

FINAL



CITY OF
BURBANK

2025 URBAN WATER MANAGEMENT PLAN

CITY OF BURBANK
JUNE 2026

PREPARED BY:
eki environment
& water



**WATER AND
POWER**

CITY OF BURBANK

2025 URBAN WATER MANAGEMENT PLAN 164 W. Magnolia Blvd. Burbank, CA 91502

FINAL | June 2026
EKI Environment & Water, Inc.
C50205.00

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City of Burbank

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ABBREVIATIONS AND ACRONYMS

°F	Fahrenheit
AB	Assembly Bill
AF	acre-feet
AFY	acre-foot per year
AMI	advanced metering infrastructure
AWWA	American Water Works Association
BOU	Burbank Operable Unit
BWP	Burbank Water and Power
BWRP	Burbank Water Reclamation Plant
CalWEP	California Water Efficiency Partnership
CCR	California Code of Regulations
cfs	cubic feet per second
CGC	California Government Code
CII	commercial, industrial, and institutional
City	City of Burbank
CRA	Colorado River Aqueduct
CWC	California Water Code
DCP	Delta Conveyance Project
DDW	Division of Drinking Water
DMM	demand management measure
DOF	Department of Finance
DPR	direct potable reuse
DTSP	Downtown Burbank Transit Oriented Development Specific Plan
DWR	California Department of Water Resources
FY	fiscal year
GAC	Granular Activated Carbon
GPCD	gallons per capita per day
gpm	gallons per minute
GPSCD	gallons per service connection per day
GSSP	Golden State Specific Plan
HCF	hundred cubic feet
HMP	Hazard Mitigation Plan
HVAC	heating, ventilation, and air conditioning
HWRP	Hyperion Water Reclamation Plant
IRC	Import Return Credit
IRWM	Integrated Regional Water Management
IVR	Interactive Voice Response
kWh	kilowatt hours

kWh/AF	kilowatt hours per acre-foot of water
kWh/MG	kilowatt-hours per Million Gallons
LADWP	Los Angeles Department of Water and Power
LASAN	Los Angeles Department of Sanitation and Environment
LVMWD	Las Virgenes Municipal Water District
MCCWL	Making Conservation a California Way of Life
MCL	Maximum Contaminant Level
MDSP	Media District Specific Plan
MG	million gallons
MGD	million gallons per day
MPP	Magnolia Power Project
MSL	mean sea level
MWD	Metropolitan Water District of Southern California
MWELO	Model Water Efficient Landscape Ordinance
NOS	North Outfall Sewer
NPDES	National Pollutant Discharge Elimination System
PFAS	per- and polyfluoroalkyl substances
Plan	Urban Water Management Plan
PWS	Public Water System
RCP	Representative Concentration Pathway
RHNA	Regional Housing Needs Allocation
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB X7-7	Water Conservation Act of 2009
SB	Senate Bill
SCAG	Southern California Association of Governments
SFB	San Fernando Basin
SGMA	Sustainable Groundwater Management Act
SMS	Short Message Service
SNMP	Salt and Nutrient Management Plan
SWP	State Water Project
SWRCB	State Water Resources Control Board
SWUO	Sustainable Water Use Ordinance
TDS	total dissolved solids
ULARA	Upper Los Angeles River Area
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
VOC	Volatile Organic Compounds

WF1	Water Farm 1
WRP	Water Reclamation Plant
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WTP	Water Treatment Plant
WUE	Water Use Efficiency

LAY DESCRIPTION

☒ CWC §10630.5

Each plan shall include a simple lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan.

This 2025 Urban Water Management Plan (UWMP or Plan) is prepared for City of Burbank (Burbank or City), which serves approximately 17,565 acre-feet (AF) of water to a population of 106,146. Burbank meets the definition of an urban water supplier.¹ Therefore, in accordance with California Water Code (CWC) §10621(e), Burbank is obligated to develop and submit a UWMP to the California Department of Water Resources (DWR) by 1 July 2026.

This UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands and supplies, and the resulting reliability during a set of defined water supply conditions over a minimum 20-year planning horizon. This Plan also describes the actions Burbank is taking to promote water conservation (referred to as “demand management measures”), and includes a Water Shortage Contingency Plan (WSCP) to address potential water supply shortages from drought or other impacts to supply availability. This Plan is updated every five years in accordance with state requirements under the UWMP Act and amendments (Division 6 Part 2.6 of the CWC §10610 – 10657). Past plans developed for Burbank are available on the DWR Water Use Efficiency (WUE) Data Portal website: <https://wuedata.water.ca.gov/>.

Pursuant to the requirements of the CWC §10630.5, this lay description provides a simple summary of this UWMP. This Plan includes 10 sections, which are summarized below.

Section 1 UWMP Introduction

This section presents the background and purpose of the UWMP, describes the Plan organization, and provides an overview of the Plan. Burbank's water supply portfolio includes a combination of treated and untreated raw imported water purchased from the Metropolitan Water District of Southern California (MWD), groundwater from the San Fernando Basin (SFB), and recycled water from the Burbank Water Reclamation Plant (BWRP). Imported supplies are subject to regional variability, including uncertainties associated with the Sacramento-San Joaquin Delta (Delta) and Colorado River conditions, as further described in later reliability sections. Because purchased water comes from the Delta, this section also demonstrates consistency with The Delta Plan by the Delta Stewardship Council.

Section 2 Plan Preparation

This section discusses key structural aspects related to the preparation of this UWMP, and describes the coordination and outreach conducted as part of the Plan's preparation, including coordination with local agencies (i.e., Los Angeles County, Glendale Water & Power, and Los Angeles Department of Water and Power [LADWP]), and the public.

¹ Per CWC §10617, “urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 AF of water annually.

Section 3 Service Area Description

This section provides a description of Burbank’s water system and service area, including information related to the climate, population, and demographics. Burbank is located in Los Angeles County and has a climate characterized by a Mediterranean climate with cool, wet winters and warm, dry summers. It is estimated that Burbank has a population of 106,146 in 2025, and it is anticipated that the service area population will increase to approximately 156,624 by 2050, assuming that the full development contemplated in two of the City’s specific plans is achieved by 2035. The City is planning for residential and commercial growth, including mixed-use development (i.e., residential/commercial/retail). New residential development will be predominantly multi-family residential.

Section 4 Water Use Characterization

This section provides a description and quantifies Burbank’s current and projected demands through the year 2050. Burbank provides drinking water (also referred to as “potable water”) and recycled water (also referred to as “non-potable water”) to meet potable and non-potable demands. Water demands refer not only to the water used by customers, but also includes the water used as part of the system’s maintenance and operation, as well as unavoidable losses inherent in the operation of a water distribution system. Total water demand within the Burbank service area was 17,167 AF in 2025.² Taking into account historical water use, expected population changes, and conservation, water demand is projected to increase to 31,094 AF by 2050 under normal hydrologic conditions, assuming that the full development contemplated in two of the City’s specific plans is achieved by 2035.

Section 5 SB X7-7 Baseline, 2020 Target, and 2025 Reporting

The Water Conservation Act of 2009 (SB X7-7), enacted in November 2009, required the State to achieve a 20% reduction in urban per capita water use by December 2020 and directed retail suppliers to establish an urban water-use target (2020 Target) to support this goal. Because the CWC does not set an end date for reporting progress toward the 2020 Target, this section documents Burbank’s compliance with SB X7-7 as of 2020. Burbank is not a member of a “Regional Alliance” and was not part of a service area merger or consolidation after 2020. In July 2024, the State enacted the Making Conservation a California Way of Life (MCCWL) regulation to promote long-term water conservation and drought resilience beyond SB X7-7. MCCWL established annual Urban Water Use Objectives (UWUO) for water suppliers. Because compliance with the UWUO requirements falls under the authority of the State Water Resources Control Board (SWRCB), UWUO projections are not included herein.

Section 6 Normal Year Water Supply Characterization

This section presents an analysis of Burbank’s water supplies over a minimum 20-year planning horizon under normal hydrologic conditions. The Burbank service area relies on groundwater, purchased or imported water, and recycled water. In 2025, Burbank’s water supplies were 3,366 AF of treated water purchased from MWD, 11,269 AF of groundwater from the SFB, and 2,930 AF of non-potable recycled water from the BWRP, totaling 17,565 AF.² Burbank did not spread any raw water from MWD in 2025 due to infrastructure upgrades and quagga mussel contamination in the untreated MWD water. This section also provides an estimate of water-related energy consumption. Energy intensity is defined as the net energy used for water treatment, conveyance, and distribution for all water entering the distribution

² Estimated supplies (17,565 AF) differ from estimated demands (17,167 AF) in 2025 due to metering inaccuracies and/or data errors.

system, and does not include the energy used to treat wastewater. The energy intensity for Burbank is estimated to be 351 kilowatt hours per acre-foot of water (kWh/AF).

Section 7 Water Supply Reliability and Drought Risk Assessment

This section assesses the reliability of Burbank’s water supplies, with a specific focus on potential constraints such as water supply availability, water quality, and climate change. The intent of this section is to identify any potential constraints that could affect the reliability of Burbank’s supply to support Burbank’s planning efforts to ensure that customer demands are met. Water service reliability is assessed during normal, single dry-year, and multiple dry-year hydrologic conditions consistent with the reliability analyses conducted by MWD in its 2025 UWMP. MWD’s long-term supply planning incorporates assumptions for Colorado River and Delta supply reliability, local supply availability, demand forecasts, storage facilities, and climate risks. Based on this analysis, Burbank expects the available groundwater, purchased treated and untreated raw water, and recycled water supplies to be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period. Further, potential water quality risks are actively monitored and Burbank is able to make all appropriate adjustments to its treatment and distribution system to ensure only high quality drinking water is served.

Section 8 Water Shortage Contingency Planning

This section is Burbank’s WSCP, which serves as a standalone document to be engaged in the case of a water shortage event, such as a drought, infrastructure failure, regulatory mandates, or catastrophic natural or human-caused events. The WSCP identifies policies and actions Burbank will implement under varying shortage conditions to protect health and human safety, minimize economic disruption, and preserve environmental and community assets. Consistent with DWR requirements, Burbank has adopted six standard water shortage stages to address shortage conditions ranging from up to 10% to greater than 50%.

Section 9 Demand Management Measures

This section includes descriptions of past and planned conservation programs that Burbank operates within each demand management measure (DMM) category outlined in the UWMP Act, including: (1) water waste prevention ordinances, (2) metering, (3) conservation pricing, (4) public education and outreach, (5) distribution system water loss management, (6) water conservation program coordination and staffing support, and (7) “other” DMMs. These DMMs have contributed to Burbank’s compliance with its 2020 Target and are anticipated to continue to support Burbank in complying with MCCWL requirements.

Section 10 Plan Adoption, Submittal, and Implementation

This section provides information on the notice of Plan preparation and public hearing, the public hearing and adoption process, Plan implementation, and procedures for amending the adopted UWMP and WSCP. Prior to adoption, Burbank held a formal public hearing on 16 June 2026, at 6:00 p.m., to present the UWMP and WSCP. This UWMP and WSCP were submitted to DWR within 30 days of adoption and by the 1 July 2026 deadline.

1 UWMP INTRODUCTION

This section discusses the importance and uses of this Urban Water Management Plan (UWMP or Plan), the relationship of this Plan to the California Water Code (CWC), the relationship of this Plan to other local and regional planning efforts, and how this Plan is organized and developed in general accordance with the California Department of Water Resources' (DWR) 2025 UWMP Guidebook.³

1.1 Background and Purpose

The City of Burbank (Burbank or City) is an urban water supplier that provides service to 26,827 metered connections, both potable and recycled, in a service area of approximately 17 square miles within Los Angeles County.⁴

This UWMP is a foundational document and source of information about Burbank's historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs. Among other things, it is used as:

- A long-range planning document for water supply and system planning; and
- A source for data on population, housing, water demands, water supplies, and capital improvement projects used in:
 - Regional water resource management plans prepared by wholesale water suppliers and other regional planning authorities (as applicable);
 - General Plans prepared by cities and counties; and
 - Statewide and broad regional water resource plans prepared by DWR, the State Water Resources Control Board (SWRCB), or other state agencies.

Burbank's last UWMP was completed in 2021, referred to herein as the "2020 UWMP." This Plan is an update to the 2020 UWMP, carries forward information from that plan that remains current and relevant, and provides additional information as required by subsequent amendments to the UWMP Act (CWC §10610-10657). Although this Plan is an update to the 2020 UWMP, it was developed to be a self-contained, stand-alone document and does not require readers to reference information contained in previous UWMP updates.

1.2 Urban Water Management Planning and the CWC

The UWMP Act requires urban water suppliers to prepare a UWMP every five years and to submit this plan to the DWR, the California State Library, and any city or county within which the supplier provides water supplies. All urban water suppliers, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) annually are required to prepare a UWMP (CWC §10617).

The UWMP Act was enacted in 1983. Over the years it has been amended in response to water resource challenges and planning imperatives confronting California. A significant amendment was made in 2009

³ The 2025 UWMP Guidebook is available at: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2025-UWMP-Guidebook/Final-2025-UWMP-Guidebook-Accessible.pdf>

⁴ In this UWMP, "Burbank" refers to the urban water supplier, whereas references to the "City" denote the municipal jurisdiction itself.

as a result of the governor’s call for a statewide 20% reduction in urban water use by 2020, referred to as the Water Conservation Act of 2009, or “SB X7-7.” This amendment required urban retail water suppliers to establish water use targets for 2015 and 2020 that would result in statewide water savings of 20% by 2020. Beginning in 2016, urban retail water suppliers were required to comply with the water conservation requirements in SB X7-7 in order to be eligible for state water grants or loans. **Section 5** of this Plan contains the data and calculations used to determine compliance with these requirements.

In 2016, Governor Brown signed Executive Order B-37-16 Making Conservation a California Way of Life (MCCWL) and subsequently Senate Bill (SB) 606 and Assembly Bill (AB) 1668 were passed. SB 606/AB 1668 added new requirements related to drought planning, including: (1) additional requirements for Water Shortage Contingency Plans (WSCP) (CWC §10640), (2) requirements for urban water suppliers to conduct a drought risk assessments as part of their future UWMPs to assess water supply reliability for a period of drought lasting five consecutive water years (CWC §10635(b)), and (3) suppliers to conduct annual water supply and demand assessments to determine their water supply reliability for the current year and one dry year (CWC §10632(a)). These elements are included in **Section 7** and **Section 8** of this Plan. Additionally, SB 606/AB 1668 set new requirements for urban water agencies to continue to increase water efficiency beyond SB X7-7. Beginning in 2024, agencies were also required to report an annual Urban Water Use Objective (UWUO). However, because compliance with the UWUO requirements falls under the authority of the SWRCB, it is not included in this Plan.

The UWMP Act contains numerous other requirements that a UWMP must satisfy. **Appendix A** lists each of these requirements and where in the Plan they are addressed.

1.3 UWMP Organization

The organization of this Plan follows the same sequence as outlined in the 2025 UWMP Guidebook.

- Section 1 UWMP Introduction
- Section 2 Plan Preparation
- Section 3 Service Area Description
- Section 4 Water Use Characterization
- Section 5 SB X7-7 Baseline, 2020 Target, and 2025 Reporting
- Section 6 Normal Year Water Supply Characterization
- Section 7 Water Supply Reliability and Drought Risk Assessment
- Section 8 Water Shortage Contingency Planning
- Section 9 Demand Management Measures
- Section 10 Plan Adoption, Submittal, and Implementation

In addition to these sections, this Plan includes appendices providing supporting documentation and supplemental information. Pursuant to CWC §10644(a)(2), this Plan utilizes the standardized forms, tables, and displays developed by DWR for the reporting of water use and supply information required by the UWMP Act. This Plan also includes additional tables, figures, and maps to augment the set developed by DWR, as appropriate. The table headers indicate if the table is part of DWR’s standardized set of submittal tables. An overall lay description of the UWMP, including information related to water service reliability, potential issues, and strategies for managing reliability risks, is provided at the beginning of this UWMP.

1.4 UWMP Relationship to Other Efforts

This Plan provides information specific to water management and planning within Burbank’s service area. However, water management does not happen in isolation; there are other planning processes that integrate with the UWMP to accomplish urban planning. Some of these relevant planning documents include:

- **2024 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS; referred to as Connect SoCal).** Provides a comprehensive, long-range transportation and land use plan for the Southern California region prepared by the SCAG. The plan describes regional transportation investments, growth strategies, and sustainability policies, and evaluates how these efforts will improve mobility, enhance equity, and reduce greenhouse gas emissions through the planning horizon.
- **1997 Integrated Water Resources Plan.** Provides an assessment of Burbank’s water supplies and forecasts future demands. Information from this plan has been incorporated into subsequent UWMPs starting in 2000.
- **2025 Metropolitan Water District of Southern California’s (MWD) UWMP.** Presents a comprehensive water management plan for Burbank’s wholesale water provider MWD. The plan includes a description of the wholesaler’s water supplies and demands and an assessment of its supply reliability into the future.

This Plan was also prepared in close coordination with the City’s Community Development and Public Works departments and is integrated with the City’s broader planning efforts, including the Burbank2035 General Plan, which informs land use planning. Burbank also coordinated with MWD, as further described in **Section 2.5.1**, to ensure consistency between Burbank’s and MWD’s 2025 UWMPs.

1.5 Special Considerations

This Plan includes information beyond the requirements of the UWMP Act to support other regulatory processes that rely on UWMP data, including the Delta Plan and permitting for ocean desalination projects.

1.5.1 Demonstration of Consistency with The Delta Plan for Participants in Covered Actions

Although not required by the UWMP Act, in the 2025 UWMP Guidebook, DWR recommends that all suppliers that are participating in, or may participate in, receiving water from a proposed project that is considered a “covered action” under The Delta Plan by the Delta Stewardship Council — such as a (1) multiyear water transfer, (2) conveyance facility, or (3) new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta)—provide information in their UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code of Regulations [CCR], Title 23, §5003).

Burbank may receive imported water from the Delta via the State Water Project (SWP) through water purchased from MWD. Because Burbank can receive water from the Delta through imported purchases, Burbank has prepared an appendix to address reduced reliance on the Delta (see **Appendix C**). This evaluation is based on regional supply diversification, to address the requirements of the Delta Plan Policy WR P1.

1.5.2 Permitting for Ocean Desalination Projects

California's *Water Supply Strategy: Adapting to a Hotter, Drier Future* updates state priorities to address water supply shortages due to long-term drought and the accelerating impacts of climate change, including identifying opportunities to access new water sources such as ocean desalination. Burbank's wholesaler, MWD, recognizes that seawater desalination represents a significant opportunity to diversify the region's water resource with a new, locally controlled, reliable potable supply, and supports the use of seawater desalination by its member agencies. Burbank is currently partnered with six other agencies to evaluate onshore infrastructure for Water Farm 1 (WF1), the first subsea reverse osmosis desalination project in the United States. The project is currently in the feasibility study phase, as further described in **Section 6.6**.

2 PLAN PREPARATION

This section discusses the type of UWMP prepared by Burbank and includes information that will apply throughout the Plan. It also summarizes the coordination and outreach completed during the Plan development.

2.1 Basis for Preparing the UWMP

☑ CWC §10617

“Urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

☑ CWC §10608.12

(t) “Urban retail water supplier” means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

(w) “Urban wholesale water supplier” means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

☑ CWC §10620

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

☑ CWC §10621

(a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

☑ California Health and Safety Code §116275

(h) “Public Water System” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

An urban water supplier is defined in CWC §10617 as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 AF of water annually.

Burbank is exclusively a retail supplier and operates the Public Water System (PWS) listed in **Table 2-1**. PWSs are systems that provide drinking water for human consumption and are regulated by the SWRCB Division of Drinking Water (DDW). The SWRCB requires that water agencies report water usage and other relevant PWS information via the electronic Annual Reports to the Drinking Water Program. These data are used by the state to determine, among other things, whether an urban retail water supplier has reached the threshold for submitting a UWMP. In calendar year 2025, Burbank provided water to 26,827 connections and served 17,565 AF of water (**Table 2-1**). Burbank is therefore subject to the requirements of the UWMP Act.

Table 2-1 Public Water Systems (DWR Table 2-1)

Has there been a change in the number of affiliated Public Water Systems since the 2020 UWMP?			No
PWS Number	PWS Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
CA1910179	Burbank Power and Water	26,827	17,565
Total		26,827	17,565

2.2 Individual or Regional Plan

Urban water suppliers may elect to prepare individual or regional UWMPs. Burbank has elected to prepare an individual UWMP (see **Table 2-2**). Urban retail water suppliers may also report on the requirements of SB X7-7 individually or as a member of a “Regional Alliance.” As described in **Section 5**, Burbank is not a member of a Regional Alliance and this UWMP provides information on Burbank’s compliance with SB X7-7 as an individual urban retail water supplier.

Table 2-2 Plan Identification (DWR Table 2-2)

	Type of Plan	Name of RUWMP
☒	Individual UWMP	
☐	Water Supplier is also a member of a SB X7-7 Regional Alliance	N/A
☐	RUWMP	N/A

2.3 Fiscal or Calendar Year and Units of Measure

☒ CWC §10608.20

(a)(1) Urban retail water suppliers ... may determine the targets on a fiscal year or calendar year basis.

Annual volumes of water reported in this UWMP are measured in AF and are reported on a calendar year basis (**Table 2-3**). Water use and planning data reported in this UWMP for calendar year 2025 cover the full twelve months of the year, as required by the UWMP Guidelines.

Table 2-3 Supplier Identification (DWR Table 2-3)

Type of Supplier	
☐	Supplier is a wholesale supplier
☒	Supplier is a retail supplier
Fiscal or Calendar Year	
☒	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
Units of measure used in UWMP	
Unit	AF

2.4 Standard Submittal Tables and Alignment with UWMP Act Requirements

The Plan has been prepared in general accordance with the format suggested in DWR’s 2025 UWMP Guidebook. Text from the UWMP Act has been included in text boxes at the beginning of relevant sections of this UWMP. The information presented in the respective UWMP sections, and the associated text, figures, and charts are collectively intended to fulfill the requirements of that sub-section of the UWMP Act. To the extent practicable, supporting documentation has also been provided in **Appendices A** through **G**. Other sources for the information contained herein are provided in the references section of the document.

Per CWC §10644(a)(2), selected information for the UWMP updates must be presented in standardized tables for electronic submittal to DWR. Text and tables in the main body of the UWMP document have been cross-referenced to the companion DWR tables, which are provided in **Appendix B**. UWMP preparers are also requested to complete a checklist of specific UWMP requirements to assist the DWR review of the submitted UWMP. The completed checklist is included in **Appendix A**.

2.5 Coordination and Outreach

Coordination with other water suppliers, cities, counties, and other community organizations in the region is an important part of preparing a UWMP and WSCP. This section identifies the agencies and organizations Burbank sought to coordinate with during the preparation of this Plan.

2.5.1 Wholesale and Retail Coordination

☒ CWC §10631

(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

MWD is a water wholesaler in the Southern California region and is comprised of 26 member agencies, including Burbank. As described in **Section 6**, Burbank typically derives 20% of its potable water supply from MWD.

Urban retail water suppliers relying on one or more wholesalers for water supply are required to provide the wholesalers with information regarding projected water supply and demand. MWD has prepared a 2025 UWMP in accordance with requirements for water wholesalers, which addresses the regional issues concerning water demands and supplies and provides data on projected imported water deliveries. Burbank coordinated with MWD to ensure alignment of demand and supply projections presented in this UWMP.

Table 2-4 Water Supplier Information Exchange (DWR Table 2-4)

Wholesale Water Supplier Name
Metropolitan Water District of Southern California

2.5.2 Coordination with Other Agencies and the Community

☒ CWC §10620

(d)(3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

☒ CWC §10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan...

In addition to coordinating with MWD, Burbank coordinated with other regional agencies to ensure that data and issues are presented accurately, including: Los Angeles County, Glendale Water & Power (Glendale), and Los Angeles Department of Water and Power (LADWP). Burbank's UWMP has also been prepared in close coordination with the Burbank Community Development Department and Burbank Department of Public Works. Accordingly, Burbank's UWMP is consistent with the Burbank 2035 General Plan and subsequent planning documents, specific plans, and timing of individual planned and approved projects.

2.5.3 Notice to Cities and Counties

☒ CWC §10621

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

Burbank provided a 60-Day Notice to the entities and the communities it serves (i.e., the County of Los Angeles) at the start of the UWMP process, more than 60 days prior to the public hearing it held on 16 June 2026, informing them that the Plan was going to be reviewed and updated. As a courtesy, Burbank also provided a 60-Day Notice to LADWP and Glendale to ensure regional alignment in water management. The 60-Day Notice recipients are listed in **Table 10-1** in **Section 10**, and copies of correspondence with the agencies are provided in **Appendix D**.

Burbank also notified the public of its intent to adopt its UWMP through a public hearing and notices to members of the community. Additional information on noticing is provided in **Section 10** and in **Appendix D**.

3 SERVICE AREA DESCRIPTION

This section provides a description of the Burbank water system and service area, including climate, population, demographics, and land uses to help in understanding various elements of water supply and demand.

3.1 General Description

☒ **CWC §10631**

(a) Describe the service area of the supplier...

There has been a community known as Burbank in Southern California since 1887. The City of Burbank was officially established in 1911, and the municipal water and electric utility was founded in 1913. In 1914, an additional 9.4 square miles were annexed, establishing today's total area of 17.1 square miles and the population grew to almost 14,000. Burbank was one of the 13 founding agencies of MWD in 1928 to secure its future water supplies.

World War II brought rapid industrial growth. During the war, 94,000 people were employed at Lockheed Corporation (Lockheed) aircraft facilities within the City, and the population grew to 78,577 by 1950. Growth continued at a slower rate for the remainder of the 20th century. The Lockheed facility closed in 1991; however, the rest of the 1990's brought an expansion of the movie and television industry and a revitalization of the downtown area. The population grew to 100,316 by 2000. Since then, former Lockheed and other industrial sites have been redeveloped for commercial and retail uses. There has been a return to intensive multi-family residential construction that replaces, or sometimes adds on to, older single-family and small multi-family units.

The City is located approximately 12 miles north of downtown Los Angeles, in the eastern end of the San Fernando Valley. The City of Los Angeles lies to the south and west and the City of Glendale to the southeast. A map of Burbank is provided on **Figure 3-1**, showing both the City boundary and the Burbank service area.

Burbank's supply portfolio reflects its strategic emphasis on maximizing local resources and reducing reliance on purchased treated water. Burbank produces approximately 77% of its potable water supply from production wells operated by Burbank Water and Power (BWP) through a contract operator, representing an increase from previous years. The groundwater is treated at the Burbank Operable Unit (BOU) before entering Burbank's distribution system. The BOU is a groundwater remediation program and treatment system that recovers contaminated groundwater from the North Hollywood and Burbank area for safe municipal use in Burbank. The BOU is discussed in more detail in **Section 6.2**. Burbank purchases the remaining 20% of its potable supply from MWD as treated potable water. Burbank has five connections with MWD that supply potable water and one connection that supplies untreated raw water, which Burbank uses for groundwater recharge. Burbank also produces recycled water (approximately 3,000 acre-feet per year [AFY]) at the Burbank Water Reclamation Plant (BWRP), which is operated by the Burbank Department of Public Works. Burbank has two connections with the neighboring Glendale and one connection with LADWP, which have been used in the past to augment supply from MWD when any of the cities have had a short-term operational difficulty.

Burbank also owns and maintains potable and non-potable distribution pipelines, booster pumps, storage tanks and reservoirs as described in greater detail in **Section 3.5**.

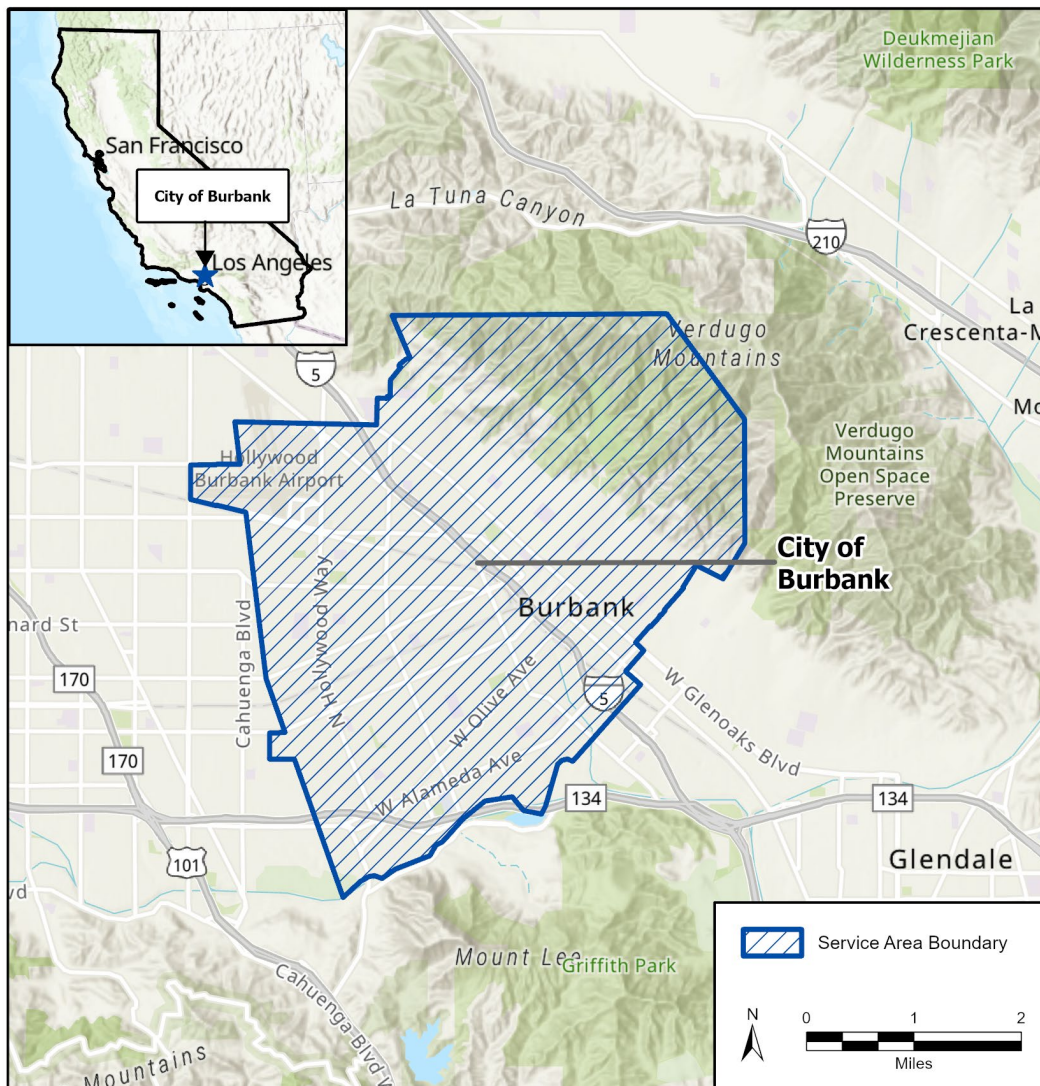


Figure 3-1 Burbank Location and Service Area Boundary

3.2 Service Area Climate

☒ **CWC §10631**

(a) Describe the service area of the supplier, including ...“climate...”

☒ **CWC §10635**

(b)(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

Burbank’s service area is characterized by a Mediterranean climate with hot and dry summers and mild winters. Burbank is located in the San Fernando Valley which is relatively inland compared to the nearby coastal areas. This means that summer days are typically hotter and winter nights are typically colder. Average temperature and rainfall data for the Burbank area were available from the Western Regional Climate Center Burbank Valley Pump Station (# 041194-6) and reference evapotranspiration data were

available from the nearby DWR California Irrigation Management System (CIMIS) North Hollywood Station (# 223) for 2015 – 2025. Based on that data, most rainfall occurs between December and March, and Burbank receives an average of 15 inches of rainfall annually (see **Table 3-1**). Maximum daily air temperature averages 88 degrees Fahrenheit (°F) during the summer months and 70°F in the winter months. The average annual reference evapotranspiration (Eto) is 51 inches, and this leads to a considerable demand for landscape irrigation in order to make up for the deficit between Eto and rainfall.

Table 3-1 Climate Characteristics

Month	Average Temperature		Standard Average ETo (inches)	Average Rainfall (inches)
	Min (°F)	Max (°F)		
January	42	70	1.97	3.22
February	44	71	2.85	3.23
March	46	71	3.89	2.66
April	50	75	5.11	0.58
May	54	74	5.10	0.31
June	59	82	5.96	0.01
July	63	88	6.99	0.05
August	63	90	6.65	0.39
September	61	88	4.99	0.15
October	54	84	3.96	0.41
November	46	77	2.27	1.13
December	42	70	1.70	3.13
Annual	52	78	51	15

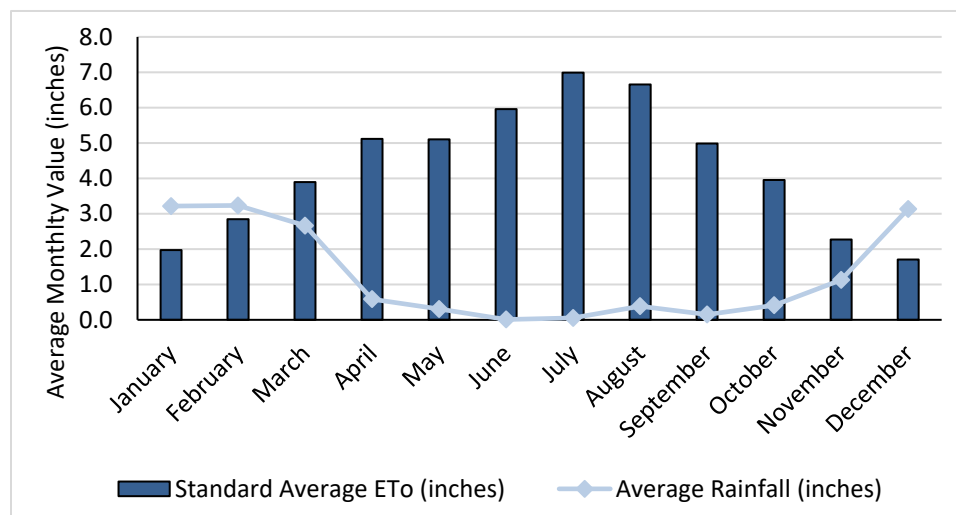


Figure 3-2 Average Monthly Rainfall and Eto

3.2.1 Climate Change

According to the Cal-Adapt tool, future projections for Burbank’s service area using Localized Constructed Analogs downscaled Coupled Model Intercomparison Project Phase 5 model indicate an average increase in temperature of 4.1°F for medium emissions (Representative Concentration Pathway [RCP] 4.5) models and 5.0°F for high emissions (RCP 8.5) models by 2064 (**Figure 3-3**).⁵

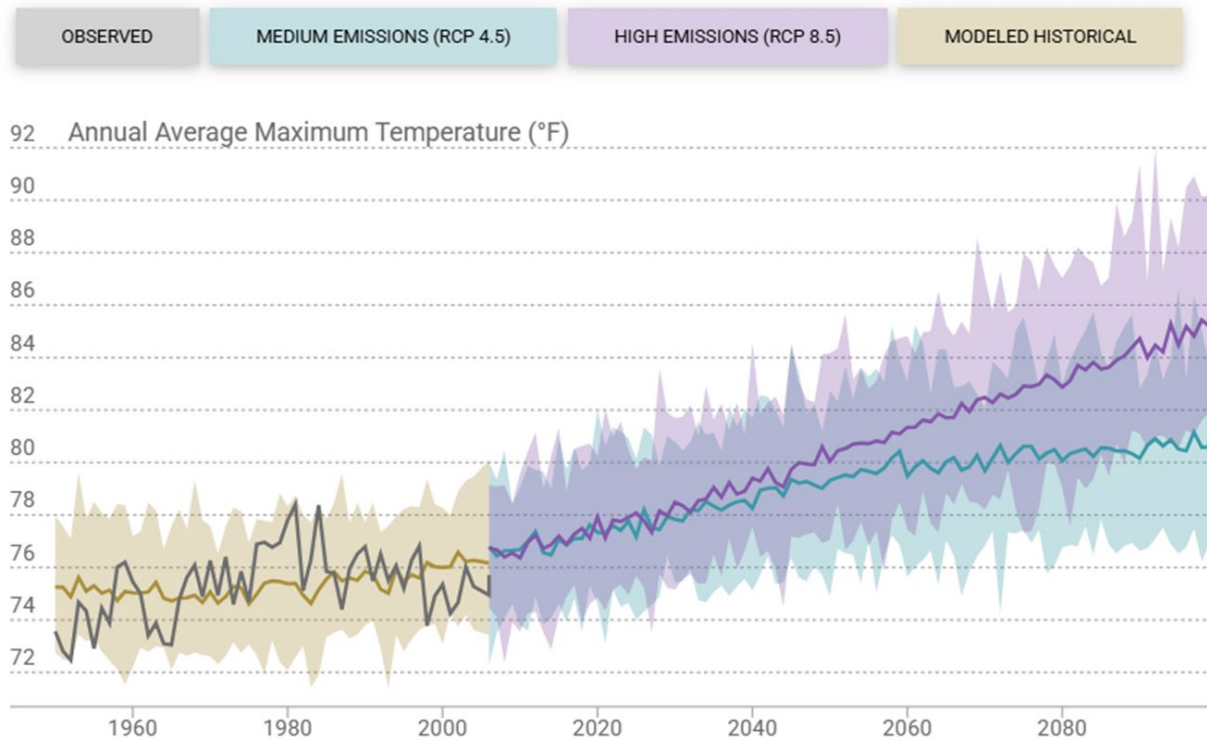


Figure 3-3 Observed and Forecasted Temperature for Burbank’s Service Area

3.2.2 Climate Change Considerations in UWMP

Pursuant to CWC requirements and the 2025 UWMP Guidebook, this Plan incorporates climate change considerations into the following relevant sections:

- Section 3 - Service Area Description;
- Section 4 - Water Use Characterization;
- Section 6 - Normal Year Water Supply Characterization; and
- Section 7 - Water Supply Reliability Assessment.

Section 4.6 discusses potential climate change impacts on water demands, and **Section 6.11.1** discusses potential climate change impacts on supplies.

⁵ The Cal-Adapt tool is available at: <https://cmip5.cal-adapt.org/tools/local-climate-change-snapshot/>

3.3 Service Area Population and Demographics

☒ CWC §10631

(a) Describe the service area of the supplier, including current and projected population ... other social, economic and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

Burbank historical and current service area population are based on estimates from the California Department of Finance (DOF), which are benchmarked with the 2020 U.S. Census Bureau data (**Figure 3-4**). In 2020, Burbank's service area population was 107,171, and it is estimated that Burbank's service area population was 106,146 in 2025, a decrease of 1.0%. This decrease is likely attributable to the 2020 COVID-19 pandemic which significantly altered socio-economic trends including increased emigration from many urban areas throughout California.

Projected population for 2030 through 2050 was provided by Burbank's wholesaler, MWD, and based on SCAG's 2024 Connect SoCal (RTP/SCS). SCAG is the regional Metropolitan Planning Organization, and it updates the Connect SoCal plan every four years to address the region's transportation, infrastructure, land use, housing, and environmental needs. Connect SoCal is developed through rigorous technical analysis, extensive stakeholder engagement and collaboration with local, state and federal government.

Burbank's 2021-2029 Housing Element Update also identified the development of three future specific plans, which are intended to facilitate residential development within the City. The three specific plans are: (1) the Downtown Burbank Transit Oriented Development Specific Plan (DTSP), (2) the Golden State Specific Plan (GSSP), and (3) the Media District Specific Plan (MDSP) (see **Section 3.4** for more information on the 2021-2029 Housing Element Update and the three specific plans). A comparison between SCAG's 2024 Connect SoCal housing projections and the preferred project alternatives for the three in-process specific plans indicated that the development from the GSSP was accounted for in the SCAG projections, while the MDSP and DTSP were not. Therefore, residential development and subsequent population increase from these two developing specific plans is considered additive to SCAG's, and consequently MWD's population projections. MWD provided estimates of the number of persons per household in Burbank's service area (**Appendix E**) and this factor was applied to the number of new housing units contemplated as part of full build-out development of the two developing specific plans to estimate the additional increase in population.

Figure 3-4 shows the baseline projections provided by MWD, and the adjustments made to incorporate the potential population associated with the developments contemplated in the MDSP and DTSP. Burbank's total current and projected service area population are shown in **Table 3-2** in five-year increments through 2050 assuming the full development potential contemplated under the DTSP and MDSP is achieved by 2035. The total population within Burbank's service area is expected to be 156,624 by 2050, which represents a 1.57% average annual growth rate between 2025 and 2050.

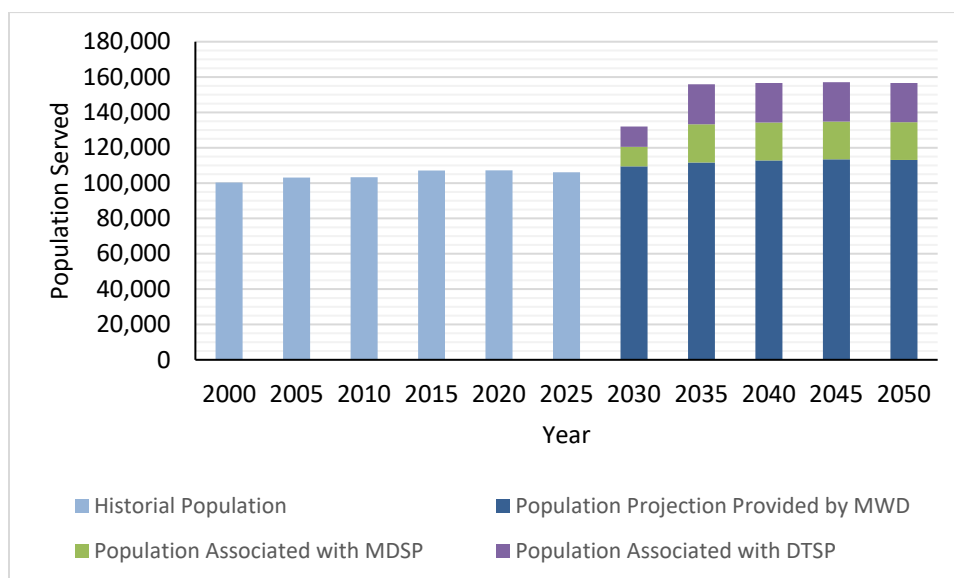


Figure 3-4 Population – Historical, Current, and Projected

Table 3-2 Population – Current and Projected (DWR Table 3-1)

Population Served	2025	2030	2035	2040	2045	2050 (opt)
	106,146	131,998	155,889	156,666	157,126	156,624

NOTES: Current population for 2025 is based on DOF estimates for Burbank (DOF, 2025); future population estimates were provided by MWD and based on SCAG’s 2024 Connect SoCal plan (SCAG, 2024). The projected population estimates were adjusted assuming the full development potential contemplated under the DTSP and MDSP in Burbank’s 2021-2029 Housing Element Update is achieved by 2035.

3.3.1 Future Employment Growth

Current and projected service area employment estimates from 2025 through 2050 are provided by MWD and based on projections from SCAG’s 2024 Connect SoCal, as shown in **Table 3-3**. Similar to the population projections, employment is expected to initially grow more quickly through 2035 and begin decreasing after 2040.

Table 3-3 Employment – Current and Projected

Service Area Employment	2025	2030	2035	2040	2045	2050 (Opt)
	134,096	138,429	144,590	145,703	145,546	145,482

NOTE: The 2025 employment estimate and future employment projections were provided by MWD and based on SCAG’s 2024 Connect SoCal plan (SCAG, 2024).

3.3.2 Other Social, Economic, and Demographic Factors

Table 3-4 summarizes demographics for Burbank’s service area based on the U.S. Census American Community Survey 2024 5-Year Estimates (U.S. Census Bureau, 2025). The age distribution of Burbank’s residents is similar to statewide demographics with approximately 20% of the population under 18 years and 16% over 65 years. Educational attainment in Burbank exceeds statewide averages, while median household income is generally consistent with statewide figures.

Employment growth is expected in a variety of commercial and industrial sectors, notably entertainment/media, retail, health care, and manufacturing.

Table 3-4 Demographic and Housing Characteristics (2020-2024)

Demographics	Burbank	California
Age and Sex		
Persons under 5 years	5.1%	5.3%
Persons under 18 years	19.1%	21.3%
Persons 65 years and older	16.3%	16.5%
Female persons	51.5%	50.1%
Race and Hispanic Origin		
White alone	57.6%	69.8%
Black or African American alone	4.2%	6.4%
American Indian and Alaska Native alone	0.6%	1.8%
Asian alone	11.7%	17.0%
Native Hawaiian and Other Pacific Islander alone	0.1%	0.5%
Two or More Races	15.8%	4.4%
Hispanic or Latino	23.9%	40.8%
White alone, not Hispanic or Latino	54.1%	33.6%
Families & Living Arrangements		
Persons per household	2.41	2.84
Living in same house 1 year ago, percent of persons age 1 year+	90%	89.2%
Language other than English spoken at home, age 5 years+	42%	44.4%
Education		
High school graduate or higher, persons age 25 years+	92.5%	84.7%
Bachelor's degree or higher, persons age 25 years+	47.1%	37.1%
Income & Poverty		
Median Household Income (2023 dollars)	\$97,082	\$99,122
Per capita income in past 12 months (2023 dollars)	\$56,287	\$49,513
Persons in poverty	10.7%	11.8%
NOTE: 2024 demographic data from the U.S. Census Bureau QuickFacts website (U.S. Census Bureau, 2025).		

3.4 Land Uses within Service Area

☒ CWC §10631

(a) ...The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities...

Burbank consists of a mix of urban land uses, including residential, commercial, industrial, institutional and open space, with residential and commercial being the dominating uses. Burbank 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 Burbank2035 General Plan prepared in 2013, 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. New residential development will be predominantly multi-family, as well as a steady production of accessory dwelling units within single family neighborhoods. Both types of development are expected to increase the population density. Redevelopment of areas adjacent to downtown is expected to continue, especially along the South San Fernando Boulevard corridor and the area around the Metrolink station.

The City has a City Council-adopted and State-Certified 2021-2029 Housing Element Update, which assesses the City's existing housing stock, capacity for housing growth and implementation programs necessary to facilitate the development of the City's Regional Housing Needs Allocation (RHNA) as established by SCAG (Burbank, 2022). Burbank's RHNA is 8,772 net units, and the City identified the capacity for this plus a buffer for a total of 10,011 net new units which could be developed to meet housing needs. The 2021-2029 Housing Element Update includes Program #5, which is to complete three specific plans which are an essential component of the City demonstrating its ability to facilitate the state mandated housing. The three specific plans are the DTSP, the GSSP, and the MDSP. In addition to facilitating the development of housing units, these specific plans are also anticipated to facilitate non-residential development across a variety of commercial sectors including hospitality, office, restaurant, retail, entertainment and light industrial land uses.

MWD provided demographic growth projections for Burbank, which are based on SCAG's 2024 Connect SoCal. These projections inform their water demand projections and 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. The SCAG 2024 Connect SoCal projections are provided at the local scale based on transportation analysis zones (TAZs). By reviewing the TAZs' overlap with the three specific plans described above, it was determined that the growth anticipated from the GSSP is included in the SCAG 2024 Connect SoCal projections, but neither the DTSP nor the MDSP were accounted for in the projections. Therefore, for this UWMP, it is assumed that the housing units associated with the DTSP and the MDSP are in addition to SCAG's, and consequently MWD's, housing projections. The capacity for the development of new housing units from the DTSP and the MDSP, all of which are anticipated to be new multi-family units, were provided by Burbank's Community Development Department. This UWMP assumes the full development potential contemplated under the DTSP and MDSP is achieved by 2035.

The current number of housing units, as estimated by the DOF, is 44,733 (DOF, 2025). MWD projects the total number of housing units will increase to 50,443 units by 2050. However, when accounting for the

full development potential contemplated under the DTSP and MDSP, this total number of housing units is projected to reach 69,950 units by 2050, as shown in **Table 3-5**.

Table 3-5 Occupied Housing Units – Current and Projected

Occupied Housing Units	2025	2030	2035	2040	2045	2050
Single Family	22,311	22,673	23,487	23,780	24,004	24,041
Multi-Family	22,422	34,246	44,761	45,463	45,832	45,909
Total	44,733	56,919	68,248	69,243	69,836	69,950
NOTES: Occupied housing units for 2025 are based on DOF estimates for Burbank (DOF, 2025); future occupied housing units were provided by MWD based on SCAG’s 2024 Connect SoCal plan (SCAG, 2024). MWD’s multi-family housing projections were adjusted assuming the full development potential contemplated under the DTSP and MDSP is achieved by 2035, as provided by Burbank’s Community Development Department.						

3.5 Water Distribution System

Burbank provides potable water and recycled water to customers within the City. Burbank's potable water supply is comprised of water from MWD and groundwater from production wells operated by the City. MWD imports its water from Northern California via the SWP and also the Colorado River via the Colorado River Aqueduct (CRA). All groundwater extracted in Burbank is treated to remove Volatile Organic Compounds (VOCs) at the BOU prior to entering the distribution system. Recycled water is produced at the Burbank Water Reclamation Plant (BWRP), operated by the Burbank Department of Public Works, and is delivered via an independent distribution system. **Section 6** contains more information about potable water supplies and the recycled water system.

Burbank’s potable water system includes approximately 278 miles of pipelines ranging in size from 30 inches to 4 inches in diameter, 35 booster pumps, 21 tanks and reservoirs, eight wells, five MWD connections, and over 26,000 service connections. The water distribution system consists of three major pressure zones and eight smaller hillside zones (see **Figure 3-5**). The three largest pressure zones are denoted Zones 1, 2, and 3. Zone 1 encompasses approximately 90% of the total City land area and represents 88% of the total City demand. The ground surface elevations in Zone 1 range from 480 feet above mean sea level (MSL) at the southerly boundary at Chavez Street and Linden Avenue, to 830 feet MSL on Bel Aire Drive at Orange Grove Avenue. The reservoirs that serve Zone 1 have a hydraulic elevation of 904 feet MSL.

Almost all of the water supplies enter the system in Zone 1. The only exception is that some water from one of the five MWD treated water connections (B-5) can feed Zone 2. Water is pumped from Zone 1 to Zones 2 and 3 at hydraulic elevations 991 and 1,156 feet MSL, respectively. From Zones 2 and 3, water is pumped to the eight hillside zones through successive pumping stations.

The potable system’s tanks and reservoirs range in capacity from 13,500 gallons to 25 million gallons (MG). The combined storage capacity of all the reservoirs is approximately 55.5 MG. The storage capacity of Zone 1 is approximately 45.5 MG, 90% of the total system storage.

Water demands by individual customers are subject to wide daily and seasonal fluctuations. Burbank's system has been designed to accommodate variability of water demands. The system includes large storage reservoirs to accommodate hourly flow and demand variations throughout the distribution system. The storage capacity is large enough to allow for short interruptions (1 to 3 days at average flow) in the water supply.

