared to level of demand in the early 1970s. In fact, the average daily water demand decreased from 24.0 to 19.6 mgd between 1970 and 1999. Maximum day water demands were 37 to 39 mgd in the early 1970s, but have not exceeded 36 mgd since 1976.

In response to the 1977 drought of record and the multiple year drought of 1990–1992, the City's service area water uses have decreased through active and passive water conservation. Water use efficiencies have also played a role, especially in response to the significant water shortage in 2015. In addition, industrial use has also declined as some major industries within the service area are closed. BWP has increased its water meter maintenance, testing, and replacement to significantly reduce unaccounted-for water losses.

5.1.2 City Projected Demands

Land Use and Population

The City consists of a mix of land uses, including residential, commercial, industrial, institutional and open space, with residential and commercial being the dominating uses. The City is largely built-out, meaning there are few vacant sites available for new developments and growth is expected to be due primarily to increases in housing density and land use intensity.

According to the City's General Plan (Burbank2035) prepared in 2013, notes that the greatest amount of growth in the next several decades is expected to be in the commercial area. The City expects to see an intensification of commercial land use in the downtown area and an increased amount of mixed-use development (i.e., residential/commercial/retail) along transportation corridors and transportation nodes. According to Burbank2035, new residential development will be predominantly multi-family that will increase the population density due to redevelopment of older single-family homes on lots zoned for multi-family use. Redevelopment of areas adjacent to downtown is expected to continue, especially along the San Fernando Boulevard corridor and the area around the Metrolink station.

The City is currently updating the Housing Element of the General Plan. BWP staff coordinated with the City's Community Development Department to obtain information related to expected changes to housing growth. The Housing Element the foundation to facilitate the City's goal for 12,000 new units through 2035. For regional planning purposes, additional information regarding housing and employment growth was obtained from the SCAG demographic projections developed for the 2020–2045 RTP/SCS (referred to as Connect SoCal). These projections incorporate data from past trends, key demographic and economic assumptions, and local, regional, state and national policy. The SCAG forecasting process also incorporates participation of local jurisdictions and stakeholders.

Employment growth is expected in a variety of commercial and industrial operations, notably entertainment/media, retail, health care, and manufacturing. (Burbank 2035 General Plan Housing Element, January 2014.; United States Census Bureau Quick Facts, July 2019).

According to the draft 2020 UWMP, the Housing Element goal of 12,000 new housing units is in addition to the SCAG housing unit growth projections.

Base on growth was used to develop future water demand in BWP's service area. The current (2020) population is consistent with California's Department of Finance estimates of population for the City. Projected population includes population projections as provided in the SCAG 2020-

2045 RTP/SCS Demographic & Growth Forecast plus the expected population growth associated with the Housing Element goal, which assumes a population of 2.46 per housing unit based on the persons per household estimated by the California Department of Finance.

MWD as the regional wholesale water supplier, prepares water resources reports, studies and plans necessary to manage its regional water supplies based on current and future supply and demand scenarios. As part of its 2020 UWMP, MWD provided BWP and other member agencies with population and supply and demand calculations. Potable water demand for 2025, 2030, 2035, 2040, and 2045 are estimated by using the total retail demand projections provided by MWD as part of the regional planning process. contains the projected demands by water use classes. In general, as shown in **Table 5-2**, total demands are expected to increase, primarily due to the expected increase in housing units as discussed in Section 2.1.

TABLE 5-2
PROJECTED WATER DEMAND (AF)

Water Use Category	2025	2030	2035	2040	2045
Single Family	8,166	8,245	8,238	8,292	8,300
Multi-Family	4,511	4,710	4,945	5,136	5,366
Other	1,160	2,926	3,480	3,480	3,480
Commercial	3,314	3,473	3,638	3,702	3,745
Institutional/Governmental	205	230	249	254	259
Fire Protection	11	12	13	13	13
Unaccounted-for Losses	695	768	823	835	847
Subtotal Potable Demand	*18,062*	*20,380*	*21,386*	*21,712*	*22,010*
Groundwater Recharge	6,800	6,800	6,800	6,800	6,800
Total	***24,862***	***27,180***	***28,186***	***28,512***	***28,810***

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, p. 13.