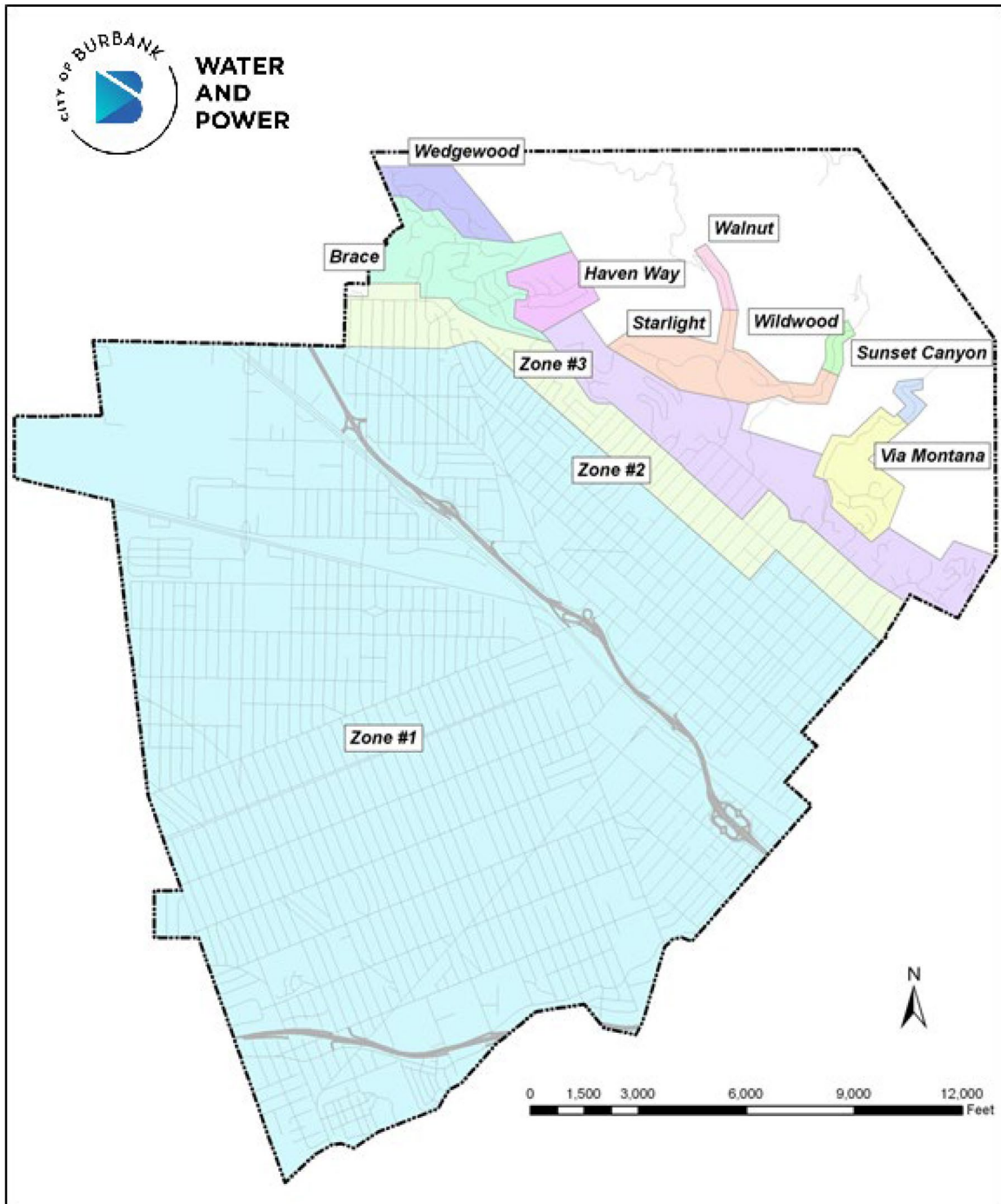


Figure 3-5 Burbank's Potable Water System and Pressure Zones

4 WATER USE CHARACTERIZATION

☒ CWC §10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

☒ CWC §10631

(d)(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following...

(d)(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(d)(4)(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(d)(4)(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following: (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections. (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

This section describes and quantifies Burbank’s historical, current, and projected water uses through 2050. For the purposes of this UWMP, the terms “water use” and “water demand” are used interchangeably.

4.1 Non-Potable Versus Potable Water Use

Potable and non-potable water uses are accounted for separately in this section. Potable uses are served by Burbank’s potable water delivery system. Potable water deliveries comply with Title 22 Drinking Water Standards. Non-potable water uses may include recycled and untreated raw water deliveries that do not meet potable drinking water standards. Uses of potable versus non-potable water are clearly distinguished in the tables included in this section of the Plan.

4.2 Water Use Sectors

☒ CWC §10631

(d)(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(J) Distribution system water loss.

Demand within Burbank's water service area is measured using water meters that are installed at each customer account. Records of current and historical water use at each account are maintained by Burbank. Demand within Burbank's service area is tracked and reported for the following sectors:

- **Single Family Residential:** Attached or detached dwelling units that are individually metered; this may include water use from associated accessory dwelling units.
- **Multi-Family Residential:** Two or more dwelling units served by a common water meter. Water use is predominately for indoor water uses.
- **Commercial:** Commercial accounts generally represent businesses that provide or distribute products or services.
- **Institutional and Governmental:** Includes meters serving City sites and institutional accounts which typically consist of public service entities such as schools, colleges and universities, hospitals, government facilities, courts, churches, and nonprofit research organizations.
- **Industrial:** Includes recycled water meters for geothermal and other energy production.
- **Landscape:** Recycled water meters used for outdoor irrigation at sites such as highway landscaping, city parks, schools and golf courses.
- **Fire Service:** Water meters used for fire suppression or system maintenance.
- **Other:** Temporary meters and miscellaneous customers not listed elsewhere.
- **Sales to Other Agencies:** Any sales, exchanges or transfers of water to another agency

The following water use sectors noted in CWC §10631(d)(1) do not apply to Burbank:

- Saline water intrusion barriers, groundwater recharge⁶, or conjunctive use, or any combination thereof; and
- Agricultural.

Burbank’s total water demand is the sum of potable water demands and recycled water demands within its service area. Burbank’s total water demand includes water consumed by metered accounts in the service area (metered water use), authorized but unbilled uses, and water losses within the system. These losses are further divided into apparent and real losses. The latter accounts for physical losses within the distribution system caused by seepage, leaks, and spills, while the former accounts for accounting losses due to meter inaccuracies, data handling errors, and unauthorized consumption.

4.3 Past and Current Water Demand

☒ CWC §10631

(d)(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use... based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors...

Past water uses inform an understanding of water use trends which are crucial for developing water use projections. **Figure 4-1** shows the 2021 through 2025 water use by sector, and **Table 4-1** shows the 2025 actual water use by sector. The 2025 water loss was estimated as 4.6% of water supplied based on the average water loss for 2021 through 2024 as reported in the American Water Works Association (AWWA) Free Water Audit Software (referred to as “water loss audit reports”).

Total water use decreased from 19,042 AF in 2021 to 16,001 AF in 2023, a 16% decrease driven by a population decline, drought conditions across the State, and implementation of Burbank’s WSCP Level 3 water use restrictions in June 2022 (see **Section 8**). As shown in **Table 4-1**, total water use was 17,167 AF in 2025. **Figure 4-2** presents the water use distribution by sector in 2025. Together, single family residential water use and multi-family residential water use accounted for 60% of total demand in 2025. Commercial and recycled water use were the next largest sectors, with each accounting for 17% of total demand.

⁶ While Burbank spreads untreated water from MWD for groundwater recharge, the water is typically recovered within the same year to meet potable demands and therefore is not accounted for separately as a demand.

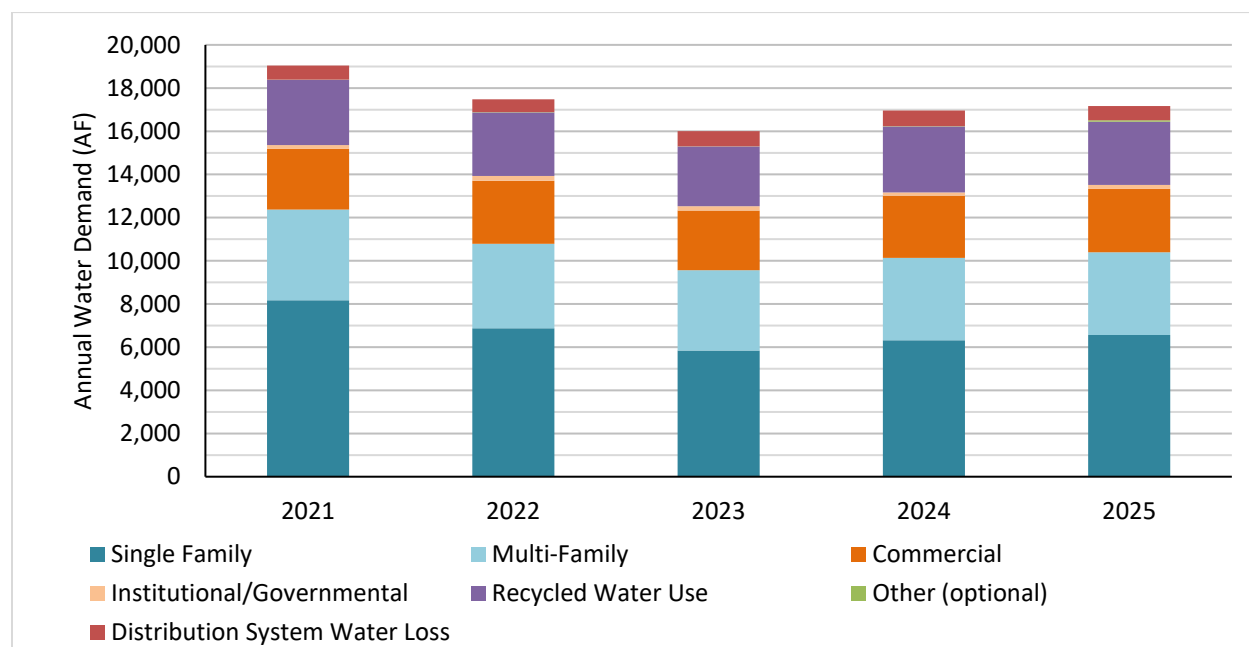


Figure 4-1 Total Uses for Potable and Non-Potable Water - 2021 – 2025 Actual

Table 4-1 Total Uses for Potable and Non-Potable Water - 2025 Actual (DWR Table 4-1)

Use Type	Additional Description	2025 Actual	
		Potable or Non-Potable	Volume (AF)
Single Family		Potable	6,562
Multi-Family		Potable	3,832
Commercial		Potable	2,936
Institutional/ Governmental		Potable	183
Other	Recycled Water Use (a)	Non-Potable	2,930
Other	Fire Protection and Temporary Water	Potable	63
Distribution System Water Loss	(b)	Potable	661
Subtotal Potable			14,237
Subtotal Non-Potable			2,930
Total (c)			17,167

NOTES:

(a) Recycled Water Use does not include water loss from the non-potable distribution system.

(b) Water loss was estimated as the average potable distribution system water loss from calendar year 2021 - 2024. For planning purposes, distribution losses are considered potable water demand.

(c) Total may not sum due to rounding. Demand differs from supply in **Table 6-10** due to metering inaccuracies and/or data errors.

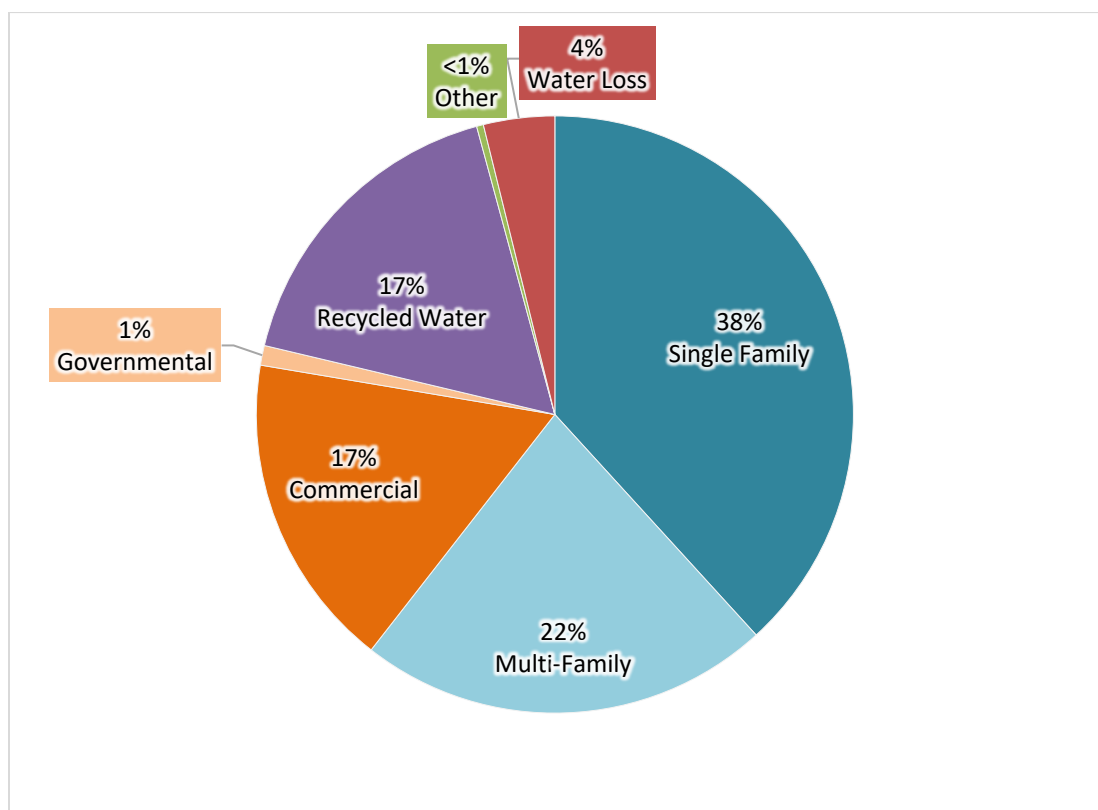


Figure 4-2 2025 Percentage of Total Water Demand by Sector

As seen in **Table 4-2**, per capita potable water use, measured in gallons per capita per day (GPCD), decreased significantly in 2022 and 2023 but then began to rebound in 2024 and 2025.

Table 4-2 Historical Water Demand and Per Capita Water Demand

Year	Potable Water Demand (AF) (a)	Service Area Population (b)	Per Capita Potable Water Use (GPCD) (c)
2021	16,022	106,849	134
2022	14,531	105,669	123
2023	13,235	105,538	112
2024	13,904	105,842	117
2025	14,237	106,146	120

NOTES:

- (a) Detailed potable water demand data from 2021 through 2025 are shown in **Figure 4-1**. For planning purposes, distribution losses are considered potable water demand.
- (b) Service area populations are from the California DOF Population Estimates (DOF, 2025)
- (c) Per capita potable water use is calculated by dividing the total annual potable water demand by the service area population and the number of days in a year.

4.4 Projected Water Demand

☒ **CWC §10631**

(d)(1) For an urban retail water supplier, quantify, to the extent records are available, ... projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors...

(d)(2) The water use projections shall be in the same five-year increments described in subdivision (a).

☒ **CWC §10631.1**

(a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirements under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

☒ **CWC §10633**

The plan shall provide, to the extent available, information on recycled water...and shall include all of the following:...

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision...

☒ **CWC §10635**

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

MWD provided its member agencies, including Burbank, with supply and demand projections developed for its 2025 UWMP (**Appendix E**). Burbank's potable water demands for 2025, 2030, 2035, 2040 and 2045 are based on MWD's total retail demand projections, which integrate demographic, housing and population projections discussed in **Section 3.3**. Per MWD's 2025 UWMP, baseline water use was adjusted to account for anticipated passive water savings, which are primarily driven by plumbing code updates, appliance efficiency standards, and gradual turnover of the existing appliances and plumbing fixtures. The anticipated passive water savings were subtracted from the baseline projected water use, as described in greater detail in the following sections.

As discussed in **Section 3.4**, MWD's demand projections are based on SCAG's 2024 Connect SoCal plan and do not include additional development contemplated in the DTSP and MDSP. Accordingly, the projected demands associated with these specific plans were estimated separately and added to MWD's baseline demand projections.

4.4.1 Passive Water Savings

☒ **CWC §10631(d)(4)**

(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

Passive savings result primarily from: (1) the natural replacement of existing plumbing fixtures with water-efficient models required under current plumbing code standards and retrofit requirements (Ordinance No. 3786), and (2) the installation of water-efficient fixtures and equipment in new buildings and retrofits as required under CALGreen Building Code Standards as adopted in the Burbank Municipal Code, Title 9, Chapter 1, Article 11. The water demand projections presented herein take into account passive savings, as affirmed in **Table 4-3**.

Table 4-3 Inclusion in Water Use Projections (DWR Table 4-3)

Are Future Water Savings Included in Projections?	Yes
If "Yes" to above: State the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found.	Section 4.4.1
Are Lower Income Residential Demands Included in Projections?	Yes
If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	Section 4.4.3
NOTES: All of Burbank's residential customers, regardless of income level, are metered and thus the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in Table 4-1 and Table 4-5 .	

Burbank's passive savings were estimated by MWD and factored into their water demand projections. MWD's conservation model incorporates efficiency requirements for indoor water fixtures from the California Plumbing Code and the Federal Energy Policy Act of 1992. The model assumes that new developments will be in compliance with all efficiency codes as soon as they come online. The model also assumes a natural replacement rate for fixtures in existing buildings to account for the replacement of old fixtures with new efficient fixtures over time. Passive Water Savings are measured relative to a 1990 baseline year and continue to increase through the planning period. This passive savings adjustment applies to all demand categories except recycled water demand. Burbank's projected passive savings, as provided by MWD, are included in **Appendix E**, and more information about which efficiency standards were used and how the passive savings were calculated can be found in MWD's 2025 UWMP.

Burbank's City Council enacted the Sustainable Water Use Ordinance (SWUO) in 2008 which prohibits the wasteful use of potable water. The SWUO includes permanent restrictions to reduce water waste, as well as a tiered set of increasing restrictions that can be used to further reduce water in response to water

shortages.⁷ The enactment of the SWUO in response to water shortage is described in **Section 8**. The impact of the SWUO on reducing water waste is not explicitly included in the passive water savings as calculated by MWD, but it is an important factor nonetheless in promoting water conservation throughout the City.

4.4.2 Projected Water Demand by Sector

The projected demands from MWD were disaggregated by water use sector using 2025 water sales by customer class, and then allocated based on projected housing unit and employment growth. Distribution system water loss was assumed to remain consistent with the 2021 – 2024 average of 4.6% of total water demand.

MWD's baseline water demand projections were adjusted assuming the full development potential contemplated under the DTSP and MDSP is achieved by 2035. The potential net new additive water demands from the DTSP and MDSP were provided by Burbank's Community Development Department by water sector. These specific plan demand projections were assumed to represent customer end-use demand and do not include distribution system water loss; therefore, additional distribution system water losses were applied at 4.6% of the total water demand of the specific plans consistent with 2021 – 2024 average water loss levels.

Table 4-4 shows the projected water demand by use type in five-year increments between 2030 and 2050. Demand is projected to increase more rapidly in the earlier planning period, growing 21% between 2030 and 2035, and then stabilizing and slightly decreasing by about -1% between 2045 to 2050. The total potable water demand is expected to reach approximately 27,501 AF in 2050, representing an approximately 93% increase from 2025 potable demand. Including both potable and non-potable demands, the total projected demand is anticipated to reach 31,094 AF by 2050. While historical recycled water use has averaged approximately 2,940 AFY for the past five years, Burbank anticipates that future recycled water use will increase to 3,593 AF by 2030 and remain constant through 2050. For more information on specific recycled water uses, see **Section 6.5.4**.

⁷ Burbank's Board may consider updates to the SWUO in the near future to clarify existing conservation measures and add in new requirements, such as the non-functional turf ban under AB 1572 and MCCWL requirements.

Table 4-4 Total Uses of Potable and Non-Potable Water - Projected (DWR Table 4-2)

Use Type	Additional Description	Projected Water Use (AF)					
		Potable or Non-Potable	2030	2035	2040	2045	2050
Single Family		Potable	6,987	7,174	7,113	7,080	7,003
Multi-Family		Potable	8,103	10,436	10,499	10,529	10,527
Commercial		Potable	5,926	8,569	8,517	8,426	8,338
Institutional/ Governmental		Potable	280	341	340	337	333
Other	Fire Protection and Temp Service	Potable	22	22	22	22	22
Other	Total Recycled Water Use	Non-Potable	3,593	3,593	3,593	3,593	3,593
Distribution System Water Loss	(a)	Potable	1,038	1,293	1,290	1,286	1,278
Subtotal Potable			22,356	27,835	27,781	27,680	27,501
Subtotal Non-Potable			3,593	3,593	3,593	3,593	3,593
Total (b)			25,949	31,428	31,374	31,273	31,094
NOTES:							
(a) Assumes average water loss from 2021 – 2024 (4.6%).							
(b) Totals may not sum due to rounding.							

4.4.3 Water Use by Lower Income Households

☒ CWC §10631.1

(a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirements under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

☒ California Health and Safety Code §50079.5

(a) “Lower income households” means persons and families whose income does not exceed the qualifying limits for lower income families... In the event the federal standards are discontinued, the department shall, by regulation, establish income limits for lower income households for all geographic areas of the state at 80 percent of area median income, adjusted for family size and revised annually.

Burbank is characterized as a middle-class community with a median household income of \$97,082 (U.S. Census Bureau, 2025). According to the SB 535 Disadvantaged Communities – 2022 Update, disadvantaged communities are primarily along the I-5 corridor and account for approximately 34% of the

City's population.⁸ Therefore, it is assumed that 34% of the residential water demand in 2025, approximately 3,550 AF, served households in disadvantaged communities. All residential customers in Burbank, regardless of income level, are metered; therefore, water demands for lower-income households are included in the single- and multi-family water use estimates shown in **Table 4-1** and **Table 4-5**. Inclusion of lower-income households in water use projections is affirmed in **Table 4-3**.

4.5 Distribution System Water Loss

☒ CWC §10631(d)(3)

(A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.

Water loss is the sum of apparent and real losses. Apparent loss is associated with metering inaccuracies, billing and administrative errors, authorized unmetered uses (e.g., system flushing and firefighting), and unauthorized uses. Real loss is associated with physical water loss through line breaks, leaks and seeps, and overflows of storage tanks.

4.5.1 Previous Five Years of Distribution System Losses

Since 2016, urban retail water suppliers have been required under CWC §10608.34 and CCR Title 23, §638.1 et seq to quantify distribution system water losses using the AWWA water loss audit reports. **Table 4-5** summarizes the water loss audit reports submitted to DWR since 2020. The water loss audit reports are available through DWR's Water Use Efficiency (WUE) Data Portal.

Table 4-5 Water Loss Audit Reporting (DWR Table 4-5)

PWS ID # Reported in DWR Table 2-1R	Reporting Period	Submitted to DWR Water Loss Audit Program
CA1910179	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
NOTE: Submitted water loss audit reports are available at: https://wuedata.water.ca.gov/ .		

4.5.2 Progress Toward Meeting the Water Loss Performance Standard

In 2022, the SWRCB adopted new performance standards for urban retail water suppliers that would reduce water loss by nearly 35%. Effective starting in 2023, the SWRCB provided a volumetric standard to each urban retail water supplier that sets cost-effective levels of achievable water loss given each water system's characteristics and budgets. Suppliers will be required to start meeting individual volumetric loss

⁸ SB 535 Disadvantaged Communities – 2022 Update is available at: <https://oehha.ca.gov/calenviroscreen/sb535>

standards over a three-year period beginning January 2028. This water loss is one component of the MCCWL. As shown in **Table 4-6**, Burbank is currently meeting the 2028 water loss standard.

Table 4-6 Progress Towards 2028 Water Loss Standard (DWR Table 4-6)

PWS ID #	Did the SWRCB Calculate a Water Loss Standard for this PWS?	Real Water Loss					Apparent Water Loss				
		SWRCB Standard		Most Recent AWWA Loss Audit			SWRCB Standard		Most Recent AWWA Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss	Number of Units (b)	Volume of Total Real Loss (AF) (b)	Real Water Loss per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Units (b)	Volume of Total Apparent Loss (AF) (b)	Apparent Water Loss per Unit per Day
CA1910179	Yes	17.4	Gallons per Service Connection per Day (GPSCD)	27,810	525	16.9	6.8	Gallons per Service Connection per Day (GPSCD)	27,810	201	6.5
NOTES: (a) Standards provided by SWRCB (b) Reported in Burbank's 2024 AWWA Loss Audit.											

4.6 Climate Change Considerations

☑ CWC §10630

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, while accounting for impacts from climate change.

☑ CWC §10635(b)

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment ...(and) shall include each of the following ...

(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

Climate change is expected to alter water demand patterns across California. Water demands within Burbank show significant seasonality, with maximum month demands (particularly for landscape irrigation and industrial uses) vulnerable to increases from more frequent, longer, and more extreme heat waves, increases in temperature, and changes in precipitation, winds, and humidity.

MWD modeled impacts of climate change on regional demands using climate adjustment factors. These factors were estimated using observed impacts of weather variables, including precipitation and temperature, on historical consumptive demands. MWD updated these factors to include the most recent weather and climate outcomes and recent changes in water use and irrigation demands. By incorporating these climate adjustment factors, MWD's demand projections are calibrated to more recent water use behaviors and better reflect current climate change impacts.

Pursuant to the CWC requirements and the 2025 UWMP Guidebook, this Plan incorporates climate change considerations from the MWD demand modeling in the water demand projections provided in this section.

4.7 Characteristic Five-Year Water Use

☑ CWC §10635

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following...

*(3) A comparison of the total water supply sources available to the water supplier with **the total projected water use for the drought period.** (Emphasis added).*

(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

In accordance with CWC §10635(b)(3), UWMPs must provide a five-year Drought Risk Assessment (see **Section 7.5**). As a first step, DWR suggests that water suppliers estimate their unconstrained water demand for the next five years (2026-2030). Unconstrained water demand is water use in the absence of drought water use restrictions. These numbers can then be adjusted to estimate the five-years' cumulative drought effects. **Table 4-7** shows unconstrained demands for 2026-2030 provided by MWD (**Appendix E**) and adjusted assuming the full development potential contemplated under the DTSP and

MDSP is achieved by 2035. The Drought Risk Assessment presented in **Section 7.5** analyses the normal year demand conditions and five-consecutive year drought supply conditions.

Table 4-7 Characteristic Five-Year Water Use (AF)

	2026	2027	2028	2029	2030
Total Potable and Non-Potable Demand	18,847	20,527	22,207	23,886	25,566
NOTE: The table shows unconstrained demand (i.e., demand in the absence of drought water use restrictions).					

4.8 Coordinating Water Use Projections

☒ **CWC § 10631(h)**

An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available.

Burbank purchases water from MWD. As part of the coordination effort for the UWMP, and in compliance with CWC §10631(h), Burbank coordinated with MWD on its water demand projections in five-year increments through 2050.

5 SB X7-7 BASELINE, 2020 TARGET, AND 2025 REPORTING

SB X7-7, mandated a 20% reduction in urban per-capita water use across California by 2020. To achieve this goal, SB X7-7 required each retail supplier to establish an urban water-use target (2020 Target), contributing to the State’s collective efforts. Because the CWC does not set an end date for reporting progress in meeting the 2020 Target, this section of the UWMP demonstrates Burbank’s compliance with SB X7-7 in 2020.

5.1 Demonstration of Compliance with 2020 Target in 2020

☒ **CWC §10608.40**

Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631.

☒ **CWC §10608.12**

(af) “Urban retail water supplier” means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

Burbank achieved its 2020 Target in 2020. The data used to calculate Burbank’s 2020 Target and demonstrate compliance are documented in Burbank’s 2020 UWMP. **Table 5-1** below summarizes Burbank’s 2020 Target and actual 2020 GPCD, confirming that Burbank met the SB X7-7 compliance requirements.

Table 5-1 SB X7-7 2020 Target Progress (DWR Table 5-1)

☐ Supplier was not an Urban Water Supplier during or before the 2020 reporting cycle.							
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target?	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020		
					Was Supplier part of a merger or consolidation since 2020?	Actual 2025 GPCD	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	157	138	Yes	n/a	n/a	n/a

5.2 Nexus to Urban Water Use Objectives

☒ **23 CCR §966**

(h) If a supplier's calculated objective-based total use is larger than its target-based total use, the supplier's urban water use objective shall be its Water Code section 10608.20 individual target less excluded demands as described in paragraph (3). If the supplier's section 10608.20 target is expressed in gallons per capita daily, the supplier shall multiply the target by its residential service area population for the reporting year and the number of days in the year.

In July 2024, California enacted the MCCWL regulation (implementing SB 606 and AB 1668) to support long-term water conservation and drought resilience. MCCWL established annual UWUO for water

suppliers and introduced Performance Measures for commercial, industrial, and institutional (CII) water users.

The UWUO is a water-budget-based framework tailored to each supplier. It consists of the following components:

1. Residential indoor water use standard,
2. Residential outdoor water budget,
3. CII landscape outdoor water use standard (for landscapes with dedicated irrigation meters),
4. Water loss standard,
5. Variance, and
6. Potable reuse bonus.

Beginning in 2027, suppliers must annually assess whether the sum of their regulated water uses (i.e., residential indoor and outdoor, dedicated irrigation meter use, and water loss) is at or below their UWUO. The state standards for residential indoor and outdoor water use and for CII outdoor use will become increasingly stringent over time, potentially requiring additional conservation efforts to achieve compliance.

Urban retail water suppliers must report annually through DWR's WUE Data Portal on their water use relative to their UWUOs.⁹ Because compliance with the UWUO requirements falls under the authority of the SWRCB, UWUO compliance projections are not required as part of a UWMP per the 2025 UWMP Guidebook. Therefore, UWUO projections are not included herein.

⁹ DWR's WUE Data Portal: https://wuedata.water.ca.gov/uwuo_plans

6 NORMAL YEAR WATER SUPPLY CHARACTERIZATION

☒ CWC §10631

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a) [in five-year increments to 20 years or as far as data is available], providing supporting and related information, including all of the following:

(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

(2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.

(3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

This section of the UWMP provides a description of Burbank's current and potential water supplies, as well as an assessment of the energy intensity used to operate Burbank's distribution systems. Burbank obtains its water supply from a combination of imported water from MWD, local groundwater from the San Fernando Basin (SFB), and recycled water.

6.1 Purchased or Imported Water

☒ CWC §10631(h) A plan shall be adopted in accordance with this chapter and shall do all of the following:

An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

Burbank is one of 26 member agencies to MWD, meaning Burbank may purchase imported water supply, benefits from regional infrastructure access, and can participate in long-term water planning programs. Burbank purchases treated and untreated raw water from MWD, a wholesale water provider that serves imported water to 26 member agencies across 5,200 square miles of Southern California. Treated water is delivered to the City's potable water distribution system and directly sent to meet customer demands, and raw water is applied to spreading grounds for groundwater recharge. The total amount of water Burbank purchases from MWD varies significantly from year to year, depending on how much raw water it purchases for groundwater recharge. Between 2021 and 2025, purchased water from MWD accounted for 17% to 49% of Burbank's total water supply.

MWD delivers imported water from the Delta via the SWP and from the Colorado River via the CRA. MWD operates five treatment plants that supply treated water to most of Southern California, including Burbank. Burbank has five treated potable water connections to the MWD system, with a maximum rated capacity of 115 cubic feet per second (cfs) (see **Table 6-1** below). In 2010, the City completed an MWD connection (B-6) to deliver untreated imported water for groundwater replenishment to the existing

Pacoima and Lopez spreading grounds in the north San Fernando Valley. A schematic of the project is shown in **Figure 6-1**.

Table 6-1 MWD Service Connection Capacity (cfs)

MWD Connection	Minimum Flow	Normal Range	90% of Maximum	Maximum Flow
B-1	3.0	15.0 - 22.0	27.0	30.0
B-2	1.5	3.0 - 7.0	13.5	15.0
B-3	1.0	3.0 - 4.0	9.0	10.0
B-4	2.0	11.0 - 14.0	18.0	20.0
B-5	2.5	7.0 - 26.0	36.0	40.0
Total Treated	n/a	39.0 - 73.0	103.5	115.0
B-6 Untreated Water Connection at Pacoima	3.0	25 - 65	63.0	70.0

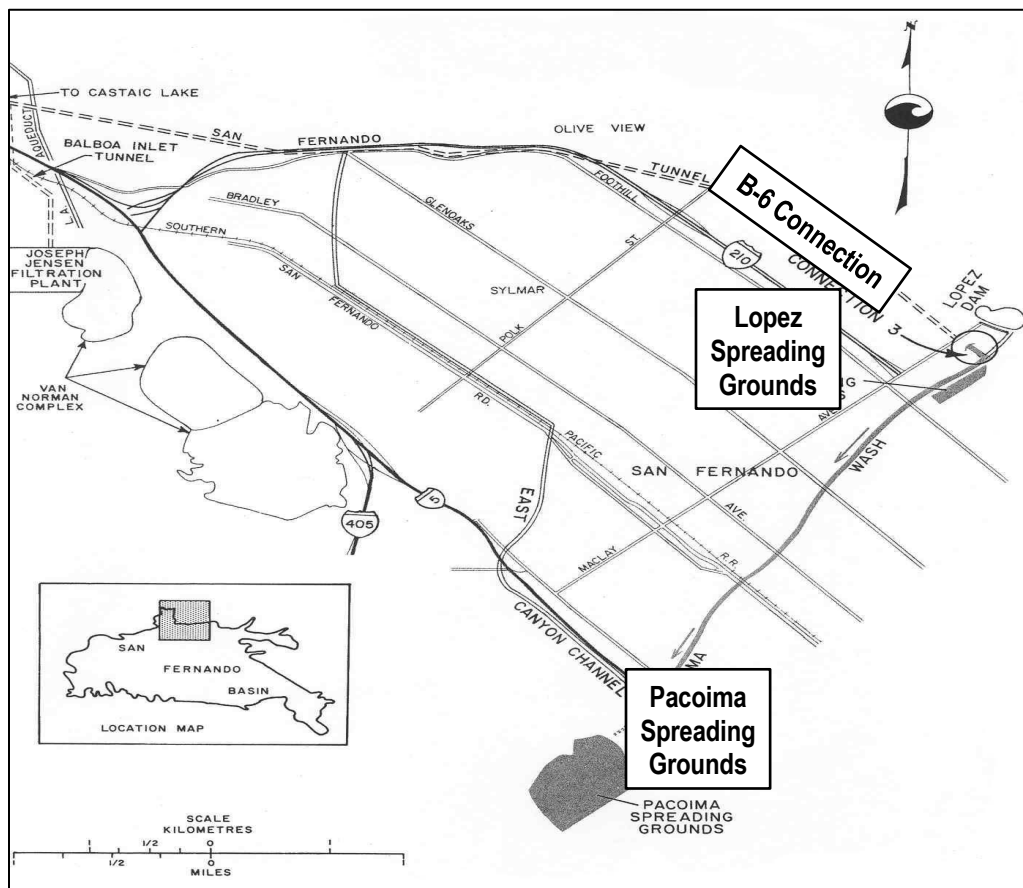


Figure 6-1 Burbank's Groundwater Recharge Project

The nominal maximum capacity of the five connections is more than the expected requirements for the next 25 years. Therefore, the water supply tables in this UWMP reflect expected water demands, not maximum capacity available.

Burbank’s demand for treated MWD water has decreased since groundwater treatment facilities came on-line, as described in **Section 6.2**. Burbank used approximately 23,000 AF of treated MWD water in 1990. Since then, treated imported water use has decreased, averaging approximately 3,100 AF between 2021 and 2025 (**Table 6-2**).

In addition to purchasing treated water, the City also purchased and spread a total of approximately 10,800 AF of raw water between 2021 and 2025 (**Table 6-2**). Since 2023, raw water spreading has decreased at the Pacoima and Lopez spreading grounds due to infrastructure upgrades and quagga mussel contamination in the untreated MWD water. In 2025, Burbank completed Raw Water Discharge Plans that address the quagga mussel contamination. Burbank expects to resume spreading raw water by 2026. Additionally, Burbank accepts additional cyclic storage deliveries from MWD which greatly increase the available untreated water for spreading in wet years. This reduces the raw water demand in normal and dry years for groundwater replenishment purchases.

Table 6-2 MWD Water Supplied – 2021-2025

MWD Supply	2021	2022	2023	2024	2025
	(AF)	(AF)	(AF)	(AF)	(AF)
Treated Potable Water	3,864	2,960	2,495	2,776	3,366
Untreated Spreading Water (a)	5,468	152	3,298	1,917	0
NOTES: (a) Untreated raw spreading water has been unusually low in recent years due to temporary infrastructure constraints at the spreading grounds, and quagga mussel contamination in the raw water.					

6.1.1 Sacramento–San Joaquin Delta Watershed

MWD began receiving water from the Delta via the SWP in the early 1970s. The SWP is owned by the State of California and operated by DWR. It is the largest state-operated water and power system in the nation and consists of a vast network of waterways that move water from Northern California through the Delta to parts of the San Francisco Bay Area, Central Valley, and Southern California.

The SWP captures snowmelt and runoff from the northeastern Sierra Nevada Mountains that has flowed to the Delta via rivers and reservoirs. From the Delta, water is pumped into the SWP to be delivered to SWP Contractors that receive allocations of SWP each year.

MWD is the largest of the 29 state water contractors with a long-term contract for water supply from the SWP with DWR. MWD’s contract allocation is presently 1,911,500 AFY. The SWP water supply contracts set forth the base annual water supply entitlement that a state water contractor may expect to be provided under the contract, as detailed in “Table A” of the contracts. However, actual delivery varies by year, depending on hydrologic conditions, water quality and environmental conditions, state water contractor delivery requests, current reservoir storage, and other operational factors. Additional information on SWP supply reliability is provided in **Section 7**.

6.1.2 Colorado River

The Colorado River originates in the Rocky Mountains of Colorado and flows southwest to the Arizona-California border, then continues south into Mexico to the Colorado River Delta and ultimately to the Gulf of California. MWD diverts Colorado River water from Lake Havasu into the CRA, which has a capacity of 1.25 million AFY and is operated by MWD. The CRA then conveys water west to its terminus at Lake Mathews in Riverside County, within MWD’s service area.

MWD is entitled to 550,000 AFY of Colorado River water under contracts with the U.S. Secretary of the Interior, which is considered a portion of California's 4.4 million AFY senior allocation under the Quantification Settlement Agreement and related agreements. In addition, MWD can access up to 662,000 AFY above California's 4.4 million AFY if unused water from higher-priority users or conserved water through transfer programs becomes available, as well as 180,000 AFY when surplus flows are available. Additional information on the Colorado River's future supply reliability, including ongoing drought conditions and a new long-term operating plan, is provided in **Section 7**.

6.2 Groundwater

☒ CWC §10631

(b)(4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:

(A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.

(B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

(C) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(D) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

Burbank pumps groundwater from the aquifer in the SFB (DWR Basin No. 4-011.04) of the Coastal Plain of Los Angeles Groundwater Basin. The SFB is adjudicated and is managed and monitored by the Upper Los Angeles River Area (ULARA) Watermaster. Per CWC §10720.8, adjudicated basins are exempt from the Sustainable Groundwater Management Act (SGMA) requirements.¹⁰

The SFB spans 112,000 acres and comprises over 90% of the total San Fernando Valley fill (**Figure 6-2**). The San Rafael Hills, Verdugo Mountains, and San Gabriel Mountains bound the SFB on the east and northeast. The northern border of the SFB is defined by the San Gabriel Mountains and the eroded south

¹⁰ Under SGMA, the SFB has been classified as a very low-priority basin as a "Basin with Adjudication & Non-Adjudicated GW Use <9,500 AF." Therefore, the SFB is not required to form a groundwater sustainability agency (GSA) and adopt a groundwater sustainability plan (GSP) or submit an alternative to a GSP. The Upper Los Angeles River Area (ULARA) Watermaster continues to maintain liaison with DWR SGMA managers, and submits information to the State's SGMA website to help verify that ULARA maintains its compliance with SGMA.

limb of the Little Tujunga Syncline which separates it from the Sylmar Basin. The SFB is bounded on the northwest and west by the Santa Susana Mountains and Simi Hills and on the south by the Santa Monica Mountains.

Historically, Burbank primarily relied on its groundwater resources, with imported water from MWD serving as a supplemental supply. During this time, well and pumping capacity were adequate to serve most of the City's needs with local groundwater. As the City grew, reliance on MWD supplies increased, although groundwater remained a major source. In 2025, groundwater supplies constituted approximately 64% of Burbank's total water supply portfolio.

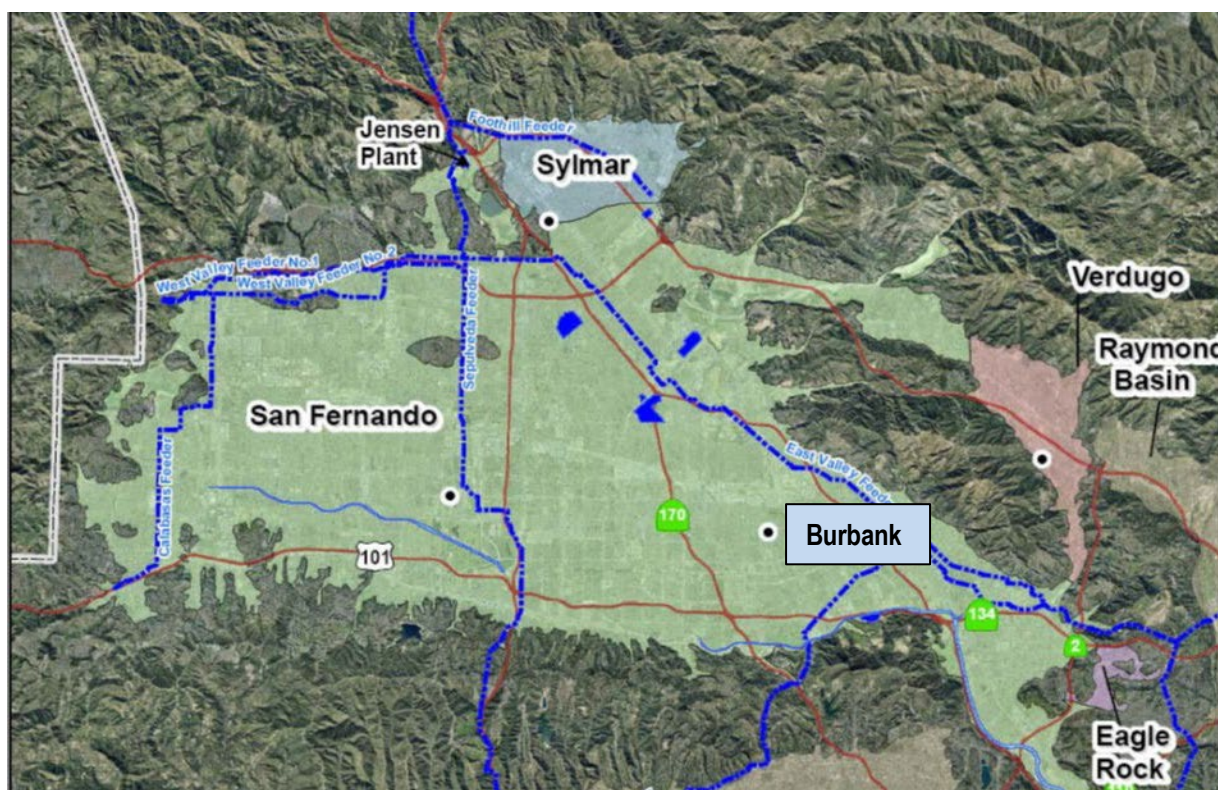


Figure 6-2 SFB Boundaries

6.2.1 SFB Groundwater Management

The ownership or rights to naturally occurring water in the SFB, also known as the 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 26 January 1979.¹¹ 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 the establishment of rights to groundwater through "groundwater credits" which can be accounted for as Import Return Credit (IRC), storage of imported water, stored water credits, and Physical Solution Water for certain parties. The Judgment provided for a Court-appointed Watermaster to enforce the Judgment, and created an Administrative Committee to advise with, request or consent to, and review actions of the Watermaster.

¹¹ The Judgment and related reports are available at: <https://www.ularawatermaster.com/document-library/legal-documents/>

Burbank is entitled to an IRC of 20% of all water delivered in Burbank, including recycled water. This provision was incorporated into the Judgment since a portion of the water delivered in Burbank, 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. The ULARA Watermaster also prepares an annual report which describes pumping activities for the SFB.¹²

Burbank is also entitled to import water and spread or percolate this water into the aquifer thus creating additional groundwater and the right to pump that additional groundwater. Burbank is entitled to accumulate or store supply as 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 Burbank 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. Burbank is entitled to purchase 4,200 AF of Physical Solution Water annually.

6.2.2 Burbank Operable Unit and Valley Pumping Plant

In the 1980s, groundwater from the City’s production wells were found to have varying degrees of VOC contamination. At this time similar contamination was being found in many parts of the country. Burbank’s contamination resulted in a complete loss of the groundwater supply until treatment plants could be built. In 1997 California State regulators classified highly contaminated groundwater including the aquifer underlying Burbank as “Extremely Impaired Sources”.

The Lake Street Granular Activated Carbon (GAC) Treatment Plant, shown in **Figure 6-3**, was constructed in 1992 to remove VOCs from City wells. However, the Lake Street GAC Treatment Plant was unable to consistently meet the hexavalent chromium limit set by City Council policy. As a result, the Lake Street GAC Treatment Plant has remained shut down since 2001.

The Burbank Operable Unit (BOU) treatment plant, shown in **Figure 6-3**, is an Environmental Protection Agency (EPA)-led project to clean up groundwater impacted by historical industrial releases, primarily by Lockheed-Martin. The BOU project consisted of drilling eight extraction wells and constructing a state-of-the-art treatment plant using Best Available Technology (Air Stripping Towers and Granular Activated Carbon Filters) to remove and stabilize the VOC plumes within the aquifer. Completion of this project, which began operation in 1996, restored a major component to the City's water supply. The eight wells and the VOC removal treatment plant were operated by Lockheed-Martin until 2001, when the City took over operation.

The City’s drinking water permit mandates blending of the BOU water with imported MWD water to meet acceptable nitrate levels. The Valley Pumping Plant, shown in **Figure 6-3**, was designed to allow blending of BOU water with MWD water to reduce nitrate levels. If the MWD supply were interrupted, production of groundwater from the Valley Pumping Plant/BOU treatment plant would also need to be stopped to avoid exceeding the nitrate Maximum Contaminant Level (MCL), further described in **Section 7.1.2**.

¹² Additional information regarding the SFB can be found on the ULARA Watermaster’s website at <https://www.ularawatermaster.com/>.

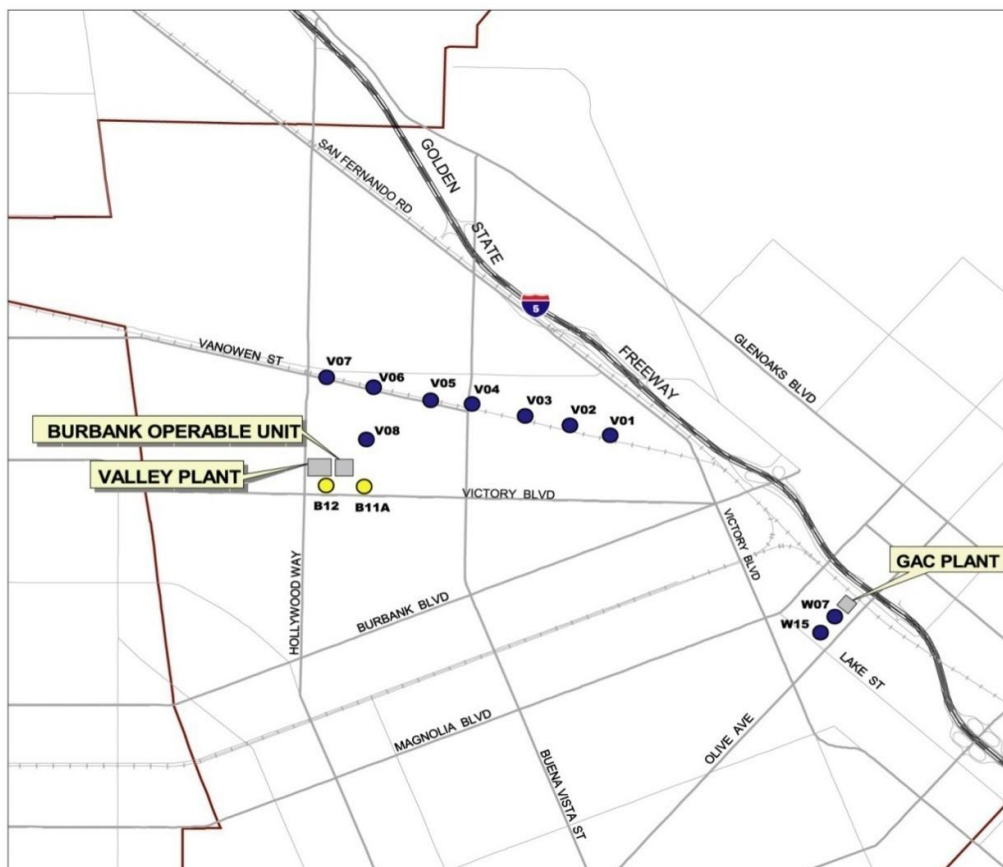


Figure 6-3 Burbank's Groundwater Production Facilities

6.2.3 Past Five Years of Groundwater Pumping

The BOU's design capacity is 9,000 gallons per minute (gpm). Assuming an 85% operational availability, the annual production could potentially be up to 12,300 AFY, which is 86% of the City's current potable water demand. However, regular maintenance and regulated blending requirements to lower nitrate and chromium concentrations in conjunction with lower system demand to accept this blended water has reduced the production levels to an average of approximately 11,600 AFY over the last five years. A summary of recent groundwater pumping is provided in **Table 6-3**.

Table 6-3 Groundwater Volume Pumped (DWR Table 6-1)

Groundwater Type	Potable or Non-Potable	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
Alluvial Basin	Potable	SFB	12,319	11,936	10,793	11,652	11,269
Total			12,319	11,936	10,793	11,652	11,269

6.3 Surface Water

Burbank does not impound or divert surface water to meet demands in the service area.

6.4 Stormwater

Burbank recognizes the multiple benefits of stormwater capture and has implemented numerous stormwater capture projects, including the EcoCampus project. While these projects are expected to recharge and improve the health of the SFB, the volume of water supply captured is relatively small and therefore not accounted for as part of supply projections in this UWMP.

6.5 Wastewater and Recycled Water

☒ CWC §10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.*
- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.*
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.*
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.*
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.*
- (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.*
- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.*

Recycling water involves treating wastewater to an acceptable level such that it can be reused for non-potable applications, such as landscape irrigation. A key benefit of water recycling is its potential to offset the use of potable supplies and to maintain local supply. The regulatory requirements for recycled water are defined in the CCR, Title 22, Division 4, Chapter 3, Article 3 (Title 22) and differ for different uses (e.g., irrigation for food crops, landscape, and recreation). Because recycled water is treated wastewater, its availability is closely linked to the location and treatment capability of the wastewater treatment plant that receives and treats wastewater from a water supplier's service area. The following sections describe wastewater collection and treatment for Burbank's service area, the use of recycled water, as well as existing and future uses of recycled water.

6.5.1 Wastewater Collection, Treatment, and Disposal

☒ **CWC §10633**

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

Wastewater generated within Burbank 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 City of Los Angeles 48" North Outfall Sewer (NOS) line also runs from west to east through the southern portion of Burbank, and collects a small portion of the City's wastewater.

The majority of Burbank's wastewater flows to the BWRP which currently treats 8.5 million gallons per day (MGD) and has a design capacity of 12.5 MGD. The BWRP treatment system consists of the following:

- Flow equalization
- Coarse solids grinding
- Primary sedimentation
- Activated sludge biological treatment with nitrification and denitrification
- Secondary sedimentation with coagulation
- Single media deep bed gravity sand filtration
- Chloramination
- Dechlorination with sodium bisulfite (for discharge to surface water)

BWRP produces a disinfected tertiary effluent which meets discharge limitations contained in its National Pollutant Discharge Elimination System (NPDES) permit issued by the Los Angeles Regional Water Quality Control Board. BWRP's effluent also meets the most stringent criteria for recycled water defined in the CCR, 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. The tertiary treated water is either used for recycled water both in and around Burbank's service area, or discharged to the Burbank Western Channel adjacent to BWRP.

A small portion of Burbank's wastewater flows are transported via trunk sewers to Los Angeles Department of Sanitation and Environment (LASAN)'s Hyperion Water Reclamation Plant (HWRP) in the City of Los Angeles. The HWRP provides primary and secondary treatment, and recycles approximately a quarter of the treated wastewater for in-plant, irrigation, industrial, and other non-potable uses outside of Burbank's service area. The remaining secondary treated effluent is ultimately discharged to the Pacific Ocean through the Hyperion deepwater outfall system.

Estimates of Burbank's wastewater flows are shown in **Table 6-4** totaling 9,335 AF in 2025, with 7,614 AF influent to the BWRP and 1,721 AF influent to the HWRP. These estimates are based on metered wastewater data from both Burbank's collection system and the Los Angeles NOS line. For wastewater collected along the Los Angeles NOS line to HWRP, LASAN measures flow entering the Burbank service area, and Burbank measures the flow leaving its service area. Therefore, wastewater generated within the Burbank service area is calculated as outflow minus inflow.

As shown in **Table 6-5**, approximately 38% of the wastewater received at the BWRP is recycled.

Table 6-4 Wastewater Collected Within Service Area in 2025 (DWR Table 6-2)

☐	There is no wastewater collection system.			
100%	Percentage of 2025 service area served by wastewater collection system			
100%	Percentage of 2025 service area population served by wastewater collection system			
Wastewater Collection			Recipient of Collected Wastewater	
Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number	Is WWTP Located Within UWMP Area?
LASAN	Metered	1,721	HWRP, Place ID 232063	No
Burbank	Metered	7,614	BWRP, Place ID 212135	Yes
Total Wastewater Received from UWMP Service Area in 2025:		9,335		

Table 6-5 Wastewater Treatment and End Uses Within UWMP Service Area in 2025 (DWR Table 6-3)

Wastewater Treatment Plant	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area?	2025 Volume of Wastewater Received from UWMP Service Area	Total 2025 Volume of Water Treated	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area		Water Recycled Outside of UWMP Service Area		Effluent Discharge that is not a Permitted Recycled Water Use		Required Discharge for Instream Flow		Delivered to Another Entity for Additional Treatment		
				Treatment Level	Volume (AF)	Treatment Level	Volume (AF)	Treatment Level	Volume (AF)	Treatment Level	Volume (AF)	Treatment Level	Volume (AF)	Name of other entity
BWRP, Place ID 212135	No	7,614	7,614	Tertiary	2,886	Tertiary	17	Tertiary	4,711		0		0	
Total		7,614	7,614		2,886		17		4,711		0		0	

6.5.2 Recycled Water Coordination

☑ CWC §10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area...

The preparation of this UWMP was coordinated with the Burbank Department of Public Works, which collects and treats the City's wastewater to a tertiary standard that is suitable for recycled water use. Burbank also coordinated with Glendale and LADWP, as its non-potable distribution system is interconnected with theirs, allowing for exchange and transfer of recycled water. Coordination efforts are further described in **Section 2.5**.

6.5.3 Recycled Water System Description

☑ CWC §10633

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

Once recycled water leaves the BWRP it can either be pumped into the recycled water distribution system in the City, flow by gravity to the Burbank EcoCampus where Burbank houses its water, electric, and administrative operations, or be discharged to the Burbank Western Channel. Recycled water is used in one of three general categories within the City: power production, landscape irrigation, and evaporative cooling. Burbank's recycled water is approved for all uses, including full body contact, except for human consumption.

Landscape Irrigation (Including Golf Courses)

CalTrans began using recycled water in 1988 for landscape irrigation along the Golden State (I-5) Freeway. The City installed a pipeline under the I-5 in 1992 to distribute recycled water to the east side of the freeway to new customers in the area of the Media City Center, a regional shopping center.

A significant expansion of the recycled water system to quadruple recycled water use began in 1994. This expansion was completed in 1997, and recycled water was used at the Burbank landfill, the DeBell Golf Course, John Muir Middle School, and McCambridge Park. The AMC theater complex and Burbank High School were eventually also connected to these pipelines. The project included upgrading BWRP's existing booster station plus two new booster stations, storage tanks, and 17,000 feet of pipeline.

Expansion of the distribution system continued with the joint support of the Burbank Redevelopment Agency, Burbank, and infrastructure improvements at major redevelopment sites. These expansions extended the recycled water system to the Chandler Bikeway, the Empire Center, the Burbank (Bob Hope) Airport, and Robert Gross Park.

Burbank prepared a Recycled Water Master Plan in 2007, which was updated in 2010, to outline a phased expansion of the recycled water system and increase the use of recycled water. The recycled water system expansion was completed in 2012 and included construction of six major pipeline projects totaling over 20 miles in length and an upgrade of pump station PS-1. All major landscaped areas that could be economically served, including city parks and schools, are now irrigated with recycled water.

Recycled water demand for golf course irrigation has increased slightly over the past few years, exceeding the 2020 UWMP projections by 50 AF in 2025 (**Table 6-7**). In contrast, recycled water demand for

landscape irrigation (excluding golf course irrigation) in 2025 was 17% lower than projected in the 2020 UWMP (**Table 6-7**). This is because annual irrigation demand naturally varies due to short-term influences, such as infrastructure changes, climate fluctuations, drought response measures, landscape conversions, and improved irrigation efficiency. Burbank projects that recycled water sales for landscape irrigation (excluding golf course irrigation) will be approximately 1,200 AF by 2030, consistent with 2020 use (**Table 6-6**).

Power Production

Recycled water was first used at Burbank's power production facilities for cooling in 1967. Originally, all excess recycled water from BWRP that was not pumped into the recycled water system flowed by gravity to the Burbank campus, with cooling tower blowdown water and excess recycled water discharged to the Burbank Western Channel.

The Magnolia Power Project (MPP), completed in 2005, uses a sufficient volume of recycled water to eliminate all recycled water discharges to the Burbank Western Channel from the Burbank campus. MPP uses recycled water exclusively for cooling and all other power plant uses, including high purity boiler feed. MPP recycles all process and cooling water through its zero liquid discharge unit, which treats cooling tower blowdown and other recovered flows for reuse as cooling tower makeup. The byproduct of the zero liquid discharge process is a salt cake that is dried and trucked to a landfill for disposal.

Three other power plants are located at the Burbank campus: Lake 1, Olive 1, and Olive 2. Lake 1 is a simple cycle natural gas fired turbine which is used intermittently to meet peak demands. This plant has a small cooling tower and uses minimal amounts of recycled water for gas compressor and lubrication oil cooling. Demineralized recycled water is also used for air emissions control equipment. The two Olive power plants are on long-term standby. Cooling and process water used in these plants is recycled water with the blowdown from their cooling towers being discharged to the sanitary sewer.

When the MPP first came online, its average annual recycled water usage was 1,350 AF. Since 2010, the annual usage has decreased. In 2025, the MPP used 986 AF of recycled water, approximately 20% lower than projected in the 2020 UWMP (**Table 6-7**). These decreases are due in part to infrastructure maintenance and upgrade projects at the MPP, which reduced its energy production and therefore demand for recycled water. Burbank estimates that recycled water sales for power production will increase to 1,200 AFY after 2030 (**Table 6-6**).

Deliveries to LADWP

Burbank has an agreement with LADWP to exchange BWRP-produced recycled water for an equivalent amount of groundwater credits in the SFB. In 2025, recycled water deliveries to LADWP were 17 AF, approximately 93% lower than projected in the 2020 UWMP (**Table 6-7**). However, Burbank anticipates exchanging up to 260 AF of recycled water with LADWP through 2050 (**Table 6-6**).

Commercial Cooling Systems

Early in 2010, Burbank identified a major opportunity for use of its recycled water in heating, ventilation, and air conditioning (HVAC) cooling towers of commercial buildings. The cooling tower serving Burbank's administration building was converted to use recycled water in 2010. Burbank also identified several cooling locations in Burbank which are feasible to serve with recycled water. In 2025, these locations used 653 AF of recycled water, consistent with projections in the 2020 UWMP (**Table 6-7**). Commercial use for recycled water is expected to remain relatively constant through 2050 (**Table 6-6**).

Recycled Water Fill Stations

Burbank provides recycled water at designated truck fill stations to supply non-potable uses, such as construction, dust control, and street maintenance. Burbank also offers temporary residential fill stations that allow customers to collect up to 300 gallons of recycled water at no cost. This program was piloted during the 2015 drought and reactivated again in September 2022. Approximately 1 AF was provided in 2025, and demand is projected to increase to 3 AF by 2050. While the volumes are relatively small, the programs provide valuable public outreach value by promoting Burbank's recycled water efforts.

6.5.4 Current, Potential, and Projected Recycled Water Uses

☒ CWC §10633

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

As shown in **Table 6-6** and **Table 6-7**, the Burbank service area used approximately 2,913 AF of recycled water in 2025 for power production, landscape irrigation (including golf course irrigation), and commercial cooling systems. Additionally, Burbank exchanged 17 AF of recycled water with LADWP for groundwater credits in the SFB, totaling 2,930 AF of recycled water for direct beneficial uses.

Burbank's recycled water distribution mains are not planned for further expansion. However, in accordance with BWP's Rules and Regulations for Utility Service, customers are required to use recycled water for non-potable demands where service is available and economically reasonable. Additionally, recycled water use for both power production and landscape irrigation is expected to return to higher use levels as seen in previous years, and the demands from LADWP are anticipated to continue growing (see **Section 6.5.3** for more information about each individual water use). Therefore total recycled water use is projected to increase to 3,593 AFY by 2030 and remain constant through 2050.

Direct potable reuse (DPR) regulations became effective on 1 October 2024 following decades of research and studies by experts. The regulations ensure that DPR water meets or exceeds all drinking water standards and contain stringent regulations for emerging contaminants. Burbank is conducting a feasibility study on DPR, which could increase water supply by 2,500 AFY. However, because this effort is in the feasibility phase, DPR is not included as a supply in this UWMP. If DPR is implemented, supply will be evaluated in future UWMPs.

Table 6-6 Recycled Water Direct Beneficial Uses Within Service Area (DWR Table 6-4)

Name(s) of Facility/ies Producing (Treating) the Recycled Water:						Burbank Water Reclamation Plant			
Name of Supplier Operating the Recycled Water Distribution System:						Burbank Water and Power (Burbank)			
Supplemental Water Added in 2025 (volume) (a):						27 AF			
Source of 2025 Supplemental Water:						Burbank Potable Supply			
Use Type	Potable or Non-Potable	Additional Information	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use (AF)
Landscape irrigation (excl. golf courses)	Non-Potable	Landscape Irrigation	992	1,200	1,200	1,200	1,200	1,200	1,200
Golf course irrigation	Non-Potable	Golf Course Irrigation	281	280	280	280	280	280	280
Commercial use	Non-Potable	Mixed Cooling Tower and Landscaping	653	650	650	650	650	650	650
Geothermal and other energy production	Non-Potable	Magnolia Power Plant and Olive Power Plant	986	1,200	1,200	1,200	1,200	1,200	1,200
Other	Non-Potable	Deliveries to LADWP	17	260	260	260	260	260	260
Other	Non-Potable	Recycled Water Fill Stations	1	3	3	3	3	3	3
Total			2,930	3,593	3,593	3,593	3,593	3,593	3,621
NOTES: (a) Burbank uses a small volume of potable water to supplement the recycled water supply in order to meet peak demands. This potable supply is included in the above projections.									

Table 6-7 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual (DWR Table 6-5)

Use Type	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Landscape irrigation (excl. golf courses)	1,200	992
Golf course irrigation	230	281
Commercial use	650	653
Geothermal and other energy production	1,200	986
Other (Deliveries to LADWP)	260	17
Other (Water Truck Fill Station)	3	1
Total	3,543	2,930
NOTES: Actual recycled water use for landscape irrigation, geothermal and other energy production, deliveries to LADWP, and water truck fill station are more than 10% lower than projected in the 2020 UWMP due to fewer new conversions than anticipated and an overall decrease in water demands within the service area.		

6.5.5 Actions to Encourage and Optimize Future Recycled Water Use

City Council and Department Managers have consistently supported the use of recycled water. Recycled water provides Burbank with the opportunity to conserve scarce imported and local potable water supplies. The City has full-time staff to assist existing users in complying with regulatory requirements and to encourage the development of new users. To encourage the use of recycled water, the City offers recycled water at approximately 90% of the corresponding potable water rate.

BWP's Rules and Regulations for Utility Service clarify the requirements to receive recycled water service, which standardizes and facilitates recycled water use. Conversion to recycled water is required when the recycled transmission main fronting the parcel is put in service. Recycled water use, when required, is a condition of potable water service. The parcel owner is responsible for all onsite retrofits necessary to use recycled water on the property.

Burbank's agreement with the LADWP to exchange recycled water for groundwater credits in-kind will also continue to encourage and optimize future recycled water use in the City of Los Angeles.

Furthermore, Burbank is currently exploring DPR. If Burbank finds that DPR is economically, politically, and environmentally feasible, it could enable the reuse of BWRP effluent.

Table 6-8 Methods to Encourage Future Recycled Water Use (DWR Table 6-6)

Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
DPR Feasibility Study	Burbank is evaluating the feasibility of DPR. Assuming economic, political, and environmental feasibility, this project could potentially reuse all BWRP effluent.	TBD	TBD (a)
Recycled Water Exchange with LADWP	Burbank anticipates increasing recycled water exchanges with LADWP for groundwater credits.	Ongoing	260
Current Recycled Water Policy Enforcement	Whenever feasible, Burbank will provide recycled water to potential users. Potential new usage is continually identified.	Ongoing	200
Total			460
NOTES: (a) The DPR Feasibility Study is underway to evaluate the potential to implement DPR using effluent from the BWRP, which could yield approximately 2,500 AFY. However, because the study has not been finalized, this potential supply is not accounted for in this UWMP. If feasible, DPR supply will be included in future UWMPs.			

6.6 Desalinated Water

☒ **CWC §10631(g)** A plan shall be adopted in accordance with this chapter and shall do all of the following:

Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

Burbank, located inland in the San Fernando Valley, has limited opportunity for desalination of ocean water. Additionally, the groundwater is not brackish. To remove substances like chromium or nitrate, membrane processes like those often used for desalination may one day be used. However, disposal of the brine from such processes is more of a problem than for seaside locations which can send it to an ocean outfall.

Seawater desalination represents a significant opportunity to diversify the region's water resources with a new, locally controlled, reliable potable supply. A seven-agency consortium, including Burbank and led by Las Virgenes Municipal Water District (LVMWD), is funding an independent feasibility study on onshore infrastructure for WF1, the first subsea reverse osmosis desalination project in the United States (OceanWell, 2025).¹³ If WF1 is successful, Burbank would potentially receive additional supply through exchanges with other MWD member agencies who are closer to the coast and who would receive the desalinated water directly from WF1. However, because WF1 is currently in the feasibility study phase, no desalinated supplies are projected in this plan.

¹³ The seven-agency consortium includes LVMWD, Burbank, Los Angeles County Waterworks District No. 29 (Malibu), Calleguas Municipal Water District, LADWP, Upper San Gabriel Valley Municipal Water District, and Santa Clarita Valley Water Agency.

6.7 Water Exchanges and Transfers

☒ CWC §10631

(c) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

6.7.1 MWD Supply Exchanges

DWR requires water suppliers to describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. As a member agency of the MWD, Burbank may contribute to the development of exchanges, transfers, and water banking through its MWD water purchases.

Additionally, as previously described in **Section 6.6**, Burbank is exploring the potential to exchange new local supplies with MWD member agencies. Local supplies are not affected by MWD's allocation plan that reduces water use during dry years.

6.7.2 LADWP Supply Exchanges

Burbank has multiple ongoing transfer and exchange agreements with LADWP. In 2015, Burbank and LADWP entered into an agreement to construct and operate an interim water system connection to transfer potable water to LADWP, treated at BOU. When Burbank's water demand is lower than the BOU's treatment capacity, Burbank uses the additional capacity to continue to treat the contaminated groundwater at a higher rate and send the balance of the treated water to LADWP. This allows LADWP to produce its annual entitlement to groundwater from the SFB, while maximizing the treatment capacity at BOU. Per the transfer agreement, LADWP will directly reimburse MWD for the water used to blend with groundwater, and LADWP will reimburse Burbank the costs related to operation and maintenance of the distribution and treatment systems. Because this exchange is intended only for operational flexibility, no exchanges or transfers with LADWP are assumed as a supply in this UWMP.

Furthermore, as described in **Section 6.5.4**, Burbank has agreed to supply LADWP customers with recycled water in exchange for groundwater credits in SFB. In 2025 Burbank delivered 17 AF to these customers, though Burbank anticipates providing up to 260 AFY of recycled water after 2030.

6.7.3 Glendale Supply Exchanges

Burbank's potable water distribution system has multiple interconnections with Glendale that 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. The policy has been to return the same amount of water, rather than buying and selling water. If MWD had to ration water during a drought, both cities would be affected. The interconnections would only help if one city had extra groundwater pumping capacity to share. The two cities' recycled water distribution systems are also interconnected at one location. Historically, Glendale has relied on Burbank's recycled water to accommodate planned plant shutdowns, while Burbank has used Glendale's recycled water from the Los Angeles-Glendale Water Reclamation Plant (WRP) to supplement its own supply during an unplanned sewage pump station shutdown. Because these interconnections are intended for short-term operational flexibility, no exchanges or transfers with Glendale are assumed as a supply in this UWMP.

6.8 Supply from Storage

Per the 2025 UWMP Guidebook, supply for storage includes only water placed into storage prior to the current reporting year. Water stored and retrieved within the same year is reported under its original source (e.g., imported or purchased water) to avoid double counting.

As described in **Section 6.1**, Burbank spreads raw water from MWD in the SFB, and the volume recharged is credited towards the total volume that Burbank is allowed to pump each year. In most years, Burbank's groundwater extractions exceed recharge, so groundwater credits are fully used within the same year. This supply is treated as pass-through or short-term storage and is therefore reported as purchased or imported raw water from MWD in this UWMP. In some years, Burbank recharges more water than it extracts, allowing additional groundwater credits to be saved for future withdrawal. While this represents "supply from storage," it is reported herein as groundwater supply as it remains subject to the SFB Judgment and is managed by the ULARA Watermaster.

6.9 Future Water Projects

☒ CWC §10631

(f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single-dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the

As described in previous sections, Burbank is currently conducting a feasibility study on DPR, which could potentially increase water supply if found to be economically, politically, and environmentally feasible. Burbank has also joined a consortium of seven water suppliers led by LVMWD as part of WF1 to evaluate desalination opportunities. Because these projects are in the early feasibility study phase and potential water supply benefits have not been confirmed, their potential supplies are not included in this UWMP (**Table 6-9**). If implemented, these supplies will be evaluated in future UWMPs.

Table 6-9 Expected Future Water Supply Projects or Programs (DWR Table 6-7)

☐	There are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply.
☒	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.
6-19	Provide page location of narrative in the UWMP.

6.10 Summary of Existing and Planned Sources of Water

Burbank's primary water supplies include purchased treated and raw water from MWD, local groundwater from the SFB treated at the BOU, and recycled water produced at the BWRP. **Table 6-10** summarizes the actual water supply volumes produced in 2025. As noted in **Table 6-11**, Burbank does not reduce salinity prior to distribution. **Table 6-12** summarizes the projected water supplies for Burbank in five-year increments through 2050 for purchased water, groundwater, and recycled water. Available supplies are anticipated to increase by 77% between 2025 and 2050, consistent with demand increases in **Table 4-5**.

Table 6-10 Water Supplies – 2025 Actual (DWR Table 6-8)

Water Supply	Additional Description	2025		
		Potable or Non-Potable	Actual Volume (AF)	Total Entitlement (Opt)
Purchased or Imported Water	Treated water from MWD (a)	Potable	3,366	-
Purchased or Imported Water	Raw water from MWD for spreading (b)	Potable	0	-
Groundwater (not desalinated)	Groundwater from SFB (c)	Potable	11,269	-
Recycled Water	Recycled water from BWRP (d)	Non-Potable	2,930	-
<i>Subtotal Potable</i>			<i>14,635</i>	<i>(e)</i>
<i>Subtotal Non-Potable</i>			<i>2,930</i>	<i>(e)</i>
Total (f)			17,565	(e)
NOTES: (a) Burbank does not have a direct contract with MWD for purchased water and supplies are discretionary to match demand. Therefore, no "Total Entitlement" is shown. (b) For completeness, raw water is included in Table 6-10 even though no water was spread in 2025 due to infrastructure upgrades and quagga mussel contamination in the untreated MWD water. While raw water supply is non-potable, it is recharged into the SFB and extracted to meet potable demands. Therefore, for purposes of this UWMP, this supply is categorized as potable. Additionally, Burbank does not have a direct contract with MWD for raw water spreading; supplies are discretionary to match demand. Therefore, no "Total Entitlement" is shown. (c) "Total Entitlement" volume includes Burbank's IRC, stored credits, and Physical Solution Water. ULARA Watermaster has not yet calculated this volume; therefore, no "Total Entitlement" is shown. (d) Total recycled water supply includes recycled water sold to Burbank's customers, recycled water delivered outside of the service area (i.e. exchanged with LADWP). This includes 27 AF of supplemental potable water to meet peak recycled water demands. Burbank does not have a specified "Total Entitlement" for recycled water. (e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent. (f) Supply differs from demand in Table 4-1 due to metering inaccuracies and/or data errors.				

Table 6-11 Source Water Desalination by Urban Water Supplier (DWR Table 6-8 DS)

☒	Supplier does not reduce salinity in either groundwater or surface water prior to distribution.
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Table 6-12 Water Supplies – Projected (DWR Table 6-9)

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	Projected Water Supply (AF)									
			2030		2035		2040		2045		2050	
			Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)
Purchased or Imported Water	Treated water from MWD (a)	Potable	10,878		16,357		16,303		16,202		16,023	
Purchased or Imported Water	Raw water from MWD for spreading (b)	Potable	7,370		7,275		7,286		7,306		7,342	
Groundwater (not desalinated)	Groundwater from SFB (c)	Potable	4,108		4,203		4,192		4,172		4,136	
Recycled Water	Recycled water from BWRP (d)	Non-Potable	3,593		3,593		3,593		3,593		3,593	
<i>Subtotal Potable</i>			22,356	(e)	27,835	(e)	27,781	(e)	27,680	(e)	27,501	(e)
<i>Subtotal Non-Potable</i>			3,593	(e)	3,593	(e)	3,593	(e)	3,593	(e)	3,593	(e)
Total (f)			25,949	(e)	31,428	(e)	31,374	(e)	31,273	(e)	31,094	(e)
NOTES: (a) “Reasonably Available Volume” is provided by MWD, included as Appendix E and adjusted to reflect the potential additive demands assuming that the development potential associated with the DTSP and MDSP is achieved by 2035. Burbank does not have a direct contract with MWD for purchased water; supplies are discretionary to match demand. Therefore, no “Total Entitlement” is shown. (b) “Reasonably Available Volume” is provided by MWD, included as Appendix E. Raw water supply is non-potable. However, because it is recharged into the SFB and extracted to meet potable demands, this supply is categorized as a potable for purposes of this UWMP. Additionally, Burbank does not have a direct contract with MWD for raw water spreading; therefore, no “Total Entitlement” is shown. (c) “Reasonably Available Volume” is calculated as the groundwater recovery projection provided by MWD, included as Appendix E, minus the raw water purchased for spreading to avoid double-counting, consistent with the 2025 UWMP Guidebook. “Total Entitlement” volume includes Burbank’s IRC, stored credits, and Physical Solution Water, and varies by year. Therefore, no “Total Entitlement” is shown. (d) Burbank does not have a specified “Total Entitlement” for recycled water; therefore, no “Total Entitlement” is shown. (e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.												

6.11 Special Conditions

Several conditions may affect the availability of Burbank’s future water supplies, including climate change, regulatory conditions, and other local factors.

6.11.1 Climate Change Effects

Climate change may affect water supplies in multiple ways. For example, extreme and higher temperatures can lead to declining snowpack and earlier runoff patterns, which could result in changes in stream flows and reservoir operations. Both the SWP and Colorado River depend on snowpack and river flows, which are projected to become increasingly variable with shifting precipitation patterns. MWD has identified multiple climate risks that could impact water supply, water quality, and infrastructure which include extended droughts, sea-level rise, increased flooding, wildfires, and extreme heat (MWD, 2025).

To plan for the anticipated impacts to water supply reliability due to climate change, efforts have been taken to increase reliability on both a regional and local level. As discussed in **Section 6.5**, Burbank began producing recycled water at the BWRP in 1988, and in 2025 recycled water met about 17% of Burbank’s total water demand. Burbank will continue encouraging increased recycled water use within its service area, as described in **Section 6.5.5**. This drought-resistant source of supply will continue to reduce Burbank’s dependency on imported water and will also reduce the potential impacts to water supply availability during future droughts. Burbank is also exploring integrating potable reuse and desalinated water supplies into its supply portfolio (see **Section 6.5** and **Section 6.6** for more details). Both projects would allow Burbank to provide additional local, and drought-proof water supply to its customers. Finally, as discussed in **Section 9**, Burbank continues to participate in water conservation programs that have proven to reduce customers’ water consumption over time. Other MWD member agencies are following a similar approach and combined, these local supplies are factored into MWD’s UWMP.

Burbank is committed to incorporating climate change into its ongoing water supply planning. If Burbank does move forward with any plans to develop supply projects, climate change impacts will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.2 Regulatory Conditions and Project Development

Emerging regulatory conditions, such as the ongoing negotiations regarding the post-2026 operations of the Colorado River and issues related to the Bay-Delta Plan (**Section 7.1.1**), may affect planned future projects and the characterization of future imported water supply availability and analyses. If Burbank does move forward with any plans to develop supply projects, emerging regulatory conditions will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.3 Other Locally Applicable Criteria

Other locally applicable criteria may affect characterization and availability of an identified water supply, such as changes in regional water transfer rules may alter the availability of a water supply that had historically been readily available. If Burbank does move forward with any plans to develop supply projects, locally applicable criteria will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.4 Wholesale and Retail Suppliers Coordination

Burbank will continue to coordinate with MWD and other member agencies in its future water supply planning, including the potential potable reuse project and the WF1 desalination project, which could create an exchange arrangement among several MWD member agencies.

6.12 Energy Intensity

☒ CWC §10631.2

- (a) *In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:*
- (1) *An estimate of the amount of energy used to extract or divert water supplies.*
 - (2) *An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.*
 - (3) *An estimate of the amount of energy used to treat water supplies.*
 - (4) *An estimate of the amount of energy used to distribute water supplies through its distribution systems.*
 - (5) *An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.*
 - (6) *An estimate of the amount of energy used to place water into or withdraw from storage.*
 - (7) *Any other energy-related information the urban water supplier deems appropriate.*
- (b) *The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The*

The “Total Utility Approach” as defined by DWR in the 2025 UWMP Guidebook is used to report water-related energy-consumption data for Burbank. Water energy intensity is the total amount of energy expended, on a per AF basis, to take water from the location Burbank acquires it to the point of delivery. **Table 6-13** shows the energy consumed through the operation of its potable water distribution system, and does not include energy associated with the treatment of wastewater. Calendar year 2025 was selected as the one-year reporting period. The total energy use for distributing 14,635 AF of potable water was 5,135,318 kilowatt hours (kWh), resulting in an energy intensity of approximately 351 kWh/AF (1,077 kWh/MG).

Table 6-13 Recommended Energy Reporting (DWR Table O-1B)

Water Delivery Product	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control		
Start Date of Reporting Period	1/1/25	Sum of all Water Management Process	Non-Consequential Hydropower	
End Date of Reporting Period	12/31/25			
Is upstream embedded energy included in the values reported?	No			
Units of Measure for Water	AF	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process		14,635	-	14,635
Energy Consumed (kWh)		5,135,318	-	5,135,318
Energy Intensity (kWh/vol. converted to MG)		1,077	-	1,077

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality

Metered Data

Data Quality Narrative:

Energy consumed during calendar year 2025 is based on the City's meters.

Narrative:

Burbank serves a combination of local groundwater pumped from the SFB and imported (treated and raw) water supplies from MWD. This excludes non-potable recycled water supply.

7 WATER SUPPLY RELIABILITY AND DROUGHT RISK ASSESSMENT

This section of the UWMP describes the reliability of Burbank’s water supplies, considering the security of both water sources and system infrastructure. The supply reliability assessment considers factors that could potentially limit the expected quantity of water available from Burbank’s current and projected sources of supply through 2050.

7.1 Constraints on Water Sources

☑ CWC §10631

(b)(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

☑ CWC §10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

☑ CWC §10635

(b)(2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.

(b)(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

The following sections provide a summary of potential constraints on future water supply availability, water quality, and climate change, and how these considerations may affect water management strategies and supply reliability.

7.1.1 Supply Availability

Burbank’s water supply portfolio includes a combination of imported water supply from MWD, local groundwater from SFB, and recycled water. Water supply availability can vary by source.

Purchased Water

Burbank is a member agency of and obtains purchased water from MWD. As described in **Section 6.1**, MWD’s imported water supplies are sourced from the Colorado River and the SWP, both of which are susceptible to supply reductions in dry years. MWD conducts supply reliability analyses as part of its long-term supply planning. MWD incorporates assumptions for Colorado River and Delta supply reliability into scenario planning, including assumptions related to regulations, agreements, and facility improvements. MWD’s long-term planning also incorporates assumptions for local supply availability, forecasted demand, and storage facilities. In addition, MWD incorporates the impacts and risks associated with climate change into its planning efforts for purchased or imported water through its 2020 Integrated Resource Plan and Climate Adaptation Master Plan for Water (MWD, 2026).

MWD member agencies, including Burbank, request deliveries of imported water from MWD that are received via connections to MWD’s regional distribution system. During drought periods when imported water availability is low, MWD can access its various storage facilities to continue to provide reliable supply, and if needed can request that member agencies implement water conservation measures to

ensure demands can be met. MWD anticipates it has reliable water supply available to meet its member agencies' demands in all hydrologic year types through 2050 (MWD, 2026).

An important component of MWD's contingency plan for responding to water shortages is the Water Supply Allocation Plan (WSAP), which MWD's Board of Directors approved in February 2008 and most recently updated in 2014. It is based on a guiding principle developed out of the Water Surplus and Drought Management Plan 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 (MWD, 2026).

Colorado River Supplies

The Colorado River has experienced drought conditions for more than two decades, resulting in development of a series of guiding documents and agreements to manage Colorado River supplies under shortage conditions. The 2007 Interim Guidelines were developed to respond to the changing river hydrology, providing coordinated operations of Lake Powell and Lake Mead, as well as the Intentionally Created Surplus program, which allows MWD to store water in Lake Mead. Due to declining water levels, the 2019 Lower Basin Drought Contingency Plan (2019 Drought Contingency Plan) was developed by United States Bureau of Reclamation (USBR) and the Colorado River Basin states to reduce the risk of Lake Mead and Lake Powell reaching critically low levels. The existing operating agreements, including the 2007 Interim Guidelines and the 2019 Drought Contingency Plan, are set to expire by the end of 2026. Negotiations for long-term operations for Lake Powell and Lake Mead after 2026 are ongoing. USBR is developing a new long-term operating plan, which requires a thorough review of environmental impacts under the National Environmental Policy Act. A draft Environmental Impact Statement was released in January 2026. In the meantime, the California agencies that depend on the Colorado River, including MWD, are discussing a framework agreement regarding how shortages will be shared. Accordingly, future drought planning and management remain subject to ongoing negotiations.

MWD has incorporated the uncertainty surrounding future Colorado River supplies into its long-term supply modeling. For the 2025 UWMP, MWD modeled Colorado River supplies consistent with USBR's Colorado River Simulation System with an additional climate change adjustment that reduces projected inflows over time. MWD's 2025 UWMP also assumes that current Colorado River operating agreements will remain in place throughout the planning horizon (MWD, 2026).

SWP Supplies

For SWP supplies, Table A in water supply contracts between the state water contractors and DWR set forth the base annual water supply entitlement that a state water contractor may expect to be provided under the contract. However, actual delivery varies by year, depending on hydrologic conditions, water quality and environmental conditions,¹⁴ state water contractor delivery requests, current reservoir storage, and other operational factors. Table A allocation percentages are publicly determined by DWR's modeling, analyses, and operations. The state water contractors may also receive other supplies that are

¹⁴ The Bay-Delta Water Quality Control Plan (Bay-Delta Plan) establishes flow and water quality standards for the Delta and its tributaries. The Bay-Delta Plan was last comprehensively updated in 1995, and while amendments were made in 2018, they have not yet been implemented. The SWRCB is currently considering further updates, including a proposed Voluntary Agreement as an alternative to stricter regulatory standards, which could affect water availability for state water contractors.

“carried over” from prior years’ entitlements or made available as hydrologic conditions warrant, above and beyond their Table A allocations (DWR, n.d.).

There are ongoing efforts aimed at increasing the long-term supply reliability of the SWP. The Delta Conveyance Project (DCP), for example, proposes to modernize the state’s aging water conveyance infrastructure by bypassing the tracts and sloughs of the central Delta, conveying water directly from the northern Delta to the SWP pumping facilities at the south of the Delta via an underground tunnel. The DCP would reduce the vulnerability of the SWP to salinity intrusion, levee failure, and other potential impacts to SWP operations as a result of climate change, sea-level rise, and earthquakes. The DCP would also address Delta ecosystem health by reducing the timing and intensity of current pumping operations impacting flows across the Delta. Recognizing these issues, MWD’s Board of Directors voted in 2020 and 2024 to support funding its share of the DCP environmental planning and pre-construction costs necessary to advance the project (MWD, 2026). In May 2025, Governor Newsom introduced a package of legislation aiming to expedite DCP implementation (MWD, n.d.).

Another effort, the Sites Reservoir Project, is a proposed 1.5 million AF off-stream storage reservoir in the Sacramento Valley that would require the construction of two large dams up to 310 feet high and nine smaller saddle dams. The water stored in the reservoir would be diverted from the Sacramento River during high flow events and returned to the Sacramento River during dry and critical years, thereby providing additional dry-year water for environmental flows and project partners including SWP agencies south of the Delta (MWD, 2026).

MWD has incorporated assumptions regarding SWP reliability into long term supply planning based on assumptions provided in the 2025 SWP Delivery Capability Report, which presents DWR estimates for SWP water availability under future conditions. Although the DCP and Sites Reservoir Project could provide significant potential benefits to MWD’s future supply reliability, MWD’s reliability assessment conservatively does not include any changes in supply reliability that could result from new facilities proposed under the DCP and Sites Reservoir Project (MWD, 2026).

Groundwater

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

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

As detailed in **Section 6.2**, the Judgment gives Burbank the right to store water in the aquifer under the administration of the ULARA Watermaster. Burbank can purchase MWD raw water for groundwater replenishment through spreading in order to add to its stored water credits. To maintain and optimize groundwater pumping, Burbank needs to acquire about 7,300 AF of groundwater per year, on average, through replenishment or a combination of replenishment and Physical Water Solution purchases.

Unavailable replenishment water during a long drought could limit the City’s ability to add to its groundwater “bank”. The City currently has a reserve of approximately 14,000 AF in groundwater credits, allowing normal extractions to continue for about two years without replenishment, assuming the purchase of 4,200 AF of Physical Solution Water.

Because Burbank has flexibility in the management of groundwater in accordance with the Judgment, Burbank's groundwater supplies are assumed to be fully reliable under all hydrologic year types throughout the 25-year planning horizon of this UWMP.

Recycled Water

All of Burbank's recycled water is supplied by BWRP and is considered fully reliable in all hydrologic year types, as it is generated from indoor water use. To address potential outages, Burbank maintains contingency measures, including a recycled water system interconnection with Glendale for backup recycled water supply from the Los Angeles-Glendale WRP, and the ability for MPP to supplement or replace recycled water supply with groundwater.

7.1.2 Water Quality

☒ CWC §10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

The drinking water quality of the Burbank system must comply with state and federal water quality regulations. As such, impaired water quality also has the potential to affect water supply reliability. Burbank has and will continue to meet all state and federal water quality regulations. All drinking water standards are set by the U.S. Environmental Protection Agency (USEPA) under the authorization of the Federal Safe Drinking Water Act of 1974. In California, the SWRCB DDW can either adopt the USEPA standards or set more stringent standards, which are then codified in Title 22 of the CCR. There are two general types of drinking water standards:

- Primary MCLs are health protective standards and are established using a very conservative risk-based approach for each constituent that considers potential health effects, detectability and treatability, and costs of treatment. Public water systems may not serve water that exceeds Primary MCLs for any constituent.
- Secondary MCLs are based on the aesthetic qualities of the water such as taste, odor, color, and certain mineral content, and are considered limits for constituents that may affect consumer acceptance of the water.

The potable water Burbank delivers to its customers is a blend of local groundwater and treated purchased water from MWD. Burbank routinely monitors its wells and the water that is treated and served to customers to ensure that water delivered to customers meets these drinking water standards. The results of this testing are reported to the SWRCB DDW following each test and are summarized annually in Water Quality Reports (also known as "Consumer Confidence Reports"), which are provided to customers electronically/by mail.¹⁵

Given Burbank's proactive monitoring and management of water quality in its source water supplies, water quality is not expected to impact the reliability of Burbank's available supplies within the planning horizon (i.e., through 2050).

¹⁵ Consumer Confidence Reports are available on Burbank's website at:
<https://www.burbankwaterandpower.com/water/water-supply/water-quality-reports>

Purchased Water

The untreated raw water purchased from MWD has recently been found to be contaminated with quagga mussels, requiring Burbank to temporarily stop spreading water at the Pacoima and Lopez spreading grounds. In 2025, Burbank completed Raw Water Discharge Plans, which are expected to allow spreading to resume in 2026. If spreading is not restored for an extended period, Burbank's annual groundwater allowance would be impacted, and Burbank would likely need to increase treated imported water supply purchases from MWD and/or purchase additional groundwater credits from the City of Los Angeles.

Groundwater

All of the City's production wells have varying degrees of VOC contamination. As described in **Section 6.2.1**, the BOU has significantly reduced VOC concentrations. A breakthrough in the system would require a shutdown of both treatment plants and create a complete loss of the groundwater supply.

Historically, elevated nitrate levels in the groundwater make it necessary to blend with MWD water to meet drinking water standards. Currently, nitrate levels are below the MCL at the BOU wells, indicating it could supply the City without blending in case of an emergency MWD shutdown. However, approval for emergency use of this source without blending would have to be obtained through the SWRCB DDW.

A few of the City's wells have high hexavalent chromium (Cr-6) levels. Currently, the BOU is using a blending plan to reduce the concentrations to below the regulatory levels. If the blending plan is no longer effective, implementation of a more advanced treatment method will be required. Other emerging constituents like 1,4-Dioxane, nitrosamines, perchlorate, uranium and microplastics that cannot be removed by Burbank's existing treatment plants could affect groundwater reliability and may also need costly treatment.

Starting in 2018, Burbank has increased sampling for per- and polyfluoroalkyl substances (PFAS) in drinking water in accordance with SWRCB requirements. Policy regarding PFAS is rapidly evolving. Currently, the BOU is removing the PFAS, and BOU wells have remained in compliance through Burbank's effort to stay ahead of regulations. However, regulatory constraints for emerging contaminants such as PFAS do pose a possible risk to the reliability of groundwater if they are to change in the future.

Although there is the potential for some regulated constituents to be present in source water, Burbank's monitoring, management, and treatment of its water results in high quality drinking water meeting all drinking water standards being served to customers. Burbank tracks changes in constituent concentrations to proactively address water quality issues before they impact supply reliability. In the event that water quality constituents are detected in source water at concentrations requiring treatment, Burbank is able to increase its blending program with MWD supply and/or take impacted wells offline to implement appropriate treatment as needed.

Recycled Water

Increased salt and nutrient loading are a growing concern to the SFB. The SWRCB mandated each basin to adopt a Salt and Nutrient Management Plan (SNMP) by 2016. The City participated in the SNMP process through the ULARA Watermaster. Recycled water usually has higher total dissolved solids (TDS) and chloride content than potable water, which may affect groundwater as it infiltrates. Recent groundwater data suggest TDS and chloride loading from irrigation with recycled water have not negatively affected the groundwater in the SFB.

7.1.3 Climate Change

☒ **CWC §10631 (b) (1)**

...For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

Section 6.11 provides a summary of potential climate change impacts that both Burbank and MWD are addressing. Burbank is actively pursuing multiple initiatives to increase its local and drought resistant supplies, such as potable reuse and desalinated water transfers. As part of its 2025 UWMP, MWD also incorporated climate change factors in both its demand projections and supply reliability analysis. Burbank is doing more work to further quantify and consider future climate change impacts as part of ongoing supply and operations planning.

7.2 Reliability by Type of Year

☒ **CWC §10631 (b)**

Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information, including all of the following:

☒ **CWC §10631 (b)(1)**

A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

☒ **CWC §10635 (a)**

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

Per the 2025 UWMP Guidebook, the water service reliability assessment includes three unique year types:

- A normal hydrologic year represents the water supplies available under normal conditions; this could be an averaged range of years or a single representative year,
- A single dry year represents the lowest available water supply, and
- A five-consecutive year drought represents the driest five-year period in the historical record.

The future water demands for the City and the entire region have been estimated by MWD using its Econometric Demand Model, developed by the Brattle Group. This model uses forecast data from SCAG for variables including population, housing units, and employment. These MWD projections provide the basis for dry-year reliability planning. The available imported supplies by year type are provided by MWD in **Appendix E** and are presented in **Table 7-1**.

Table 7-1 Basis of Water Year Data (Reliability Assessment) (DWR Table 7-1)

Year Type	Base Year	Available Supplies if Year Type Repeats
		% of Average Supply
Average Year	1922-2021	100%
Single-Dry Year	1977	100%
Consecutive Dry Years 1st Year	1988	100%
Consecutive Dry Years 2nd Year	1989	100%
Consecutive Dry Years 3rd Year	1990	100%
Consecutive Dry Years 4th Year	1991	100%
Consecutive Dry Years 5th Year	1992	100%

Generally, dry weather, especially hot, dry weather, causes an increase in water demand, mostly for landscape irrigation. However, conservation practices during past droughts have been sufficient to lower demands. Burbank achieved a 10% reduction in water use during the 1990/91 drought, a 20% reduction for the 2008-2010 drought, and a 24% reduction in the 2014-2016 drought, and a 17% reduction in the 2021-2022 drought. Based on an analysis completed by MWD as part of its 2025 UWMP (**Appendix E**), Burbank’s potable demands are projected to decrease by 0.5% during single dry years, and fluctuate from a 1.5% decrease to a 2% increase in multiple dry years. Burbank’s non-potable demands are assumed to remain unchanged during dry periods.

The base years listed in **Table 7-1** were chosen as the driest years for MWD over a 100-year historical hydrologic record. In reviewing the 100-year record, MWD found that the SWP allocations fluctuate the most in response to extreme hydrologic conditions, and this five-year drought period (1988-1992) reflects the lowest SWP allocations to MWD on record. MWD assessed the reliability of its own supply sources, as well as the in-region resources based on the hydrologic conditions present over that five-year period. MWD also included climate change impacts provided by DWR in regards to the SWP delivery capability, and climate change factors for Colorado River system based on modeling from USBR. MWD projects 100% reliability for full-service demands through the year 2050 based on its 2025 UWMP (MWD, 2026). In addition to having reliable imported water supply from MWD, Burbank’s groundwater and recycled water supplies are anticipated to be unaffected by dry periods, as described in **Section 7.1.1**. Therefore, **Table 7-1** assumes 100% reliability of all of Burbank’s water supplies in all year types.

7.3 Supply and Demand Assessment

☒ CWC §10635(a)

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

Water supply and demand change during normal, single dry, and multiple dry years. The following sections compare Burbank’s projected water demands with projected water supply availability during normal years, single dry years, and multiple dry year periods.

7.3.1 Normal Year Supply and Demand Assessment

Table 7-2 compares the projected supply and demand over the 25-year planning horizon under normal conditions. MWD expects to maintain sufficient and reliable water supply to meet the imported water demands of its member agencies, including Burbank, in normal years through 2050 (MWD, 2026). Burbank’s groundwater and recycled water are also considered reliable in normal years. Accordingly, projected supply is assumed to equal projected demands through 2050, and no WSCP actions are reflected in **Table 7-2**.

Table 7-2 Normal Year Supply and Demand Comparison (DWR Table 7-2)

	2030	2035	2040	2045	2050
Supply Totals (DWR Table 6-9)	25,949	31,428	31,374	31,273	31,094
Use Totals (DWR Table 4-2 R)	25,949	31,428	31,374	31,273	31,094
Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.					

7.3.2 Single-Dry Year Supply and Demand Assessment

Table 7-3 compares the projected supply and demand totals over the 25-year planning horizon under single dry year conditions. Based on projections provided by MWD (**Appendix E**) and adjusted assuming that the development potential contemplated in the DTSP and MDSP is achieved by 2035, Burbank’s demands are anticipated to decrease by approximately 0.5% in single dry years. Overall demand decreases during single dry years can result from several factors, including implementation of water shortage response measures and conservation requirements, reductions in outdoor irrigation, and increased conservation awareness. MWD expects to maintain sufficient and reliable water supplies to meet the imported water demands of its member agencies, including Burbank, in single years through 2050 (MWD, 2026). Burbank’s groundwater and recycled water are also considered reliable in single dry years. Accordingly, projected supply is assumed to equal projected demands through 2050, and no WSCP actions are reflected in **Table 7-3**.

Table 7-3 Single Dry Year Supply and Demand Comparison – District Total (DWR Table 7-3)

	2030	2035	2040	2045	2050
Supply Totals	25,814	31,263	31,209	31,109	30,931
Use Totals	25,814	31,263	31,209	31,109	30,931
Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.					

7.3.3 Multiple Dry Year Supply and Demand Assessment

Table 7-4 compares the projected supply and demand totals over the 25-year planning horizon under multiple dry year conditions. Based on projections provided by MWD (**Appendix E**) and adjusted assuming that the development potential contemplated in the DTSP and MDSP is achieved by 2035, in multiple dry year conditions, Burbank’s demands are anticipated to fluctuate, ranging from a decrease of 1.5% in 2030 to an increase of 2% in 2050. This reflects the competing effects of sustained conservation and water use efficiency and the long-term impacts of climate change. MWD expects to maintain sufficient and reliable water supplies to meet the imported water demands of its member agencies, including Burbank, in multiple dry years through 2050 (MWD, 2026). Burbank’s groundwater and recycled water are also

considered reliable in multiple dry years. Accordingly, projected supply is assumed to equal projected demands through 2050, and no WSCP actions are reflected in **Table 7-3**.

Table 7-4 Five Consecutive Dry Years Supply and Demand Comparison (DWR Table 7-4)

		2030	2035	2040	2045	2050
First Year	Supply Totals	25,566	31,655	31,922	31,848	31,715
	Use Totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(Shortfall)	0	0	0	0	0
Second Year	Supply Totals	25,566	31,655	31,922	31,848	31,715
	Use Totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(Shortfall)	0	0	0	0	0
Third Year	Supply Totals	25,566	31,655	31,922	31,848	31,715
	Use Totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(Shortfall)	0	0	0	0	0
Fourth Year	Supply Totals	25,566	31,655	31,922	31,848	31,715
	Use Totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(Shortfall)	0	0	0	0	0
Fifth Year	Supply Totals	25,566	31,655	31,922	31,848	31,715
	Use Totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.						

7.4 Water Supply Management Tools and Options

☒ CWC §10620 (f)

An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

Burbank coordinates on an ongoing basis with all relevant agencies in the region to optimize the use of regional water supplies. This includes MWD, LADWP, Glendale, and other public and private entities with which Burbank can collaborate to protect and enhance local water resources. Burbank and LADWP are both continuing to encourage new customers to connect to Burbank's recycled water system where feasible, and Burbank is exploring the possibility of adding DPR to its supply portfolio, as described in **Section 6.5.5**. Burbank has also joined a consortium of seven agencies led by LVMWD to explore WF1, as discussed in **Section 6.6**. These programs represent both local and regional coordinated efforts to increase local supplies and reduce reliance on imported water.

7.5 Drought Risk Assessment

☒ CWC §10635(b)

Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

- (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.*
- (2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.*
- (3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.*
- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.*

In addition to the long-term water service reliability assessment presented above, the Drought Risk Assessment evaluates Burbank's supply risks under a severe drought period lasting for the next five consecutive years after the assessment is completed. The Drought Risk Assessment is intended to inform the demand management measures (DMM) and water supply projects and programs to be included in the UWMP (see **Section 9**). Suppliers may conduct an interim update or updates to this Drought Risk Assessment within the five-year cycle of its UWMP update (i.e., before the 2030 UWMP).

7.5.1 Data, Methods, and Basis for Water Shortage Condition

This evaluation considers historical drought hydrology and plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria. As a first step to the Drought Risk Assessment, Burbank estimated unconstrained water demand for the next five years (i.e., 2026-2030). Unconstrained water demand is the expected water use in the absence of drought water use restrictions. The characteristic five-year water demand is described in **Section 4.7**. The available potable water supplies assumed in the Drought Risk Assessment are based upon the same methodology and assumptions used for the long-term water service reliability assessment in **Section 7.3** and relies on information from MWD's 2025 UWMP. Details of how Burbank's available supplies are then estimated as part of the Drought Risk Assessment are provided below.