5.1.3 Proposed Project Demands

Proposed Project Demand – Construction and Operation

Proposed Project construction activities are anticipated to commence as early as July 2022 and would be completed as early as December 2025. Over this 3.5-year period water would be used for dust control purposes during grading activities, equipment cleaning, vehicle wash downs, washout basins, soil excavation, and re-compaction of backfill materials, and similar uses. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water use ranges from 10,000 to 15,000 gallons per day (gpd)[6]. Based on this conservative estimate of water use this WSA assumed a mid-point of 12,500 gpd. Water use over the 3.5 year (1,280 days) construction period would be up to 16 million-gallons or 49.10 af. Calculated annually this would be 14.02 af.

[6] 2311 North Hollywood Way, Utility Infrastructure Technical Report, July 1, 2021. Page 8

The expected water use of the proposed Project was determined by analyzing demand based on planned uses as described in Section 1 and as shown in Table 1-1, and with water demand shown in **Table 5-3**. To determine the water demand factors of the proposed project, water use demand factors were formulated based on data from the draft 2020 UWMP as well as current and historical uses at similar facilities along with information similar mixed-use projects. The proposed Project water demand includes all indoor (commercial and residential) and outdoor water uses in all water year types. The calculated demand of 235.79 AFY represents the worst-case scenario of the potential demand for the proposed Project. Outdoor irrigation for landscaping and plants in common areas is calculated to be 4,520 gpd or 5.06 AFY and would be supplied by new plumbing for recycled water that is available through an existing recycled water pipeline at the project site[7]. Table 5-3 shows that the proposed Project would contribute approximately 221.59 AFY in net water demands above historical water demands (14.20 AFY) at the Project Site. Construction related water demand would be similar to previous water use demands at the project site.

Projected Single Dry-Year and Multiple-Dry-Year Demand

In all water year types including single dry and multiple dry years, it is anticipated that the proposed Project demand of approximately 235.79 AFY and 221.59 in net water demands above historical water demand at the Project Site, proposed Project demand could be reduced if consumers within the City's service area are asked to conserve and reduce water use through active conservation measures described in Section 8 of BWP's draft 2020 UWMP.

Historical Project-Site Demands

Historically, the 10.43-acre Project Site has been used for commercial uses. Since 1995, Fry's Electronics Store and associated surface parking; in addition, two additional ancillary structures are co-located on the project site. The Fry's Electronics Store and ancillary structures are approximately 105,626 sf. The daily water use associated with these previous uses is calculated to be 12,675 gpd or 14.20 AFY.[8] The proposed Project gross water demands compared to previous uses are considered the net change in water demands.

[7] BWP Comment on the Draft Water Supply Assessment for the 2311 N. Hollywood Way Project. June 22, 2021

[8] Consistent with Burbank's approved development projects, this assumes a 120 percent increase for potable water demand above wastewater generation rates.

TABLE 5-3
PROJECTED PROJECT WATER DEMAND

Category	Area (sf)	Units	Water Generation Rates	GPD	AFY
Non-Residential Uses[1]					
Office	151,800		200 gpd/1,000 sf	36,432	40.81
Commercial (Two restaurants)	9,70		125 gpd/1,000 sf	1,455	1.63
			Subtotal Non-Residential Uses	*37,887*	*42.44*
Residential Uses[1]					
	Area (sf)	**Units**			
Studio (334 units)	171,450	334	156 gpd/unit	62,525	70.04
1-Bedroom (363 units)	280,614	364	156 gpd/unit	68,141	76.33
1-Bedroom Live/Work (1 unit)	1,900	1	156 gpd/unit	187	0.21
2-Bedroom (133 units)	146,178	128	195 gpd/unit	29,9522	33.55
2-Bedroom Live/Work (5 units)	8,681	5	156 gpd/unit	936	1.05
3-Bedroom (20 units)	28,000	20	195 gpd/unit	4,680	5.24
3-Bedroom Townhouse (6 units)	10,380	6	195 gpd/unit	1,404	1.57
Subtotal Residential Uses	*647,203*	*862*		*167,825*	*187.99*
			Commercial and Residential Water Uses	*205,712*	*230.43*
Open Space					
	Area (sf)		**Water Generation**		
Fry's Way Plaza[3]	15,000		See note 3		
Three (3) Courtyards on Level 2 Podium[3]	8,000		See note 3		
Plaza on Level 1[3]	25,000		See note 3		
Two (2) Residential Pool Decks on Level 6[3]	34,000		Two Pools[2] = 94,254 gallons Two Spas[2] = 4,488 gallons	98,742 gallons per year	0.30
Outdoor Landscaping/Plantings[3]	36,555		Ornamental and grasses	4,520 gpd	5.06
			Open Space and Pools/Spas Water Uses		*5.37*
			Proposed Project Water Use Totals	***308,974.68***	***235.79***