7.5.2 Drought Risk Assessment Individual Water Source Reliability

Burbank's available imported supplies during the five-consecutive-year drought are based on an assessment by MWD, which reviewed its SWP and Colorado River supplies during the driest five-year period from the 100-year hydrologic record (1921-2021). MWD also included climate change impacts to delivery capacity and allocations from both sources. Despite cutbacks from both sources, MWD expects to maintain sufficient and reliable water supplies to meet the imported water demands of its member agencies, including Burbank. In addition, the SFB is adjudicated, and groundwater supplies can be managed adaptively in accordance with the Judgment. Accordingly, projected groundwater supplies are assumed to be reliable during drought conditions. Recycled water purchases are considered drought-

proof, as they are generated from consumed indoor water supplies within the region and are not expected to be significantly impacted by weather conditions.

7.5.3 Drought Risk Assessment Total Water Supply and Use Comparison

Table 7-5 provides a comparison of the water supply sources available to Burbank with the total projected water use for an assumed drought period of 2026 through 2030. Burbank's supply is expected to be sufficient to meet demands in all hydrologic conditions, including an extended five-year drought period.

Table 7-5 Five-Year Drought Risk Assessment Tables (DWR Table 7-5)

2026	Total (AF)
Total Water Use	18,847
Total Supplies	18,847
Surplus/Shortfall without WSCP Action	0
2027	Total
Total Water Use	20,527
Total Supplies	20,527
Surplus/Shortfall without WSCP Action	0
2028	Total
Total Water Use	22,207
Total Supplies	22,207
Surplus/Shortfall without WSCP Action	0
2029	Total
Total Water Use	23,886
Total Supplies	23,886
Surplus/Shortfall without WSCP Action	0
2030	Total
Total Water Use	25,566
Total Supplies	25,566
Surplus/Shortfall without WSCP Action	0

8 WATER SHORTAGE CONTINGENCY PLANNING

☒ CWC §10640

(a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

This Water Shortage Contingency Plan (WSCP) for the City of Burbank (Burbank or City) addresses the requirements in California Water Code (CWC) §10632 of the Urban Water Management Plan (UWMP) Act. The WSCP includes the stages of response to a water shortage caused by drought, water supply reductions, failure of a water distribution system, or other emergencies. The objectives of this WSCP are to describe and demonstrate Burbank's ability to meet water demands where emphasis is placed on the protection of public health and safety. This WSCP serves as a guide for Burbank's intended actions during water shortage conditions to ensure a quick and adequate response in managing and mitigating possible water shortages.

The WSCP is organized into twelve sections and includes each of the following elements as indicated by the California Department of Water Resources (DWR) 2025 UWMP Guidebook:

1. An analysis of water supply reliability
2. Procedures for conducting an annual water supply and demand assessment (AWSDA)
3. Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50% shortages and greater than 50% shortage
4. Shortage response actions that align with the defined shortage levels
5. Communication protocols and procedures
6. Customer compliance, enforcement, appeal, and exemption procedures
7. A description of legal authorities
8. A description of financial consequences
9. Monitoring and reporting requirements
10. Reevaluation and improvement procedures
11. Special water feature distinction
12. Plan adoption, submittal, and availability

This WSCP is a stand-alone plan, that may be adopted independently from the UWMP and may be amended or refined and readopted as needed over coming months and years independently from the UWMP (see **Section 8.12** below).

8.1 Water Supply Reliability Analysis

☑ CWC §10632

(a)(1) The analysis of water supply reliability conducted pursuant to Section 10635.

☑ CWC §10632.5

(a) In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

Burbank has three primary sources of water supply: imported water, groundwater, and recycled water. Treated and raw imported water is purchased from its wholesaler, the Metropolitan Water District of Southern California (MWD). Burbank also pumps groundwater from the San Fernando Basin (SFB) of the Coastal Plain of Los Angeles Groundwater Basin. The SFB is adjudicated, and Burbank is entitled to an Import Return Credit (IRC) of 20%, storage of imported water, stored water credits, and Physical Solution Water equivalent to 4,200 acre-feet per year (AFY). If needed and assuming the SFB still held enough water, Burbank would have to negotiate the purchase of additional groundwater from the Los Angeles Department of Water and Power (LADWP). Burbank also has access to recycled water from the Burbank Water Reclamation Plant (BWRP).

Burbank has a reliable water supply in normal, single dry, and multiple dry year conditions through 2050 (see **Section 7.3** of the Burbank 2025 UWMP). Burbank maintains a diverse water supply portfolio that allows the City to conjunctively use purchased and groundwater assets. To reduce reliance on imported water supplies, Burbank has expanded its local resources, including recycled water to meet non-potable demands. Burbank is currently evaluating potential opportunities such as DPR and water exchanges with other MWD member agencies associated with a potential ocean desalination project to augment regional potable supplies.

When determining the availability of supply for any given period, Burbank evaluates not only the total quantity of supplies, but also considers other factors that affect their reliability and accessibility. This includes:

- **Infrastructure Capacity:** Evaluating the infrastructure capacity to extract groundwater, deliver imported water, and distribute water through the distribution systems is of high importance in determining the availability of water supplies.
- **Timing of Delivery:** The timing of delivery of water supplies must be considered in assessing the supply availability, particularly water from the State Water Project (SWP). For example, in January 2014, DWR reduced SWP allocation to zero, limiting water supplies.

Burbank has developed redundant infrastructure systems to help mitigate outages that may be due to factors beyond hydrology or regulatory constraints. For example, Burbank has interconnections with the Glendale Power & Water (Glendale) and the Los Angeles Department of Water and Power (LADWP).

8.2 AWSDA Procedures

☑ CWC §10632

(a)(2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

(A) The written decision-making process that an urban water supplier will use each year to determine its water supply reliability.

(B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:

(i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.

(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.

(iii) Existing infrastructure capabilities and plausible constraints.

(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.

(v) A description and quantification of each source of water supply.

☑ CWC §10632.1

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan.

An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

Urban suppliers are required to submit an AWSDA to DWR by July 1 each year. The AWSDA examines Burbank's water reliability for the current year and one additional dry year to determine what, if any, water shortages stages may be triggered during the required period. The steps and timing to complete the AWSDA and submit the final report are listed below to provide consistency year-after-year regardless of City staff changes:

1. April-May

- a. Initial Burbank determines total available supply – inclusive of imported water supply.
- b. Burbank determines infrastructure constraints (including water quality conditions limiting local sources).
- c. Burbank determines expected demand for current year and next year.
- d. Burbank compares supply and demand and makes a determination of the water supply reliability.

2. June

- a. Draft AWSDA and results briefing for Burbank staff.
- b. AWSDA report to be submitted to DWR by July 1.

It should be noted that this timeline serves as a guideline for preparing the AWSDA and may be modified based on circumstances relevant at that time.

8.2.1 Decision-Making Process

A decision-making process will occur each year to approve the water supply reliability determination of the AWSDA. The AWSDA will document anticipated shortages if any, triggered shortage response actions, associated compliance and enforcement actions, and communication actions. If the AWSDA determines a potential supply shortage, the City Council's approval of the AWSDA, with potential coordination with MWD, will also serve as a formal declaration of any foreseen water shortage level, and trigger recommendations for specific shortage response actions.

8.2.2 Data and Methodologies

This section describes the key data inputs and AWSDA methodologies used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry. For purposes of this analysis, Burbank's definition of dry year mimics characteristics of a single dry year as defined in **Section 7.2** of the Burbank 2025 UWMP. This also aligns with the water shortage levels described in **Section 8.3**.

Evaluation Criteria

The City will evaluate both local supplies and imported supplies as part of the AWSDA. The local supply evaluation will include evaluation of changes in groundwater availability, changes in recycled water availability, and recent demand trends to determine any deviations from normal availability. To evaluate imported water, the City will rely on MWD's evaluation of regional supplies and demands to evaluate shortage levels.

Water Supply

Burbank will quantify each source of water supply on a monthly basis. The evaluated supply sources will include treated and raw imported water purchases from MWD, groundwater from the SFB, and recycled water.

Imported Water: Burbank will rely on MWD and its 2025 UWMP to evaluate imported water supplies. MWD will evaluate the availability of SWP and CRA supplies in conjunction with locally availability supplies and unconstrained regional demand to develop the imported water availability. Under normal (non-shortage) conditions, the City can purchase as much water as necessary from MWD to meet demands. When the imported supply is under shortage conditions, the amount of shortage (allocation of shortage) specific to the City is determined in a process lead by MWD. In years where there is a shortage of imported water, MWD will implement its Water Shortage Allocation Plan (WSAP) and provide information to member agencies regarding allocations.

Groundwater: Burbank uses groundwater from the Court-adjudicated Upper Los Angeles River Area (ULARA), which is part of the SFB. The City will evaluate groundwater availability based on annual entitlement, including the IRC, storage of imported water, stored water credits, and Physical Solution Water. Burbank reports projected pumping to the ULARA Watermaster for inclusion in the Pumping and Spreading Plan developed each water year that provides the annual entitlement and planned pumping for each pumper in the SFB.

Recycled Water: The City's non-potable recycled water supply is produced at the BWRP. This source of supply is reliable during single and multi-year droughts because it uses wastewater as its source which is derived from indoor water use, and the City produces sufficient wastewater to meet recycled water demands even in drought years.

Unconstrained Customer Demand

Unconstrained demand projections will be consistent with the methodology outlined in **Section 4.7** of the Burbank 2025 UWMP. If needed, baseline demands will be adjusted to account for population changes in the service area, planned developments, and major land use changes.

Current Year Available Supply

Burbank will evaluate how the anticipated supplies for the coming year will be used. Water supply projections will be informed by **Section 6** and **Section 7** of Burbank's 2025 UWMP.

Infrastructure Considerations

Burbank will evaluate the infrastructure capabilities and constraints that may affect the ability to deliver supplies to meet expected customer water use needs in the coming year. The AWSDA will also outline anticipated projects that may add capacity or constrain capabilities to meet demands.

8.3 Six Standard Water Shortage Levels

☒ CWC §10632

(a)(3)(A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.

The WSCP requires water suppliers to adopt six water shortage stages, which correspond to progressively severe water shortage conditions (up to 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage) as compared to the normal reliability condition. These water shortage stages have been standardized to allow for a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions.

Burbank adopted the Sustainable Water Use Ordinance (SWUO) in June 2008 and defines six stages covering the range from normal water supply to extreme shortages. Although shortage percentages are not linked to the ordinance, Stage VI bans all landscape watering with potable water. This could provide the 50% reduction required by the UWMP Act. Also, Burbank would defer main and fire hydrant flushing and reservoir drainage for maintenance. It is likely that a water supply emergency would be declared by the time the maximum reduction was called into effect.¹⁶

¹⁶ Potential revisions to the SWUO were presented to the Burbank Board in March 2026; however, no action or vote was taken. The City is in the process of re-evaluating updates to its SWUO to clarify existing conservation measures and add in new requirements. However, for consistency with the currently adopted SWUO, this WSCP reflects the existing ordinance provisions and does not incorporate proposed revisions.

Table 8-1 Cross-reference for Standard vs Supplier Shortage Levels (DWR Table 8-1)

☐ Supplier uses the Standard six levels of water shortage.			
Standard Shortage Levels	Percent Shortage Range	Burbank's SWUO	Percent Shortage Range
1	Up to 10%	Implement Stage I of Burbank's SWUO	Up to 10%
2	Up to 20%	Implement Stage II of Burbank's SWUO	Up to 20%
3	Up to 30%	Implement Stage III of Burbank's SWUO	Up to 30%
4	Up to 40%	Implement Stage IV of Burbank's SWUO	Up to 40%
5	Up to 50%	Implement Stage V of Burbank's SWUO	Up to 50%
6	>50%	Implement Stage VI of Burbank's SWUO	>50%

8.4 Shortage Response Actions

☑ CWC §10632

(a)(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

- (A) Locally appropriate supply augmentation actions.*
- (B) Locally appropriate demand reduction actions to adequately respond to shortages.*
- (C) Locally appropriate operational changes.*
- (D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.*
- (E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.*

☑ CWC §10632.2

An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

Burbank's SWUO provides a basis for achieving water demand reductions which may be required because of emergency or drought conditions. Stage I, consisting of 13 sustainable water use measures, is always in effect. The other five stages can be activated by the City Council in times of water shortage.

It is not expected that the City will implement supply augmentation actions in response to emergency or drought conditions, as shown in **Table 8-2**. The demand reduction measures contained in the SWUO to reduce potential shortages are shown in **Table 8-3**.

Table 8-2 Supply Augmentation and Other Actions (DWR Table 8-2)

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap?	Additional Explanation or Reference (Opt)
Up to 10%	No action taken	0%	Burbank will not use supply augmentation to mitigate shortfalls. Short-term shortfalls may be mitigated with emergency supply interties with adjacent water supply systems.
10-20%	No action taken	0%	
20-30%	No action taken	0%	
30-40%	No action taken	0%	
40-50%	No action taken	0%	
>50%	No action taken	0%	

Table 8-3 Demand Reduction Actions (DWR Table 8-3)

Yes	Is the Supplier completing this table using the standard six levels?			
Shortage Level (a)	Demand Reduction Actions (b)	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Landscape – Limit landscape irrigation to specific days	3%	Do not water outdoor landscaped areas more than fifteen (15) minutes per day per station and no more than three (3) days per week, year-round. Areas watered with low volume irrigation systems that require additional spray time are exempt from the 15-minute time restriction of this requirement, but must comply with the three (3) days per week watering limit. The three allowable irrigation days are Tuesdays, Thursdays and Saturdays. With the exception of attended hand- watering, irrigation will not be allowed any day outside of the requirement listed here. Attended hand-watering is allowed any day of the week. Do not water outdoor landscaped areas on rainy days and at least two days thereafter.	Yes
1	Landscape - Limit landscape irrigation to specific times	2%	Do not water outdoor landscaped areas between the hours of 9:00 a.m. to 6:00p.m. or during daylight hours from November through March except by use of attended hand-watering, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	1%	Adjust sprinklers and irrigation systems to eliminate overspray and avoid run-off into streets, sidewalks, parking lots, alleys or other paved surfaces	Yes

Yes	Is the Supplier completing this table using the standard six levels?			
Shortage Level (a)	Demand Reduction Actions (b)	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Other - Prohibit use of potable water for washing hard surfaces	2%	Do not hose or wash driveways, patios, sidewalks, or other hard or paved surfaces except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a high pressure, low volume spray hose using only potable water with no cleaning agents at an average water usage of 0.006 gallons per square feet of sidewalk area in accordance with Resolution No. 98-08 issued by the Los Angeles Regional Water Quality Control Board, or a low-volume, high-pressure cleaning machine equipped to recycle any water used.	Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	No additional explanation	Yes
1	Other	1%	When washing vehicles, use a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off device. This does not apply to any commercial car washing facility.	Yes
1	CII - Restaurants may only serve water upon request	<1%	No additional explanation	Yes
1	CII - Lodging establishment must offer opt out of linen service	<1%	No additional explanation	Yes

Yes	Is the Supplier completing this table using the standard six levels?			
Shortage Level (a)	Demand Reduction Actions (b)	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	CII - Other CII restriction or prohibition	0.4%	Food preparation establishments, such as restaurants or cafes, are prohibited from using non-water conserving dish wash spray valves.	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	1%	Operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.	Yes
1	Other	<1%	Installation of single pass cooling systems is prohibited in buildings requesting new water service.	Yes
1	Other	<1%	Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.	Yes
1	Other	<1%	All commercial conveyor car wash systems and commercial laundry systems must have installed operational re-circulating water systems.	Yes
1	Landscape - Other landscape restriction or prohibition	2%	Do not irrigate ornamental turf on public street medians.	Yes
2	Landscape - Limit landscape irrigation to specific days	1%	Landscape watering limited to 15 minutes/day. Three days per week (Tuesdays, Thursdays and Saturdays) April – October, and one day per week (Saturday), November - March	Yes
3	Landscape - Limit landscape irrigation to specific days	1%	Landscape watering limited to 15 minutes/day, two days per week (Tuesdays and Thursdays), April – October. Areas watered with low volume irrigation systems that require additional spray time are exempt from the 15-minute time restriction.	Yes
3	Other	<1%	Use of outdoor cooling devices (mistors) prohibited	Yes

Yes	Is the Supplier completing this table using the standard six levels?			
Shortage Level (a)	Demand Reduction Actions (b)	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
3	Landscape – Prohibit certain types of landscape irrigation	1%	Hand watering also prohibited between 9AM and 6 PM	Yes
3	Other water feature or swimming pool restriction	2%	Use of pool and spa covers required	Yes
4	Landscape – Limit landscape irrigation to specific days	5%	Landscape watering limited to one day per week	Yes
5	Landscape - Prohibit certain types of landscape irrigation	5%	Watering limited to deep irrigation of trees and shrubs, 20 min, 2 days per month	Yes
5	Other	5%	No new or upgraded potable water services permitted, except R-1 and R-2, unless building permit already issued	Yes
6	Landscape - Prohibit all landscape irrigation	10%	No additional explanation	Yes
NOTES: (a) All demand reduction actions from previous stages remain in effect as the City progresses to a higher shortage level. (b) The City is in the process of evaluating updates to its SWUO, which may affect the shortage level stages and conservation measures. However, for consistency with the currently adopted SWUO, this WSCP reflects the existing ordinance provisions and does not incorporate potential revisions.				

8.4.1 Catastrophic Supply Interruption

A water shortage can result from a catastrophe like an earthquake, a major power outage, or a water supply source problem, i.e. major breakdown or a water quality disruption. Catastrophes like these occur with little or no warning but typically a partial restoration of supply can be expected within days or at most a few weeks. MWD developed a catastrophic supply interruption plan which contains the Emergency Storage Requirements (ESR).

The ESR is based on the three major aqueducts (SWP, CRA, and Los Angeles) being out of service for six months after a major earthquake. Diamond Valley Lake and other Southern California reservoirs and groundwater basins provide emergency storage. After such a disaster, MWD's emergency plan implements a mandatory 25% cutback in firm supplies to member agencies. Extraordinary conservation would be required to stay within the reduced supply in either of the above extreme cases.

Burbank has a formal disaster preparedness program. Every City employee is considered a disaster services worker. Training and drills are held regularly. When an emergency occurs, the Emergency Operations Center can be activated. This involves personnel from all City departments, and it operates according to the formal Standardized Emergency Management System procedures. There is a formal process for checking the water system for problems. Burbank could manage a short-term deficiency or emergency situations by mandating water conservation and also with the following actions:

- Increasing local groundwater pumping
- Purchasing additional water from the MWD to the extent available
- Using emergency interconnections to adjacent water agencies

If Burbank experiences a major power failure, but MWD is still producing water, Burbank can receive water to Zones 1 and 2. Portable diesel pumps are available to move water to higher zones if necessary. If all the City's water supplies were interrupted, stored water in local reservoirs would last up to three days at average use. Immediate curtailment of non-essential uses (i.e., landscaping), could make supplies last much longer. Burbank's SWUO provides procedures to reduce water use citywide and thereby mitigate the effect of a shortage of water resources. Through the use of incremental stages, as appropriate for prevailing conditions, the ordinance provides for increasing levels of water use restrictions and penalties in order to discourage wasteful water use practices and achieve reduced water consumption. In the case of a major local earthquake, a portion of stored water could be lost due to broken pipelines. Several of Burbank's main water reservoirs are equipped with seismic sensors that will automatically valve off a portion of the water in storage, to prevent a total loss in case of uncontrolled main breaks.

Since Burbank has one groundwater treatment plant, as well as five MWD connections, there is some flexibility in emergency operations. Burbank is situated where several reaches of the MWD distribution systems converge. Burbank can receive water from various sources within the MWD system. If a problem developed with Burbank's treatment plants, MWD could supply additional water from the five connections. If MWD supply had to be reduced, then treated groundwater could supplement the MWD supply. Blending MWD water with Valley Pumping Plant/Burbank Operable Unit (BOU) water (described in **Section 6.2.2** of Burbank's 2025 UWMP) is necessary to maintain production due to groundwater nitrate levels, but an increased BOU/MWD blending ratio could suffice.

There are presently two emergency interconnections with Glendale (one from Glendale to Burbank and one from Burbank to Glendale). These emergency interconnections have proven to be effective in providing a short-term supplemental supply, but the capacity is very low and Glendale relies on MWD water under the same conditions as Burbank. Burbank also has an interconnection with LADWP to ensure reliable, shared water supply during shortage or emergencies.

8.4.2 Seismic Risk Assessment and Mitigation Plan

Urban water suppliers are required to include within their WSCP a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. An urban water supply may comply with this requirement by submitting a copy of the most recently adopted multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the multi-hazard mitigation plan addresses seismic risk.

Appendix F includes a copy of the *City of Burbank Hazard Mitigation Plan (HMP)*. The HMP was prepared under the federal Disaster Mitigation Act of 2000 and last updated in 2023. Seismic risk is considered and addressed throughout the HMP. The HMP identified seismic risks including earthquakes due to proximity to local faults. Historically, the two most significant earthquakes to affect the City were the 1971 Sylmar earthquake and the 1994 Northridge earthquake, which caused substantial damage to streets, the sewer system, the water system, public buildings, and privately-owned residential and commercial structures. Future earthquakes could cause significant damage. The City is working on several projects and actions to address potential hazards from earthquakes, including: improving emergency power systems at water processing facilities and hardening them against hazard event; installing backup power systems for key City-owned water pumps; improving waste and runoff water systems against hazardous events in conjunction with Burbank 2035 conservation priorities; and considering the use of flexible water pipes, particularly across known faults, to enhance seismic resiliency (Burbank, 2023). In the event of a water shortage due to an earthquake, Burbank would implement the demand reduction measures in **Table 8-3**.

The City has also prepared a Risk and Resiliency Assessment as required by America's Water Infrastructure Act of 2018. Burbank's primary water facilities were analyzed, and recommendations were made to address risks.

Several projects to address seismic risks are included in the City's *Adopted Fiscal Year 2025/26 and Proposed Fiscal Year 2026/27 Budget* as part of the capital improvement program, including seismic retrofit of pipelines and Valley Pumping Plant forebay seismic assessment.

8.5 Communication Protocols

☒ CWC §10632

(a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan consists of each of the following elements:

(5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.

(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.

(C) Any other relevant communications.

The shortage response actions described in this WSCP will be declared by resolution of the City Council. Before adopting any such resolution, the City Council will hold a public hearing when required by CWC §351 or other applicable law. In addition to the formal noticing to the public the City will do at the varying Shortage Levels, the City will expand its public information campaign starting in Shortage Level II, which will also serve as a means of communicating Shortage Levels and required actions. This information campaign may include bill inserts, public service announcements, or other outreach efforts.

Burbank uses its website as one of its tools to communicate the current Shortage Level and associated water restrictions. The website also allows for reporting of water waste, responding to water waste citations, and receiving information on water conservation and rebates.¹⁷

8.6 Compliance and Enforcement

☒ CWC §10632

(a)(6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

Enforcement of the mandatory restrictions defined in the SWUO is through the issuance of an administrative citation. A notification process is used to alert citizens of reported water waste so corrections can be made. At least two notifications are made to allow citizens the opportunity to correct reported water waste incidents.¹⁸ Continued violation of the SWUO after receiving notifications may result in the issuance of an Administrative Citation, per section 1-1-108.1 of Title 1 of the Burbank Municipal Code. An Administrative Citation allows for fines of \$100 for the first violation, \$200 for the second violation, and \$500 for every violation thereafter.

8.7 Legal Authorities

☒ CWC §10632

(a)(7)(A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.

(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.

(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

☒ CWC §350

The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

Under California law, including CWC Chapters 3.3 and 3.5 of Division 1, Parts 2.55 and 2.6 of Division 6, , and Article X, Section 2 of the California Constitution, the City Council is authorized to implement the water shortage actions outlined in this WSCP. In all water shortage cases, shortage response actions to be

¹⁷ Information on Burbank's current Shortage Level is available at:

<https://www.burbankwaterandpower.com/watering-schedule>

¹⁸ The SWUO enforcement procedures, including the use of notification prior to issuance of administrative citations, may be revised as part of potential SWUO updates under consideration by the Burbank Board. For consistency with the currently adopted SWUO, this WSCP reflects the existing ordinance provisions and does not incorporate potential revisions.

implemented will be at the discretion of the City Council and will be based on an assessment of the supply shortage (determined by the City's annual supply and demand assessment, notification from MWD to member agencies, or other means as appropriate), customer response, and need for demand reductions.

It is noted that upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the state will defer to implementation of locally adopted WSCPs to the extent practicable. The City will coordinate with regional and local water suppliers for which it provided water supply services for possible proclamation of a local emergency as necessary.

8.8 Financial Consequences of WSCP

☒ CWC §10632

(a)(8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

It is difficult to precisely gauge the revenue and expenditure impacts of implementation of the WSCP. The WSCP provides for prohibitions on outdoor water use and requests for indoor use reductions, enforced by penalties for violation. Ultimate impacts will be based upon a mix of responses to these requirements and overall public cooperation in saving water in additional ways. Revenue will be reduced through lower water sales. However, the City will see this compensated to some degree by lower water purchase, pumping and treatment charges.

During the large 2014-16 drought, the City experienced the following revenue impacts:

- FY 2014/15 – Approximately -12.6% consumption reduction from FY 2013/14 levels, which resulted in approximately \$2.75 million in reduced revenues
- FY 2015/16 – Approximately -17.9% consumption reduction from FY 2014/15 levels, which resulted in a cumulative decrease in revenues of approximately \$6.1 million from FY 2013/14 levels

No additional costs are assumed for WSCP enforcement nor compliance with Chapter 3.3, because it is assumed that enforcement will be completed using existing staff. Burbank does not anticipate requiring any mitigations actions to address revenue reduction. Most water savings are likely to accrue from reduced outdoor water use.

8.9 Monitoring and Reporting

☒ CWC §10632

(a)(9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

Under normal conditions, the City monitors water sales and deliveries on a monthly basis. All of the City's water connections are metered with each individual meter read monthly. The City prepares monthly sales and delivery reports which are reviewed and compared to reports and statistics from prior months and the same period as the prior year. Under shortage conditions, the City will determine water savings made from implementing the stages of the WSCP by reviewing and comparing production reports. Each customer or customer group can be evaluated for compliance with conservation requirements.

The WSCP is an adaptive management plan that can be revised and refined to ensure its shortage response actions are effective and produce desired results. Results of monitoring and reporting efforts will be used to evaluate the effectiveness of shortage actions. If certain procedure refinements or new actions are identified by City staff, or suggested by customers or other interested parties, the City Council has the authority to quickly incorporate and implement such refinements to the WSCP, as needed.

8.10 WSCP Refinement Procedures

☒ **CWC §10632**

(a)(10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

This WSCP is an adaptive management plan that is designed to be responsive to the effectiveness of water shortage actions during a declared water shortage. As such, the WSCP is subject to adjustments and refinements as needed to ensure that actions are appropriate and effective. In the event that water shortage response actions are not producing the necessary demand reductions, Burbank will take adaptive measures necessary to achieve further demand reductions among the various customer categories. This may include adding new or modifying existing water use restrictions, creating targeted outreach programs, or implementing additional conservation incentive programs.

WSCP refinements are accomplished through a legislative process that involves staff analysis, presentations to decision-makers, and consideration and approval by the Burbank Board and City Council. Specifically, Burbank staff briefs and proposes recommended water shortage response actions to the Burbank Board which then approves the action to be brought before the City Council. Once approved, the updates are incorporated into the Plan and implemented at the appropriate water shortage level.

8.11 Special Water Feature Distinction

☒ **CWC §10632**

(b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

For the purposes of this WSCP, special water features are defined and analyzed separately from pools and spas. Non-pool and non-spas may use or be able to use recycled water, whereas pools and spas must use potable water for health and safety considerations. Special water features include, but are not limited to, ornamental fountains, lakes, and ponds. According to the City's SWUO, operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.

8.12 WSCP Adoption, Submittal, and Availability

☒ CWC §10632

(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

☒ CWC §10642

...Prior to adopting either [UWMP and WSCP], the urban water supplier shall make both the plan [UWMP] and water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon... After the hearing or hearings, the plan [UWMP] or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

☒ CWC §10640

(b) ...The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article [Article 3 Sections 10640–10645].

☒ CWC §10644

(b) If an urban water supplier revises its water shortage contingency plan the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 [required elements of a WSCP] no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

The final WSCP was included in the adoption of the 2025 UWMP, which was adopted as described in **Section 10**. However, because the WSCP is a stand-alone document, it can be amended, as needed, outside of a UWMP update cycle. The processes for approving WSCP amendments and conducting required public hearings are similar to those required for UWMP adoption. The City will release a 60-Day Notice and a Public Hearing Notice for the amended WSCP. The public hearing to receive public comments on the amended WSCP will be held immediately prior to the adoption of the amended WSCP by the City Council. The amended WSCP will be made available for the public on the City's website within 30 days of the adoption date.

9 DEMAND MANAGEMENT MEASURES

☒ CWC §10631 (e)

Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

(v) Programs to assess and manage distribution system real loss.

(vi) Water conservation program coordination and staffing support.

(vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

Burbank has taken proactive steps to manage and reduce water demand over the past two decades. In 2005, the per capita daily usage was 184 GPCD. Since then, it has steadily declined, reaching 120 GPCD in 2025. During drought conditions, per capita water use can be even lower, dropping to 112 GPCD after the 2022 drought. Burbank will continue implementing DMMs to maintain low per capita water use and to prepare for potential restrictions during future droughts. For purposes of this section, these programs have been grouped into the following DMM categories in accordance with CWC §10631(e):

- (i) Water waste prevention ordinances
- (ii) Metering
- (iii) Conservation pricing
- (iv) Public education and outreach
- (v) Programs to assess and manage distribution system real loss
- (vi) Water conservation program coordination and staffing support, and
- (vii) Other demand management measures

The following are descriptions of the conservation programs Burbank operates within each of these DMM categories.

9.1 Water Waste Prevention Ordinances

The City Council enacted the SWUO in 2008 which prohibits the wasteful use of potable water. The SWUO aligns with Burbank's WSCP and provides a tiered response of water use restrictions, allowing the City a nimble mechanism by which to respond to water supply shortages. The SWUO includes prohibitions on landscape water overspray, prompt leak repair, and that restaurants only serve water by request. The

provision of penalties for residents or businesses not acting in accordance with the requirements is built into the Ordinance. City Council enacted Stage III of the SWUO during the drought years 2015 and 2022 to limit landscape watering to two days per week in the summer and one day per week in the winter.¹⁹

9.2 Metering

☒ CWC §526 (a)

Notwithstanding any other provision of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract ... shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings constructed prior to January 1, 1992, located within its service area.

(2) On and after March 1, 2013, or according to the terms of the Central Valley Project water contract in operation, charge customers for water based on the actual volume of deliveries, as measured by a water meter.

☒ CWC §527 (a)

(a) An urban water supplier that is not subject to Section 526 shall do both of the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

Burbank meters all of its customers, with separate meters for potable and non-potable water uses and bills its customers monthly. Burbank does not allow the installation of unmetered services and provides rental hydrant meters for temporary usage of water.

Burbank implemented an advanced metering infrastructure (AMI) system between 2009 and 2011, improving water use efficiency by capturing customer consumption data and identifying wasteful usage and leak detection. However, aging communication modules have reduced system reliability, affecting about 17% of water meters in 2021. In the interim, Burbank has deployed an automatic meter reading system to restore functionality. Burbank is in the process of updating its AMI system to ensure that customers continue to receive efficient, reliable, and modern utility services. As part of this project, Burbank will replace approximately 26,800 communication modules on residential and commercial water meters with new modules to ensure Burbank continues to receive usage data via wireless technology directly. Substantial completion for the water AMI project is anticipated by June 2026.

9.3 Conservation Pricing

A tiered water rate, adopted in 2009 for single-family residential water users, increases the cost of potable water as usage increases. The first tier, up to 8 hundred cubic feet (HCF) per month, is generally enough for most families to use for indoor domestic purposes. This structure reflects the fact that higher usage increases Burbank's costs (e.g., added strain on infrastructure, pipe wear, etc.). While water conservation was not the primary purpose of the tiered rate structure, it may influence customer behavior.

¹⁹ The SWUO conservation measures, including watering restrictions, may be revised as part of potential SWUO updates under consideration by the Burbank Board. For consistency with the currently adopted SWUO, this WSCP reflects the existing ordinance provisions and does not incorporate potential revisions.

Burbank also has multiple financial assistance programs that help its customers afford their utility bills. In general, the programs include exemptions and reductions on utility bills and discounts on energy use. However, there are currently no programs that specifically aid with water service fees.

9.4 Public Education and Outreach

Burbank prides itself on the use of many communications outlets to help spread the sustainability issues forward. In response to changing and challenging environmental issues, Burbank staff have significantly ramped up customer programs and customer communications over the past decade. Burbank staff use multiple communication channels to inform individuals and organizations about available programs and services.

9.4.1 Print Channels

- Newsletter, “Currents”: An annual newsletter mailed to all Burbank addresses covering a wide range of topics.
- Direct Mail: Letters are sent to customers related to specific issues and build awareness about programs and services.
- Utility Bill Inserts: Burbank places timely and relevant information on customer bills.

9.4.2 Digital Channels

- Burbank Website: Burbank’s website had about 16,000 visitors per month in 2025. The website highlights programs and issues important to the industry and community. Burbank’s website has dedicated webpages for:
 - City’s SWUO and ongoing conservation efforts
 - Watering schedules
 - Water-saving tips to reduce residential indoor and outdoor water consumption
 - Tips for identifying water leaks
 - Residential and commercial rebate programs
 - Landscape design with California-native and drought-resistant plant
 - Graywater use
- Digital Currents electronic newsletter: A digital newsletter that is emailed monthly to approximately 36,000 Burbank residential emails.
- Digital Currents electronic newsletter: A digital newsletter that is emailed quarterly to approximately 8,400 Burbank business emails.
- Emails: Burbank sends targeted emails to customers to promote conservation and efficiency programs and services.
- Social Media: Burbank has Facebook, Instagram, X and LinkedIn social media accounts with over 8,600 cumulative followers and growing.

9.4.3 Online Portals

- WaterSmart Portal (<https://bwp.watersmart.com/index.php/welcome>) allows customers to review their water usage and get personalized tips for conserving water and saving on their bill.

- SoCal WaterSmart Portal (<https://socalwatersmart.com/en/commercial/rebates/apply-online/>) allows customers to apply for rebates funded by Burbank and MWD.

9.4.4 Events and Partnerships

- Event Sponsorship: Burbank supports several community organizations and events, receiving advertising as part of the sponsorship.
- City Events with Burbank staff present: Burbank has an ongoing presence at City events to disseminate information and respond to customer questions.
- Workshops: free workshops on California friendly landscaping are offered to Burbank residents.
- Burbank Guest Speakers: Presentations to organizations as requested.
- Student Outreach: Burbank has student sustainability programs in place that are run on an annual basis and also participates in ad hoc programs.

9.4.5 Community Demonstration Garden Grants

Burbank has previously supported the development of demonstration gardens for the community to enjoy and is currently working on a new project with the Burbank Unified School District for a site at Theodore Roosevelt Elementary. Demonstration gardens are supported with interpretive signage to provide detailed information about each garden and practical landscape advice.

9.4.6 Home Water Reports Program

In April 2015, at the peak of the four-year statewide drought, Burbank began providing Home Water Reports to 15,000 residential single family water customers. The Home Water Reports contain information on bi-monthly water use, a comparison with similarly sized homes, and program promotional information and tips to reduce water use. The program also provides online access to the reports for customers, which includes hourly, daily and weekly water use so that customers can work to reduce their usage before receiving their next bill. In addition, the online component contains a water conservation tip library and a leak detection module so that customers will know within one to two days when a leak is occurring and can take immediate steps to fix it. Customers can also compare their water usage to similar households with similar occupancy.

This program is currently on hold but may be reactivated in the future.

9.4.7 LivingWise Program

Burbank has partnered with the Burbank Unified School District for at least 15 years to provide sixth-grade students in Burbank with water- and energy-efficiency education and a home retrofit kit. These kits include water- and energy-saving devices that teach students the importance of conservation through a series of in-home and classroom activities. Students and their parents install these devices in their homes and are rewarded with immediate and lasting savings. More than 1,000 students participate annually, typically achieving savings of over 2.8 MG (8.6 AF) per year, in addition to 178,000 kWh.

9.5 Programs to Assess and Manage Distribution System Real Loss

As discussed in **Section 4.5**, reducing distribution system losses is an important component of the State's MCCWL regulations, and suppliers will be required to start meeting individual volumetric loss standards over a three-year period beginning January 2028. Burbank conducts annual distribution system audits using AWWA M36 Standard Water Audit methodology. The approach consists of a component analysis of

metered water sources, metered water demands, quantification of water losses (apparent and real), and calculation of non-revenue water as a percentage of total system flows.

As shown in **Table 4-7**, Burbank is currently meeting the 2028 water loss standard under MCCWL. Burbank's real losses in 2024 were approximately 525 AF, or 3.7% of the water supplied to the system. Burbank minimizes real losses by regularly and methodically replacing vulnerable water mains, which are identified and prioritized on Burbank's 5-year capital improvement program. Additionally, Burbank has a proactive water leak detection program. Through a review of hourly consumption data provided by advanced meters, staff reports to customers about possible water leaks. As customers repair these leaks, water savings are tracked.

9.6 Water Conservation Program Coordination and Staffing Support

Burbank centrally administers its conservation programs and coordinates with regional partners including MWD through its SoCal Water\$mart program. Burbank staff are directly involved in implementing some of the conservation programs including the various public outreach programs and the leak detection program.

9.7 Other Demand Management Measures

There are a wide variety of water efficiency rebates, programs and services available to Burbank residents and businesses.

9.7.1 Home Improvement Program

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The Home Improvement Program is a unique water and energy efficiency program available to all Burbank single-family and multi-family residential customers. The program offers a water and energy audit, as well as water and electric home upgrades, all provided at no cost to customers. Burbank's Home Improvement Program offerings exceed those of other agencies for both inside and outside the home. Burbank added leak detection and repair measures to this already excellent program in January 2026. The program now includes the following water upgrades and services:

- Water audit and education regarding existing water use in and outside of the home
- Indoor and outdoor leak detection
- Indoor and outdoor leak monitoring devices
- Installation of low-flow showerheads and faucet aerators
- Toilet installation, leak test and repair
- Weather-based irrigation controllers and programming
- High-efficiency sprinkler heads and irrigation pipe repair

The program services about 450 homes per year, delivering an estimated annual water savings of over 4.5 MG (13.8 AF). Over the past five years, the program serviced about 2,671 homes.

9.7.2 Residential Rebate Programs

Burbank participates in partnership conservation programs with MWD to promote regional conservation programs, take advantage of grant funding, and help lower conservation program costs through economies of scale. Rebates funded by Burbank and MWD through the SoCal Water\$mart program include:

- High-efficiency clothes washers
- Premium high-efficiency toilets
- Flow monitor devices
- Weather-based irrigation controllers
- Rotating sprinkler nozzles
- Rain barrels and cisterns
- Soil moisture sensors
- Turf replacement

Additional information is available at <https://socalwatersmart.com/en/residential/rebates/available-rebates/available-rebates-overview/>. In the past five years, Burbank has distributed 1,582 residential rebates.

9.7.3 Commercial Rebate Programs

Burbank also provides rebates for commercial customers in partnership with MWD. Rebates funded by Burbank and MWD through the SoCal Water\$mart program include:

- Plumbing fixtures
- Landscaping equipment
- Food equipment
- HVAC equipment
- Turf replacement

Additional information on specific devices is available at <https://www.burbankwaterandpower.com/conservation/commercial-programs-rebates/commercial-water-conservation-rebates>. In the past five years, Burbank has distributed 68 commercial rebates.

9.8 California Water Efficiency Partnership

Compliance with California Urban Water Conservation Council Best Management Practices used to be required to receive financial assistance (i.e., grants and loans) from the State of California for water projects. However, this was replaced in 2018 by the California Water Efficiency Partnership (CalWEP), an organization launched to address increasing pressures from climate change and State regulations. CalWEP provides resources and tools that enable utilities to address these challenges in innovative, collaborative ways. Burbank has been a member of CalWEP since 2021.

9.9 Implementation to Achieve Water Use Targets

☒ CWC §10631

(e)(1)(A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measure that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

As described in **Section 5**, all the DMMs described above contributed to Burbank's compliance with its 2020 Target. These programs will continue to support Burbank in complying with MCCWL requirements, including achieving its UWUO, and in advancing long-term conservation.

10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

This section provides information on a public hearing and adoption process for Burbank's UWMP and WSCP, as well as submittal requirements for the adopted plans. It also outlines plan implementation and the process for amending the adopted UWMP or WSCP.

10.1 Inclusion of All 2025 Data

Because Burbank reports on a calendar year basis, this UWMP includes complete water use and planning data for the entire 2025 calendar year, per the 2025 UWMP Guidebook. All data reported herein reflects the finalized 2025 information necessary to meet UWMP requirements.

10.2 Notice of Plan Preparation and Public Hearing

☒ CWC §10621

(b) Every urban water supplier required to prepare a plan shall ... at least 60 days prior to the public hearing on the plan ... notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

☒ CWC §10642

...Prior to adopting either [the plan or water shortage contingency plan], the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code [see below]. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area.

☒ CGC §6066

Publication of notice pursuant to this section shall be once a week for two successive weeks. Two publications in a newspaper published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. The period of notice commences upon the first day of publication and terminates at the end of the fourteenth day, including therein the first day.

Section 2.5 describes Burbank's initial outreach for the 2025 UWMP update, including distribution of the 60-Day Notice on 23 March 2026. The 60-Day Notice was provided more than 60 days prior to the public hearing and informed applicable entities that the Plan would be reviewed and updated. Agencies that received the 60-Day Notice are listed in **Table 10-1**, and correspondence is provided in **Appendix D**.

Burbank also provided a Public Hearing Notice to the entities listed in **Table 10-1** notifying them of the UWMP and WSCP public hearing with the specific date, time, and location of the public hearing (see **Section 10.3**). The Public Hearing Notice also provided instructions on how to view the Draft UWMP and WSCP prior to the hearing, the revision schedule, and contact information of the UWMP and WSCP preparer. In addition, Burbank published the Public Hearing Notice in the Burbank Leader at least two weeks in advance, once a week for two consecutive weeks, with at least five days between the respective publication dates. The Public Hearing Notice was first noticed in the local paper on 30 May 2026, and again on 6 June 2026. The Public Hearing Notices, including correspondence with entities and publications, can be found in **Appendix D**.

Burbank maintained a copy of the Draft UWMP and WSCP in its office and website (<https://burbankwaterandpower.com/>) prior to the public hearing for public review. The deadline for public comments on the UWMP and WSCP was 16 June 2026, the date of the public hearing.

Table 10-1 Notification to Cities and Counties (DWR Table 10-1)

City Name	60 Day Notice	Notice of Public Hearing
Glendale Water & Power (a)	Yes	Yes
Los Angeles Department of Water and Power (a)	Yes	Yes
County Name	60 Day Notice	Notice of Public Hearing
Los Angeles County	Yes	Yes
NOTES: Burbank provided a 60-Day Notice to LADWP and Glendale Water & Power due to geographical proximity and to ensure regional alignment in water management.		

10.3 Public Hearing and Adoption

☒ **CWC §10642**

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon.... After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

☒ **CGC §7291**

...every local public agency... serving a substantial number of non-English-Speaking people, shall employ a sufficient number of qualified bilingual persons in public contact positions or as interpreters to assist those in such positions, to ensure provision of information and services in the language of the non-English-speaking person.

Burbank held an in-person public hearing on 16 June 2026 at 6:00 p.m. to present the UWMP and WSCP. The UWMP and WSCP were formally adopted by the Burbank City Council on 16 June 2026. A copy of the signed Resolution of Plan Adoption is included in **Appendix G**. Correspondence with various participating agencies regarding this Plan is also included in **Appendix G**.

10.4 Plan Submittal and Public Availability

☒ CWC §10621

(a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

(c) An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.

☒ CWC §10635

(c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

☒ CWC §10644

(a)(1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(a)(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

☒ CWC §10645

(a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

This UWMP and WSCP were submitted to DWR electronically through the WUE Data Portal within 30 days of adoption, by the 1 July 2026 deadline. A hard copy of Burbank's adopted UWMP and WSCP were also sent to the California State Library and to the entities listed in **Table 10-1** within 30 days of adoption. Because the City is not regulated by the California Public Utilities Commission, CWC §10621(c) does not apply.

Following Plan submittal, Burbank made an electronic version of the UWMP and WSCP available for public review online (<https://burbankwaterandpower.com/>).

10.5 Plan Implementation and Amendments

☒ CWC §10621

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

☒ CWC §10643

An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

☒ CWC §10644

(a)(1) Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared...no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

The implementation of this UWMP shall be carried out as described unless significant changes occur between the adoption of this UWMP and the 2030 UWMP. If such significant changes do occur, Burbank will amend and readopt the UWMP as required by the CWC.

If the UWMP or WSCP are amended, each of the steps for notification, public hearing, adoption and submittal (i.e., **Section 10.2** through **Section 10.4**) will also be followed for the amended document(s).

11 REFERENCES

- California Department of Finance (DOF), 2025. Population Projections. Available at: <https://dof.ca.gov/forecasting/demographics/projections/>
- California Department of Water Resources (DWR), 2026. 2025 UWMP Guidebook. Available at: https://wuedata.water.ca.gov/public/public_resources/4825681388/2025_Draft_UWMP_Guidebook_Release.zip
- California Department of Water Resources (DWR), n.d. California Irrigation Management Information System (CIMIS), Station 223 – North Hollywood.
- California Department of Water Resources (DWR), n.d.. State Water Project. Available at: <https://water.ca.gov/programs/state-water-project>
- California Department of Water Resources (DWR), n.d.. Water Loss Audit Reports. Available at: <https://wuedata.water.ca.gov/>.
- City of Burbank, 2022. Burbank 2021 – 2029 Housing Element Update. Available at: https://www.burbankca.gov/documents/173607/0/2022_Adopted_Burbank+Housing_Element_clean.pdf
- City of Burbank, n.d. Consumer Confidence Reports. Available at: <https://www.burbankwaterandpower.com/water/water-supply/water-quality-reports>
- City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 123 Cal.Rptr. 1, 537 P.2d 1250 (Cal. 1975).
- Metropolitan Water District of Southern California (MWD), 2025. Climate Adaptation Master Plan for Water - Implementation Strategy, 2025.
- Metropolitan Water District of Southern California (MWD), 2026. Draft 2025 Urban Water Management Plan. Available at: <https://d1q0afiq12ywwq.cloudfront.net/media/5ralzxit/public-review-draft-february-2026-uwmp.pdf>
- Metropolitan Water District of Southern California (MWD), n.d.. State Water Project: From the Northern Sierra to Southern California. Available at: <https://www.mwdh2o.com/securing-our-imported-supplies/state-water-project/>
- OceanWell, 2025. California Water Farm 1. Available at: <https://www.oceanwellwater.com/water-farm-one>.
- Southern California Association of Governments (SCAG), 2024, Demographics and Growth Forecast Report. Available at: <https://www.scag.ca.gov/sites/default/files/2024-05/23-2987-tr-demographics-growth-forecast-final-040424.pdf>
- U.S. Census Bureau, 2024. 2024 American Community Survey 5-year Estimates. U.S. Census Bureau, dated 2024. Retrieved from: <https://data.census.gov/cedsci/>
- U.S. Census, 2025. U.S. Census Bureau QuickFacts. Available at: <https://www.census.gov/quickfacts/>

Appendix A: UWMP Act Checklist

2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Relevant Submittal Table	2025 UWMP Location
Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	n/a	Pages: ES-1 to ES-3
Chapter 1	10630.5	Each plan shall include a simple description of the Supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter.	n/a	Pages: ES-1 to ES-3
Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	n/a	Page: 2-1
Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	2-1	Page: 2-2
Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	2-2	Page: 2-2
Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	2-3	Page: 2-3
Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	n/a	Page: 2-4, Appendix D
Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	n/a	Pages: 2-4 to 2-5
Section 2.4.1	10631(h)	Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source.	2-4	Page: 2-4
Chapter 3.0	10631(a)	Describe the Supplier service area.	n/a	Page: 3-1
Section 3.3	10631(a)	Describe the climate of the Supplier's service area.	n/a	Pages: 3-2 to 3-4
Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	3-1	Page: 3-6
Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier's water management planning.	n/a	Pages: 3-6 to 3-7
Section 3.5	10631(a)	Describe the land uses within the service area... include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area.	n/a	Page: 3-8
Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	4-1 and 4-2	Pages: 4-4 and 4-8
Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	4-5	Page: 4-10
Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	4-6	Page: 4-11
Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the Supplier.	4-3	Page: 4-7
Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	4-3	Page: 4-7
Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	4-3	Page: 4-7
Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall... Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.	4-3	Page: 4-7
Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	n/a	Page: 4-12
Section 5.2	10608.4	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	5-1	Page: 5-1
Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	n/a	Pages: 6-1 to 6-19

2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Relevant Submittal Table	2025 UWMP Location
Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	n/a	Pages: 6-22, and 7-6 to 7-9
Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	6-1	Page: 6-4 to 6-7
Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	n/a	Pages: 6-4 to 6-6
Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	n/a	Pages: 6-4 to 6-5
Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump.	n/a	Pages: 6-5 to 6-6
Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin...	n/a	n/a
Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	n/a	n/a
Section 6.2.2.	10631(b)(4)(C)	If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	6-1	Page: 6-7
Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	6-9	Page: 6-21
Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	6-8 and 6-9	Pages: 6-20 to 6-21
Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	n/a	Page: 6-18
Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods.	6-2	Page: 6-10
Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	6-3	Page: 6-11
Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	6-4	Page: 6-14 to 6-15
Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	6-4	Page: 6-14 to 6-15
Section 6.2.5	10633(e)	Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected.	6-4 and 6-5	Page: 6-15 to 6-16
Section 6.2.5	10633(f)	Describe the actions that may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	6-6	Page: 6-17
Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	n/a	Page: 6-16
Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	6-7	Pages: 6-17 and 6-19
Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years.	6-7	Page: 6-19
Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain.	O-1B	Page: 6-24
Section 7.1	10634	Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability.	n/a	Pages: 7-4 to 7-5
Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years.	7-2, 7-3, and 7-4	Pages: 7-7 to 7-9
Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	n/a	Page: 7-9
Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	n/a	Pages: 7-10 to 7-11

2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Relevant Submittal Table	2025 UWMP Location
Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive years.	n/a	Page: 7-10
Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	n/a	Page: 7-10 to 7-11
Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period.	7-5	Page: 7-11
Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	n/a	Pages: 7-6 to 7-7
Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	n/a	Pages: 8-1 to 8-16
Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	n/a	Page: 8-2
Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability.	n/a	Pages: 8-3 to 8-4
Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the Supplier's water reliability for the current year and one dry year pursuant to factors in the code.	n/a	Pages: 8-4 to 8-5
Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	n/a	Page: 8-5
Section 8.3	10632(a)(3)(B)	Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories.	8-1	Page: 8-6
Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	8-2	Page: 8-7
Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	8-3	Pages: 8-8 to 8-10
Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	8-2	Page: 8-7 and 8-11
Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions.	8-3	Pages: 8-8 to 8-10
Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	8-2 and 8-3	Pages: 8-7 to 8-10
Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	n/a	Page: 8-12 and Appendix F
Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	n/a	Page: 8-12
Section 8.5	10632(a)(5)(B), 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	n/a	Page: 8-12
Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	n/a	Page: 8-13
Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	n/a	Pages: 8-13 to 8-14
Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. <i>Water Shortage Emergencies</i> .	n/a	Page: 8-13 to 8-14
Section 8.7	10632(a)(7)(C)	Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	n/a	Page: 8-14
Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	n/a	Page: 8-14
Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	n/a	Page: 8-14
Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, <i>Excessive Residential Water Use During Drought</i> .	n/a	Page: 8-14

2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Relevant Submittal Table	2025 UWMP Location
Section 8.9	10632(a)(9)	Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance.	n/a	Pages: 8-14 to 8-15
Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	n/a	Page: 8-15
Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	n/a	Page: 8-15
Section 8.12	10632(c)	Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan.	n/a	Page: 8-16
Sections 9.1	10631(e)(1)	Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	n/a	Pages: 9-1 to 9-7
Chapter 10	10608.26(a)	Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	n/a	Page: 10-2
Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan.	10-1	Page: 10-1 to 10-2, and Appendix D
Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 2026.	n/a	Page: 10-3
Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP.	n/a	Pages: 10-1 to 10-2 and Appendix D
Section 10.2.2	10642	The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water.	10-1	Pages: 10-1 to 10-2
Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	n/a	Appendix G
Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	n/a	Page: 10-3
Section 10.4	10644(a)(1)	Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption.	n/a	Page: 10-3
Sections 10.4.1 and 10.4.2	10644(a)(2)	The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically.	n/a	Page: 10-3
Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	n/a	Page: 10-4
Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	n/a	Page: 10-3
Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	n/a	Page: 10-3
Section 10.6	10621(c)	If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	n/a	n/a

Appendix B: Required Data Tables in DWR Format

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
Add additional rows as needed			
CA1910179	Burbank Power and Water	26,827	17,564
Total		26,827	17,564
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES:			

Submittal Table 2-2: Plan Identification

Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
☒	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
☐	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☐	Supplier is a wholesale supplier
☒	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☒	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP (Select from the drop down list).	
Unit	AF
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: 	

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
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The retail Supplier has informed the following wholesale supplier(s) of projected water use.
--

Wholesale Water Supplier Name

Add additional rows as needed

Metropolitan Water District of Southern California
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NOTES:

Submittal Table 3-1 Retail: Population - Current and Projected
Water Code Section 10631(a)

Population Served	2025	2030	2035	2040	2045	2050(opt)
	106,146	131,998	155,889	156,666	157,126	156,624

NOTES: Current population for 2025 is based on DOF estimates for Burbank (DOF, 2025); future population estimates were provided by MWD and based on SCAG's 2024 Connect SoCal plan (SCAG, 2024). The projected population estimates were adjusted assuming the full development potential contemplated under the DTSP and MDSP in Burbank's 2021-2029 Housing Element Update is achieved by 2035.

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual
Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family		Potable	6,562
Multi-Family		Potable	3,832
Commercial		Potable	2,936
Institutional/Governmental		Potable	183
Other (optional)	Recycled Water Use (a)	Non-Potable	2,930
Other (optional)	Fire Protection and Temporary Water	Potable	63
Distribution System Water Loss	(b)	Potable	661
Subtotal Potable			14237
Subtotal Non-Potable			2930
Total			17,167
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES: (a) Recycled Water Use does not include water loss from the non-potable distribution system. (b) Water loss was estimated as the average potable distribution system water loss from calendar year 2021 - 2024. For planning purposes, distribution losses are considered potable water demand. (c) Total may not sum due to rounding. Demand differs from supply in Table 6-8 due to metering inaccuracies and/or data			

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected
Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	Projected Water Use (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 opt (AF)
Add additional rows as needed.							
Single Family		Potable	6,987	7,174	7,113	7,080	7,003
Multi-Family		Potable	8,103	10,436	10,499	10,529	10,527
Commercial		Potable	5,926	8,569	8,517	8,426	8,338
Institutional/Governmental		Potable	280	341	340	337	333
Other (optional)	Fire Protection and Temp Services	Potable	22	22	22	22	22
Other (optional)	Total Recycled Water Use	Non-Potable	3,593	3,593	3,593	3,593	3,593
Distribution System Water Loss	(a)	Potable	1,038	1,293	1,290	1,286	1,278
Subtotal Potable			22,356	27,835	27,781	27,680	27,501
Subtotal Non-Potable			3,593	3,593	3,593	3,593	3,593
Total			25,949	31,428	31,374	31,273	31,094

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

(a) Assumes average water loss from 2021 – 2024 (4.6%).

(b) Totals may not sum due to rounding.

(a) Assumes average water loss from 2021 – 2024 (4.6%).

(b) Totals may not sum due to rounding.

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? Drop down list (y/n)	Yes
If "Yes" to above, state the section or page number , in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. Optional Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	Section 4.4.1
Are Lower Income Residential Demands Included In Projections? Drop down list (y/n)	Yes
Optional If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	Section 4.4.3
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES: All of Burbank's residential customers, regardless of income level, are metered and thus the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in the 2025 UWMP Table 4-1 and Table 4-2.	

Optional Submittal Table 4-4 Retail: Passive Water Savings Projections
Water Code Section 10631(d)(4)(A)

Description (Codes, Standards, Ordinances, or Plans)	Passive savings				
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 opt (AF)
Add additional rows as needed					
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.					
NOTES:					

Submittal Table 4-5 Retail: Water Loss Audit Reporting
Water Code Section 10631(d)(3)(A)

Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
CA1910179	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES: Submitted water loss audit reports are available at: https://wuedata.water.ca.gov/		

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit		Real Water Loss Per Unit per Day	State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)		2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	
Add additional rows as needed.											
CA1910179	Yes	17.4	Gallons per Service Connection per Day (GPSCD)	27810	525	16.9	6.8	Gallons per Service Connection per Day (GPSCD)	27810	201	6.5
<u>Water Board's Calculated Water Loss Standards</u>											
DWR NOTES: Units of measure (AF, CCF, MG) for Water Loss MUST remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations.											
NOTES:											

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
☐	Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020 See DWR NOTES below.	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	157	138	Yes		NA
DWR NOTES: Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies. Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance. NA=Not Applicable						
NOTES:						

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)							
☐	Check the box if the Supplier does not pump groundwater. Proceed to the next table.						
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)						
Groundwater Type Drop Down List May use each category multiple times	Potable or Non-Potable (OPTIONAL) Drop down list	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
Add additional rows as needed							
Alluvial Basin	Potable	San Fernando Basin	12,319	11,936	10,793	11,652	11,269
Total			12,319	11,936	10,793	11,652	11,269
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES							

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area Water Code Section 10633(a)				
☐	Check the box if there is no wastewater collection system. Proceed to the next table.			
100%	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)			
100%	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)			
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL Drop Down List	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number Drop down list	Is WWTP Located Within UWMP Area? Drop Down List
Add additional rows as needed				
LASAN	Metered	1,721	Hyperion WWTP, Place ID 232063	No
Burbank	Metered	7,614	Burbank WRP, Place ID 212135	Yes
Total Wastewater Received from UWMP Service Area in 2025:		9,335		
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.				
NOTES: 				

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area														
Water Code Section 10633(b)														
☐	Check the box if no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.													
Wastewater Treatment Plant Name and Place ID Number Drop down list	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) Drop down list	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (AF)	Total 2025 Volume of Water Treated (AF)	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		Water Recycled Outside of UWMP Service Area (enter data as applicable)		Effluent Discharge that is not a Permitted Recycled Water Use (enter data as applicable)		Required Discharge for Instream Flow (enter data as applicable)		Delivered to Another Entity for Additional Treatment (enter data as applicable)		
				Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Name of other entity
Add additional rows as needed														
Burbank WRP, Place ID 212135	No	7614	7,614	Tertiary	2,886	Tertiary	17	Tertiary	4711					
Total		7,614	7,614		2,886		17		4,711		0		0	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.														
NOTES:														

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area										
Water Code Section 10633 (c),(d),(e)										
☐	Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.									
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :			Burbank Water Reclamation Plant							
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :			Burbank Water and Power (Burbank)							
Volume of Supplemental Water Added in 2025 (OPTIONAL) :			27							
Source of 2025 Supplemental Water (OPTIONAL) :			Burbank Potable Supply							
Use Type Drop down list	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
Landscape irrigation (exc golf courses)	Non-Potable	Landscape Irrigation	992	1,200	1,200	1,200	1,200	1,200	1200	
Golf course irrigation	Non-Potable	Golf Course Irrigation	281	280	280	280	280	280	280	
Commercial use	Non-Potable	Mixed Cooling Tower and Landscaping	653	650	650	650	650	650	650	
Geothermal and other energy production	Non-Potable	Magnolia Power Plant and Olive Power Plant	986	1,200	1,200	1,200	1,200	1,200	1200	
Other (Description Required)	Non-Potable	Deliveries to LADWP	17	260	260	260	260	260	260	
Other (Description Required)	Non-Potable	Recycled Water Fill Stations	1	3	3	3	3	3	3	
Subtotal Potable			0	0	0	0	0	0	0	
Subtotal Non-Potable			2,930	3,593	3,593	3,593	3,593	3,593	3,593	
Total			2930	3593	3593	3593	3593	3593	3593	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table. Potential recycled water use: a description of the feasibility of these uses must be included in the narrative. Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.										
NOTES:										

**Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection
Compared to 2025 Actual
Water Code Section 10633(e)**

☐

Check the box if recycled water was not used in 2025 nor previously projected for use in 2020.
Proceed to the next table.

Use Type Drop Down list	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Add additional rows as needed		
Landscape irrigation (exc golf courses)	1,200	992
Golf course irrigation	230	281
Commercial use	650	653
Geothermal and other energy production	1,200	986
Other (Description Required)	260	17
Other (Description Required)	3	1
Total	3,543	2,930

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3

Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES: Actual recycled water use for landscape irrigation, geothermal and other energy production, deliveries to LADWP, and water truck fill station are more than 10% lower than projected in the 2020 UWMP due to fewer new conversions than anticipated and an overall decrease in water demands within the service area.

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
☐	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
Add additional rows as needed			
DPR Feasibility Study	Burbank is evaluating the feasibility of DPR. Assuming economic, political, and environmental feasibility, this project could potentially reuse all BWRP effluent.	TBD	TBD (a)
Recycled Water Exchange with LADWP	Burbank anticipates increasing recycled water exchanges with LADWP for groundwater credits.	Ongoing	260
Current Recycled Water Policy Enforcement	Whenever feasible, Burbank will provide recycled water to potential users. Potential new usage is continually identified.	Ongoing	200
Total (AF)			460
Unit Conversion to AF			460
DWR NOTES: Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.			
NOTES: (a) The DPR Feasibility Study is underway to evaluate the potential to implement DPR using effluent from the BWRP, which could yield approximately 2,500 AFY. However, because the study has not been finalized, this potential supply is not accounted for in this UWMP. If feasible, DPR supply will be included in future UWMPs.			

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs

Water Code Section 10631(f)

☐

Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.

☒

Check the box if some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.

6-11

Provide page location of narrative in the UWMP

Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (as needed)	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Planned Implementation Year	Planned for Use in Year Type Drop Down List	Expected Increase in Water Supply to Supplier (This may be a range) (AF)
	Drop Down List (yes/no)	If Yes, Supplier Name					
Add additional rows as needed							

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3.

NOTES:

Submittal Table 6-8 Retail: Water Supplies — Actual Water Code Section 10631(b)				
Water Supply	Additional Description (as needed)	2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed				
Purchased or Imported Water	Treated water from MWD (a)	Potable	3,366	
Purchased or Imported Water	Raw water from MWD for spreading (b)	Potable	0	
Groundwater (not desalinated)	Groundwater from SFB (c)	Potable	11,269	
Recycled Water	Recycled water from BWRP (d)	Non-Potable	2,930	
Subtotal Potable			14,635	0
Subtotal Non-Potable			2,930	0
Total			17,565	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.				
NOTES: (a) Burbank does not have a direct contract with MWD for purchased water and supplies are discretionary to match demand. Therefore, no "Total Entitlement" is shown. (b) For completeness, raw water is included in Table 6 10 even though no water was spread in 2025 due to infrastructure upgrades and quagga mussel contamination in the untreated MWD water. While raw water supply is non-potable, it is recharged into the SFB and extracted to meet potable demands. Therefore, for purposes of this UWMP, this supply is categorized as potable. Additionally, Burbank does not have a direct contract with MWD for raw water spreading; supplies are discretionary to match demand. Therefore, no "Total Entitlement" is shown. (c) “Total Entitlement” volume includes Burbank’s IRC, stored credits, and Physical Solution Water. ULARA Watermaster has not yet calculated this volume; therefore, no “Total Entitlement” is shown. (d) Total recycled water supply includes recycled water sold to Burbank’s customers, recycled water delivered outside of the service area (i.e. exchanged with LADWP). This includes 27 AF of supplemental potable water to meet peak recycled water demands. Burbank does not have a specified “Total Entitlement” for recycled water. (e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent. (f) Supply differs from demand in Table 4 1 due to metering inaccuracies and/or data errors.				

Optional Table 6-8DS: Source Water Desalination by Urban Water Supplier											
☒	Check the box if the Supplier does not reduce salinity in either groundwater or surface water prior to distribution.										
Desalination Facility Drop Down list	Plant Capacity	Intake Type Drop down list	Source Water Type Drop down list	Influent TDS	Brine Discharge Drop down list	Volume of Water Desalinated					Name(s) of Agencies that Receive this Water
						2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)	
Add additional rows as needed											
Total						0	0	0	0	0	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submital Table 2-3. This table identifies the units of measure reported in Submittal Table 2-3.											
NOTES:											

Submittal Table 6-9 Retail: Water Supplies — Projected
Water Code Section 10631 (b)

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Projected Water Supply (Report to the Extent Practicable)									
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool			2030		2035		2040		2045		2050 (opt)	
			Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed												
Purchased or Imported Water	Treated water from MWD (a)	Potable	10,878		16,357		16,303		16,202		16,023	
Purchased or Imported Water	Raw water from MWD for spreading (b)	Potable	7,370		7,275		7,286		7,306		7,342	
Groundwater (not desalinated)	Groundwater r from SFB (c)	Potable	4,108		4,203		4,192		4,172		4,136	
Recycled Water	Recycled water from BWRP (d)	Non-Potable	3,593		3,593		3,593		3,593		3,593	
Subtotal Potable			22,356	0	27,835	0	27,781	0	27,680	0	27,501	0
Subtotal Non-Potable			3,593	0	3,593	0	3,593	0	3,593	0	3,593	0
Total			25,949	0	31,428	0	31,374	0	31,273	0	31,094	0
DWR NOTES:												
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.												
Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.												
NOTES:												
(a) “Reasonably Available Volume” is provided by MWD, included as Appendix E and adjusted to reflect the potential additive demands assuming that the development potential associated with the DTSP and MDSP is achieved by 2035. Burbank does not have a direct contract with MWD for purchased water; supplies are discretionary to match demand. Therefore, no "Total Entitlement" is shown.												
(b) “Reasonably Available Volume” is provided by MWD, included as Appendix E. Raw water supply is non-potable. However, because it is recharged into the SFB and extracted to meet potable demands, this supply is categorized as a potable for purposes of this UWMP. Additionally, Burbank does not have a direct contract with MWD for raw water spreading; therefore, no "Total Entitlement" is shown.												
(c) “Reasonably Available Volume” is calculated as the groundwater recovery projection provided by MWD, included as Appendix E, minus the raw water purchased for spreading to avoid double-counting, consistent with the 2025 UWMP Guidebook. “Total Entitlement” volume includes Burbank’s IRC, stored credits, and Physical Solution Water, and varies by year. Therefore, no “Total Entitlement” is shown.												
(d) Burbank does not have a specified “Total Entitlement” for recycled water; therefore, no "Total Entitlement" is shown.												
(e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.												

Optional Submittal Table O-1B: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - TOTAL UTILITY APPROACH

Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control		
Start Date of Reporting Period	1/1/2025	Sum of All Water Management Processes	Non-Consequential Hydropower	
End Date of Reporting Period	12/31/2025			
Is upstream embedded energy in the values reported?	No	Total Utility See DWR NOTES	Hydropower	Net Utility
Units of Measure for Water	AF			
Volume of Water Entering Process		14,634		14,634
Energy Consumed (kWh)		5,135,318		5,135,318
Energy Intensity (kWh/vol. converted to MG)		1,077	-	1,077
DWR NOTES: Total Utility:The volume of water entered in the “Total Utility” column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.				
Quantity of Self-Generated Renewable Energy				
		0 kWh		
Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)				
		Metered Data		
Data Quality Narrative:				
Energy consumed during calendar year 2025 is based on the City’s meters.				
Narrative:				
Burbank serves a combination of local groundwater pumped from the SFB and imported (treated and raw) water supplies from MWD. This excludes non-potable recycled water supply.				
NOTES:				

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		☐	Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: [insert location from UWMP]
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	% of Average Supply
Average Year	1922-2021		100%
Single-Dry Year	1977		100%
Consecutive Dry Years 1st Year	1988		100%
Consecutive Dry Years 2nd Year	1989		100%
Consecutive Dry Years 3rd Year	1990		100%
Consecutive Dry Years 4th Year	1991		100%
Consecutive Dry Years 5th Year	1992		100%
DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 R if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 R, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 R are being used and identify the particular water source that is being reported in each submittal table. Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the units of measure reported in Submittal Table 2-3.			
NOTES:			

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison
Water Code Section 10635 (a)

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	25,949	31,428	31,374	31,273	31,094
Use totals (autofill from Submittal Table 4-2 R)	25,949	31,428	31,374	31,273	31,094
Surplus/(shortfall)	0	0	0	0	0

OPTIONAL Planned WSCP Actions

WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					

DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison
Water Code Section 10635(a)

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals	25,814	31,263	31,209	31,109	30,931
Use totals	25,814	31,263	31,209	31,109	30,931
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)

		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	25,566	31,655	31,922	31,848	31,715
	Use totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals	25,566	31,655	31,922	31,848	31,715
	Use totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals	25,566	31,655	31,922	31,848	31,715
	Use totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals	25,566	31,655	31,922	31,848	31,715
	Use totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals	25,566	31,655	31,922	31,848	31,715
	Use totals	25,566	31,655	31,922	31,848	31,715
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

**Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment
Water Code Section 10635(b)(3)**

2026	Total
Total Water Use (AF)	18,847
Total Supplies (AF)	18,847
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2027	Total
Total Water Use (AF)	20,527
Total Supplies (AF)	20,527
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2028	Total
Total Water Use (AF)	22,207
Total Supplies (AF)	22,207
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2029	Total
Total Water Use (AF)	23,886
Total Supplies (AF)	23,886
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2030	Total
Total Water Use (AF)	25,566
Total Supplies (AF)	25,566

Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

**Submittal Table 8-1: Cross-reference for Standard vs
Supplier Shortage Levels
Water Code Section 10632(a)(3)(B)**



Check the box if the Supplier uses the Standard
six levels of water shortage.
Proceed to the next table.

Standard Shortage Levels	Percent Shortage Range	Suppliers Shortage Levels	Percent Shortage Range
1	Up to 10%	Implement Stage I of Burbank's	Up to 10%
2	Up to 20%	Implement Stage II of Burbank's	Up to 20%
3	Up to 30%	Implement Stage III of Burbank's	Up to 30%
4	Up to 40%	Implement Stage IV of Burbank's	Up to 40%
5	Up to 50%	Implement Stage V of Burbank's	Up to 50%
6	>50%	Implement Stage VI of Burbank's	>50%

NOTES:

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions				
Water Code Section 10632(a)(4)(A),(C) and (E)				
	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
Up to 10%	No action taken	0%		Burbank will not use supply augmentation to mitigate shortfalls. Short-term shortfalls may be mitigated with emergency supply interties with adjacent water supply systems.
10-20%	No action taken	0%		
20-30%	No action taken	0%		
30-40%	No action taken	0%		
40-50%	No action taken	0%		
>50%	No action taken	0%		
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES:				

Submittal Table 8-3 Retail: Demand Reduction Actions					
Water Code Section 10632(a)(4)(B),(D), and (E)					
	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? For Retail Suppliers Only Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Add additional rows as needed					
1	Landscape – Limit landscape irrigation to specific days	3%		Do not water outdoor landscaped areas more than fifteen (15) minutes per day per station and no more than three (3) days per week, year-round. Areas watered with low volume irrigation systems that require additional spray time are exempt from the 15-minute time restriction of this requirement, but must comply with the three (3) days per week watering limit. The three allowable irrigation days are Tuesdays, Thursdays and Saturdays. With the exception of attended hand- watering, irrigation will not be allowed any day outside of the requirement listed here. Attended hand-watering is allowed any day of the week. Do not water outdoor landscaped areas on rainy days and at least two days thereafter.	
1	Landscape - Limit landscape irrigation to specific times	2%		Do not water outdoor landscaped areas between the hours of 9:00 a.m. to 6:00p.m. or during daylight hours from November through March except by use of attended hand-watering, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system	
1	Landscape - Restrict or prohibit runoff from landscape irrigation	1%		Adjust sprinklers and irrigation systems to eliminate overspray and avoid run-off into streets, sidewalks, parking lots, alleys or other paved surfaces	
1	Other - Prohibit use of potable water for washing hard surfaces	2%		Do not hose or wash driveways, patios, sidewalks, or other hard or paved surfaces except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a high pressure, low volume spray hose using only potable water with no cleaning agents at an average water usage of 0.006 gallons per square feet of sidewalk area in accordance with Resolution No. 98-08 issued by the Los Angeles Regional Water Quality Control Board, or a low-volume, high-pressure cleaning machine equipped to recycle any water used.	
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%		No additional explanation	
1	Other	1%		When washing vehicles, use a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off device. This does not apply to any commercial car washing facility.	
1	CII - Restaurants may only serve water upon request	<1%		No additional explanation	
1	CII - Lodging establishment must offer opt out of linen service	<1%		No additional explanation	
1	CII - Other CII restriction or prohibition	0%		Food preparation establishments, such as restaurants or cafes, are prohibited from using non-water conserving dish wash spray valves.	
1	Water Features - Restrict water use for decorative water features, such as fountains	1%		Operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.	
1	Other	<1%		Installation of single pass cooling systems is prohibited in buildings requesting new water service.	
1	Other	<1%		Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.	
1	Other	<1%		All commercial conveyor car wash systems and commercial laundry systems must have installed operational re-circulating water systems.	
1	Landscape - Other landscape restriction or prohibition	2%		Do not irrigate ornamental turf on public street medians.	
2	Landscape - Limit landscape irrigation to specific days	1%		Landscape watering limited to 15 minutes/day. Three days per week (Tuesdays, Thursdays and Saturdays) April – October, and one day per week (Saturday), November - March	
3	Landscape - Limit landscape irrigation to specific days	1%		Landscape watering limited to 15 minutes/day, two days per week (Tuesdays and Thursdays), April – October. Areas watered with low volume irrigation systems that require additional spray time are exempt from the 15-minute time restriction.	
3	Other	<1%		Use of outdoor cooling devices (mistlers) prohibited	
3	Landscape – Prohibit certain types of landscape irrigation	1%		Hand watering also prohibited between 9AM and 6 PM	
3	Other water feature or swimming pool restriction	2%		Use of pool and spa covers required	
4	Landscape – Limit landscape irrigation to specific days	5%		Landscape watering limited to one day per week	
5	Landscape - Prohibit certain types of landscape irrigation	5%		Watering limited to deep irrigation of trees and shrubs, 20 min, 2 days per month	
5	Other	5%		No new or upgraded potable water services permitted, except R-1 and R-2, unless building permit already issued	
6	Landscape - Prohibit all landscape irrigation	10%		No additional explanation	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES: All demand reduction actions from previous stages remain in effect as the City progresses to a higher shortage level.					

**Submittal Table 10-1 Retail: Notification to Cities and Counties
Water Code Section 10621(b) and 10642**

City Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
City of Glendale (a)	Yes	Yes
City of Los Angeles (a)	Yes	Yes
County Name Drop Down List	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
Los Angeles County	Yes	Yes
NOTES: (a) Burbank provided a 60 Day Notice to the City of Los Angeles and Glendale due to geographical proximity and to ensure regional alignment in water management.		

Appendix C: Reduced Delta Reliance

CITY OF BURBANK

Reduced Reliance on the Delta

FINAL | May 2026
EKI C50205.00

The purpose of this document is to demonstrate compliance with the Sacramento-San Joaquin Delta Reform Act of 2009. The Sacramento-San Joaquin Delta Reform Act of 2009 is described below, followed by an analysis of the City of Burbank's (City or Burbank) reduced reliance in accordance with State protocols and expected outcomes for reduced reliance on the Sacramento-San Joaquin Delta (Delta).

1 SACRAMENTO-SAN JOAQUIN DELTA REFORM ACT OF 2009

Under the Sacramento-San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a "covered action" in the Sacramento-San Joaquin Delta (Delta) must submit a written certification of consistency to the Delta Stewardship Council as to whether the covered action is consistent with applicable Delta Plan policies. Covered actions include a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta. Anyone may appeal a certification of consistency, and if the Delta Stewardship Council grants the appeal, the covered action may not be implemented until the agency proposing the covered action submits a revised certification of consistency, and either no appeal is filed, or the Delta Stewardship Council denies the subsequent appeal.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action is required to provide information in their 2015 and subsequent Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

WR P1 details what is needed for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

- (a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:*
 - (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
 - (2) That failure has significantly caused the need for the export, transfer, or use; and*
 - (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

- (c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:*
 - (A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*
 - (B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and*
 - (C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan*

as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

The analysis and documentation provided below include all of the elements described in WR P1(c)(1) that need to be included in a water supplier's UWMP to support a certification of consistency for a future covered action. Including this document as an appendix in the 2015 and subsequent UWMPs fulfills the requirements of WR P1 subsection (c)(1) Paragraph A.

2 REDUCED RELIANCE ANALYSIS

The City obtains a portion of its supplies through purchases from the Metropolitan Water District of Southern California (MWD). MWD supplies imported water sourced from the Delta via the State Water Project (SWP) and the Colorado River via the Colorado River Aqueduct (CRA). Additionally, MWD supports the Delta Conveyance Project (DCP), which is a covered action under the Delta Reform Act. Therefore, the City has prepared a Regional Self Reliance and Reduced Delta Reliance analysis conservatively assuming that all purchased imported water supplies are sourced from the Delta.

The methodology used to determine the City's reduced Delta reliance and improved regional self-reliance is consistent with the approach detailed in Appendix C of Department of Water Resources' (DWR) Urban Water Management Plan Guidebook 2025 (Guidebook Appendix C) issued in January 2026, including the use of narrative justifications for the accounting of supplies and the documentation of specific data sources. Some of the key assumptions underlying the City's demonstration of reduced reliance include:

- All data were obtained from the current 2025 UWMP or previously adopted UWMPs and represent average or normal water year conditions.
- All analyses were conducted at the service area level, focusing on the City's demands and supplies.
- No projects or programs that are described in the UWMPs as "Projects Under Development" were included in the accounting of supplies.

Tables 1 through 4 present the analysis of the City's reduced Delta reliance using DWR's spreadsheet tool and fulfill the requirements of WR P1 subsection (c)(1) Paragraph C. Descriptions of the various inputs of the analysis are provided below:

- **Baseline (2010) and 2015-2050 Conditions** – The analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in DWR's Guidebook. Data for the 2010 baseline were taken from the 2010 UWMP. To evaluate conditions relative to the baseline, actual conditions for 2015, 2020, and 2025 of the corresponding UWMPs are presented. Normal year projections for 2030 through 2050 from the 2025 UWMP are then subsequently used.
- **Service Area Water Demands with Water Use Efficiency Accounted For** – These values reflect the City's actual and projected water use.
- **Non-Potable Water Demands** – This item includes recycled water, untreated water demands, raw water losses, and/or water placed in storage, if applicable to the system.
- **Water Supplies Contributing to Regional Self-Reliance**

- **Water Use Efficiency** – This amount is calculated by DWR’s spreadsheet tool based on the City’s baseline demand, actual demands, and expected future demands. The value shown is the reduction in per capita water demand from the baseline (2010) multiplied by the projected population for each.
- **Water Recycling** – This is wastewater that is treated to an acceptable level such that it can be reused for irrigation, cooling, and other non-potable applications.
- **Water Supplies from the Delta Watershed**
 - **CVP/SWP Contract Supplies** – the City derives a portion of its supplies from MWD, who is a SWP Contractor that obtains a portion of its water supply from the Delta via the SWP.

3 EXPECTED OUTCOMES FOR REDUCED RELIANCE ON THE DELTA

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta.

The following provides a summary of the near-term (2030) and long-term (2050) expected outcomes for the City’s Delta reliance and regional self-reliance based on the assumptions described in the previous section and DWR’s analysis tool.

Expected Outcomes for Regional Self-Reliance

- Near-term (2030) – Normal water year regional self-reliance is expected to increase by 10% from the 2010 baseline (see Table 3).
- Long-term (2050) – Normal water year regional self-reliance is expected to decrease by 5.3% from the 2010 baseline (see Table 3).

Expected Outcomes for Percent of Water Supplies from the Delta Watershed

- Near-term (2030) – Normal water year reliance on supplies from the Delta watershed is expected to decrease by 5.6% relative to the 2010 baseline (see Table 4).
- Long-term (2050) – Normal water year reliance on supplies from the Delta watershed is expected to increase slightly by 1% relative to the 2010 baseline (see Table 4).

The results indicate that the City is measurably reducing reliance on the Delta and improving regional self-reliance, based on the percentage of the City’s water supplies from the Delta Watershed. Additionally, the regional analysis prepared by the MWD (2025 UWMP Appendix 10) demonstrates that, at a regional scale, reliance on Delta supplies is projected to decrease over the planning horizon as a result of continued investments in supply diversification, conservation, and storage. Accordingly, while reductions are limited at the local level due to system constraints, the City contributes to and benefits from broader regional efforts to reduce Delta reliance

Reduced Reliance Calculation - Data Template

Please refer to these resources for guidance on completing these tables:
Appendix C of the Urban Water Management Plan Guidebook 2025
[DWR Training Session #1: Demonstrating Reduced Reliance On the Delta](#)

Table C-1: Optional Calculation of Water Use Efficiency -To be completed if Water Supplier doesnot specifically estimate Water Use Efficiency as a supply

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	21,813	24,855	15,876	17,167	25,949	31,428	31,374	31,273	31,094
Non-Potable Water Demands	2,010	2,463	3,027	2,930	3,593	3,593	3,593	3,593	3,593
Potable Service Area Demands with Water Use Efficiency Accounted For	19,803	22,392	12,849	14,237	22,356	27,835	27,781	27,680	27,501

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Population	108,469	106,084	105,861	106,146	131,998	155,889	156,666	157,126	156,624

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Per Capita Water Use (GPCD)	163	188	108	120	151	159	158	157	157
Change in Per Capita Water Use from Baseline (GPCD)		25	(55)	(43)	(12)	(4)	(5)	(6)	(6)
Estimated Water Use Efficiency Since Baseline		(3,024)	6,478	5,142	1,743	626	821	1,006	1,094

Table C-2: Calculation of Service Area Water Demands Without Water Use Efficiency

Total Service Area Water Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	21,813	24,855	15,876	17,167	25,949	31,428	31,374	31,273	31,094
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline	-	(3,024)	6,478	5,142	1,743	626	821	1,006	1,094
Service Area Water Demands without Water Use Efficiency Accounted For	21,813	21,831	22,354	22,309	27,692	32,053	32,195	32,279	32,188

Table C-3: Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Use Efficiency	-	(3,024)	6,478	5,142	1,743	626	821	1,006	1,094
Water Recycling	2,010	2,463	3,027	2,930	3,593	3,593	3,593	3,593	3,593
Stormwater Capture and Use									
Advanced Water Technologies									
Conjunctive Use Projects									
Local and Regional Water Supply and Storage Projects									
Other Programs and Projects the Contribute to Regional Self-Reliance									
Water Supplies Contributing to Regional Self-Reliance	2,010	(561)	9,505	8,072	5,336	4,219	4,414	4,599	4,687

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	21,813	21,831	22,354	22,309	27,692	32,053	32,195	32,279	32,188
Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies Contributing to Regional Self-Reliance	2,010	(561)	9,505	8,072	5,336	4,219	4,414	4,599	4,687
Change in Water Supplies Contributing to Regional Self-Reliance		(2,571)	7,495	6,062	3,326	2,209	2,404	2,589	2,677
Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	9.2%	-2.6%	42.5%	36.2%	19.3%	13.2%	13.7%	14.2%	14.6%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		-11.8%	33.3%	27.0%	10.1%	3.9%	4.5%	5.0%	5.3%

Table C-4: Calculation of Reliance on Water Supplies from the Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
CVP/SWP Contract Supplies	15,603	12,115	6,317	3,365	18,248	23,632	23,589	23,508	23,365
Delta/Delta Tributary Diversions									
Transfers and Exchanges									
Other Water Supplies from the Delta Watershed									
Total Water Supplies from the Delta Watershed	15,603	12,115	6,317	3,365	18,248	23,632	23,589	23,508	23,365
Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	21,813	21,831	22,354	22,309	27,692	32,053	32,195	32,279	32,188
Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies from the Delta Watershed	15,603	12,115	6,317	3,365	18,248	23,632	23,589	23,508	23,365
Change in Water Supplies from the Delta Watershed		(3,488)	(9,286)	(12,238)	2,645	8,029	7,986	7,905	7,762
Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies from the Delta Watershed	71.5%	55.5%	28.3%	15.1%	65.9%	73.7%	73.3%	72.8%	72.6%
Change in Percent of Water Supplies from the Delta Watershed		-16.0%	-43.3%	-56.4%	-5.6%	2.2%	1.7%	1.3%	1.1%

Appendix D: Documentation of Notifications/Postings



**WATER AND
POWER**



March 23, 2026

Chisom Obegolu
Chief Assistant General Manager, Water
141 N. Glendale Ave., Suite 420
Glendale, CA 91206-4976

**Subject: Notice of Preparation of Urban Water Management Plan and Water Shortage
Contingency Plan - 2025 Update**

Dear Mr. Obegolu,

The Urban Water Management Planning Act (California Water Code §10608–10656) requires Burbank Water and Power (BWP) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due July 1, 2026.

BWP is currently reviewing its existing UWMP and associated WSCP, which were updated in 2021, and considering revisions to the documents. Coordination with water suppliers, cities, and counties is an important part of the preparation of BWP's 2025 UWMP and WSCP. We invite your agency's participation in this revision process. We are available to discuss the assumptions used in the development of the plans including available water supply, water demands, land use, as well as other aspects of the plans.

A draft of the 2025 UWMP and WSCP will be made available for public review, and a public hearing will be scheduled in 2026. In the meantime, if you would like more information regarding BWP's 2020 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2025 UWMP and WSCP, please contact Michelle Elorde at:

Burbank Water and Power
164 W. Magnolia Blvd., Burbank, CA 91502
(818) 238-3500
MElorde@burbankca.gov

Sincerely,

Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

c: Project file



**WATER AND
POWER**



March 23, 2026

County of Los Angeles
Chief Executive Office
Kenneth Hahn Hall of Administration
500 W. Temple St.
Los Angeles, CA 90012

**Subject: Notice of Preparation of Urban Water Management Plan and Water Shortage
Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires Burbank Water and Power (BWP) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due July 1, 2026.

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Burbank Water and Power
164 W. Magnolia Blvd., Burbank, CA 91502
(818) 238-3500
MElorde@burbankca.gov

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard H. Wilson'.

Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

c: Project file



**WATER AND
POWER**



March 23, 2026

Mr. David R. Pettijohn
Director of Water Resources
111 N. Hope St Room 1460
Los Angeles, CA 90012

**Subject: Notice of Preparation of Urban Water Management Plan and Water Shortage
Contingency Plan - 2025 Update**

Dear Mr. Pettijohn,

The Urban Water Management Planning Act (California Water Code §10608–10656) requires Burbank Water and Power (BWP) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due July 1, 2026.

BWP is currently reviewing its existing UWMP and associated WSCP, which were updated in 2021, and considering revisions to the documents. Coordination with water suppliers, cities, and counties is an important part of the preparation of BWP's 2025 UWMP and WSCP. We invite your agency's participation in this revision process. We are available to discuss the assumptions used in the development of the plans including available water supply, water demands, land use, as well as other aspects of the plans.

A draft of the 2025 UWMP and WSCP will be made available for public review, and a public hearing will be scheduled in 2026. In the meantime, if you would like more information regarding BWP's 2020 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2025 UWMP and WSCP, please contact Michelle Elorde at:

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164 W. Magnolia Blvd., Burbank, CA 91502
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MElorde@burbankca.gov

Sincerely,

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Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

c: Project file



**WATER AND
POWER**



May 29, 2026

Chisom Obegolu
Chief Assistant General Manager, Water
141 N. Glendale Ave., Suite 420
Glendale, CA 91206-4976

Subject: Notice of Preparation of Burbank's 2025 Urban Water Management Plan

Dear Mr. Obegolu,

Every five years, Burbank Water and Power (BWP) is required to develop a State-mandated Urban Water Management Plan (UWMP). State law provides a framework for how water suppliers such as BWP are to carry out their long-term resource planning responsibilities through the UWMP. Specifically, suppliers are to assess supplies and demand, consider and analyze actions to be taken during droughts, and commit to implementing demand management strategies to encourage efficient water use.

This letter serves as notice that an updated UWMP and WSCP is currently under development. Pursuant to California Water Code Section 10621(b), the required 60-day notice was sent to you on March 23, 2026. This letter is to inform you that the City Council public hearing, at which the updated UWMP and WSCP will be considered for adoption, is scheduled for June 16, 2026.

The Draft UWMP, which includes the WSCP, is available on BWP's website for review and public comment prior to the public hearing at: www.burbankwaterandpower.com/UWMP.

If you would like more information or have any questions, please contact Asif Sheikh, Manager Water Engineering & Planning, at 818-238-3500 or ASheikh@burbankca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Richard H. Wilson'.

Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

RHW:as

c: Project file



**WATER AND
POWER**



May 29, 2026

County of Los Angeles
Chief Executive Office
Kenneth Hahn Hall of Administration
500 W. Temple St.
Los Angeles, CA 90012

Subject: Notice of Preparation of Burbank's 2025 Urban Water Management Plan

Every five years, Burbank Water and Power (BWP) is required to develop a State-mandated Urban Water Management Plan (UWMP). State law provides a framework for how water suppliers such as BWP are to carry out their long-term resource planning responsibilities through the UWMP. Specifically, suppliers are to assess supplies and demand, consider and analyze actions to be taken during droughts, and commit to implementing demand management strategies to encourage efficient water use.

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Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

RHW:as

c: Project file



**WATER AND
POWER**



May 29, 2026

Mr. David R. Pettijohn
Director of Water Resources
111 N. Hope St Room 1460
Los Angeles, CA 90012

Subject: Notice of Preparation of Burbank's 2025 Urban Water Management Plan

Dear Mr. Pettijohn,

Every five years, Burbank Water and Power (BWP) is required to develop a State-mandated Urban Water Management Plan (UWMP). State law provides a framework for how water suppliers such as BWP are to carry out their long-term resource planning responsibilities through the UWMP. Specifically, suppliers are to assess supplies and demand, consider and analyze actions to be taken during droughts, and commit to implementing demand management strategies to encourage efficient water use.

This letter serves as notice that an updated UWMP and WSCP is currently under development. Pursuant to California Water Code Section 10621(b), the required 60-day notice was sent to you on March 23, 2026. This letter is to inform you that the City Council public hearing, at which the updated UWMP and WSCP will be considered for adoption, is scheduled for June 16, 2026.

The Draft UWMP, which includes the WSCP, is available on BWP's website for review and public comment prior to the public hearing at: www.burbankwaterandpower.com/UWMP.

If you would like more information or have any questions, please contact Asif Sheikh, Manager Water Engineering & Planning, at 818-238-3500 or ASheikh@burbankca.gov.

Sincerely,

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Richard H. Wilson, P.E.
Assistant General Manager, Water Systems

RHW:as

c: Project file

Publication: Burbank Leader
Outlook Control #:
Ad Description: Urban Water Management Plan Hearing
Publication Dates: 5/30/2026, 6/6/2026

This space is reserved for Clerk's Filing Stamp

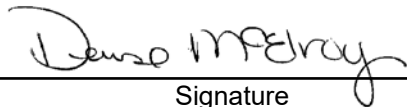
Outlook Newspapers Group
PO Box 578
La Cañada Flintridge, CA 91012

PROOF OF PUBLICATION
2015.5 C.C.P.
State of CA, County of Los Angeles

I am a citizen of the United States and employed by a publication in the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the mentioned matter. I am the principal clerk of the Burbank Leader, a newspaper published weekly in the City of Burbank, County of Los Angeles, and adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of June 20, 1927, Case Number 221017. The notice, of which the attached is a printed copy (set in type not smaller than nonpareil) has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

5/30/2026, 6/6/2026

I certify (or declare) under the penalty of perjury that the following is true and correct.



Signature

Dated in Burbank,
California

5/30/2026, 6/6/2026

Page 1 of 1

PROOF OF PUBLICATION
BURBANK LEADER
800 Foothill Boulevard,
La Cañada Flintridge, CA 91011
(626) 792-6397

Public Notice (Cal. Gov't Code 10642)
Notice of Public Hearing Before the Burbank City Council
Regarding the City of Burbank's Proposed 2025 Urban Water
Management Plan and Water Shortage Contingency Plan

On **Tuesday, June 16, 2026, at 6:00 p.m.**, the Burbank City Council will hold a public hearing to consider adoption of the City of Burbank's 2025 Urban Water Management Plan and Water Shortage Contingency Plan. The meeting will be held in the **City Council Chambers in City Hall at 275 E. Olive Avenue in Burbank.**

How do I find out more?

Call Asif Sheikh, Manager Water Engineering & Planning, at
818-238-3500
Email: ASheikh@burbankca.gov

The California Urban Water Management Planning Act (California Water Code Division 6, Part 2.6) requires that the City's Urban Water Management Plan and Water Shortage Contingency Plan be reviewed and updated by July 1, 2026; that the plans be made available for public inspection; and that a public hearing be held prior to adoption of the plans.

The Urban Water Management Plan includes evaluations of historical and future water supplies and demands, reliability of the supplies, and descriptions of water conservation and water management activities, which includes water recycling and preparation for water shortages. The Urban Water Management Plan includes the Water Shortage Contingency Plan that details how the City will act in the event of an actual water shortage condition.

The Proposed 2025 Urban Water Management Plan and Water Shortage Contingency Plan for the City of Burbank are available for inspection on the Burbank Water and Power website, www.burbankwaterandpower.com/UWMP.

Dated: May 30, 2026 and June 6, 2026

Appendix E: Metropolitan Water District of Southern California Demand Projections

Draft

(March 19, 2026)

City of Burbank*Normal Year*

(Average of 1922-2021 Hydrology)

Demographics¹	2030	2035	2040	2045	2050
Total Population	109,467	111,608	112,775	113,430	113,123
Household Population	108,758	110,876	112,064	112,733	112,446
Occupied Housing Units	47,165	48,741	49,736	50,329	50,443
<i>Single Family</i>	22,673	23,487	23,780	24,004	24,041
<i>Multi-Family</i>	24,492	25,254	25,956	26,325	26,402
Persons Per Household	2.31	2.27	2.25	2.24	2.23
Urban Employment	138,429	144,590	145,703	145,546	145,482

Conservation	2030	2035	2040	2045	2050
Conservation ²	6,287	6,720	7,129	7,531	7,908
Installed Active Device Through FY2024/25	330	210	146	96	28
Code-Based and Price-Effect Savings	5,956	6,510	6,982	7,434	7,881

Total Demands After Conservation	2030	2035	2040	2045	2050
Total Demand	27,911	28,288	28,245	28,165	28,022
Retail Municipal and Industrial ³	20,541	21,013	20,959	20,858	20,679
Retail Agricultural	0	0	0	0	0
Seawater Barrier	0	0	0	0	0
Groundwater Replenishment	7,370	7,275	7,286	7,306	7,342

Local Supplies	2030	2035	2040	2045	2050
Total Local Supplies	14,674	14,678	14,678	14,678	14,678
Groundwater Production	0	0	0	0	0
Surface Production	0	0	0	0	0
Los Angeles Aqueduct	0	0	0	0	0
Seawater Desalination	0	0	0	0	0
Groundwater Recovery	11,478	11,478	11,478	11,478	11,478
Recycling	3,196	3,200	3,200	3,200	3,200
<i>M&I and Agricultural</i>	3,196	3,200	3,200	3,200	3,200
<i>Groundwater Replenishment</i>	0	0	0	0	0
<i>Seawater Barrier</i>	0	0	0	0	0
Other Non-Metropolitan Imports	0	0	0	0	0

Demands on Metropolitan	2030	2035	2040	2045	2050
Total Metropolitan Demands ⁴	13,237	13,610	13,567	13,487	13,344
Consumptive Use	5,867	6,335	6,281	6,180	6,001
Seawater Barrier	0	0	0	0	0
Replenishment Water	7,370	7,275	7,286	7,306	7,342

All units are acre-feet except in Demographics Section. Totals may not foot due to rounding.

1. Based on SCAG's 2024 Regional Transportation Plan.

2. Includes code-based, price-effect and existing active savings through fiscal year 2024/25.

Does not include future active conservation savings. Conservation is 1990 base year.

3. Retail M&I projections include conservation.

4. Replenishment water includes direct and in-lieu replenishment.

Draft

(March 19, 2026)

City of Burbank*Single Dry-Year*

(Repeat of 1977 Hydrology)

Demographics¹	2030	2035	2040	2045	2050
Total Population	109,467	111,608	112,775	113,430	113,123
Household Population	108,758	110,876	112,064	112,733	112,446
Occupied Housing Units	47,165	48,741	49,736	50,329	50,443
<i>Single Family</i>	22,673	23,487	23,780	24,004	24,041
<i>Multi-Family</i>	24,492	25,254	25,956	26,325	26,402
Persons Per Household	2.31	2.27	2.25	2.24	2.23
Urban Employment	138,429	144,590	145,703	145,546	145,482

Conservation	2030	2035	2040	2045	2050
Conservation ²	6,287	6,720	7,129	7,531	7,908
Installed Active Device Through FY2024/25	330	210	146	96	28
Code-Based and Price-Effect Savings	5,956	6,510	6,982	7,434	7,881

Total Demands After Conservation	2030	2035	2040	2045	2050
Total Demand	27,825	28,200	28,157	28,077	27,935
Retail Municipal and Industrial ³	20,434	20,903	20,849	20,749	20,571
Retail Agricultural	0	0	0	0	0
Seawater Barrier	0	0	0	0	0
Groundwater Replenishment	7,391	7,297	7,308	7,328	7,364

Local Supplies	2030	2035	2040	2045	2050
Total Local Supplies	14,674	14,678	14,678	14,678	14,678
Groundwater Production	0	0	0	0	0
Surface Production	0	0	0	0	0
Los Angeles Aqueduct	0	0	0	0	0
Seawater Desalination	0	0	0	0	0
Groundwater Recovery	11,478	11,478	11,478	11,478	11,478
Recycling	3,196	3,200	3,200	3,200	3,200
<i>M&I and Agricultural</i>	3,196	3,200	3,200	3,200	3,200
<i>Groundwater Replenishment</i>	0	0	0	0	0
<i>Seawater Barrier</i>	0	0	0	0	0
Other Non-Metropolitan Imports	0	0	0	0	0

Demands on Metropolitan	2030	2035	2040	2045	2050
Total Metropolitan Demands ⁴	13,151	13,522	13,479	13,399	13,257
Consumptive Use	5,760	6,225	6,171	6,071	5,893
Seawater Barrier	0	0	0	0	0
Replenishment Water	7,391	7,297	7,308	7,328	7,364

All units are acre-feet except in Demographics Section. Totals may not foot due to rounding.

1. Based on SCAG's 2024 Regional Transportation Plan.

2. Includes code-based, price-effect and existing active savings through fiscal year 2024/25.
Does not include future active conservation savings. Conservation is 1990 base year.

3. Retail M&I projections include conservation.

4. Replenishment water includes direct and in-lieu replenishment.

Draft

(March 19, 2026)

City of Burbank

Drought Lasting Five Consecutive Years
(Repeat of 1988-1992 Hydrology)

Demographics¹	2030	2035	2040	2045	2050
Total Population	109,467	111,608	112,775	113,430	113,123
Household Population	108,758	110,876	112,064	112,733	112,446
Occupied Housing Units	47,165	48,741	49,736	50,329	50,443
<i>Single Family</i>	22,673	23,487	23,780	24,004	24,041
<i>Multi-Family</i>	24,492	25,254	25,956	26,325	26,402
Persons Per Household	2.31	2.27	2.25	2.24	2.23
Urban Employment	138,429	144,590	145,703	145,546	145,482

Conservation	2030	2035	2040	2045	2050
Conservation ²	6,287	6,720	7,129	7,531	7,908
Installed Active Device Through FY2024/25	330	210	146	96	28
Code-Based and Price-Effect Savings	5,956	6,510	6,982	7,434	7,881

Total Demands After Conservation	2030	2035	2040	2045	2050
Total Demand	27,668	28,410	28,539	28,472	28,352
Retail Municipal and Industrial ³	20,238	21,165	21,325	21,242	21,092
Retail Agricultural	0	0	0	0	0
Seawater Barrier	0	0	0	0	0
Groundwater Replenishment	7,430	7,245	7,213	7,230	7,259

Local Supplies	2030	2035	2040	2045	2050
Total Local Supplies	14,672	14,676	14,678	14,678	14,678
Groundwater Production	0	0	0	0	0
Surface Production	0	0	0	0	0
Los Angeles Aqueduct	0	0	0	0	0
Seawater Desalination	0	0	0	0	0
Groundwater Recovery	11,478	11,478	11,478	11,478	11,478
Recycling	3,194	3,198	3,200	3,200	3,200
<i>M&I and Agricultural</i>	3,194	3,198	3,200	3,200	3,200
<i>Groundwater Replenishment</i>	0	0	0	0	0
<i>Seawater Barrier</i>	0	0	0	0	0
Other Non-Metropolitan Imports	0	0	0	0	0

Demands on Metropolitan	2030	2035	2040	2045	2050
Total Metropolitan Demands ⁴	12,996	13,733	13,861	13,794	13,674
Consumptive Use	5,566	6,488	6,647	6,564	6,414
Seawater Barrier	0	0	0	0	0
Replenishment Water	7,430	7,245	7,213	7,230	7,259

All units are acre-feet except in Demographics Section. Totals may not foot due to rounding.

1. Based on SCAG's 2024 Regional Transportation Plan.

2. Includes code-based, price-effect and existing active savings through fiscal year 2024/25.
Does not include future active conservation savings. Conservation is 1990 base year.