NOTE: gpd = gallons per day; AFY – acre-feet per year; sf = square feet

1. Indoor water demands are assumed to be 120 percent of anticipated wastewater generation amounts associated with the Project's indoor uses. Los Angeles County Sanitation Districts wastewater generation factors used in calculations.

2. Pools (70 x 20 x 4.5 or (6,300 ft^3) and spa (10'8" x 8 x 3.5 or 300 ft^3). This WSA assumes for health and safety purposes (cleaning, water quality purposes), 25% of pool and spa water is drained and replenished four (4) times per year. This would be equal to an annual draining and refilling of each pool and spa.

3. Water use associated with outdoor landscaping/plantings is the sum of the areas with Open Space category. As required by City of Burbank – Community Development Department, Building Division. Per the Water Budget Form outdoor water use for landscaping and planted areas is calculated through a two-step process. Step 1 – determines that Maximum Applied Water Allowance and Step 2 calculates the Estimated Total Water Use through this equation:

$$ETWU = (32.05)\left(\frac{PF \times HA}{0.71}\right)$$

Where:
ETWU = Estimated total water use per year
32.05 = Equation constant
PF = Look up Plant Factor for Region 4 from the WUCOLS III. Mix of planting that require low or moderate water use.
For VL (very low) use 0.05, for L (low) use 0.2, for M (moderate) use 0.5, for H (high) use 0.8
HA = Hydrozone Area (high, medium, and low water use areas) in square feet
0.71 = Default Minimum Irrigation Efficiency value, (the amount of water beneficially used divided by the amount applied)

SECTION 6
Supply-Demand Comparison

This section reviews the regional, local, and Project-level supply and demand considerations.

6.1 MWD's Water Supply Sufficiency

MWD strives for a "diverse water portfolio" that allows it to meet demands even in years when its primary supplies would be inadequate. In fact, MWD has developed a water supply portfolio capable of meeting all demands in any given year. As documented in MWD's 2020 UWMP that it plans for drought conditions and potential water shortages, and therefore has taken measures to have water in storage within its existing water supply systems and facilities to use during years when SWP and CRA supplies are curtailed. Using surplus water from normal and wet years, MWD's large storage portfolio contains both dry-year storage and emergency storage that can be used to meet demand in case of shortages. As documented in its 2020 IRP scenario planning components are being used to predict a broader range of possible water supply and demand futures. As previously discussed, MWD's UWMP, its Water Shortage Contingency Planning and Drought Risk Assessments use a similar approach to assess reliability of water supplies and sufficiency to meet demand. Expanding the range of planning scenarios that MWD considers in their supply and demand modeling would likely increase the reliability water supplies to MWD and its member agencies. Operational studies used in this assessment demonstrate that MWD has sufficient water supply to meet this future demand for every hydrologic year on record. Therefore, MWD does not anticipate any reductions in water supply availability from SWP and CRA supplies due to water quality concerns over the study period.

Table 6-1 through Table 6-4 illustrate the available water supplies as hydrologic conditions change when compared to demand changes of the next 25 years. In years of above-average rainfall, MWD could possibly store more water throughout its storage system effectively building up more supplies for dry or multiple dry years.

6.2 Local Water Supply Sufficiency

Table 6-1 compares the City's projected supply and demand over a 25-year planning horizon out to 2045 under normal water year conditions. As shown in Table 6-1, the City can satisfy all customer demands in each year.

TABLE 6-1
BURBANK NORMAL-YEAR SUPPLY AND DEMAND COMPARISON – POTABLE (AFY)

	2025	2030	2035	2040	2045
Supply Totals	18,062	20,380	21,386	21,712	22,010
Demand Totals	18,062	20,380	21,386	21,712	22,010
Difference	***0***	***0***	***0***	***0***	***0***

NOTE: AFY – acre-feet per year

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, Table 6-2, p. 40.