3. Retail M&I projections include conservation.

4. Replenishment water includes direct and in-lieu replenishment.

Vanessa De Anda

From: Hourany, Melissa <MHourany@burbankca.gov>
Sent: Thursday, May 28, 2026 5:03 PM
To: DSumi@mwdh2o.com
Cc: Sheikh, Asif; Elorde, Michelle
Subject: Burbank 2025 Urban Water Management Plan Additional Growth and Demand Details
Attachments: Increased Demands from Specific Plans.pdf

Good Afternoon David,

During the preparation of Burbank's 2025 Urban Water Management Plan (UWMP), the City of Burbank identified additional potential developments beyond the growth projections provided by the Metropolitan Water District of Southern California (MWD). These developments are projected to generate additional potable water demands, which will require Burbank to purchase increased volumes of treated water from MWD. Burbank is also projecting higher recycled water demand than was estimated in MWD's Draft projections; however, this increased demand will be met through recycled water supply from Burbank and is not anticipated to affect Burbank's purchases from MWD.

The additional developments are described by three specific plans that Burbank has prepared as part of its 2021–2029 Housing Element Update to meet its Regional Housing Needs Allocation (RHNA). These three specific plans are the Downtown Specific Plan (DTSP), the Golden State Specific Plan (GSSP), and the Media District Specific Plan (MDSP). Through a review of the Southern California Association of Governments (SCAG) 2024 Connect SoCal projections, it was determined that the growth anticipated under the GSSP is already captured; however, neither the DTSP nor the MDSP are accounted for in those projections. Accordingly, for the purposes of this UWMP, the development associated with the DTSP and the MDSP is assumed to be incremental to SCAG's projections, and consequently MWD's population growth and water demand projections. The additional water demands associated with these specific plans were calculated assuming that the full development potential contemplated under the DTSP and MDSP is achieved by 2035, as provided by Burbank's Community Development Department.

Attached is a table summarizing the impact of these additional demands on Burbank's total water demand, as well as the resulting increase in treated water purchases from MWD. By 2050, Burbank's projected volume of MWD treated water purchases increases from 6,001 acre-feet per year (AFY) to 16,023 AFY.

For additional information regarding the growth projections and associated water demand projections described above, please refer to the Public Draft of Burbank's 2025 UWMP, available at www.burbankwaterandpower.com/uwmp. Should you have any questions or comments, please contact Asif Sheikh, Manager of Water Engineering & Planning, at 818-238-3500 or ASheikh@burbankca.gov.

Thank you,



Melissa Dekermenji Hourany, MPA

Senior Administrative Analyst
(818) 238-3497 office
BurbankWaterAndPower.com
Always There for You!

Table 4-2 and 6-9	2030	2035	2040	2045	2050
Burbank 2025 UWMP Demands					
Potable Water (a)	22,356	27,835	27,781	27,680	27,501
MWD Projected Demands	17,345	17,813	17,759	17,658	17,479
Specific Plan Projected Demands	5,011	10,022	10,022	10,022	10,022
Recycled Water (b)	3,593	3,593	3,593	3,593	3,593
MWD Projected Demands	3,196	3,200	3,200	3,200	3,200
Burbank Projected Demands	3,593	3,593	3,593	3,593	3,593
Total	25,949	31,428	31,374	31,273	31,094
Burbank 2025 UWMP Supplies					
Potable Water	22,356	27,835	27,781	27,680	27,501
Local - Groundwater Pumped	11,478	11,478	11,478	11,478	11,478
MWD - Treated Water	10,878	16,357	16,303	16,202	16,023
Original Projections	5,867	6,335	6,281	6,180	6,001
Additional Supplies	5,011	10,022	10,022	10,022	10,022
Recycled Water	3,593	3,593	3,593	3,593	3,593
MWD Projected Supplies	3,196	3,200	3,200	3,200	3,200
Burbank Projected Supplies	3,593	3,593	3,593	3,593	3,593
Total	25,949	31,428	31,374	31,273	31,094
NOTES:					
(a) The Potable demands shown in Burbank's 2025 UWMP are equal to the sum of MWD's projected potable demands and the additional potable demands from the Downtown and Media District Specific Plans. The Golden State Specific Plan is considered to be accounted for in the SCAG 2024 projections, and therefore it is already included in the MWD projections. The total demand from the specific plans is assuming the full development potential contemplated under the DTSP and MDSP is achieved by 2035, as provided by Burbank's Community Development Department.					
(b) Burbank has higher projections for its recycled water use in the future, but this is all met by local supplies and does not impact MWD deliveries.					

Appendix F: City of Burbank Hazard Mitigation Plan

CITY OF BURBANK

Local Hazard Mitigation Plan



January 2023

CREDITS

ACKNOWLEDGMENTS

City of Burbank

- ✓ Jess Talamantes, Mayor
- ✓ Konstantine Anthony, Vice-Mayor
- ✓ Bob Frutos, City Council Member
- ✓ Nick Schultz, City Council Member
- ✓ Sharon Springer, City Council Member
- ✓ Justin Hess, City Manager
- ✓ Judie Wilke, Assistant City Manager
- ✓ Eric Garcia, Fire Chief
- ✓ Eric Baumgardner, Emergency Management Coordinator
- ✓ Channing Reyes, Intermediate Clerk
- ✓ Matthew Smyj, Emergency Management Intern

POINT OF CONTACT

To request information or provide comments regarding this mitigation plan, please contact:

Name & Position Title	Eric Baumgardner, Emergency Management Coordinator
Email	ebaumgardner@burbankca.gov
Mailing Address	City of Burbank Fire Department - Emergency Management Division, 311 East Orange Grove Ave Burbank CA 91502
Telephone Number	818-238-3350

MAPPING AND VISUAL PRODUCTS

The maps and other visual aids in this plan were provided by the City of Burbank, County of Los Angeles, State of California, Federal Emergency Management Agency (FEMA), other Federal Agencies, or were acquired from public domain sources. Care was taken in the creation of the maps contained in this plan; however, they are provided "as is." The City of Burbank cannot accept any responsibility for errors, omissions, or positional inaccuracies; therefore, there are no warranties that accompany these products (maps, images, tables). Although information from land surveys may have been used in the creation of these products, in no way does this product represent or constitute a land survey. Users are cautioned to verify field information on visual products used in this document before making any decisions.

MANDATED CONTENT

In an effort to assist the readers and reviewers of this document, the jurisdiction has inserted "markers" emphasizing mandated content as identified in the Disaster Mitigation Act of 2000 (Public Law – 390). The following example is a sample marker:

EXAMPLE

Q&A | ELEMENT A: PLANNING PROCESS | A1a

Q: Does the plan document the planning process, including how it was prepared (with a narrative description, meeting minutes, sign-in sheets, or another method)? (Requirement §201.6(c)(1))

A:

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Section 1 OFFICIAL RECORD OF ADOPTION

This section provides an overview of the Disaster Mitigation Act of 2000 (DMA 2000; Public Law 106-390), the adoption of this Local Hazard Mitigation Plan (LHMP) by the local governing body and supporting documentation for the adoption.

1.1 DISASTER MITIGATION ACT OF 2000

The DMA 2000 was passed by Congress to emphasize the need for mitigation planning to reduce vulnerability to natural and human-caused hazards. The DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 United States Code 5121 et seq.) by repealing the Act's previous Mitigation Planning section (409) and replacing it with a new Mitigation Planning section (322).

To implement the DMA 2000 planning requirements, the Federal Emergency Management Agency (FEMA) published an Interim Final Rule in the Federal Register on February 26, 2002 (FEMA 2002a). This rule (44 Code of Federal Regulations [CFR] Part 201) established the mitigation planning requirements for states, tribes, and local communities. The planning requirements are described in detail in Section 2 and identified in their appropriate sections throughout the Burbank Hazard Mitigation Plan (the Plan).

1.2 ADOPTION BY THE LOCAL GOVERNING BODY AND SUPPORTING DOCUMENTATION

The requirements for the adoption of an LHMP by the local governing body, as stipulated in the DMA 2000 and its implementing regulations, are described below.

DMA 2000 REQUIREMENTS: PREREQUISITES

Adoption by the Local Governing Body

Requirement §201.6(c)(5): [The local hazard mitigation plan shall include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).

Element

- Has the local governing body adopted the plan?
- Is supporting documentation, such as a resolution, included?

Source: FEMA, March 2004.

The City of Burbank (the City) LHMP meets the requirements of Section 409 of the Stafford Disaster Relief and Emergency Assistance Act and Section 322 of the DMA 2000. This LHMP has been prepared by the City's Hazard Mitigation Planning Team (Planning Team), made available for review to the California Office of Emergency Services (Cal OES) and the Federal Emergency Management Agency (FEMA) prior to being presented for review and adoption by the City Council via resolution. This resolution is available below in Appendix B.

Section 2 COMMUNITY DESCRIPTION

This section describes the history, location, and environment of the City as well as its government, demographic information, and current land use and development trends.

Q&A | ELEMENT B3: JURISDICTION SUMMARY

Q: Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(b)(3))

A: See **2.1 HISTORY AND LOCATION**, and **2.2 ENVIRONMENT** below.

2.1 HISTORY AND LOCATION

The City of Burbank is located in the eastern part of the San Fernando Valley, in Los Angeles County, approximately 12 miles from downtown Los Angeles. It is bordered by the cities of Glendale to the east, North Hollywood and Toluca Lake on the west, and Griffith Park to the south. The Verdugo Hills (AKA, Verdugo Mountains or simply "the Verdugos") form the northern border. The location of Burbank is illustrated in the Figure 1 below.



Figure 1 Burbank Location Data

Incorporated in 1911, the City occupies an area of about 17.4 square miles, of which about one-fourth is in the Verdugo Hills. The latest U.S. Census population estimate for Burbank (2019) is 102,511, an increase of about 2.0% since the 2010 census. The official City website notes that Burbank's history is built on people, pride, and progress. These ingredients turned a sleepy, rural town into the thriving community it is today.

Originally part of two Spanish and Mexican-era colonial land grants, Rancho San Rafael and Rancho Providencia, the area that would become Burbank was settled across the 1870s and 1880s. Important steps

in the development of Burbank occurred in 1874 with the arrival of the Southern Pacific Railroad and in 1887 with establishment of a water system. Even with these arrivals, the town remained small at about 500 residents by the time it was incorporated. In 1920, the town had grown to 3,000 people and expanded rapidly through the 1950s as shown by the U.S. Census data in Table 1.

Census	Population	Percent Change
1920	2,913	n/a
1930	16,662	472.0%
1940	34,337	106.1%
1950	78,577	128.8%
1960	90,115	14.7%
1970	88,871	-1.4%
1980	84,625	-4.8%
1990	93,635	10.6%
2000	100,316	7.1%
2009 ¹	103,121	2.8%

Table 1 Burbank Population Data *

* U.S. Census Data. For reporting purposes, the Burbank Water and Power Department uses California Department of Finance population data, which may differ from Census data.

While growth from the 1920s to the 1950s was fueled by rapid expansion of the motion picture and aviation industries, the City's population declined in the 1960s and 1970s. Population and economic growth rebounded in the 1980s and since then Burbank has had a thriving economy with strong redevelopment and revitalization of the City's economic base. Today, it is a prominent media and entertainment hub, which prides itself on a high quality of life, combining 21st century technology and innovation while retaining a small-town ambiance. Burbank is indeed, a city of "people, pride, and progress." The City has two distinct geographic areas. Much of the land is in the San Fernando Valley, with generally flat topography and elevations around 500-feet. The northeastern part of Burbank extends from an alluvial fan into the foothills of the Verdugo Hills with elevations reaching about 2,600-feet.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1a

Q: Does the plan include a general description of all natural hazards that can affect each jurisdiction?
(Requirement §201.6(c)(2)(i))

A: See **2.2 ENVIRONMENT** below.

2.2 ENVIRONMENT

Some natural hazards, such as earthquakes, flooding, and drought, pose a hazard to the entire city of Burbank, with the level of risk varying with location soil type and construction. Other hazards, such as high winds, landslides, mudslides and wildland/urban interface fires pose a much greater risk in the foothill areas. Slopes

range from less than three percent in the valley floor areas, from three percent to ten percent in the alluvial fan areas, and to greater than ten percent in the hill areas.

The major waterways in the City include the Los Angeles River Flood Control Channel along Highway 5, the Burbank Western Flood Control Channel, and the Lockheed Drain Channel. The 2008 FEMA Flood Insurance Study for Los Angeles County identifies the Los Angeles River as the primary flood hazard however later FIRM studies for the confluence of the Burbank Western and Lockheed Drain Channels as having a greater risk.

The area's climate is subtropical with average highs ranging from 67° in January to 90° in August. Average lows range from 41° in December to 62° in July and August. Record high and low temperatures are 113° and 22°, respectively. Mean annual rainfall is about 16.5 inches, with more than 90% of the rainfall occurring from November to April, with about two-thirds of annual rainfall between January and March. The respective record low and high annual precipitation amounts are 0.57 inches (1939) and 39.77 inches (1983). The mean average snowfall is about 0.1 inch, although measurable snow has occurred only six times from 1938 to 2006. The record snowfall of 4.7 inches which occurred in January 1948 accounts for much of the mean average snowfall. Other notable snowfalls were 0.5 inches in March 1950 and 0.10 inches on four occasions. The last measurable snowfall occurred in January 1966. The historical climate data above are for the Burbank Valley Pumping Plant meteorological station with a period of record from 1938 through 2006 as compiled by the Western Regional Climate Center.

2.3 GOVERNMENT

Burbank is a charter city with a City Council – City Manager form of government. The City Council serves as the elected legislative and policy-making body of the City, enacting all laws and directing all actions necessary to provide for the general welfare of the community through appropriate programs, services, and activities. The City Council is the body which formally adopts the Local Hazard Mitigation Plan.

The City government has 14 departments, all of which have roles in hazard mitigation planning, community outreach efforts, and/or the implementation of mitigation action items: Burbank Water and Power, City Attorney, City Clerk, City Manager, City Treasurer, Community Development, Financial Services, Fire, Information Technology, Management Services, Parks and Recreation, Police, Public Library, and Public Works.

Departments with major roles related to hazard mitigation planning and implementation are briefly summarized below:

- ✓ **The Community Development Department** functions include building plan review and inspection, building code development, land use planning/zoning, updating the General Plan, and code enforcement.
- ✓ **The Fire Department** includes the Emergency Management Division, which has responsibility for developing, implementing and maintaining a comprehensive program to ensure that the City and the community are ready for various threats including natural disasters and human-caused incidents. Important elements of the program include disaster preparedness, hazard mitigation, response procedures, and recovery operations.
- ✓ **The Public Works Department** functions include maintaining the wastewater collection and treatment facilities, city buildings, and streets.
- ✓ **The Burbank Power & Water Department** maintains the infrastructure providing electric power and water for Burbank.
- ✓ **The City Manager's Office** has a major role in setting and overseeing city policies and practices, including those related to mitigation.

2.4 DEMOGRAPHICS

Selected demographic data for Burbank from the U.S. Census Bureau are shown in Table 2. Age and ethnicity categories intentionally include overlapping subsets of the ACS Census Bureau data as compiled for 2019 for planning purposes. For emergency planning purposes, children, elderly adults, the disabled, people whose primary language is not English, and low-income residents are considered special needs population groups. The number of people in these groups may also be a factor in mitigation planning, including community participation efforts, and in developing and prioritizing mitigation goals, objectives, and action items. Burbank has a substantial population of children and elderly adults. As shown below, about 18% of the population are children less than 18-years, while about 15% are adults over 65-years. Roughly 6% of the population is classified as having a disability. Almost 11% of the population is below the poverty level.

Just over 41% of Burbank's residents speak a language other than English at home, with some 13% speaking Spanish and the remaining population speaking a wide variety of Indo-European, Asian, Pacific Island, and other languages. About 19% of Burbank's residents speak English less than very well. Approximately, 30% of the population was born outside of the United States.

Demographic Data		
Age		
	Under 5 years	5.6%
	Under 18 years	18.2%
	18 years and over	81.8%
	65 years and over	15.4%
Population with Disability		
	Under 65 years	5.6%
Ethnicity of Households		
	White	56.9%
	Hispanic or Latino (of any race)	23.5%
	Asian	11.9%
	Black or African American	2.7%
	American Indian or Alaska Native	0.4%
	Native Hawaiian and Pacific Islander	0.0%
	Some other race	1.2%
	Two or more races	3.3%
Language Spoken at Home		
	English only	59.0%
	Spanish	13.2%
	Other Indo-European	14.5%
	Asian and Pacific Island	9.8%
	Other languages	3.6%
Country of Birth		
	United States	69.8%
	Foreign Born	30.2%
Income and Poverty Data		
	Median Family Income	\$73,613
	Population In Poverty	10.7%
	Under 18 years	4.8%
	18 to 64 years	10.6%
	65 years and older	17.0%
	65 years and older	17.0%

Table 2 Burbank Population Demographics*

*U.S. Census Bureau Data: 2019

2.5 LAND USE AND DEVELOPMENT TRENDS

The overall pattern of land use and development in Burbank is shown in Figure 2, a simplified version of the Burbank zoning map. The City has a balanced mix of commercial and industrial to complement its residential areas.

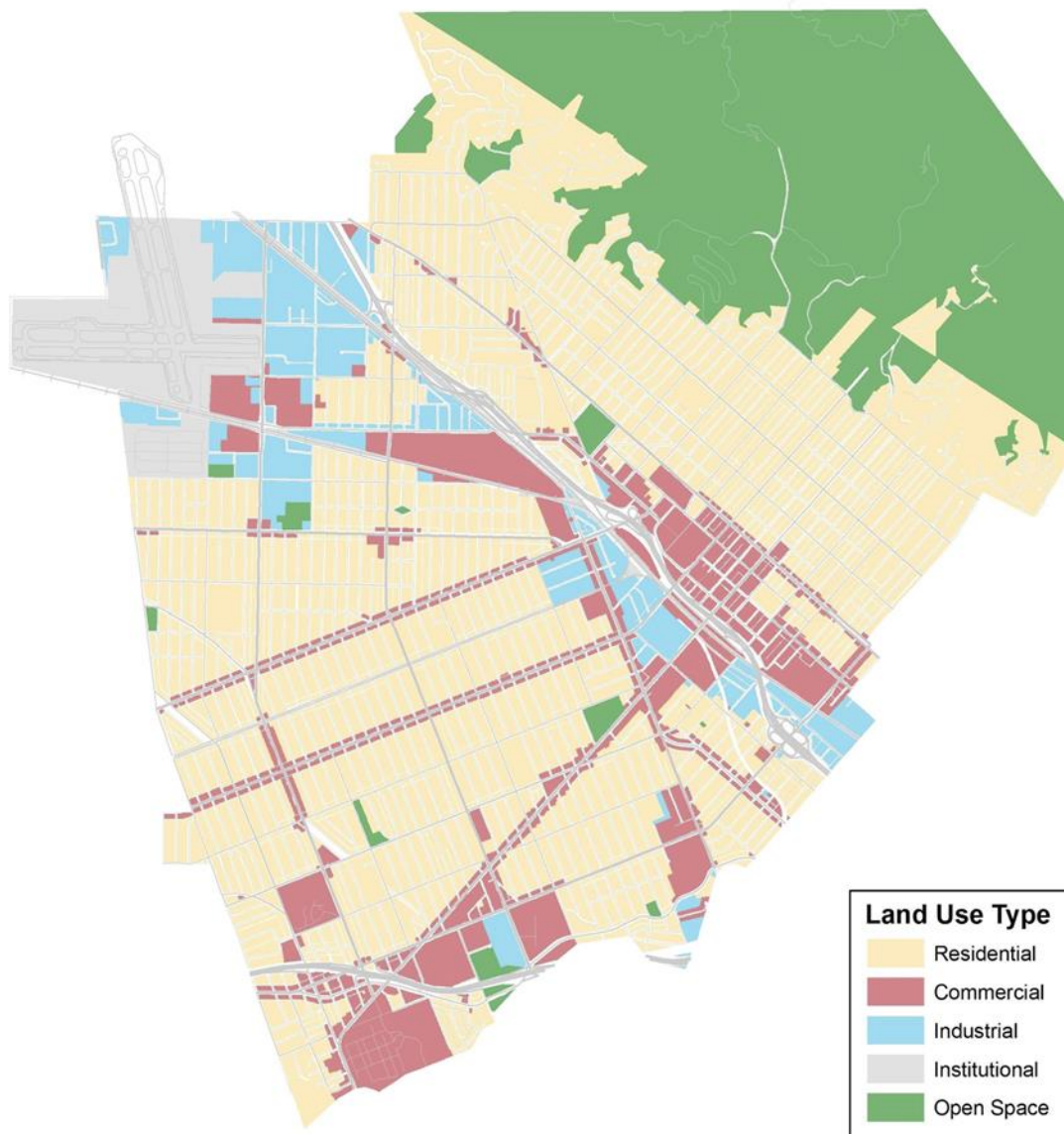


Figure 2 Burbank Zoning Map (Simplified)

Burbank is a virtually fully built-out city. The only significant areas of vacant land remaining are in the Verdugo Hills, which are preserved as open space. This open space, along with the City's parks, comprises nearly 25% of Burbank's land area. By use, the largest fraction of Burbank's land area, about 30%, is occupied by single-family homes. The remaining land area is devoted to a mix of types and intensities of development and transportation infrastructure, including multiple-family residential, commercial, light and heavy industrial, railroads, freeways, streets, and the Hollywood-Burbank Airport.

As Burbank is a fully developed city, there is almost no land left for new development aside from a few individual residential parcels in the hillside area. Out of the approximately 25,000 parcels in Burbank, only about 420 are undeveloped. Most of these undeveloped parcels are owned by government agencies and used for public utilities or preserved as open space.

Nearly all development that occurs in Burbank is infill or redevelopment projects on previously developed lots. There has been some development in Burbank since 2005, but the overall pattern and intensity of development has not changed. The greatest potential for additional development exists with the long-term master plans for the three major studio facilities in Burbank. Since 2005, the main notable development related to these master plans was the construction of a 14-story, 485,000 square foot office building on the former NBC lot.

During the housing boom that lasted through 2007, Burbank experienced substantial redevelopment in multifamily and commercial projects. Dozens of new units in multistory apartments and condominium projects were added to the city, replacing single-family homes or smaller apartment buildings. Notable commercial projects during this time included two mixed-use projects in the downtown area that included commercial space and condominiums: The Collection and Village Walk and a new Marriott Residence Inn hotel. Starting in 2008, development slowed substantially as it did throughout the country. Applications for new multiple family residential projects dropped dramatically. Most residential projects seen today are small projects with one or two new units being added to an existing single-family home or duplex. Commercial project applications have also been relatively low compared to prior years. The notable exceptions to this trend are two new office buildings completed in 2009 (one of which is on the NBC lot as noted above) and a major apartment complex with 276 units completed in 2010. All three of these projects received approvals prior to the economic decline. Because Burbank is extensively built out, it is not expected that the overall distribution of land uses will change significantly in the future. Rather, there will be further intensification through redevelopment of existing development in areas other than the single-family residential neighborhoods.

However, the rate of future redevelopment will continue to be heavily dependent upon the economy. The state of the housing market and similarly the commercial real estate market have growth and contraction phases which can be difficult to forecast. As a result of Burbank's location amid the Los Angeles metropolitan area and the strong presence of the media industry, it does not face the same challenges as some outlying suburbs face in retaining its land value and attraction for redevelopment. There is little concern that Burbank will not fully recover from any downturns in the commercial or residential markets and that demand will remain constant even though the timing or extent is uncertain.

Section 3 PLANNING GUIDANCE

Q&A | ELEMENT A: PLANNING PROCESS | A2

Q: Does the plan document an opportunity for neighboring communities, local, and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, as well as other interested parties to be involved in the planning process?

A: See **3.1 INTRODUCTION** details below.

Q&A | ELEMENT A: PLANNING PROCESS | A3a

Q: Does the plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))

A: See **3.1 INTRODUCTION** details below.

3.1 INTRODUCTION

Throughout the planning project, City of Burbank Departments were considered the primary stakeholders as therein rested responsibility for, and implementation of, the LHMP on behalf of the people working, visiting, and residing within the jurisdiction. Along this line of responsibility, other government agencies that are “Authorities Having Jurisdiction” within the City of Burbank were considered secondary stakeholders.

The secondary stakeholders included but were not limited to the Los Angeles County Department of Public Works (LACoDPW) Flood Control District with jurisdiction over floodplains and watersheds, the Los Angeles County Department of Public Health (LACoDPH) with jurisdiction over public and environmental health, the Burbank Glendale Pasadena Airport Authority, which is a Joint Powers Authority with jurisdiction over the commercial Hollywood-Burbank Airport and attendant facilities and the Burbank Unified School District with jurisdiction over K-12 schools.

Tertiary stakeholders included neighboring governments (the cities of Glendale and Los Angeles), Non-Governmental Organizations (NGOs), non-profits, major media studios, and the public at large. Members of the public, and particularly vulnerable demographics, including those with a disability, access and functional needs (AFN), and disenfranchised communities in general gained additional representation through participating NGOs and non-profit organizations.

In the planning process, a concerted effort was made to gather information from the general public, external agencies, joint powers authority jurisdictions, utility providers, and special districts. In addition, the Planning Team solicited information from agencies and people with specific knowledge of hazards and past historical events, as well as building codes and facilities maintenance planning. The various hazard mitigation strategies contained in this plan were developed through the planning process and involved the City of Burbank staff, related external agencies, and the general public at large.

The City Planning Team, which included the primary and secondary stakeholders, contributed to the initial development of the First Draft of the mitigation plan via in-person and virtual meetings as well as circulated

copies of the draft plan in progress. Once a foundational First Draft was complete, the tertiary stakeholders (including the general public) were invited to contribute to the mitigation plan in the Second Draft phase. The First Draft Plan was posted on the Ready Burbank website on 06/29/2020 and public notice was provided through social media, publicly posted memo as well as emails directly to identified tertiary stakeholder agencies and neighboring city jurisdictions. The comments and feedback gathered during this process was reviewed by the City Planning Team and incorporated into the Final Draft Plan. This Final Draft Plan was posted on the Ready Burbank website on 10/04/2021 and public notice was provided through social media, publicly posted memo as well as emails directly to identified tertiary stakeholder agencies and neighboring city jurisdictions for final review and comment prior to submission to Cal OES and FEMA.

The Final Draft Plan was submitted to Cal OES and FEMA along with a request for a determination of “approval pending adoption”. Upon receiving “approval pending adoption” from FEMA, the City of Burbank Emergency Management Coordinator will prepare a staff report to the City of Burbank City Council requesting adoption of the Local Hazard Mitigation Plan. Following adoption by the City Council, proof of adoption will be forwarded to FEMA. The FEMA Letter of Approval (see Appendix C) was included in the Final Plan. The planning process noted above is outlined in section 3.5 Planning Team Involvement.

Q&A | ELEMENT A: PLANNING PROCESS | A1b

Q: Does the plan list the jurisdiction(s) participating in the plan that are seeking approval? (Requirement §201.6(c)(1))

A: See **3.2 LEGAL FOUNDATION** below.

3.2 LEGAL FOUNDATION

The Hazard Mitigation Plan (Mitigation Plan) was prepared in response to the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 (also known as Public Law 106-390) has required State and local governments (including special districts and joint powers authorities) to prepare mitigation plans to document their mitigation planning process, and identify hazards, potential losses, mitigation needs, goals, and strategies since 2005. This type of planning supplements the City’s comprehensive land use planning and emergency management planning programs. This document is a federally mandated update to the City of Burbank 2011 Local Hazard Mitigation Plan and ensures eligibility for Hazard Mitigation Grant Program (HMGP) funding.

DMA 2000 was designed to establish a national program for pre-disaster mitigation, streamline disaster relief at the Federal and State levels, and control Federal disaster assistance costs. Congress believed these requirements would produce the following benefits:

- ✓ Reduce loss of life and destruction of property, human suffering, economic disruptions, and disaster costs.
- ✓ Prioritize hazard mitigation at the local level with an increased emphasis upon planning and public involvement, assessing risks, implementing loss reduction measures, and ensuring critical facilities and services survive a disaster.
- ✓ Promote educational and economic incentives to form community-based partnerships and leverage non-federal resources to commit to and implement long-term hazard mitigation activities.

The following FEMA definitions are used throughout this plan (Source: FEMA, 2002, *Getting Started, Building Support for Mitigation Planning*, FEMA 386-1):

Hazard Mitigation – “Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.”

Planning – “The act or process of making or carrying out plans; specifically, the establishment of goals, policies, and procedures for a social or economic unit.”

Q&A | ELEMENT A: PLANNING PROCESS | A3b

Q: Does the plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))

A: See **3.3 PRIMARY and SECONDARY STAKEHOLDERS** and **3.4 TERTIARY STAKEHOLDER INVOLVEMENT** below.

3.3 PRIMARY and SECONDARY STAKEHOLDERS

A Hazard Mitigation Planning Team (Planning Team), consisting of the City of Burbank staff, was initially guided by the primary stakeholders.

As required by DMA 2000, the Planning Team expressly involved primary, secondary and tertiary stakeholders, including the general public. Primary and secondary stakeholders were invited to contribute to the mitigation plan during the plan during the initial First Draft writing phase via in-person and virtual meetings as well as circulated copies of the draft plan in progress. Once a foundational First Draft was complete, the tertiary stakeholders (including the general public) were invited to contribute to the mitigation plan in the Second Draft phase.

Q&A | ELEMENT A: PLANNING PROCESS | A2a

Q: Does the plan document an opportunity for neighboring communities, local, and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, as well as other interested parties to be involved in the planning process? (Requirement §201.6(b)(2))

A: See **3.1 INTRODUCTION** above and **3.4 TERTIARY STAKEHOLDER INVOLVEMENT** below.

Q&A | ELEMENT A: PLANNING PROCESS | A2b

Q: Does the plan identify how the stakeholders were invited to participate in the process? (Requirement §201.6(b)(2))

A: See **3.1 INTRODUCTION** and, **3.3 PRIMARY and SECONDARY STAKEHOLDERS** above, and **3.4 TERTIARY STAKEHOLDER INVOLVEMENT** below.

3.4 TERTIARY STAKEHOLDER INVOLVEMENT

Tertiary stakeholders, including the general public and neighboring cities (Cities of Glendale and Los Angeles) were provided opportunities to provide feedback during the Second Draft phase. The First Draft Plan was posted on the Ready Burbank website on 06/29/2020 and public notice was provided through social media, publicly posted memo as well as emails directly to identified tertiary stakeholder agencies and neighboring city jurisdictions. All relevant feedback and gathered information was incorporated into the Final Draft Plan. This Final Draft Plan was posted on the Ready Burbank website on 10/04/2021 and public notice was provided through social media, publicly posted memo as well as emails directly to identified tertiary stakeholder agencies and neighboring city jurisdictions for final review and comment prior to submission to Cal OES and FEMA.

Q&A | ELEMENT A: PLANNING PROCESS | A1

Q: Does the plan document an opportunity for neighboring communities, local, and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, as well as other interested parties to be involved in the planning process?

A: See **3.5 PLANNING TEAM INVOLVEMENT** below.

3.5 PLANNING TEAM INVOLVEMENT

The Planning Team consisted of diverse representatives and included individuals from City Departments with a role in the hazard mitigation processes. The Planning Team served as liaisons among all stakeholders throughout the planning process. During the planning process the Planning Team was faced with unique challenges related to COVID-19, resulting in a mix of in-person and virtual meetings. As noted previously, the general public and external agencies served as tertiary stakeholders in the planning process. The Planning Team was responsible for the following tasks:

- ✓ Confirming planning goals
- ✓ Prepare timeline for plan update
- ✓ Ensure plan meets DMA 2000 requirements
- ✓ Organize and solicit involvement of public and external agencies
- ✓ Analyze existing data and reports
- ✓ Update hazard information
- ✓ Update status of Mitigation Action Items
- ✓ Develop new Mitigation Action Items
- ✓ Participate in Planning Team meetings and City Council public meetings
- ✓ Provide existing resources including maps and data

3.6 PLANNING APPROACH

The four-step planning approach outlined in the FEMA publication, *Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies* (FEMA 386-3) was used to develop this plan:

- ✓ **Develop mitigation goals and objectives** - The risk assessment (hazard character, inventory, and findings), along with municipal policy documents, was utilized to develop mitigation goals and objectives.
- ✓ **Identify and prioritize mitigation actions** - Based on the risk assessment, goals and objectives, existing literature/resources, and input from participating entities, mitigation activities were identified for each hazard.
- ✓ **Prepare implementation strategy** - Generally, high-priority activity is advised for implementation first; however, based on organizational requirements and goals, project costs, and available funding, some medium or low priority activities might be implemented before some high priority items.
- ✓ **Document mitigation planning process** - The mitigation planning process is documented throughout this plan document.

Q&A | ELEMENT E: PLAN ADOPTION | E1

Q: Does the plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))

A: See **3.7 PLAN ADOPTION PROCESS** below.

3.7 PLAN ADOPTION PROCESS

Adoption of the plan by the local governing body demonstrates the City of Burbank's commitment to meeting mitigation goals and objectives. Governing body approval legitimizes the plan and authorizes accountable agencies to execute their responsibilities. The City Council must adopt the Local Hazard Mitigation Plan before it can be approved by FEMA. The Final Draft Plan was submitted to Cal OES and FEMA for review and approval. FEMA issued an Approval Pending Adoption on 01/26/2023 requiring the adoption of the Plan by the City of Burbank City Council. The adoption resolution was submitted to FEMA along with a request for a FEMA Letter of Approval.

In preparation for the public meeting with the City Council, the Emergency Management Coordinator prepared a Staff Report to the City Manager. The City Council heard the item on DD/MM/YYYY. The City Council voted to adopt the Local Hazard Mitigation Plan. **The Resolution of adoption by the City Council is in Appendix B.**

3.8 PLAN APPROVAL

FEMA issued an Approval Pending Adoption notice on 01/26/2023. A copy of the FEMA Letter of Approval Pending Adoption is in **Appendix C**. Upon adoption by the City Council, the resolution was forwarded to FEMA. A copy of the City Council Adoption Resolution is in **Appendix B**.

Q&A | ELEMENT C. MITIGATION STRATEGY | C1a

Q: Does the plan document each jurisdiction's existing authorities, policies, programs, and resources? (Requirement §201.6(c)(3))

A: See **3.9 CAPABILITY ASSESSMENT - RESOURCES** below.

3.9 CAPABILITY ASSESSMENT – RESOURCES

The City of Burbank incorporates mitigation planning as an integral component of daily operations. This will be accomplished by the Planning Team working with their respective departments to integrate mitigation strategies into the planning documents and the City of Burbank operational guidelines. In addition to the Capability Assessment, the Planning Team strives to identify additional policies, programs, practices, and procedures that could be created or modified to address mitigation activities. Details of existing resources with mitigation activity capability are listed in Tables 3 through 7 below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C1b

Q: Does the plan document each jurisdiction's ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))

A: See **3.9.1 CAPABILITY ASSESSMENT - RESOURCES TYPES** below.

3.9.1 CAPABILITY ASSESSMENT – RESOURCE TYPES

The capabilities noted in this LHMP as resources available to the City to use towards reducing long-term vulnerability via mitigation actions fall into four categories: planning and regulatory, financial, administrative and technical, and education and outreach. In this section how the resources noted in Tables 3 through 7 fit into this schema are detailed with specific examples. Tables 3 through 7 organize capabilities hierarchically with respect to the following jurisdictions: City, County, State-Regional-Federal, and Private. Additionally, how the selected cases demonstrate forward thinking to expand and improve mitigation is noted.

Planning and regulatory resources accessible for application toward reducing vulnerability with mitigation planning are considerable. These resources are available at each jurisdictional level and include capabilities related to ordinance, policy, laws, statutes, plans, and programs for managing growth and development. They include the Burbank Capital Improvement Program (CIP), the LAC General Plan (LACGP), the California State Hazard Mitigation Plan (CSHMP), the National Railroad Passenger Corporation (AMTRAK) and the Federal Emergency Management Agency (FEMA). Founded on the 2019 California Building Code and guided by City Council mandated amendments to Title 9 of the Burbank Municipal Code (BMC), the Burbank CIP is in an ongoing state of revision to improve safety and mitigate hazards across the jurisdiction's physical infrastructure.

Financial resources for application toward reducing vulnerability via mitigation planning come in a wide but not always readily accessible variety. These resources are available at each governmental jurisdiction levels and include capabilities related to funding of mitigation actions. They include the Electric Utility Fund, the Los Angeles County Office of Emergency Management (LAC-OES), the California Department of Transportation (CalTrans), and the US Bureau of Reclamation (USBR). Burbank seeks to diversify and expand access to financial resources, ranging from the frequently used to the obscure, that can be employed to fund hazard mitigation actions. In this vein, Burbank Water & Power (BWP) has initiated an expansion of its Drought Contingency Plan that promises to open access to ongoing mitigation funding. This USBR grant funded update will make the City eligible to win future funding that promotes improved hazard mitigation with better water resource management.

Administrative and technical resources are broadly accessible to apply toward reducing vulnerability with mitigation planning both within and across jurisdictions. These resources include capabilities related to coordination of staff, their skills, and departmental tools available to them. Examples of these resources include the Burbank Fire Department (BFD), the Los Angeles County Flood Control District (LAC-FCD), the California Governor's Office of Emergency Services (CalOES), and Southern California Edison (SCE). Do to the nature of the metropolitan area in which it is located, there is an extensive pool of experience, skill sets, and tools available both internally and externally for the City to apply toward hazard mitigation. Additionally, where any of these aspects are lacking due to routine positional vacancies mechanisms to hire, promote, or backfill administrative and technical resources from either the eligible workforce permanently or larger jurisdictional entities temporarily are available. Within the BFD's Emergency Management Division an Emergency Management intern program was created to act as a project management tool to research, organize, and codify material for the current LHMP revision. Future expansion of this program by the Emergency Management Coordinator will support personnel skills development, departmental training through Cal OES's California Specialized Training Institute, and a more actively managed mitigation plan maintenance process.

Education and Outreach resources are a readily accessible but practically constrained capability to apply toward reducing hazard vulnerability and enhancing mitigation plans. The constraint found here is that capability efficacy is based on the degree to which the public participates in a given educational and/or outreach resource. Available at all jurisdictional levels, these resources are mutually supporting and actively promote participation in both their own and affiliated activities as they seek to spread hazard mitigation and disaster preparedness educational material throughout the community. Examples of these resources are Ready Burbank's Community Emergency Response Team (CERT) program, CalOES's California Specialized Training Institute (CSTI), FEMA's Independent Study program, and the Amateur Radio Emergency Service (ARES). Each of these resources has a hazard mitigation component as is demonstrated by Burbank CERT training which advocates for the national Firewise-USA wildfire mitigation program. Ongoing efforts by the BFD and Ready Burbank aims to bolster CERT membership and registration of a larger pool of qualified disaster service worker volunteers. Coordinated with these effort is expanded membership of the Burbank Fire Corps thus promoting proactive whole community fire safety.

RESOURCE	RESOURCE TYPE	MITIGATION SUPPORT CAPABILITY
CITY RESOURCES		
Capital Improvement Program	Planning and Regulatory	The CIP is a set of planned construction projects at City owned buildings, facilities, and infrastructure. Examples include new or retrofit City facilities, technology disaster resilience, and communications equipment. The current CIP is for the 2020/2021 fiscal year and is updated annually. Mitigation actions that involve construction or retrofits to City buildings, facilities, and infrastructure may be implemented through inclusion in the Capital Improvement Program.
General Plan	Planning and Regulatory	The City of Burbank's General Plan (Burbank2035) is the community's comprehensive, long-range blueprint that guides how the City will change and develop. It addresses topics such as land use, public safety, noise, and open space. Individual goals and policies in the General Plan create a framework for municipal programs and projects. The General Plan was adopted in 2013. Mitigation actions are supported by the goals and policies in the General Plan, and these actions can be directly integrated into the General Plan in future updates, providing a stronger enforcement mechanism.
General Fund	Planning and Regulatory	The General Fund is revenue that the City collects from sales tax, property tax, license and permit fees, and various other sources. The General Fund revenue may be used for any City expenses. Most General Fund revenue is spent on the salary and benefits of City staff but also supports mitigation actions by providing the financial resources to implement projects such as debris flow and seismic mitigation work.
Water and Wastewater Funds	Financial	The Water Reclamation & Sewer Fund is separate from the fees charged to City water and wastewater customers. Salaries for water and wastewater employees are paid from these funds, along with maintenance and operations of water and wastewater systems, capital improvements to water and wastewater infrastructure, and other charges related to these services. Mitigation actions that involve water or wastewater service and requisite infrastructure in the City is supported by the Water and Wastewater utility fund.
Electric Utility Fund	Financial	The Electric Utility Fund is a dedicated amount of money from the fees charged to City customers for electrical service. The fund is used to pay for maintenance and operations of the City's electricity network as well as improvement projects. Mitigation actions that promote resiliency of electrical services and infrastructure, such as micro-grids, data line redundancy, and operational reliability are supported by the Electric Utility Fund.
Seismic Retrofit Regulations	Planning and Regulatory	Burbank's Seismic Retrofit Ordinances are a set of standards requiring all existing buildings with an unreinforced masonry bearing wall or concrete walls with a flexible diaphragm to be reinforced. Mitigation actions that relate to the seismic resiliency of other building types in the City may be implemented through amendments to this set of regulations. Other mitigation actions related to the resiliency for other building types (including to other hazards) may be implemented or changed from voluntary to mandatory under these ordinances.
Floodplain Management Regulations	Planning and Regulatory	Floodplain Management Regulations (FMRs) are a required component of the City's participation in the National Flood Insurance Program. Under them, construction activities within the 100-year flood plain must feature flood-resilient design features. Additionally, regulations limit the types of land use activities that can be conducted within the flood plain. Mitigation actions that address the vulnerability of buildings could be implemented through amendments to the City's FMRs as climate changes affect the region.
Building and Construction Regulations	Planning and Regulatory	The 2019 California State Building Code are adopted and enforced with Local amendments found in Title 9 of the Burbank Municipal Code which governs the construction of new and renovated buildings. The Building and Construction Regulations as updated with local amendments require new or renovated buildings to better resist damage or harm to occupants during a hazardous event and as such support hazard mitigation activities.
Zoning Code	Planning and Regulatory	Zoning Ordinances are a set of regulations for different land uses in the community. They establish standards for where different types of development and land use activity may occur (including defining hazard-prone areas where different development and land use standards may apply), how they look and how they can be operated, and the necessary permitting and approval processes for development. The Zoning Code is an implementation tool of Burbank's General Plan, and plays a significant role in determining Burbank's appearance and community characteristics. Mitigation actions that govern the siting, construction, and operation of new developments are implemented through City Zoning Ordinances.

Table 3 Capability Assessment – City Resources 1

RESOURCE	RESOURCE TYPE	MITIGATION SUPPORT CAPABILITY
CITY RESOURCES		
Community Emergency Response Team	Outreach and Education	Burbank's Community Emergency Response Team (CERT) is a group of volunteer residents who can provide assistance during an emergency event. CERT participants are trained in first aid, disaster preparedness, search and rescue, and other light emergency response duties. CERT volunteers can also assist with organizing and maintaining shelters for persons displaced by an emergency. Burbank's CERT program is operated by the City's Fire Department. Mitigation actions that involve community training and education can be implemented through the CERT program, and CERT volunteers can assist with mitigation-related outreach activities.
Community Development Department	Planning and Regulatory	The Community Development Department (CDD) is responsible for conducting short term and long term planning activities, approving building permits and business licenses, and inspecting properties. The CDD enforces Building and Construction Regulations and related standards, as well as land use regulations. Mitigation actions related to land use, construction of structures or retrofits, and private property conditions, are carried out through CDD staff.
Water and Power Department	Planning and Regulatory	The Water and Power Department (WPD) provides electrical service to properties in the community and maintains the city's electricity distribution network. As a part of these duties, it is responsible for setting electrical rates and has purview over local renewable energy and electrical energy efficiency programs. Mitigation actions that relate to the resiliency of electrical service and electrical infrastructure will be implemented through WPD staff.
Police Department	Administrative and Technical	The Police Department (BPD) is responsible for maintaining public safety in the community. This includes investigating criminal activity, directing traffic, and responding to public safety emergencies. Mitigation actions that fall within the BPD's purview include those related to the safe movement of traffic and the public safety of community members during hazard events.
Emergency Communication Services	Outreach and Education	ARES is provided by volunteer FCC-licensed amateur radio operators who can provide backup communication services if a disaster damages or destroys conventional communication networks. ARES volunteers can provide communication services for emergency response personnel and other key City staff. The program is part of the National Association of Amateur Radio. ARES volunteers may also assist with community-wide outreach and education, with respect to emergency communication through the CERT program.
Financial Services Department	Financial	The Finance Services Department (FSD), is responsible for City financial operations. It conducts budgeting activities, handles payroll, provides general accounting services, and prepares financial reports. The FSD integrates mitigation actions into the City budget and administers mitigation-related grants staff in their efforts to improve local resiliency.
Fire Department	Administrative and Technical	The BFD is responsible for firefighting, fire protection, and emergency medical response services in the community. This includes mitigation activities that reduce the likelihood of fires and limit their damage. BFD activities also include efforts to prepare for local disasters such as mitigation actions against wildfire. The BFD is also responsible for more general emergency preparedness and can coordinate with other agencies to implement mitigation actions related to a wide variety of hazard events.
Water and Power Department	Administrative and Technical	Burbank's Water and Power Department (WPD) provides water service to the community as well as wastewater collection and treatment services. This includes constructing, maintaining, and operating the infrastructure that sources and distributes most of the City's water and conveys wastewater. Such systems include groundwater wells, pump stations, pipes, storage tanks, and wastewater treatment facilities. The WPD is also responsible for conservation activities within its service area. Any mitigation actions that involves water sources, how much water the community uses, the City's water or wastewater-related infrastructure, or runoff channels may be implemented by the WPD staff.
Public Works Department	Administrative and Technical	The Public Works Department (PWD) is responsible for maintaining City-owned buildings and parks, constructing and maintaining City streets, and sidewalks which includes public landscaping. The PWD also provides engineering services to the City, oversees the CIP, and issues permits for engineering activities. Mitigation activities that involve construction or maintenance activities for City facilities or on City-owned land, relate to the City fleet, or involve standards for other engineering activities, are implemented through PWD staff.

Table 4 Capability Assessment – City Resources 2

RESOURCE	RESOURCE TYPE	MITIGATION SUPPORT CAPABILITY
LAC RESOURCES		
Los Angeles County Office of Emergency Services	Administrative and Technical & Financial	The LAC-OES is responsible for emergency planning, hazard mitigation, and emergency response and recovery activities throughout the county in collaboration with local communities. It helps coordinate activities between the county and cities, conducts emergency training and exercises, manages emergency grants, among other activities. Mitigation actions involving coordination with county agencies or other cities may be facilitated through LAC-OES and can support Burbank's own hazard mitigation activities by providing funding or other resources.
Los Angeles County Flood Control District	Administrative and Technical	The LAC-FCD, part of the county's Department of Public Works, is responsible for constructing and maintaining flood control infrastructure in Los Angeles County. The LAC-FCD completes hydraulic surveys for FEMA NFIP maps and has purview over flow from the Burbank Western Channel as well as various storm drainage channels throughout the City. Mitigation actions that involve changes to flood control infrastructure will require support and coordination with the LAC-FCD.
Los Angeles Valley Municipal Water District	Administrative and Technical	The Los Angeles County Waterworks Districts (LACWD), a division of Los Angeles County Public Works, provides customers with water from local groundwater, water imported through the State Water Project, and the Colorado River Aqueduct. It is responsible for long-term water supplies in Los Angeles County. The district acts as a water wholesaler, obtaining water and distributing it to local water suppliers. The City works with LACWD on mitigation actions that relate to local water supply and water use.
Los Angeles County General Plan	Planning and Regulatory	The LACGP guides the long-term growth and development of the County's unincorporated areas. This includes minor adjacent unincorporated areas within Burbank's sphere of influence. Hazard mitigation actions that require coordination with the County or action in these unincorporated areas may be integrated into the County's General Plan to provide a stronger framework and make them more enforceable.
Los Angeles County Multi- Jurisdictional Hazard Mitigation Plan	Planning and Regulatory	The Los Angeles County Multi-Jurisdictional Hazard Mitigation Plan identifies hazard events present in the unincorporated areas of Los Angeles County (LAC) and recommends mitigation actions to reduce the harm from these events. LAC and Burbank share resources and best practices for hazard mitigation activities. Aligned mitigation actions in the county's and Burbank's plans can help create more regional consistency. Mitigation actions that require coordination with the LAC-OES or other county agencies may be integrated into the county's plan.

Table 5 Capability Assessment – LA County Resources

RESOURCE	RESOURCE TYPE	MITIGATION SUPPORT CAPABILITY
STATE, REGIONAL, & FEDERAL RESOURCES		
Cal-Adapt	Administrative and Technical	Cal-Adapt is an online tool to share information about climate change projections in California. It allows users to learn about expected climate conditions throughout the state at a highly refined level for a variety of factors such as temperature, precipitation, wind, wildfire, and sea level rise. The tool was created by the California Energy Commission and a host of institutional, governmental, and nonprofit partners. Cal-Adapt can be used to support implementation of this LHMP and future updates, providing the best available science on climate change to guide Burbank's mitigation actions.
California Dept. of Transportation	Administrative and Technical & Financial	The California Department of Transportation (Caltrans) is responsible for construction and maintenance of California's state-owned highways, including sections of I-5 and the Ventura Freeway in Burbank. It provides funding and other resources to local and regional governments to support transportation-related projects. Mitigation actions related to these corridors or other transportation activity can be implemented in coordination with Caltrans.
California Governor's Office of Emergency Services	Administrative and Technical & Financial	The California Governor's Office of Emergency Services (CalOES) is the agency responsible for conducting statewide hazard mitigation, supporting emergency response/recovery activities, and coordinating such activities as disaster recovery fund disbursement from the federal government. CalOES distributes grant funding, provides guidance on hazard mitigation, and shares best practices. Mitigation actions in Burbank may be guided, supported and funded through grant opportunities provided by CalOES.
California State Hazard Mitigation Plan	Planning and Regulatory	The CSHMP identifies and analyzes the hazards common to the state. It includes descriptions of these hazards, summaries of past events, assessment of how hazards may affect citizens and assets of the state, and projections of future hazard changes. The CSHMP was last updated in 2018 and changes to Burbank's LHMP will continue to be informed through the latest data and analyses available within it.
US Bureau of Land Reclamation	Administrative and Technical & Financial	The USBR, is a federal agency that oversees water resource management, specifically as it applies to the oversight and operation of the diversion, delivery, and storage projects that it has built throughout the western United States. The agency works to develop and implement a thoughtful approach to water allocations to serve water users while protecting the environment, modernizing infrastructure, advancing storage projects, implementing water operation plans amongst others. Water resource mitigation activities in Burbank may be guided by and funded through the USBR.
Federal Emergency Management Agency	Planning and Regulatory, Outreach and Education Administrative and Technical & Financial	The FEMA is the agency responsible for hazard mitigation, emergency preparedness, and emergency response/recovery at the national level. FEMA provides hazard mitigation guidance to state and local governments, including information on best practices and compliance with federal requirements for hazard mitigation plans. Mitigation actions in Burbank can be supported through and developed with assistance from FEMA grants. The agency also provides LHMP guidance that will be used in plan updates.