The future water demands for the City and the entire region have been estimated by MWD using its new Econometric Demand Model. This model uses forecast data from SCAG for variables including population, housing units, and employment. Although the City is using lower demand projections which take into account the reductions to meet 20x2020 targets, these MWD projections provide the basis for dry-year reliability planning.

Generally, dry weather, especially hot, dry weather, causes an increase in water demand, mostly for landscape irrigation. However, water use efficiencies and conservation practices during past droughts have successfully lowered water demand. The City achieved a 10 percent reduction in water use during the 1990–1992 multiyear drought, a 20 percent reduction in demand during the 2008–2010 drought, and a 24 percent reduction in demand in 2015. Based on MWD's analysis, reliability of water supply for the City assumed a slight decrease in potable water demand in a single dry year (decrease of 0.4 percent); however, the analysis shows a slight increase in potable demands during multiple dry years that start at 0.85 percent in 2025 and increase to 1.8 percent in 2045. Non-potable demands are assumed to be unchanged during dry periods because the recycled water produced at BWRP is considered highly reliable and accessible at the Project site. Based on this existing infrastructure, recycled water can be relied on for outdoor irrigation purposes.

For water supply planning purposes, BWP in its draft 2020 UWMP presented a comparison of projected water supply and demand for over a 20-year planning horizon; however, for this 2020 UWMP cycle, the City extended this through 2045, based on this information, BWP's draft 2020 UWMP can be used through the next four to five years 2021–2025) specifically for WSA's and WSVs that require a 20-year planning horizon from MWD, based on its 2020 UWMP projects 100 percent water supply reliability through the year 2045. As a result, the City as a MWD member agency does not expect critical shortages during the 25-year planning period. If necessary, the City will implement specific water shortage response actions as described in the Water Shortage Contingency Plan (Section 7 of its draft 2020 UWMP). the City will continue to rely on MWD for water either for direct use or for groundwater replenishment. the City cooperates with MWD's regional water supply planning. MWD relies on its member agencies to continue with their ongoing demand management efforts as MWD's water demand projections include significant increases in conservation throughout its service area and over the planning period. Groundwater and recycled water supplies are assumed to drought resistant and are available during dry and critical dry years.

Table 6-2, **Table 6-3**, and **Table 6-4** provide a comparison of supply to demand during single-dry- and multiple-dry-year periods. As shown in these tables, water demand in the City will increase over the 25-year planning period. Water supplies provided by MWD and supplemented by groundwater supplies in addition to recycled water for irrigation are sufficient to meet demand. As shown, the City can meet existing demand in addition to new demands created by the proposed project and no shortfall will occur.

TABLE 6-2
SINGLE-DRY-YEAR SUPPLY AND DEMAND COMPARISON – POTABLE (AFY)

	2025	2030	2035	2040	2045
Supply Totals	17,989	20,298	21,300	21,625	21,922
Demand Totals	17,989	20,298	21,300	21,625	21,922
Difference	***0***	***0***	***0***	***0***	***0***

NOTE: AFY – acre-feet per year

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, Table 6-4, p. 41.

6.2.1 Multiple Dry Years

As shown in Table 6-3 and Table 6-4, BWP uses MWD's projections to provide the basis for dry-year reliability planning. BWP's draft 2020 UWMP evaluates supply and demand comparisons for multiple dry years.

TABLE 6-3
MULTIPLE-DRY-YEAR SUPPLY AND DEMAND COMPARISON – POTABLE

Years 1–3	2025	2030	2035	2040	2045
Supply Totals	18,214	20,730	21,693	22,111	22,406
Demand Totals	18,214	20,730	21,693	22,111	22,406
Difference	***0***	***0***	***0***	***0***	***0***

NOTE: AFY – acre-feet per year

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, Table 6-6, pp. 41–42.

TABLE 6-4
MULTIPLE-DRY-YEAR SUPPLY AND DEMAND COMPARISON – POTABLE

Years 4–6	2025	2030	2035	2040	2045
Supply Totals	18,214	20,730	21,693	22,111	22,406
Demand Totals	18,214	20,730	21,693	22,111	22,406
Difference	***0***	***0***	***0***	***0***	***0***

NOTE: AFY – acre-feet per year

SOURCE: BWP, *2020 Urban Water Management Plan, Draft*, May 2021, Table 6-4, pp. 41–42.