Table 6 Capability Assessment – State, Regional, Federal Resources

RESOURCE	RESOURCE TYPE	MITIGATION SUPPORT CAPABILITY
PRIVATE RESOURCES		
American Red Cross	Outreach and Education & Administrative and Technical	The American Red Cross is a humanitarian assistance organization that provides disaster relief services in the aftermath of major hazard events. This includes operating emergency shelters, distributing meals and relief supplies, and providing basic health services. Although the American Red Cross's services are more related to preparation than mitigation actions, there may be opportunities for the organization to support mitigation activities related to community engagement and education.
Southern California Edison	Outreach and Education Administrative and Technical	SCE is a primary electricity provider for much of southern California. Although it supplies electricity to a limited number of properties in Burbank, it owns and operates high-voltage electrical transmission lines and most of the electrical substations in LAC. Mitigation actions that involve the resiliency of Burbank's electrical infrastructure not owned by the city present an opportunity for coordination with SCE.
Southern California Gas Company	Administrative and Technical	The Southern California Gas Company (SoCalGas) is the primary natural gas service provider for most of southern California, including Burbank. It also owns and operates the natural gas infrastructure in and around LAC. Mitigation actions which involve natural gas use or are relate to the resiliency of natural gas infrastructure would be implemented in coordination with SoCalGas.
AMTRAK	Planning and Regulatory & Administrative and Technical	AMTRAK is a major national rail corporation that manages the Metrolink train system serving Burbank's citizens with a quasi-corporation, nationally essential service. They are also responsible to managing other rail line's (Union Pacific, BNSF, etc.) traffic on their rail lines. Any mitigation activities regarding passenger or freight transportation would be coordinated with their local staff.

Table 7 Capability Assessment – Private Resources

Q&A | ELEMENT A: PLANNING PROCESS | A4

Q: Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))

A: See **3.10 USE OF EXISTING DATA** below.

3.10 USE OF EXISTING DATA

The Planning Team gathered and reviewed existing data and plans during plan writing and specifically noted these as “sources.” Numerous electronic and hard copy documents were used to support the planning process:

City of Burbank Website

<https://www.burbankca.gov/departments>

Applicable Incorporation: Department information.

City of Burbank Municipal Code

<https://www.codepublishing.com/CA/Burbank/>

Applicable Incorporation: Building code information.

City of Burbank General Plan - Burbank2035 (2013)

<https://new.burbankca.gov/documents/173607/0/Burbank2035+General+Plan.pdf/139656b0-80e9-3b11-dc6d-751642c85b38?t=1612301807431>

Applicable Incorporation: Information about hazards contributed to the hazard-specific sections in the City of Burbank Hazard Mitigation Plan.

City of Burbank Hazard Mitigation Plan (2011)

<https://www.burbankfire.us/divisions/emergency-management/hazard-mitigation-plan-2011>

Applicable Incorporation: Information about hazards contributed to the hazard-specific sections in the City of Burbank Hazard Mitigation Plan.

County of Los Angeles General Plan (2015)

http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf

Applicable Incorporation: Information about the planning area and geography.

County of Los Angeles All-Hazards Mitigation Plan (2019)

http://file.lacounty.gov/SDSInter/lac/1062614_AHMPPublicDraft_Oct1.pdf

Applicable Incorporation: Information about hazards in the County contributed to the hazard-specific sections in the City of Burbank Hazard Mitigation Plan and Previous Occurrences.

State of California Hazard Mitigation Plan (2018)

<https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/state-hazard-mitigation-plan>

Applicable Incorporation: Used to identify hazards posing the greatest threat to the State.

FEMA State and Local “How To” Mitigation Series (Documents 386-1 to 386-9)

<https://www.hsdil.org/c/>

Applicable Incorporation: Mitigation Measures Categories and 4-Step Planning Process are quoted across several sections.

National Flood Insurance Program

www.fema.gov/national-flood-insurance-program

Applicable Incorporation: Repetitive Loss Information.

Local Flood Insurance Rate Maps

<https://msc.fema.gov/portal/home>

Applicable Incorporation: Provided by FEMA and included in Flood Hazard section.

California Department of Forestry and Fire Protection (CAL FIRE)

www.fire.ca.gov

Applicable Incorporation: Wildland fire hazard mapping.

U.S. Geological Survey (USGS)

www.usgs.gov

Applicable Incorporation: Earthquake records and statistics.

SCEDC – Southern California Earthquake Data Center

<https://scedc.caltech.edu/earthquake/verdugo.html>

Applicable Incorporation: Earthquake Information.

California’s Fourth Climate Change Assessment: Los Angeles Region Report (2019)

https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf

Applicable Incorporation: Climate Information.

NOAA National Centers for Environmental Information, Climate at a Glance (2019)

<https://www.ncdc.noaa.gov/cag/county/time-series>

Applicable Incorporation: Data Image.

County of Los Angeles Public Health, Acute Communicable Disease Control (2019)

<https://admin.publichealth.lacounty.gov/acd/WNVData.htm>

Applicable Incorporation: Pandemic/Epidemic/Vector Borne Disease Information.

Western Regional Climate Center

www.wrcc.dri.edu

Applicable Incorporation: Climate information.

FEMA, Multi-Hazard Mitigation Planning Guidance Under the Disaster Mitigation Act of 2000 (2008)

<https://www.fema.gov/sites/default/files/2020-07/state-mitigation-planning-guidance.pdf>

Applicable Incorporation: Plan guidance.

Section 4 RISK ASSESSMENT

4.1 OVERVIEW OF RISK ASSESSMENT

Conducting a risk assessment can provide information regarding the location of hazards, the value of existing land and property in hazard locations as well as an analysis of risk to life, property, and the environment that may result from natural hazard events.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1a

Q: Does the plan include a general description of all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.2 HAZARD IDENTIFICATION AND SCREENING** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1b

Q: Does the plan provide rationale for the omission of any natural hazards that are commonly recognized to affect the jurisdiction(s) in the planning area? (Requirement §201.6(c)(2)(i))

A: See **4.2 HAZARD IDENTIFICATION AND SCREENING** below.

4.2 HAZARD IDENTIFICATION AND SCREENING

This section covers the description of the geographic extent, potential intensity, and the probability of occurrence of a given hazard. Maps are used in this plan to display hazard identification data. The City of Burbank utilized the categorization of hazards as identified in California's State Hazard Mitigation Plan, including earthquakes, floods, levee failures, wildfires, landslides and earth movements, climate-related hazards, volcanoes, and other hazards.

The Planning Team reviewed existing documents to determine which of these hazards posed the most significant threat to the City and its ability to deliver services. Expressly, which hazards would likely result in a local declaration of emergency became the plan focus.

The geographic extent of each relevant hazard was identified by the Team utilizing maps and data contained in the City's 2013 General Plan and 2011 Hazard Mitigation Plan. In addition, numerous internet resources and the 2019 County of Los Angeles All-Hazard Mitigation Plan served as valuable consultation resources. Utilizing the Calculated Priority Risk Index (CPRI) ranking technique, the Planning Team concluded the following hazards posed a significant threat for the City of Burbank:

Earthquake | Wildfire | Flood | Windstorm | Epidemic/Pandemic/Vector-Borne Diseases | Drought

The hazard ranking system is described in Table 8 below.

CPRI Category	Degree of Risk			Assigned Weighting Factor
	Level ID	Description	Index Value	
Probability	Unlikely	Extremely rare with no documented history of occurrences or events. Annual probability of less than 1 in 1,000 years.	1	45%
	Possibly	Rare occurrences. Annual probability of between 1 in 100 years and 1 in 1,000 years.	2	
	Likely	Occasional occurrences with at least 2 or more documented historic events. Annual probability of between 1 in 10 years and 1 in 100 years.	3	
	Highly Likely	Frequent events with a well-documented history of occurrence. Annual probability of greater than 1 every year.	4	
Magnitude/Severity	Negligible	Negligible property damages (less than 5% of critical and non-critical facilities and infrastructure. Injuries or illnesses are treatable with first aid and there are no deaths. Negligible loss of quality of life. Shut down of critical public facilities	1	30%
	Limited	Slight property damage (greater than 5% and less than 25% of critical and non-critical facilities and infrastructure). Injuries or illnesses do not result in permanent disability, and there are no deaths. Moderate loss of quality of life. Shut down of critical public facilities for more than 1 day	2	
	Critical	Moderate property damage (greater than 25% and less than 50% of critical and non-critical facilities and infrastructure). Injuries or illnesses result in permanent disability and at least 1 death. Shut down of critical public facilities for more than 1 week and less than 1 month.	3	
	Catastrophic	Severe property damage (greater than 50% of critical and non-critical facilities and infrastructure). Injuries and illnesses result in permanent disability and multiple deaths. Shut down of critical public facilities for more than 1 month.	4	
Warning Time	> 24 hours	Population will receive greater than 24 hours of warning.	1	15%
	12–24 hours	Population will receive between 12-24 hours of warning.	2	
	6-12 hours	Population will receive between 6-12 hours of warning.	3	
	< 6 hours	Population will receive less than 6 hours of warning.	4	
Duration	< 6 hours	Disaster event will last less than 6 hours.	1	10%
	< 24 hours	Disaster event will last less than 6-24 hours.	2	
	< 1 week	Disaster event will last between 24 hours and 1 week.	3	
	> 1 week	Disaster event will last more than 1 week.	4	

Table 8 Calculated Priority Risk Index*

*(Source: Federal Emergency Management Agency)

Profiling hazard events describes the causes and characteristics of each hazard and which part of the City facilities, infrastructure, and environment may be vulnerable to each specific hazard. A profile of each hazard discussed in the Plan is provided in Section 4.3 Hazard Profile and *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1a

Q: Does the plan include a general description of all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1c

Q: Does the plan include a description of the **type** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 10 Hazards: Standardized Measurement Scales* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See *Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank* below.

Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank below indicates a generalized perspective of the community's vulnerability of the various hazards according to extent/degree, location, and probability.

Hazard	Type	Location (Where)	Extent (How Big an Event)	Probability (How Often)*	Previous Occurrences
Epidemic/Pandemic/ Vector-Borne Disease	Natural; Infectious Disease	Global; citywide	Quarantines, shelter-in-place orders, closed business and functions, curfews.	Highly Likely	COVID-19, March 2020 to present
Windstorm	Natural; Meteorological; katabatic wind	South of the 134 Freeway to City limits	Historically, winds ranging from 55-60 mph have impacted the City.	Likely	No significant events on record.
Drought	Natural; Hydrological; water source precipitation deficit	Regional; citywide	97.6% of California, per NOAA, is categorized as in Severe Drought	Highly Likely	Moderate drought conditions prevailed across California in the period 2013 through 2019.
Wildfire	Natural; Climatological; surface and crown fires	Verdugo Hills; See Figure 23	The City of Burbank has a Moderate Fire Threat rating designated by CAL FIRE.	Likely	September 1, 2017: La Tuna Fire, 7200 acres and 3 homes burned.
Flood	Natural; Hydrological; river and sewage flooding	Burbank Western and Lockheed Drain Channel confluence: See Figures 10, 11, 12	An instance of flooding for the City is greatest at the confluence of the main drainage channels however the area affected is limited in both depth and breadth.	Possibly	No significant events within record with current, modern flood controls in place.
Earthquake	Natural; Geophysical; tectonic; shallow and subduction	Regional; citywide	The Southern California Earthquake Center (SCEC) in 2007 concluded that there is a 99.7% probability that an earthquake of M6.7 or greater will hit California within 30 years. Earthquake would most likely originate from the San Andreas fault. **	Likely	January 17, 1994: the Northridge earthquake, caused damage to streets, the sewer system, the water system, public buildings, and privately-owned residential and commercial structures in the City.
* Probability is defined as: Unlikely = 1:1,000 years, Possibly = 1:100-1:1000 years, Likely = 1:10-1:100 years, Highly Likely = 1:1 year					
** Uniform California Earthquake Rupture Forecast					

Table 9 Vulnerability: Location, Extent, and Probability for the City of Burbank

(See Table 8 for Probability details and explanation.)

Table 10 Hazards: Standardized Measurement Scales below note the standard scales accepted nationally as measures of intensity for the listed disaster types.

HAZARD	SCALE / INDEX	WEAK	MODERATE	SEVERE	EXTREME
Disease	WHO Clinical Progression Scale ¹	Ambulatory	Hospitalized	Critical	Death
Windstorm	Saffir-Simpson Hurricane Wind Scale ²	1	2	3	4
Drought	Palmer Drought Severity Index ³	-1.99 TO +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and Below
Wildfire	USDA Forest Service WildFire Classification ⁴	1-2	3	4-5	6-7
Flood	First Street Foundation Flood Risk Model ⁵	1-2	3-6	7-8	9-10
Earthquake	Modified Mercalli Scale ⁶	I to IV	V to VII	VII	IX to XII
	Richter Magnitude ⁷	2, 3	4, 5	6	7, 8

1 - <https://www.who.int/docs/default-source/documents/emergencies/minimalcoreoutcome measure.pdf> ; 2 - <http://nhc.noaa.gov> ; 3 - <https://www.ncdc.noaa.gov/temp-and-precip/drought/historical-palmers/> ; 4 - https://www.fs.fed.us/rm/pubs_journals/2018/rmrs_2018_tedim_f001.pdf ; 5 - <https://firststreet.org/research-lab/published-research/2022-first-street-foundation-flood-model-methodology-addendum/> ; 6 - <http://earthquake.usgs.gov> ; 7 - <http://earthquake.usgs.gov>

Table 10 Hazards: Standardized Measurement Scales

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.2.1 CRITICAL FACILITIES** below.

4.2.1 CRITICAL FACILITIES

Speaking generally, FEMA separates critical buildings and facilities into the five categories shown below based on their loss potential. All of the following elements are considered critical facilities:

Essential Facilities are essential to the health and welfare of the whole population and are especially important following hazard events. Essential facilities include hospitals and other medical facilities, police and fire stations, emergency operations centers and evacuation shelters, and schools.

Transportation Systems include airways – airports, heliports; highways – bridges, tunnels, roadbeds, overpasses, transfer centers; railways – trackage, tunnels, bridges, rail yards, depots; and waterways including canals, locks, seaports, ferries, harbors, dry docks, piers.

Lifeline Utility Systems such as potable water, wastewater, oil, natural gas, electric power and communication systems.

High Potential Loss Facilities are facilities that would have a high loss associated with them, such as nuclear power plants, dams, and military installations.

Hazardous Material Facilities include facilities housing industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

Q&A | ELEMENT D: MITIGATION STRATEGY | D1

Q: Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))

A: See **4.2.2 CHANGES IN DEVELOPMENT** below.

4.2.2 CHANGES IN DEVELOPMENT

Since the 2011 HMP, there have been no significant alterations to the development pattern of the City in the hazard-prone areas. This conclusion was reached after a review of the General Plan and discussion with the Planning Team. Furthermore, the Planning Team concluded the overall vulnerability to identified hazards had generally remained the same.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1a

Q: Does the plan include a general description of all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See introduction for each respective hazard in **4.3 HAZARD PROFILES** subsections below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1c

Q: Does the plan include a description of the **type** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See introduction for each respective hazard in **4.3 HAZARD PROFILES** subsections below.

4.3 HAZARD PROFILES

An important aspect of preparing a mitigation plan is to understand the hazards facing a particular community. Understanding the various hazard risks and consequences is a first step in mitigating adverse effects of these events. A hazard profile is a description and analysis of a specific type of local hazard. It is performed for each hazard and based on criteria, such as frequency, duration, and speed of onset.

4.3.1 EARTHQUAKE

A seismic event, more commonly known as an earthquake or quake, is the sudden motion or trembling that results from the release of strain accumulated within or along the edge of the earth's tectonic plates without warning. Quakes manifest by shaking, displacing, and disrupting the earth and anything on its surface with a range of seismicity from undetectable to levels capable of triggering landslides and/or tsunamis. Events of the latter magnitude will have profound effects in the built environment both immediately and over time from aftershocks, topography shifts, and consequent events like ground subsidence, water course shift, etc.

Of the hazards discussed here, earthquakes are a type of disaster that can profoundly affect the integrity of the City's infrastructure. As such, the recovery period for such an event can be on the order of decades as transportation routes are disrupted, structures destroyed, and the citizenry displaced and injured. As with any such incident, those individuals who are part of the access and functional needs (AFN) community would be impacted to a greater degree than the majority of residents.

Essentially, the euphemistic "Big One" can be either a single large earthquake (M7.8 and higher) on the 30mi distant San Andreas Fault or a smaller local event (M6.5 to M7.0+) on faults within or near Burbank. The damage scenarios in the latter case are challenging to model as the event size and proximity are not the only variables. An event could, for example, involve multiple faults cascading to have a cumulative effect. Furthermore, this scenario presupposes that all fault lines in the area are known and this may not be the case.

A localized event in this lower magnitude range on the Verdugo Fault, an unknown fault within the City, or some combination thereof are all possibilities. Estimated economic and casualty impact from simplified scenarios are presented in Section 4.3.1.9.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.1 PREVIOUS OCCURRENCES OF EARTHQUAKES IN BURBANK** below.

4.3.1.1 PREVIOUS OCCURRENCES OF EARTHQUAKES IN BURBANK

The two most significant earthquakes to affect the City were the 1971 Sylmar and the 1994 Northridge events. According to the City of Burbank Hazard Mitigation Plan Update (2011), the 1971 Sylmar earthquake struck on February 9th with an epicenter six miles northeast of Sylmar. The earthquake caused 65 deaths and millions of dollars in property loss. There were numerous instances of bridge, freeway, and hospital damage. The San Gabriel Mountains east of Burbank rose several feet. Surface breaks caused by faulting during the earthquake appeared across the northeastern corner of the San Fernando Valley.

The second major earthquake affecting the City was the Northridge earthquake on January 17th, 1994. This event was measured at a magnitude of 6.7 and caused extensive damage to structures and utilities in the City of Burbank. The earthquake originated in a hidden fault approximately eight miles below the surface of the San Fernando Valley to the west. The earthquake caused a rupture along the fault line that traveled upwards in a northwestern direction. The fault, now called the Oak Ridge or Northridge fault system, intersected with a branch of the Sierra Madre fault, which was responsible for the 1971 Sylmar earthquake.

The earthquake lasted approximately 15 seconds. After the initial event, aftershocks of varying magnitude occurred at the rate of approximately 1,000 per day for several weeks. The earthquake caused substantial damage to streets, the sewer system, the water system, public buildings, and privately-owned residential and commercial structures in the City. In the first six months following this disaster, the City expended more than \$1 million and thousands of personnel hours on earthquake-related activities.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **LOCAL CONDITIONS** for each respective Hazard Profile below.

4.3.1.2 LOCAL CONDITIONS

There are several active faults that have the potential to impact the City. Among these, the well-known San Andreas fault is considered a “master fault” because it is the boundary of the Pacific and North American tectonic plates. There are also a number of minor faults in the eastern San Fernando and northern San Gabriel Valleys, including the Sierra Madre, Newport-Inglewood, Northridge, and Verdugo faults to consider.

Although seismic events are inherently unpredictable due to many factors including the region’s highly complex geologic nature, the City has been diligent in adopting new and upgraded building standards as they are available. Continuing this wise practice, the Burbank City Council passed resolution 15-7-22 (July, 2022) adopting the most current version of the International Building Code (IBC) as one aspect of an ongoing process of improving building safety and community resilience through higher structural standards.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.3 SAN ANDREAS FAULT ZONE** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.3 SAN ANDREAS FAULT ZONE** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.3 SAN ANDREAS FAULT ZONE** below.

4.3.1.3 SAN ANDREAS FAULT ZONE

The San Andreas Fault zone has the potential for a strong effect on the City of Burbank. This fault zone extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The total length of the San Andreas Fault Zone is approximately 750-miles. The activity of the fault has been recorded during historic events, including the 1906 M8.0 event in San Francisco and the 1857 M7.9 event between Cholame and San Bernardino, where at least 250-miles of surface rupture occurred. These seismic events are among the most significant earthquakes in California history. Geologic evidence suggests that the San Andreas Fault has a 50% chance of producing a magnitude 7.5 to 8.5 quake comparable to the great San Francisco earthquake of 1906 within the next 30 years.

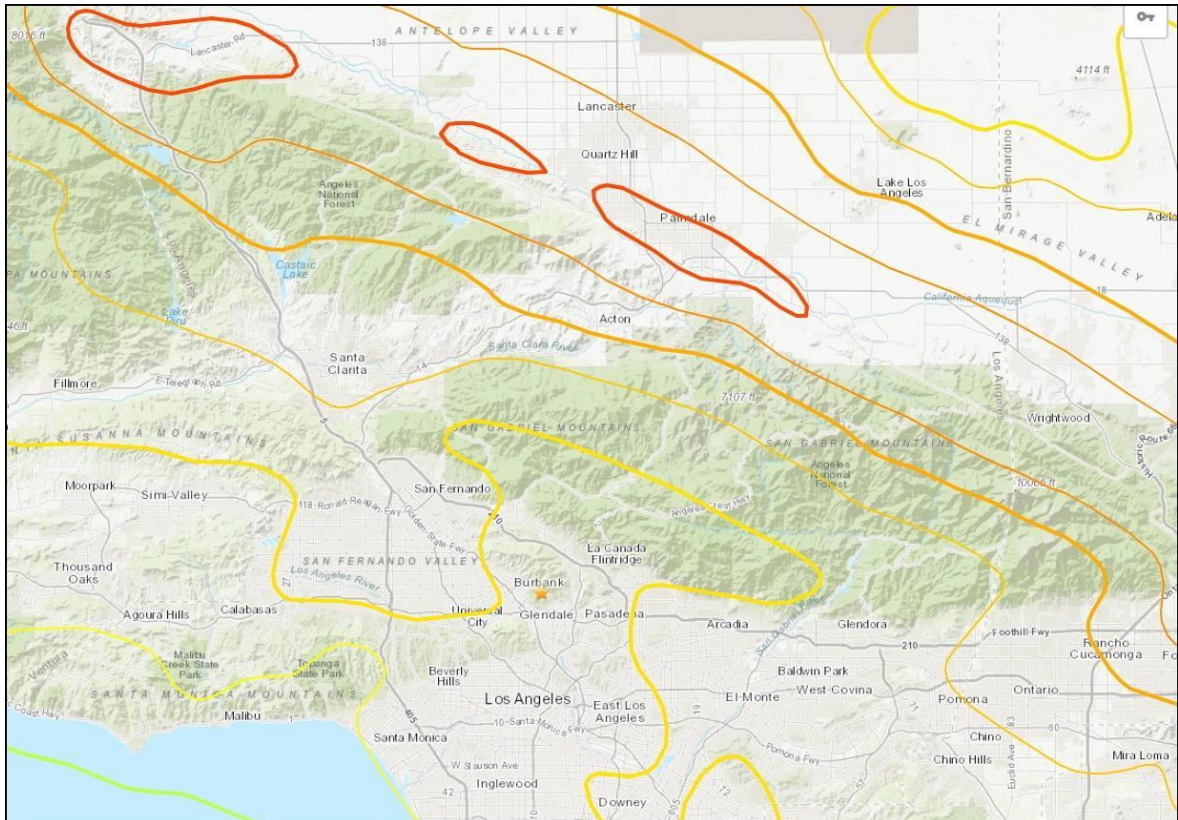


Figure 3 Shake Intensity Map – San Andreas Fault M7.8*

*(Source USGS, Scenario Map, Star indicates City of Burbank)

4.3.1.4 SIERRA MADRE FAULT ZONE

The Sierra Madre fault zone is a series of moderate angle, north-dipping, reverse faults (thrust faults). Movement along these frontal faults has resulted in the uplift of the San Gabriel Mountains. According to the Southern California Earthquake Data Center, rupture on the Sierra Madre fault zone could, theoretically, be limited to one segment at a time, it has recently been suggested that a large event on the San Andreas fault to the north (like that of 1857) could cause simultaneous rupture on reverse faults south of the San Gabriel Mountains – the Sierra Madre fault zone being a prime example of such. Whether this could rupture multiple Sierra Madre fault zone segments simultaneously is unknown. Seismic activity on the Sierra Madre fault is expected to have a maximum magnitude of 7.2.

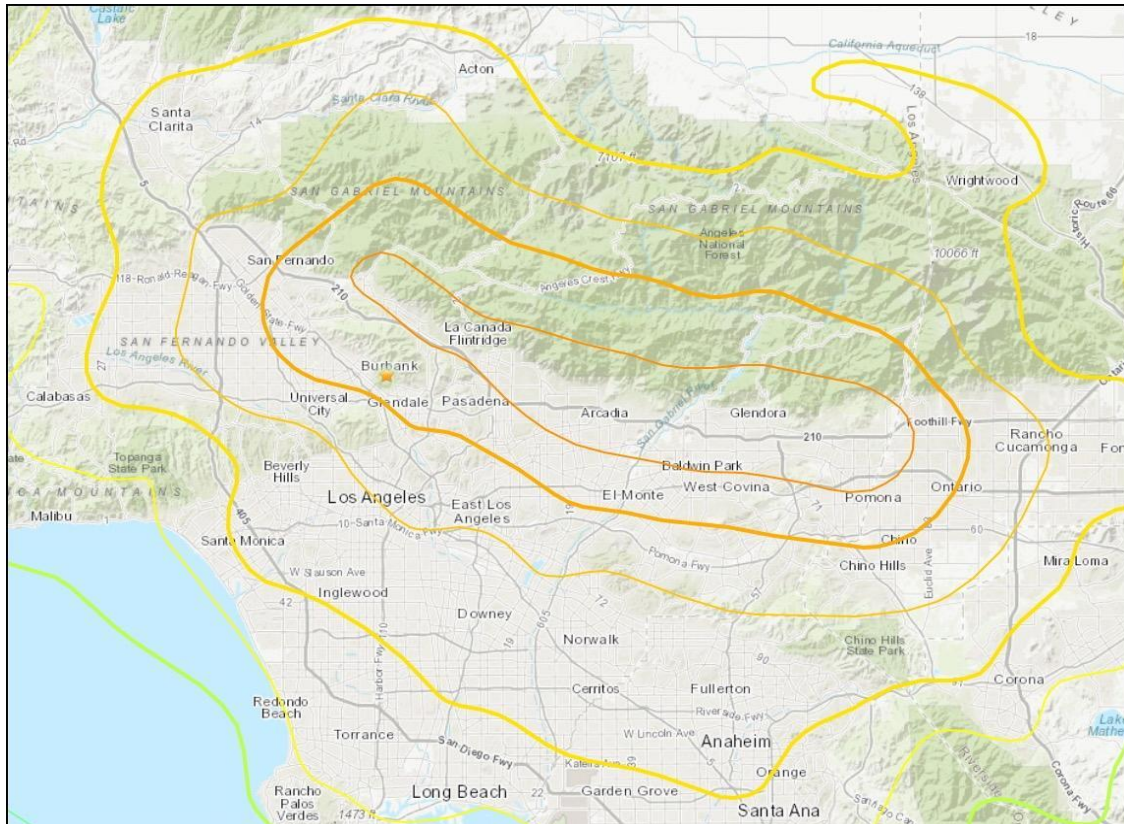


Figure 4 Shake Intensity Map – Sierra Madre Fault M7.2*

*(Source USGS, Scenario Map, Star indicates City of Burbank)

4.3.1.5 NEWPORT-INGLEWOOD FAULT

The Newport-Inglewood fault is a right-lateral fault with a length of 75 kilometers in the Los Angeles Basin. The fault zone can easily be noted by the existence of a chain of low hills extending from Culver City to Signal Hill. South of Signal Hill, it roughly parallels the coastline until just south of Newport Bay, where it heads offshore, and becomes the Newport-Inglewood – Rose Canyon fault zone. The most recent rupture on March 10th, 1993, was an M6.4 subterranean event.

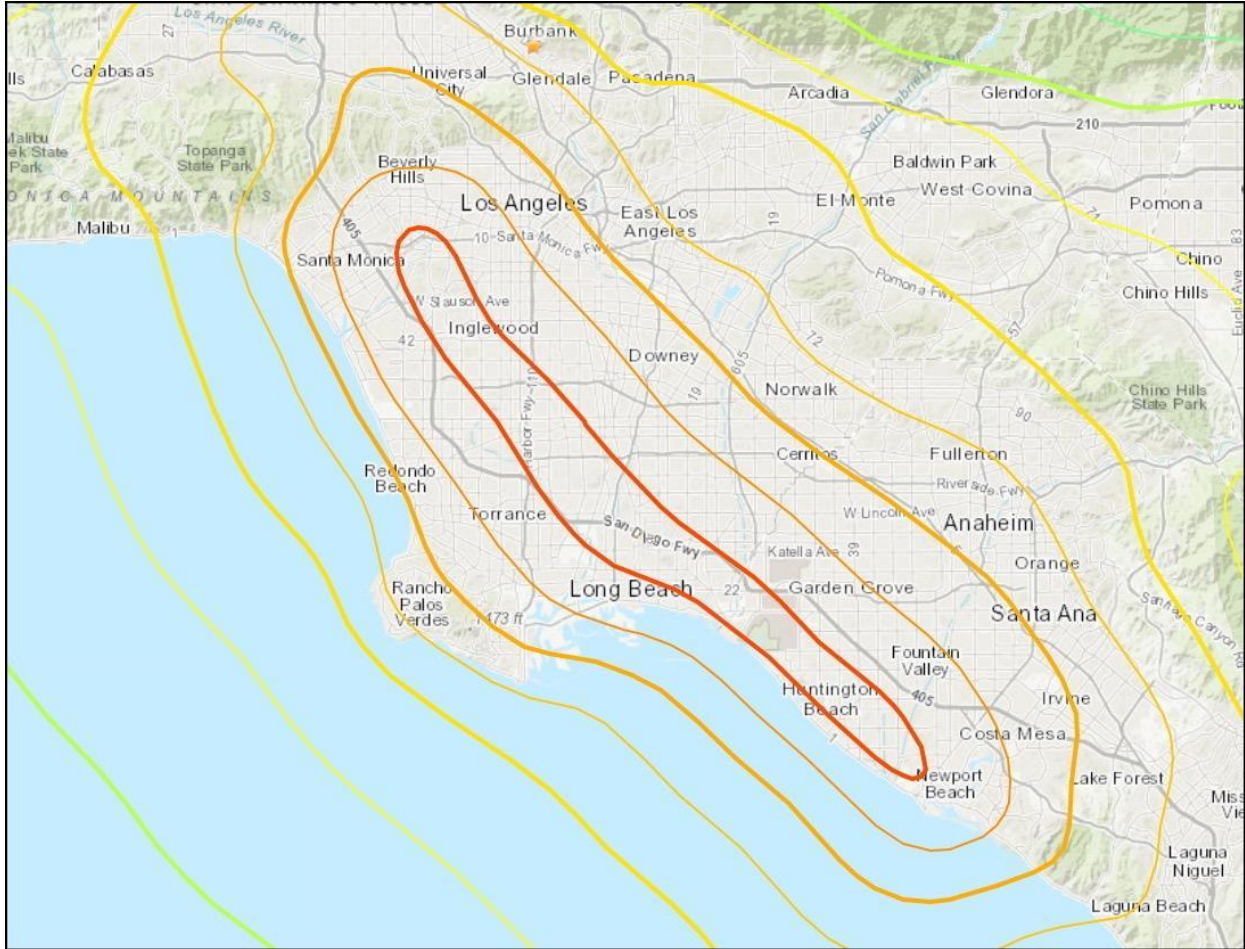


Figure 5 Shake Intensity Map – Newport-Inglewood Fault M7.2*

*(Source USGS, Scenario Map, Star indicates City of Burbank)

4.3.1.6 OAK RIDGE FAULT

The Oak Ridge fault is a thrust fault with a length of 90 kilometers. The fault drops south at an angle less than 45 degrees, meaning the epicenter of an earthquake on this fault could appear distant from the surface trace. The surface track of the Oak Ridge thrust forms a ridge to the south of its trace and is roughly paralleled by both the Santa Clara River and California State Highway 126, from the town of Piru to the coast, just southeast of Ventura. The Oak Ridge thrust continues offshore, out to a point about 20 kilometers due south of Santa Barbara. The offshore segment is associated with a definite zone of active seismicity, though the only known Holocene surface rupture is found well onshore, between the towns of Bardsdale and Fillmore. At its eastern end, the Oak Ridge thrust becomes progressively more difficult to follow and appears to be over thrust by the Santa Susana fault, thus becoming a blind thrust fault. Indeed, the fault associated with the 1994 Northridge earthquake is probably part of the Oak Ridge fault system, as it shares many of the characteristics of this latter fault. This blind thrust fault is known either as the Pico Thrust, named for the Pico Anticline (a geologic fold it is creating), or as the Northridge Thrust, for more obvious reasons. The fault has a probable magnitude of between 6.5 and 7.5.

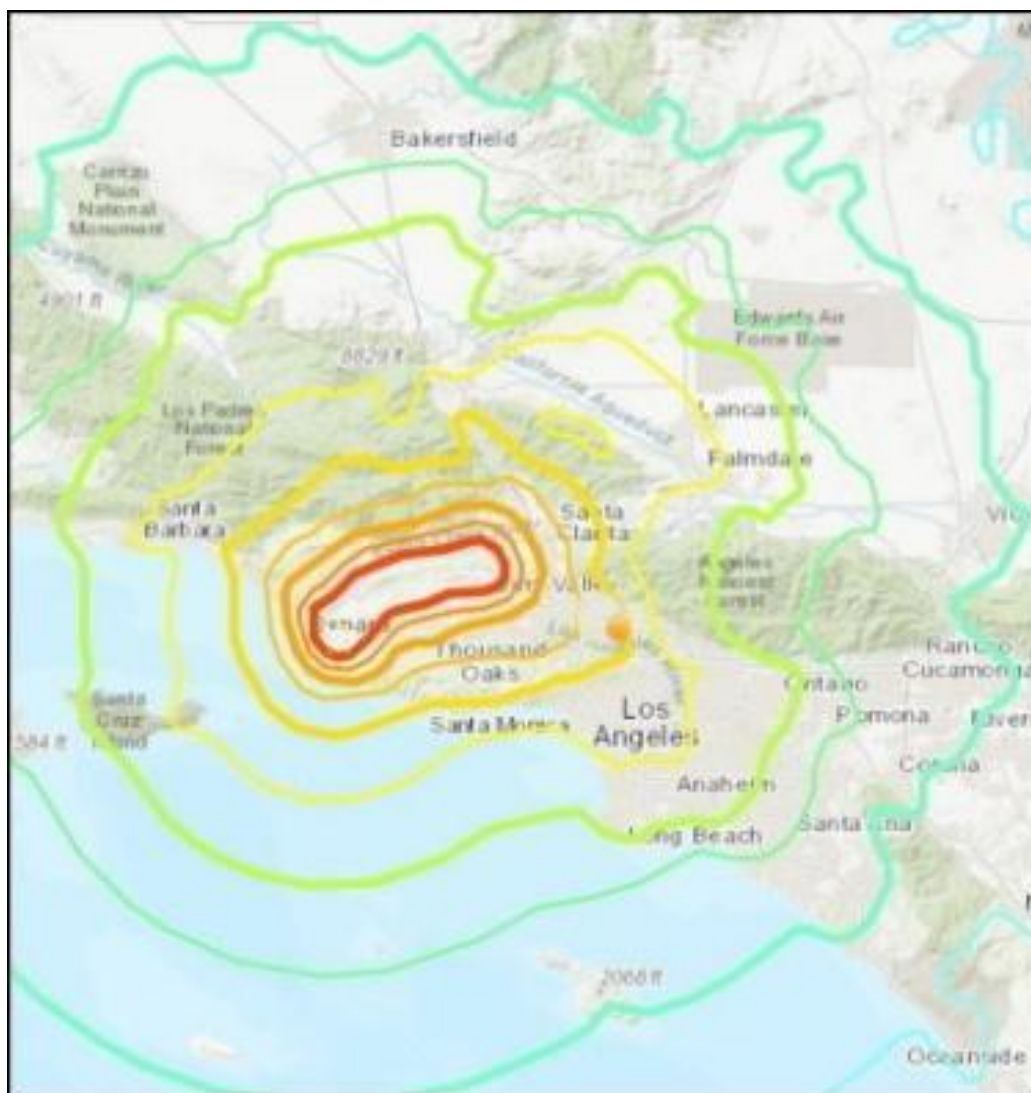


Figure 6 Shake Intensity Map – Oak Ridge Fault M7.2*

* (Source USGS, Scenario Map, Scenario Map, Star indicates City of Burbank)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.7 VERDUGO FAULT** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.7 VERDUGO FAULT** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.1.7 VERDUGO FAULT** below.

4.3.1.7 VERDUGO FAULT

The presence of a considerable number of active faults makes the City vulnerable to a broad range of interrelated earthquake activity. The segment of the San Andreas fault system in closest proximity and potentially of greatest impact, is the Verdugo Fault, which runs through the City in a southeast to northwesterly direction along Highway 5. According to Weber, et. al., (1980) the fault may be most active between Verdugo Wash on the southeast and Big Tujunga Wash on the northwest portion of the Verdugo's western aspect across a distance of approximately 21 km. The fault runs along the southwest edge of the Verdugo Hills as a north-dipping reverse fault just south of the topographic Verdugo Hills range front. The fault curves under the hills and is covered by sediments to a depth of between 500 and 3500 ft. Over the years, urban development has hidden the 2 to 3 meter high scarps found in alluvial fan deposits along its length in both the Burbank and Glendale jurisdictions prior to urbanization. While the surface of the fault is generally apparent from mapped soil displacement, both the depth and width of the fault zone are not well understood. Previously considered capable of producing a M6.9 quake, as modeled in USGS Figure 7, some recent structural analysis indicates that the fault is not a reverse fault but a somewhat less rupture prone left-lateral strike-slip fault (Walls et al., 1998). Essentially this means that there is gradual horizontal creep along the fault that gradually releases tension that would otherwise be released suddenly during a rupture. It is estimated that the Verdugo Fault is capable of producing a maximum M6.8 magnitude earthquake (SCEDC, 2022).

The City's vulnerability to earthquakes on the Verdugo fault is directly related to the nature of an earthquake instance affecting the jurisdiction, impacts of a given event (liquefaction, uplift, lateral movement, etc.), local soil conditions, and the degree to which the structures in the city have been improved to resist damage. While current technology does not allow us to predict the timing of any given event, how the fault will move, or what surface impacts will predominate, we can measure fault slippage and make estimates of the probability of when a quake within a magnitude range will occur. The Verdugo Fault is slipping at a rate of about 0.5mm/yr,

holds the potential for an event ranging from M6.0 to M6.8 (SCEDC, 2022) and has a 0.063% chance of a M6.5 or greater quake occurring over the next 20 years (USGS, 2008).

The Verdugo Fault presents something of a challenge for vulnerability planning as details regarding both its nature and the danger it poses are limited to intermittent studies and informed probabilities. This lack of detail is owed to the fault's limited scale and lack of profound activity within a time scale of either the City or United States' existence. It is only considered active as there has been rupture movement on it within the Holocene—approximately the last 12,000 years. Regardless of whether any impact from an event on the fault is likely in the near future or not, the City government will continue to work toward fostering a safer environment for its residents through close adherence to best practices and improved building codes.

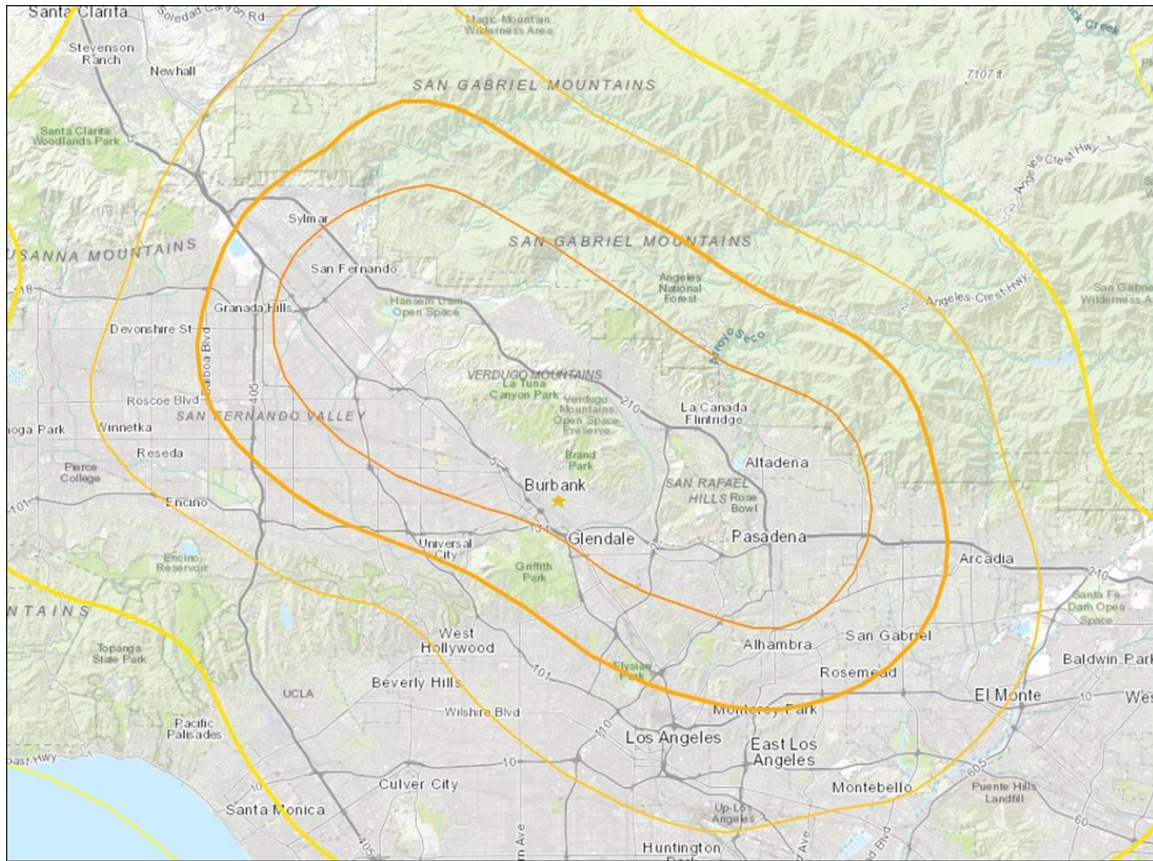


Figure 7 Shake Intensity Map – Verdugo Fault M6.9*

*(Source USGS, Scenario Map, Scenario Map, Star indicates City of Burbank)

4.3.1.8 EARTHQUAKE-RELATED HAZARDS

Direct hazards include ground shaking, landslides, and liquefaction and are the specific hazards associated with earthquakes. The severity of these hazards depends on several factors, including soil and slope conditions, proximity to the fault, earthquake magnitude, and the type of earthquake. There are also consequential hazards that result from these events which can occur, such as building collapse, hazardous material release, structural fire, and other events which are not addressed in depth here

4.3.1.8.1 GROUND SHAKING

Ground shaking is the motion felt on the earth's surface caused by seismic waves generated by the earthquake. It is the primary cause of earthquake damage. The strength of ground shaking depends on the magnitude of the earthquake, the type of fault, and distance from the epicenter--where the earthquake originates. Buildings on poorly consolidated and thick soils will typically see more damage than buildings on consolidated soils and bedrock.

4.3.1.8.2 EARTHQUAKE INDUCED LANDSLIDES

Earthquake induced landslides are secondary earthquake hazards that occur from ground shaking. They can destroy the roads, buildings, utilities, and other critical facilities necessary to respond and recover from an earthquake. Many communities in Southern California have a high likelihood of encountering such risks, especially in areas with steep slopes. Rock falls may happen suddenly and without warning but are more likely to occur in response to earthquake induced ground shaking, during periods of intense rainfall, or as a result of human activities, such as grading and blasting. Ground acceleration of at least 0.10g in steep terrain is necessary to induce earthquake-related rock falls.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.1.8.3 LIQUEFACTION** below.

4.3.1.8.3 LIQUEFACTION

Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or equivalent events. Liquefaction occurs in saturated soils, which are soils in which the space between individual soil particles is completely filled with water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. Prior to an earthquake, the water pressure is relatively low; however, earthquake shaking can cause the water pressure to increase to the point where the soil particles can readily move with respect to each other. As liquefaction only occurs in saturated soil, its effects are most commonly observed in low lying areas. Typically, liquefaction is associated with shallow groundwater, which is less than 50-feet beneath the earth's surface. The area noted in Figure 8 Burbank Liquefaction Potential Area has remained mapped to the same extent as in 1999 on the California Dept. of Conservation's California Earthquake Hazards Zone Application (EQ Zapp), however the regional water tables have dropped owing to long term drought conditions and growing urban use requirements over the last 20 years. What should be taken from the area in this map is that the soils have the potential for liquefaction under the right conditions even if they are not at the time of the release of the current LHMP. It should be noted that settlement and spreading of soil can occur as well and these impacts can be challenging to differentiate from the consequences of liquefaction following seismic events.

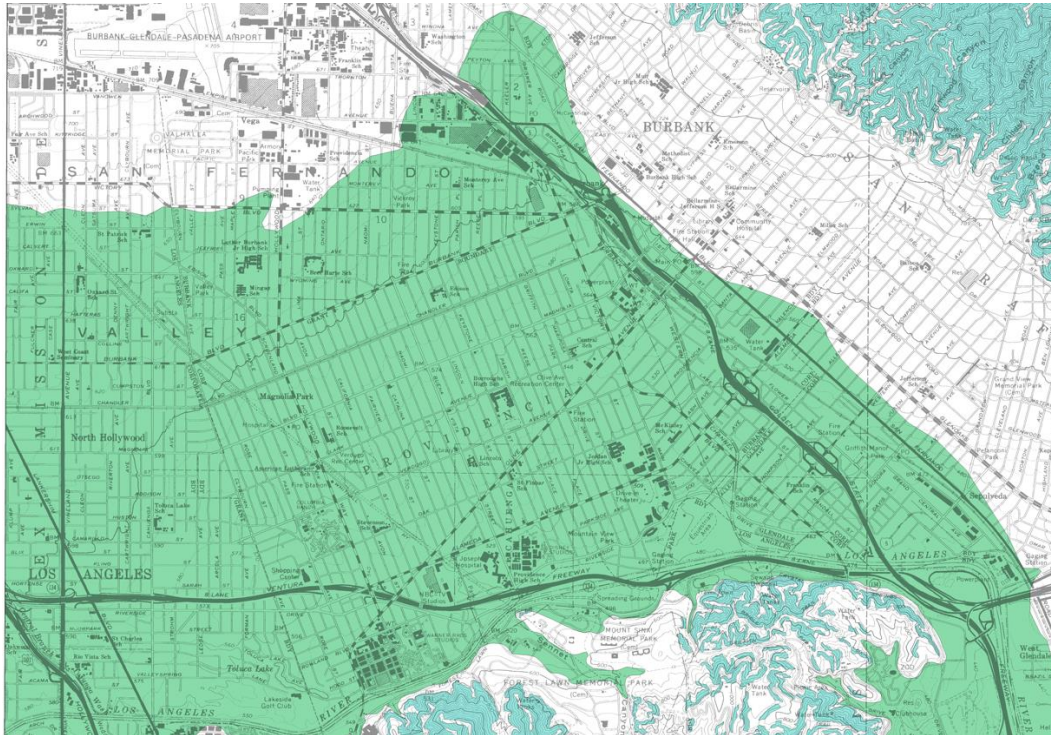


Figure 8 Burbank Liquefaction Potential Area*

* (California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zones, Burbank Quadrangle (Excerpt), Updated Sept 23, 2021)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.1.9 IMPACTS OF EARTHQUAKES IN THE CITY OF BURBANK** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.1.8 IMPACTS OF EARTHQUAKES IN THE CITY OF BURBANK** below.

4.3.1.9 IMPACTS OF EARTHQUAKES IN THE CITY OF BURBANK

Based on the risk assessment, it is evident that earthquakes will continue to have the greatest potential for devastating impacts across the City of Burbank. Impacts that can generally be anticipated in future events include:

- ✓ Injury and loss of life
- ✓ Commercial and residential structural damage
- ✓ Disruption of and damage to public infrastructure
- ✓ Damage to roads/bridges resulting in loss of mobility
- ✓ Negative impact on commercial and residential property values
- ✓ Significant economic impact (jobs, sales, tax revenue) within the community
- ✓ Significant disruption to citizens as temporary facilities and relocations would be needed

Specific physical impacts that can be expected include some or all of the following localized issues: flooding from fire sprinkler system failure, minor hazardous material spills, unsecured residential furniture and water heater displacement, cracked water lines, and natural gas leaks. On a wider scale, electrical distribution system damage, both localized potable or recycled water distribution system disruption, transportation system interruption, sewage system breaks, and combinations/hybrids of these issues could manifest. To be fair, there is a wide range of qualifications to consider with respect to when, if, and what degree the physical impacts above and the economic and casualty numbers below are realized. These qualifications include diverse factors such as economic fluctuations, property valuation, soil types, seismic event timing, and steadily improving structural and mitigation guidance among many others. Regardless of these provisos, the scenario estimates here remain valuable to critical discussions, underscoring challenges, and informing planning.

When addressing either residential buildings or City infrastructure a key vulnerability consideration is that they have been constructed across decades of building codes. As a result, it is reasonable to expect uneven structural performance during seismic events across the built environment with more recent construction likely to perform better due to improved safety standards. A critical component of the City's infrastructure that makes for an illustrative example of this can be found in the campus of Burbank's Providence Saint Joseph Medical Center (PSJMC).

The privately owned, 446 bed facility has had considerable construction completed since it opened in 1943 and unsurprisingly has seen uneven structural performance during seismic events that have more directly affected neighboring Southern California communities. Medical facilities of this type cost tens of millions of dollars to upgrade and the only functionally and financially realistic approach to meeting rising safety standards is with ongoing incremental improvements. At the minimum, PSJMC has had strong compliance with state and federal seismic safety standards such as the Alfred E. Alquist Hospital Act of 1973 and FEMA's suggested seismic performance goals for health care facilities (2014). Further addressing seismic safety, the facility's administration has implemented deep soil stabilization work across the center, added structural upgrades informed by building code updates, and replaced aging structures as demonstrated by 2022's \$73 million state-of-the-art emergency department building. So, while it can be expected that structural performance will remain uneven, the likelihood of buildings critical to the facility remaining not just structurally sound but in full operation following seismic events has been markedly increased.

In a wider and more historical perspective, certain trends since the previous LHMP was published, which have mitigation planning implications, should be noted for Burbank as a whole. The first is that the population of the city has remained relatively stable with the most recent estimate showing approximately 2% growth (Census.gov 2021). It should be noted however, that the daily gross population can fluctuate greatly when visitors and day worker numbers are considered. The second is a migration of residents from single family to multi-family dwellings. This trend is strongly reflected in a jurisdiction wide building inventory reduction of some 840 structures. The City, with key infrastructure depicted in Figure 9 below, is clearly a built out urban environment subject to rapid re-division, renewal, and structural changes under City code and State law. The result of this significant alteration in the urban residential landscape, regardless of more than a decade of construction under earthquake hazard mitigation focused building codes, has been to increase population density and potential risk. This is reflected in the 2022 HAZUS projections for both economic and casualty impacts.