Furthermore, MWD's contingency plan for responding to water shortages is the WSAP.[9] WSAP is based on a guiding principle for allocating shortages across MWD's service area. The WSAP formula uses different adjustments and credits to balance impacts of water shortage at the retail level, where local supplies can vary dramatically, and provide equity on the wholesale level among member agencies. It also takes into account the following: growth in demand, local investments, change in local supply conditions, the reduction in potable water demand from recycled water, and the implementation of water conservation programs.[10]

The City's water supply during a dry period could exceed the supplies used during a normal year given the ability to purchase additional imported supplies from its wholesaler, MWD. Further MWD projects sufficient supplies and storage to meet demands in future single- and multiple-dry-year scenarios. The City's supply is determined to be reliable in normal-, single-dry-, and multiple-dry-year scenarios, with additional supplies purchased from MWD to meet demands in dry years as needed.

This WSA finds that the City has sufficient water supplies provided by MWD and within its existing groundwater pumping IRC under all hydrologic conditions. Because of MWD's long-term success of delivery of water to all customers and commitment to continue to serve treated water to all retailers, when SWP and CRA curtailments occur, MWD has supply flexibility through its vast network of water supply facilities and long-term water management programs to continue to meet all demands. In addition, BWP could pump additional local groundwater during drought, emergency or other surface supply reductions to meet demands in the future. Furthermore, as presented in Section 5 consumers and retailers could effectively reduce demands by 10 or 25 percent to relieve demand pressure on local and regional supplies. It is reasonable to assume, based on the consumer demand reductions shown in Section 5 above that BWP customers would continue to curb per-capita use and when necessary based on water supply allocations, customers could reduce per capita demands by up to 25 percent.

Project Water Supply Sufficiency

In normal years, the proposed Project would create an estimated 221.59 AFY of new water demand, or about 1.2 percent of the City's anticipated total system demand of 18,062 AFY in 2025, and 1.0 percent of overall treated water demands of 22,010 AFY in 2045 As stated previously, the draft 2020 UWMP consistent with SCAG population and employment projections and the City's Housing Element includes potential water demands that would be generated by land use changes and new commercial and residential developments similar to the proposed project. To convey water to the proposed Project Site, this WSA assumes the proposed Project would use treated water delivered through existing or upgraded infrastructure connected to and expanded upon the City's existing water conveyance systems.

[9] WSAP approved by MWD Board of Directors, February 2008.

[10] WSAP and the WSDM were incorporated into MWD's 2020 WSCP and prepared in conjunction with MWD's 2020 UWMP.

SECTION 7
Conclusion

According to the requirements of Water Code Section 10910(c)(3) "the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses."

As previously shown in Table 6-1 through Table 6-4, MWD can meet all water demands in normal, single dry, and multiple dry years by utilizing its current and diverse water portfolio. Voluntary and when required demand reduction measures during dry years would alleviate system demand capacities during periods of SWP and CRA curtailments (for drought, emergency, or environmental mitigation reasons). As discussed in Section 5, customers in the City's service area successfully reduced water uses and curbed demand in previous multiple-year droughts in 1990–1992 and 2008–2010 and significantly reduced demand in 2015 by 24 percent. Therefore, it is reasonable to assume that this level of conservation could be achieved again. As shown in Table 5-1, the City's total demand in 2020 was 15,733, or 136 gpcd, which is significantly lower than its 156 gpcd target—demand hardening is expected to occur over time; however, some level of conservation measures can still successfully reduce demand if necessary.

This WSA finds that MWD, as the wholesale potable water supplier has sufficient water supplies available to serve its member agencies now and over a 25-year planning horizon. Furthermore, the City's groundwater supplies stored in the SFB are reliable in all water year types. With that understanding, the City as a MWD member agency has sufficient water supplies provided through MWD and supplemented with its local groundwater to meet existing demands combined with the proposed Project demands and cumulative demands in 2025, in 2035, and to the 2045 planning horizon of its draft 2020 UWMP.

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SECTION 8
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