	M7.8 SAN ANDREAS SCENARIO		M6.7 VERDUGO FAULT	
	2011	2022	2011	2022
DAMAGE & ECONOMIC LOSS				
Undamaged	94.7%	80.5%	28%	33.3%
Minor	4.8%	15.7%	55%	39.4%
Moderate	0.5%	< 3.4%	17%	21.4%
Major	< 0.1%	< 0.1%	2.5%	4.5%
Destroyed	<< 0.1%	<< 0.1%	0.5%	1.5%
Total impacted structures	5.3%	19.6%	75%	66.8%
Building economic loss	\$76.8MM	\$297.87MM	\$1,081MM	\$2,140.31MM
Transportation economic loss	\$3.4MM	\$28.76MM	\$21.3MM	\$120.28MM
Utility economic loss	< \$100K	\$93.48MM	< \$100K	\$561.38MM
Total economic loss	\$80.2MM	\$420.11MM	\$1,103MM	\$2,821.97MM
CASUALTIES				
Injuries - 2PM	11	143	473	753
Injuries - 2AM	3	23	154	266
Deaths - 2PM	0	1	19	46
Deaths - 2AM	0	0	5	10

Table 11 Impact Summary Comparison for Earthquake Scenarios

It is well documented that, single family dwelling, which generally are single story wood framed structures, are more resilient to moderate seismic events than multifamily, multistory structures. An additional factor in the performance of the type of multistory structures implemented regionally is that they frequently have soft story ground level construction to comply with parking requirements. These units, while reinforced with seismic events in mind, are still considered less resilient to earthquakes and the 2022 HAZUS calculations reflect this.

The percentages depicted in Table 11 reflect how the respective seismic events would affect the City as a whole while being more relatable than the granular building counts provided by HAZUS software. It is clear from these projections that the damage, economic impact, and casualties are expected to be substantially lower for a large quake (M7.8) on the San Andreas fault than a moderate quake on the proximate Verdugo fault (M6.7). Relatively speaking, a seismic event on the Verdugo Fault would result in approximately three times the number of damaged structures, seven times the economic loss, and between six and twelve times the casualties (injuries and deaths) of that of a considerably stronger event on the distant San Andreas Fault.

Finally, it should be clearly stated that the projections summarized in Table 11 should not be interpreted as the literal results of these earthquake scenarios. They should be taken as guidelines and reasonable estimates of the damages, economic impacts, and casualties for an event whose potential toll might be considerably different depending on a large number of interrelated factors.

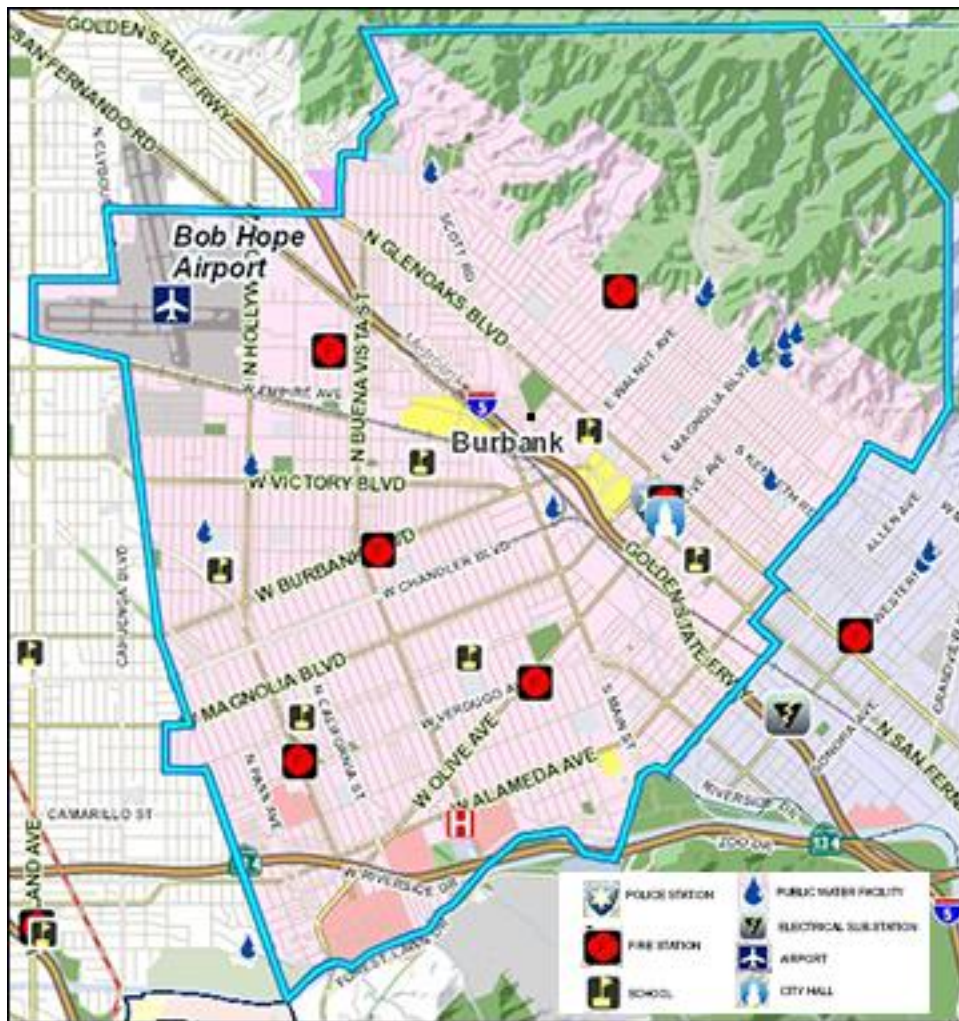


Figure 9 Burbank Critical Infrastructure*

*(GIS-NET Public – Dept. of Regional Planning, Planning and Zoning Information)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction?
(Requirement §201.6(c)(2)(i))

A: See **4.3.2 FLOODS** below.

4.3.2 FLOODS

A flood is an environmental water load that overwhelms natural and/or manmade drainage processes such that a land area which is usually not submerged becomes so for a period sufficient to be hazardous and damaging. Water can pool or be flowing depending on local topology, drainage, soil type, and other factors of the local geography. The extent of damage the water causes is generally a function of its depth, motion, content, and residence time outside its usual channels. While the ponding of water from sustained precipitation is a potential hazard, it is not considered significant for the vast majority of the City of Burbank's area as a result of regional climatic conditions (See Section **4.3.5 DROUGHT**) and extensive water management works.

Runoff, "riverine", water management is addressed by the Burbank Public Works department in conjunction with the Los Angeles County-Flood Control District (LACFCD) and Army Corps of Engineers. That area with the greatest potential to be affected is the conjunction of the Lockheed Drain Channel and the Burbank Western Channel—the latter being a minor tributary of the Los Angeles River. These channels are lined in concrete as flood control works and are scheduled to receive improvements by the Army Corps to further reduce the possibility of bank overtopping in the event of heavy regional precipitation. That area which would be affected is noted as the floodplain designated in the FEMA Flood Insurance Rate Map (FIRM) for the City of Burbank below.

A floodplain is a land area adjacent to a river, stream, lake, estuary, or other water body that is subject to flooding. This area, depending on extent and urban land use changes, acts to store flood waters that exceed drainage channel capacity. The floodplain is made up of two sections: the floodway and the flood fringe. These components of the floodplain are judged with respect to 100-year flood events. The 100-year flood is that event having a one percent chance of being equaled or exceeded in magnitude in any given year. Consequently, the 100-year floodplain is the area adjoining a given watercourse that becomes inundated during the occurrence of a 100-year flood.

4.3.2.1 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

Established in 1968, FEMA's NFIP provides federally backed flood insurance to homeowners, renters, and businesses in communities that adopt and enforce floodplain management ordinances to reduce future flood damage. The City of Burbank adopted a floodplain management ordinance as noted in California Building Code 9-1-2-G102.2 [Appendix-G] and has Flood Insurance Rate Maps (FIRMs) that show floodways, 100-year flood zones, and 500-year flood zones. The Chief Assistant Public Works Director/City Engineer is designated as floodplain administrator and their duties are noted in California Building Code 9-1-2-G103.10 [Appendix-G]. These components of the Burbank Municipal Code are current as of August 10th, 2021 relative to this mitigation plan.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.2.2 NFIP PARTICIPATION** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.2.2 NFIP PARTICIPATION** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.2.2 NFIP PARTICIPATION** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C2

Q: Does the plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))

A: See **4.3.2.2 NFIP PARTICIPATION** below.

4.3.2.2 NFIP PARTICIPATION

The City of Burbank (Community #065018) participates in the NFIP, and its FIRMs were last updated on September 26th, 2008. These maps represent flood risks at that time and did not incorporate planning for floodplain changes due to future development. While FEMA is considering changing that policy, it would be marginally relevant for a built-out city, such as Burbank, where even redevelopment is infrequent and the areas of mapped flood risk area—rated A, AE, or AO—are of limited extent. The area noted in Figures 10, 11, and 12 detail the extent of concern for flooding in Burbank as a result of channel overflow during a 100-year flood event. The extent is limited based on current data and may be reduced further as more recent climate data enters the calculated record for what constitutes a 100-year flood in the region.

The FEMA floodplain maps delineate the 100-year floodplain boundaries and other potentially flood-prone areas as defined above. The 100-year flood is the flood with a 1% chance of being exceeded in any given year. A 1% annual chance of flooding corresponds to about a 26% chance of flooding in a 30-year time period. Detailed floodplain boundaries are shown on the Flood Insurance Rate Maps.

The FEMA Flood Insurance Study and Flood Insurance Rate Maps include a large number of terms of art and acronyms. A glossary of the terms used in flood hazard mapping is available on the FEMA website in the following document:

http://www.fema.gov/pdf/floodplain/nfip_sg_appendix_d.pdf



Figure 10 Los Angeles County FIRMette, Panel 1328*

*(Source FEMA, FEMA Flood Map Service Center)

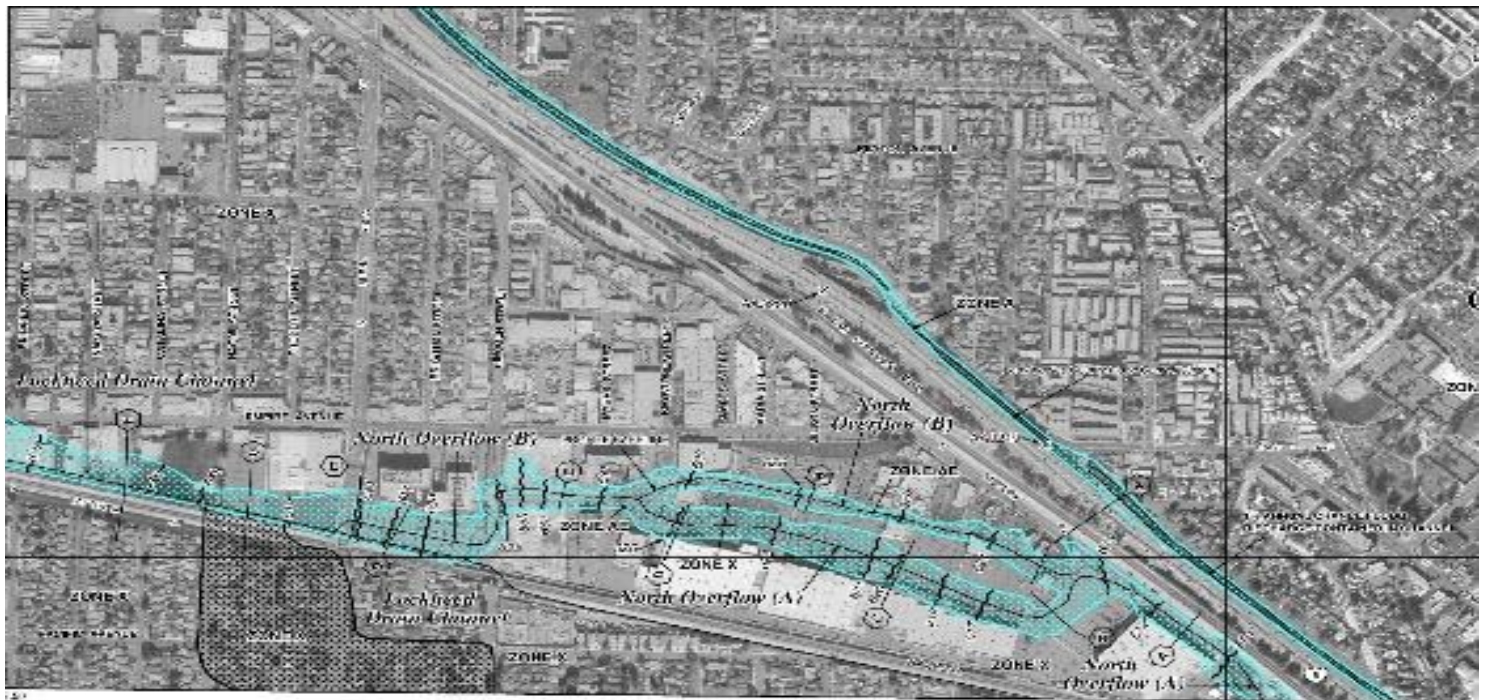


Figure 11 Los Angeles County FIRMette, Panel 1329*

*(Source FEMA, FEMA Flood Map Service Center)



Figure 12 Los Angeles County FIRMette, Panel 1337*

*(Source FEMA, FEMA Flood Map Service Center)

The City's Non-Special Flood Hazard Area (NSFHA) is not in any imminent danger from flooding as a result of geography, ongoing water management improvements, and increasingly common drought conditions throughout the region; however, it is important to note that structures within an NSFHA are still at some risk as more than 20% of all flood insurance claims nationwide come from areas outside of mapped high-risk flood zones. With this in mind, the City will continue to adopt and enforce building codes, as noted above, that protect the citizens and property within its jurisdiction.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B4

Q: Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))

A: See **4.3.2.3 REPETITIVE LOSS PROPERTIES** below.

4.3.2.3 REPETITIVE LOSS PROPERTIES

Repetitive Loss Properties (RLPs) are most susceptible to flood damages; therefore, they have been the focus of flood hazard mitigation programs. Unlike a countywide program, the Floodplain Management Plan (FMP) for repetitive loss properties involves highly diversified property profiles, drainage issues, and property owner's interest. It also requires public involvement processes unique to each RLP area. The objective of an FMP is to provide specific potential mitigation measures and activities to best address the problems and needs of communities with repetitive loss properties. A repetitive loss property is one for which two or more claims of \$1,000 or more have been paid by the National Flood Insurance Program (NFIP) within any given 10-year period. According to FIRM map resources and a lack of recorded loss within the noted 10-year window, none of the properties within the City of Burbank borders are designated to be within the RPL category.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.2.4 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.2.4 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.2.4 LOCAL CONDITIONS** below.

4.3.2.4 LOCAL CONDITIONS

The potential for flooding in Burbank is primarily related to one or more major winter rain events causing flood control channels to spill over bank. Although this type of flooding has not occurred in the City since modern flood controls were implemented, FIRMs designate the areas illustrated in Figures 10, 11, 12 as being within the 100-year floodplain. The City's 2011 LHMP describes these areas of the 100-year floodplain as follows:

- ✓ A narrow area west of Victory Boulevard in the vicinity of South Main Street
- ✓ Several limited areas south of Highway 134 near Burbank's southern boundary
- ✓ An area adjacent to the Lockheed Drain Channel near Empire Avenue and W. Vanowen St. Street from near the Burbank Airport eastwards towards Interstate 5, then southward in the vicinity of Victory Boulevard

The possibility of flooding in the latter area is expected to be reduced upon completion of soon to be scheduled Army Corps of Engineer flood control improvements. Furthermore, it should be stressed that the extent of areas within the FEMA mapped 100-year floodplains have far larger adjoining areas that are mapped outside even the 500-year flood area (Zone X). The majority of the City is in fact categorized as Zone X with the exception of one section in northeastern Burbank where no FIRM analysis has been conducted (Zone D) due to its elevation in the Verdugo Hills.

There are no large dams in the immediate vicinity of Burbank and water storage works within the City are limited to relatively small potable water storage sites. Reservoirs are, for the sake of hazard analysis, considered dams and as such we note that minor "dams" exist in the jurisdiction: Reservoir 4 and Reservoir 5 being the largest of these holding units and the only ones with a limited potential flood risk.

The inundation maps depict scenarios in which there were catastrophic structural failures in Reservoir 4's east side, Reservoir 4's south side, Reservoir 5's east side, Reservoir 5's south side, or Reservoir 5's west side in Figures 13, 14, 15, 16, and 17 respectively. In addition to these reservoirs, there are several "debris basins" within the City with the largest identified as the Stough and Lower Sunset Debris Basins. These structures are works designed to capture sediment, gravel, boulders, and vegetative debris that are washed out of the canyons during storms but allow water to flow into the downstream storm drain system, thereby reducing flood risk for communities downstream of the facility. They are typically located at the mouths of canyons and are key components of the Los Angeles County Flood Control District's flood risk management system. It is notable that these basins do not normally either retain water or have the potential for catastrophic failure as a reservoir.

In the event flooding were to occur, the geographical areas affected include those delimited in figures 13 through 17 below related to failure of water containment structures and figures 10 through 12 above related to bank overflow due to exceptional regional precipitation. For the figures that outline the areas affected by sudden containment failure, there is potential for highly localized property damage and personal injury mainly at the initial release where water levels would be highest. In an effort to mitigate this danger, there has been ongoing maintenance and upgrade work as part of the City's CIP budget for storage facilities (See adopted CIPs FY2018-19 thru 2022-23 for recent individual project funding and work detail examples) within the jurisdiction. As these units are small scale water retention locations, the released water can reasonably be expected to drain expeditiously into the subsurface water drainage system as it spreads out.

It should be noted that Burbank has instituted mitigation efforts for sudden flooding events that include educational material, public services, and street design. Educational material for homeowners and a limited supply of free sandbags to residents who are unable to acquire them from local commercial sources are available through the City's Public Works Department. In areas prone to heavy runoff from sudden high precipitation events, geographically relevant roadways are designed to contain and channel runoff such that water flow is directed into the City's drainage system. A prime example of this design can be found in Burbank's Country Club Drive which accesses the Verdugos and can act as a drainage channel for flooding.

Flooding is the most common disaster event in the United States and while a disaster declaration as a result of this type of event is unlikely in Burbank, there are conditions in which flood waters could impact transportation routes and hence emergency response services indirectly with traffic complications. Emergency response vehicles are not expected to be directly affected. As a caveat we should remember that evolving urban surface conditions within, up, and downstream of Burbank, seasonal and climatic precipitation variability, and flood protection measure updates can act to influence the flood potential for any given or series of precipitation events.

While neither flood maps from Los Angeles County's Public Works Department or FEMA's Flood Map Service Center indicate extensive areas affected by flooding there are key transportation routes in close proximity to or running through lands which have that potential during extended periods of heavy precipitation. Flooding in these locations can impact both residential and commercial traffic at the locations noted below.

- Burbank Roadways:
 - The intersection of Burbank Boulevard, Victory Boulevard and Victory Place
 - North Buena Vista Street
 - Griffith Park Drive between Chandler Boulevard and Olive Avenue
 - Virginia Avenue between Olive Avenue and Oak Street
 - Oak Street between Virginia Avenue and Glenwood Place
 - The intersection of Lake Street and Chestnut Street
 - Empire Avenue in the vicinity of the Burbank airport
 - Lincoln at the Interstate 5 freeway off ramp*
 - Country Club Drive and Harvard Canyon Road above the golf course
 - Southern Pacific Railway crossings:
 - Railroad above Hollywood Way at Empire*
 - Railroad above Hollywood Way at San Fernando*
 - Railroad at the San Fernando pedestrian tunnel*
 - Railroad above Victory Place*
 - Railroad above Alameda*
- *(Storm water pumps have been installed to mitigate flooding)

In a general hazard perspective, the impacts on the jurisdiction from flooding are expected to be minimal as a result of robust flood control measures and profound drought conditions across the region which reduce both the number and severity of precipitation events. Historically, the City does not have any recent incidents of flooding which have resulted in either minor widespread or severe localized damage. The last such events occurred in 1938 with the Los Angeles river over spilling its banks and 1941 when Lockheed Corporation factory buildings were damaged. There are no documented resident casualties since the 1938 event nor extensive damage since the 1941 event respectively as a result of flooding and none are currently anticipated due to extensive flood control works, drier conditions, and modern forecasting and alerting systems. Finally, there are no properties in the jurisdiction that are categorized as repetitive loss buildings within the FEMA mapped flood zones noted as type A, AE, or AO.

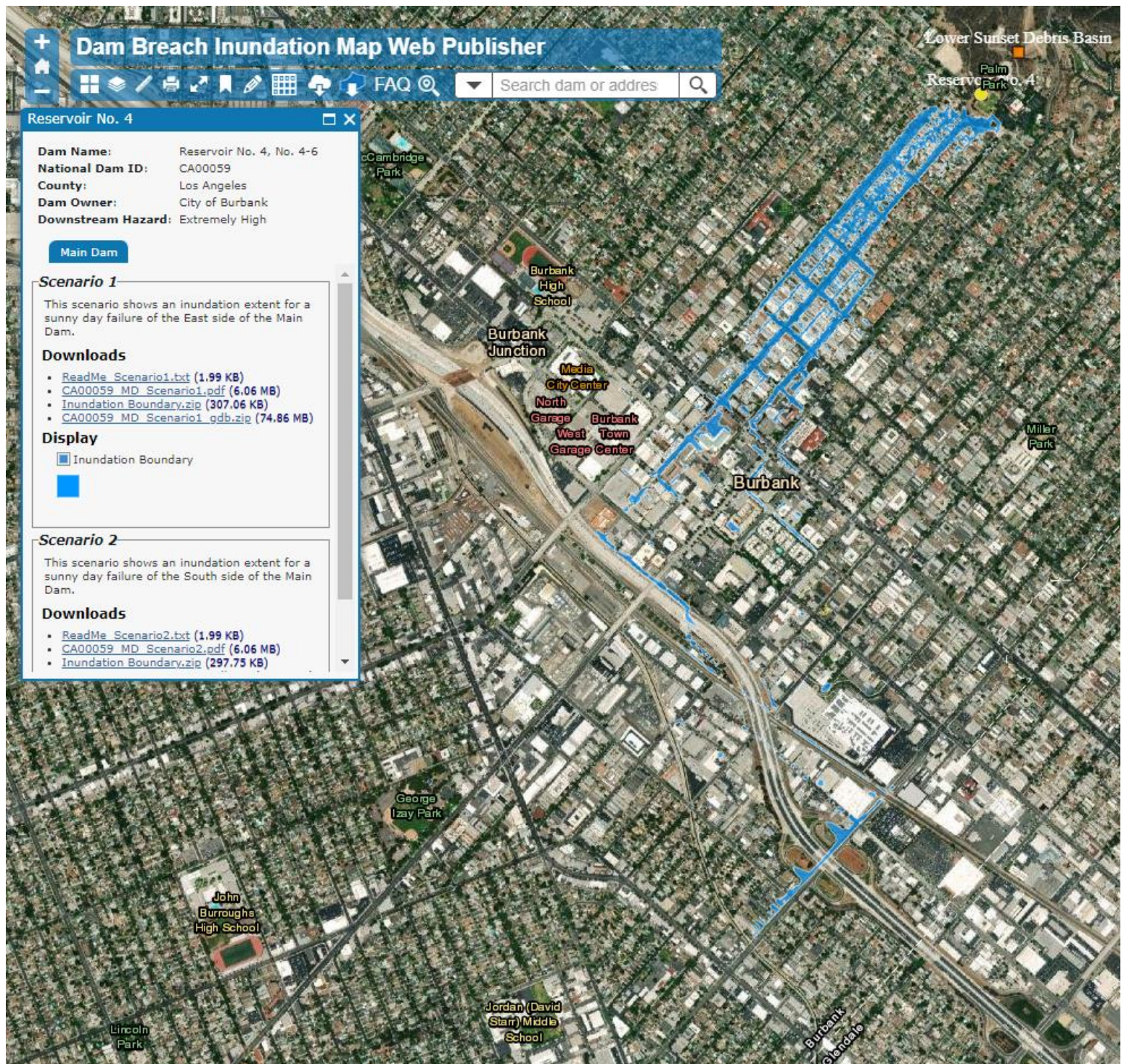


Figure 13 Reservoir 4 East Side Failure Inundation Map

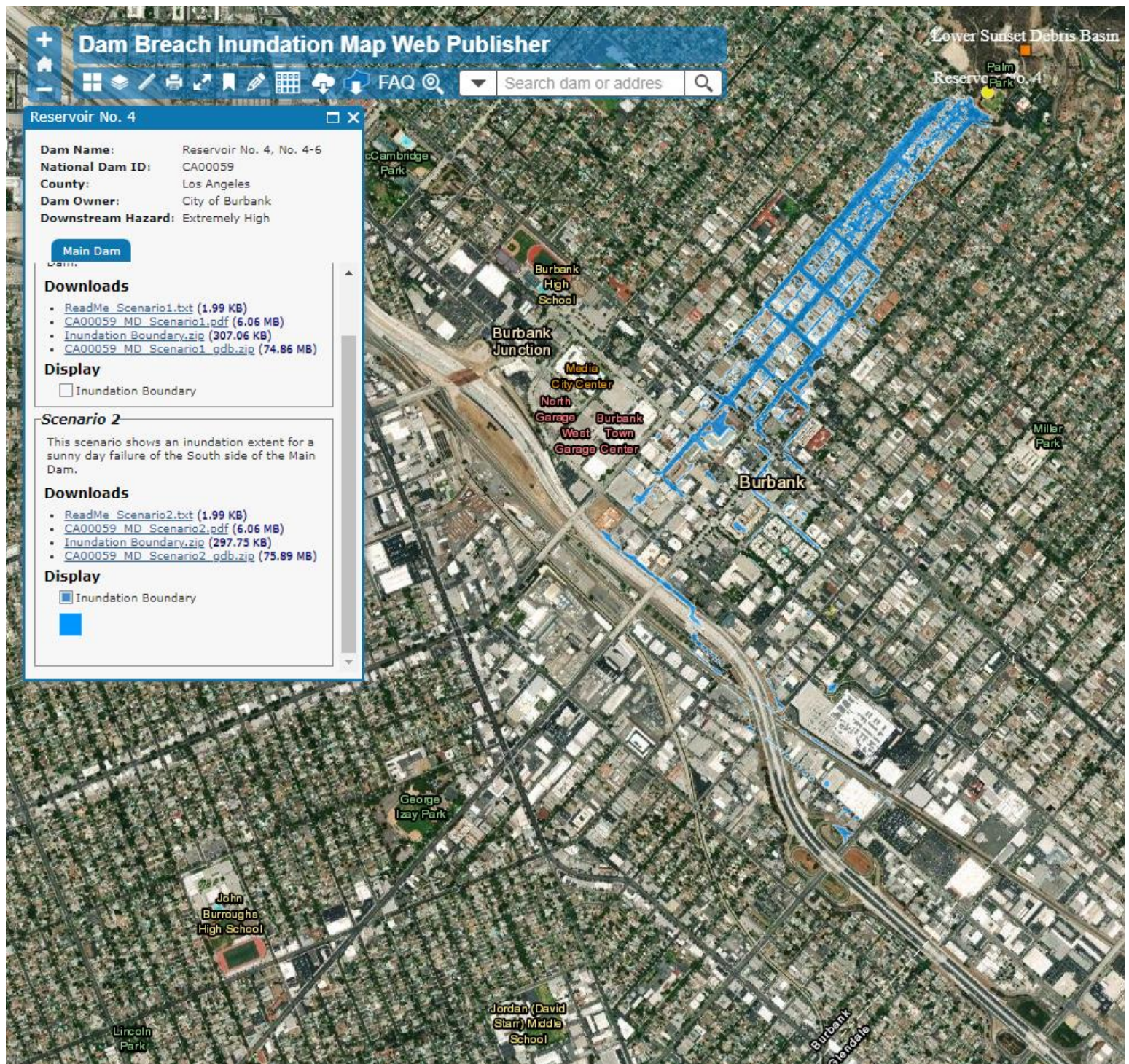


Figure 14 Reservoir 4 South Side Failure Inundation Map

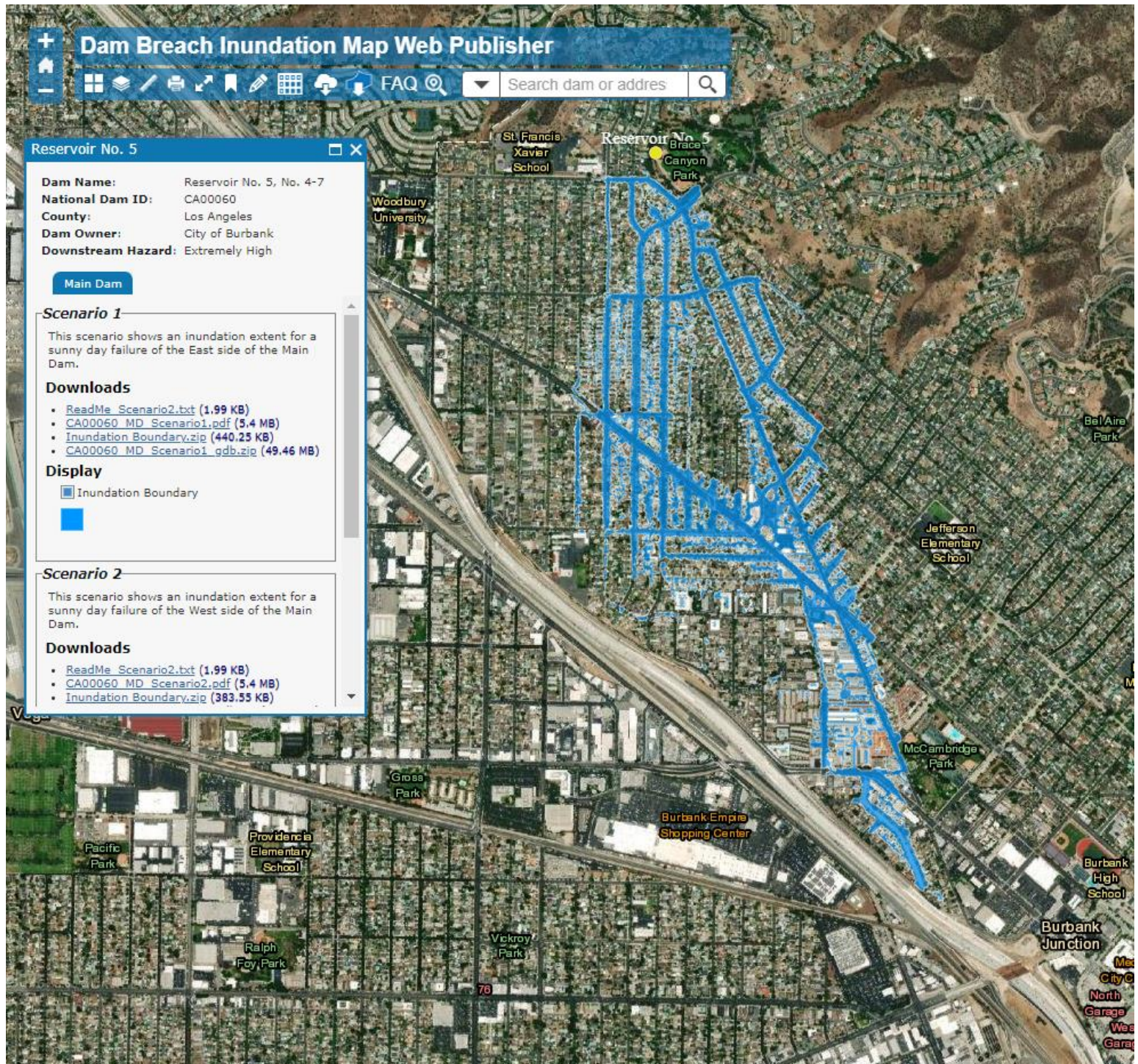


Figure 15 Reservoir 5 East Side Failure Inundation Map

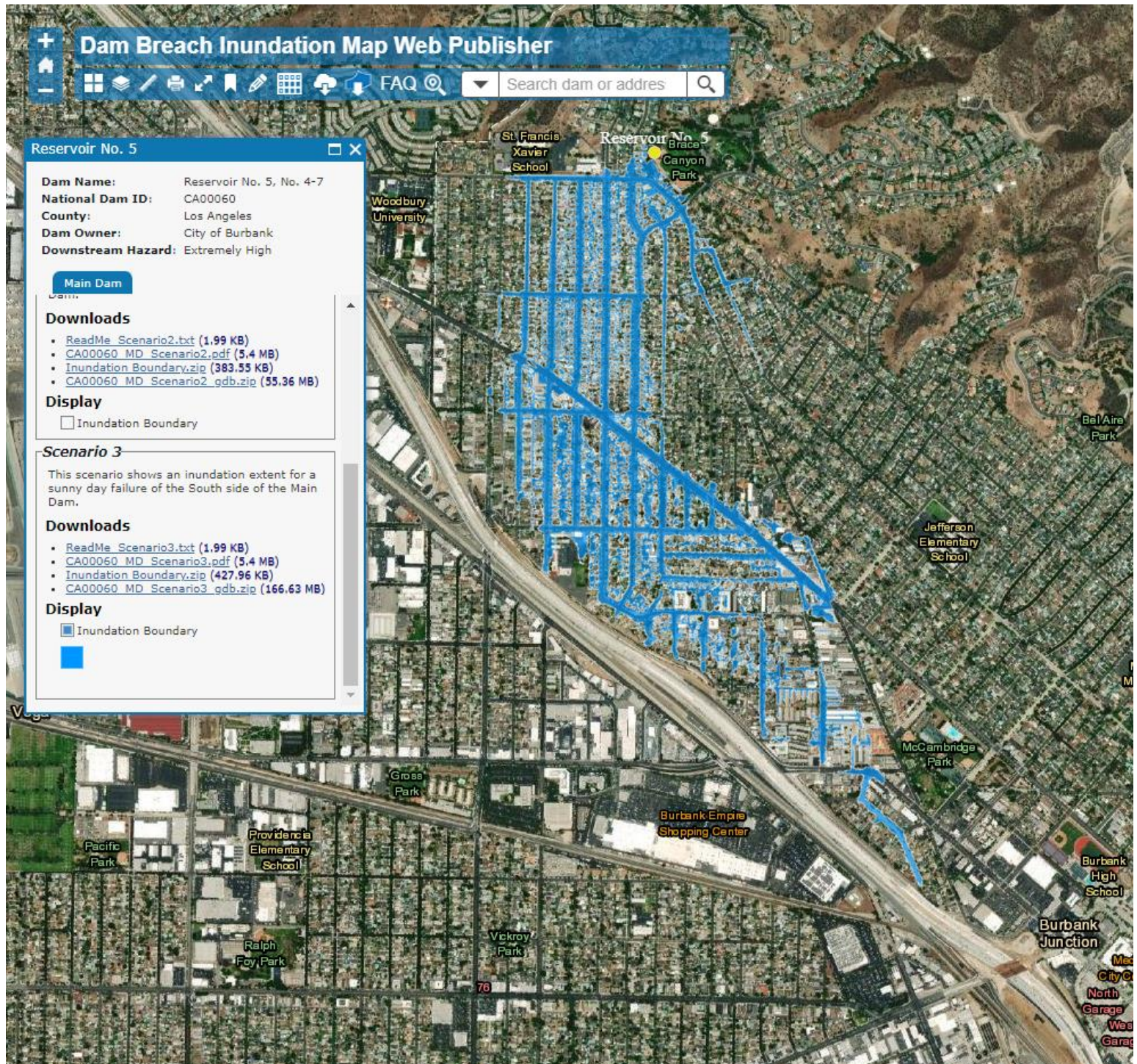


Figure 16 Reservoir 5 South Side Failure Inundation Map

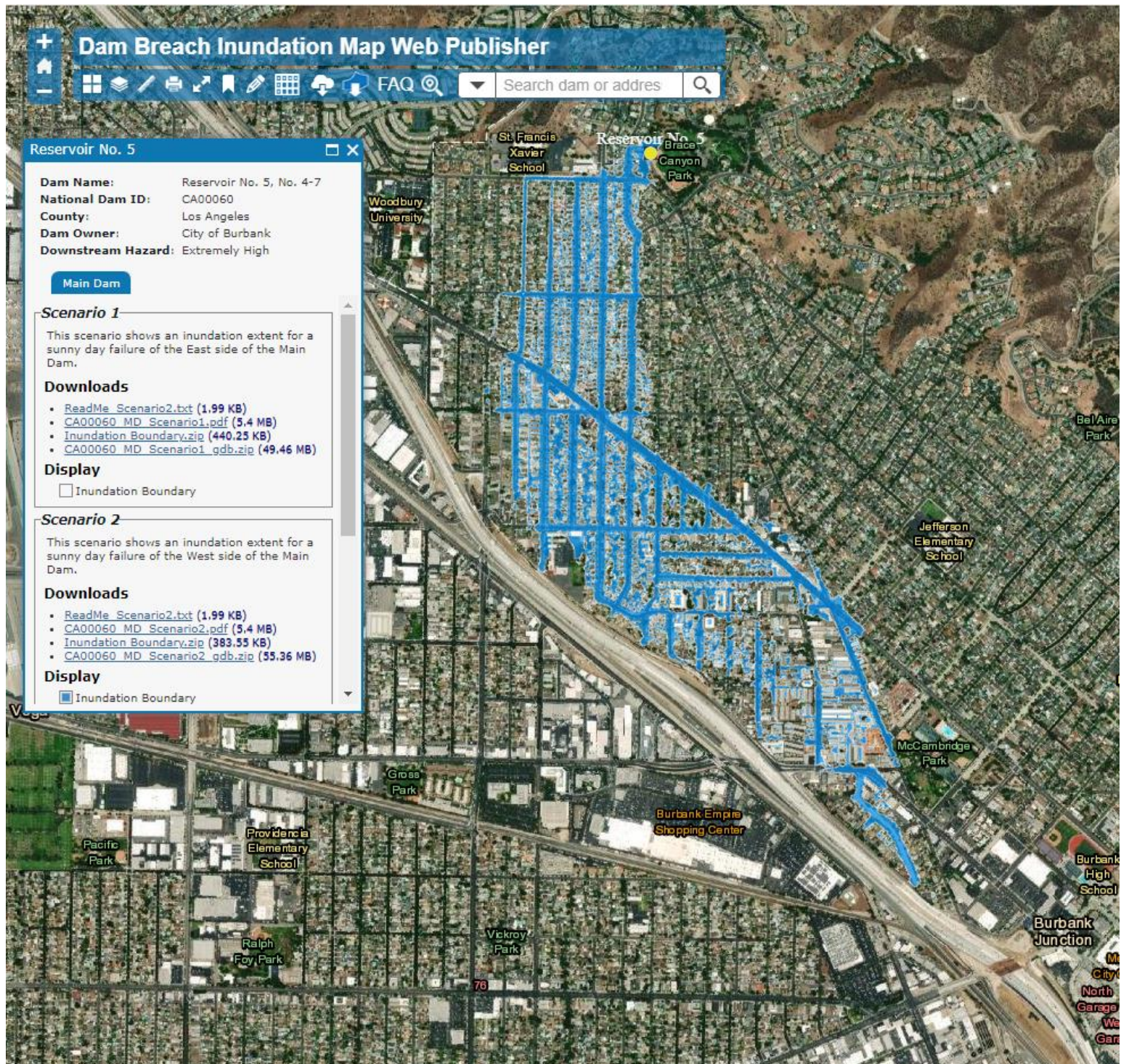


Figure 17 Reservoir 5 West Side Failure Inundation Map

Taking into consideration the extensive flood control works throughout the city, high percentage of the land that is outside the 100-year floodplain, and prevalence of severe drought across the region, it would appear that floods in the jurisdiction are unlikely. However, remembering that floods are the most common disaster in the United States and ongoing climate change is responsible for a higher degree of variability with respect to both type and severity of local weather, ongoing reevaluation of vulnerabilities to flooding will remain a consideration.

4.3.3 WINDSTORMS

Santa Ana winds are generally defined as warm, dry winds that blow from the east or northeast offshore. These winds occur below the passes and canyons of the coastal ranges of Southern California and in the Los Angeles and Orange County basins. Santa Ana winds often blow with exceptional speed in the Santa Ana Canyon. Forecasters at the National Weather Service offices in Oxnard and San Diego usually place speed minimums on these winds and reserve the use of "Santa Ana" for winds greater than 25 knots where 1 knot is 1.15MPH or 1.85KPH. These winds accelerate to 35 knots as they move through canyons and passes with gusts as high as 60 knots.

The complex topography of Southern California combined with various atmospheric conditions create numerous scenarios that may cause widespread or isolated Santa Ana events. Commonly, Santa Ana winds develop when a region of high pressure builds over the Great Basin (the high plateau east of the Sierra Mountains and west of the Rocky Mountains, including most of Nevada and Utah). Clockwise circulation around the center of this high-pressure area forces air downslope from the high plateau. The air warms as it descends toward the California coast at the rate of five degrees Fahrenheit per thousand feet due to compressional heating. The air originates in an arid climate, and its relative humidity decreases further as its temperature rises.

These regional winds typically occur from October to March as depicted in Figure 18. According to most accounts, they are named either for the Santa Ana River Valley where they originate, or for the Santa Ana Canyon, southeast of Los Angeles, where they are known to accelerate though. For scale and perspective we have included the widely known Beaufort Wind Scale, reproduced with land wind speeds in Table 12 below.

Force	Speed (MPH/KPH)	Description	Specification
0	0-1 / 0-2	Calm	Calm; smoke rises vertically.
1	1-3 / 2-5	Light Air	Direction of wind shown by smoke drift, but not by wind vanes.
2	4-7 / 6-11	Light Breeze	Wind felt on face; leaves rustle; ordinary vanes moved by wind.
3	8-12 / 12-19	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag.
4	13-18 / 20-29	Moderate Breeze	Raises dust and loose paper; small branches are moved.
5	19-24 / 30-39	Fresh Breeze	Small trees in leaf begin to sway; crested wavelets form on inland waters.
6	25-31 / 40-50	Strong Breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.
7	32-38 / 51-61	Near Gale	Whole trees in motion; inconvenience felt when walking against the wind.
8	39-46 / 62-74	Gale	Breaks twigs off trees; generally, impedes progress.
9	47-54 / 75-87	Severe Gale	Slight structural damage occurs (chimney-pots and slates removed)
10	55-63 / 88-101	Storm	Seldom experienced inland; trees uprooted; considerable structural damage occurs.
11	64-72 / 102-116	Violent Storm	Very rarely experienced; accompanied by wide-spread damage.
12	72-83 / 117-134	Hurricane	Saffir-Simpson Hurricane Wind Scale applicable at this speed and higher.

Table 12 Beaufort Wind Scale*

*(Source: Weather.gov)

4.3.3.1 WINDSTORM IMPACTS

Windstorm events can be expected, perhaps annually, across widespread areas of the region which can be adversely impacted during a windstorm event. This can result in the involvement of emergency response personnel during wide-ranging windstorm or microburst tornadic activity.

4.3.3.1.1 LIFE AND PROPERTY

Both residential and commercial structures with weak reinforcement are susceptible to damage. Wind pressure can act as a direct assault on a structure, pushing walls, doors, and windows inward. Conversely, passing currents create forces that pull building components and surfaces outward. With extreme wind forces, roofs can be displaced, or entire buildings can collapse resulting in considerable local damage and injury or death to both occupants and those nearby.

4.3.3.1.2 UTILITIES

Historically, falling trees are the major cause of power outages in the project area. Windstorms, such as strong microbursts and Santa Ana Wind conditions cause flying debris and downed utility lines. For example, tree limbs breaking from winds of only 45MPH/72KPH can be thrown over 75-feet, while overhead power lines are damaged in even relatively minor windstorm events. Furthermore, falling trees bring electric power lines down to the pavement, creating the potential for lethal electric shock and fires.

4.3.3.1.3 INFRASTRUCTURE

Windstorms damage buildings, power lines, and other infrastructure, due to falling trees and branches. During the rainy season, particularly rare heavy precipitation events, saturated soils result in trees becoming unstable and more vulnerable to uprooting during high wind events.

4.3.3.1.4 FIRE THREAT

Perhaps the greatest danger from windstorm activity in the project area comes from the combination of the Santa Ana winds with the major fires that occur every few years in the urban/wildland interface. With the Santa Ana winds driving the flames, the speed and reach of the conflagration can be greatly enhanced making both civil population warning and firefighting activities difficult if not impossible.

4.3.3.1.5 TRANSPORTATION

Windstorm activity impacts local transportation in addition to the problems caused by downed trees and electrical wires blocking streets and highways. During periods of extremely strong Santa Ana winds, major highways can be temporarily closed to truck and recreational vehicle traffic; however, these disruptions are typically not long lasting, and they do not carry a severe long-term economic impact on the region.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.3.2 PREVIOUS OCCURRENCES OF WINDSTORMS IN THE CITY OF BURBANK** below.



Figure 18 Santa Ana Wind Direction and Impact Area*

*(Source AccuWeather)

4.3.3.2 PREVIOUS OCCURENCES OF WINDSTORMS IN THE CITY OF BURBANK

The City has not directly experienced devastation from windstorm hazards; however, neighboring communities in the foothills of the San Gabriel Mountains endured toppled trees, power outages, and millions of dollars' worth of damage due to the 2011 Santa Ana winds. Based on local history, most incidents of high wind in the County of Los Angeles are the result of Santa Ana and El Niño related conditions. While high-impact wind incidents are not frequent in the area, significant wind events and sporadic tornado activity have been known to negatively affect the county. Between 2015-2019, the County of Los Angeles experienced 49 wind related events with gusts reaching 79MPH/127KPH. Although the region did not suffer fatalities or serious injuries, high winds fueled the devastating Thomas Fire (2017).

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.3.3 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.3.3 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.3.3 LOCAL CONDITIONS** below.

4.3.3.3 LOCAL CONDITIONS

Incidents of high winds in the City are primarily the result of Santa Ana conditions. These conditions and related damaging events have been known to negatively impact the local Southern California communities. Windstorm events can be expected, perhaps even annually, across widespread areas of the region as a result of progressing climate change. The City and surrounding area can be adversely impacted during a windstorm event to a limited extent by direct damage and profoundly in relation to increasing the extent, likelihood of, and damage by instances of wildfire.

Santa Ana's occur from fall through early spring with the strongest winds typically occurring in late autumn. The City is not widely vulnerable to direct wind damage but may be impacted by downed trees, electrical and communication services interruption in those areas where lines have not been moved underground, and blocked roadways that interfere with responding emergency personnel. Certainly trees have a higher probability of being affected directly by severe wind conditions in the Verdugo Hills and along the wildland/urban interface as delimited in Figure 22: Burbank Very High Fire Hazard Severity Zone, however their contribution to hazard vulnerability is constrained by their scarcity. The Verdugo Hills are mostly chaparral and scrubs with trees such as coast live oaks, California bay laurel, and sycamore limited to shadier north slope canyons. Along the wildland/urban interface, e.g. Cabrini Dr. and Villa Cabrini Park, and along service access routes into the Hills, e.g. Chandler Fire Road, there are scattered examples of both native and invasive tree species, however access to natural or restricted municipal water resources prevents the existence of anything that could be considered forested land.

Additionally, unreinforced local structures are susceptible to toppling damage and variable wind pressure can directly damage even moderately reinforced structures should severe conditions persist. If a severe wind event strikes the community, downed trees, electrical/data service interruption, and blocked roadways can be hindrances to responding emergency personnel. In general, any of these conditions can result in the reduced availability of emergency response personnel across the region and access to mutual aid resources but not to the same degree as found in geographies that support more extensive wild and municipal tree growth.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.3.4 IMPACT OF WINDSTORMS IN THE CITY OF BURBANK** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.3.4 IMPACT OF WINDSTORMS IN THE CITY OF BURBANK** below.

4.3.3.4 IMPACT OF WINDSTORMS IN THE CITY OF BURBANK

Based on the risk assessment, it is evident that windstorms will continue to have potentially devastating economic impacts to the City of Burbank. Impacts that are not quantified, but can be anticipated in future events, include:

- ✓ Injury and loss of life
- ✓ Commercial and residential structural damage
- ✓ Disruption of and damage to public infrastructure
- ✓ Secondary health hazards e.g., toxic chemical spills
- ✓ Damage to roads/bridges resulting in loss of mobility
- ✓ Negative impact on commercial and residential property values
- ✓ Significant economic impact (jobs, sales, tax revenue) upon the community
- ✓ Significant disruption to citizens as temporary facilities and relocations would be needed

Geographically, Burbank is located in the eastern end of the San Fernando Valley and as such is subject to seasonal Santa Ana wind conditions. The majority of the City benefits from its position in the lee of the Verdugo Hills with respect to such winds and this coupled with well enforced modern building codes reduces their direct impact. It should be noted however that at least two factors may result in more pronounced hazardous conditions due to windstorms in the future. The first is an increase in their prevalence from climate change leading to a higher degree of variability in local weather conditions. This may result in an increase in both the number and severity of windstorms across the Los Angeles region. The second is that a synergy with drier conditions due to regional drought may set the City up for more extensive and more rapidly spreading wildfire during high wind events. To be clear, while there is no way to accurately forecast either the frequency or severity of events for which no historic record exists, we can envision increasingly hazardous conditions due to windstorms as evolving climatic conditions influence local weather events. Looking to more vulnerable adjoining communities subject to damage from Santa Anas for a glimpse of potential impacts, damages can range from less than \$100,000 to tens of millions of dollars as a result of either their direct impact or synergy with drought conditions and wildfire.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.4 EPIDEMIC/PANDEMIC/VECTOR-BORNE (EPV) DISEASE** below.

4.3.4 EPIDEMIC/PANDEMIC/VECTOR-BORNE (EPV) DISEASE

The 2018 California State Hazard Mitigation Plan, as noted by the California Department of Public Health, identified epidemics, pandemics, and vector borne (EPV) diseases as specific hazards having a profound impact throughout the State. This statement has proven both timely and accurate. According to the Centers for Disease Control (CDC), an epidemic refers to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population area. A pandemic refers to an epidemic that has spread over several countries or continents, usually affecting a large number of people. Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors—living organisms that can transmit infectious pathogens between humans or from animals to humans. The recurrence interval for EPV disease is an ongoing challenge for epidemiologists as factors that include climate change, increased human-wildlife contact, growing human movement globally, and disease variation over time result in non-seasonally constrained outbreaks. Inter-pandemic intervals for influenza are roughly 40 years (NIH, 2010) based on historical records however other diseases, particularly novel strains, have a more limited historical records to give clues as to when they might reemerge as public health crises.

4.3.4.1 SEASONAL INFLUENZA

Seasonal influenza, also known as “the flu”, is a disease that attacks the respiratory system (nose, throat, and lungs) in humans. Seasonal influenza occurs annually. In the United States, the influenza season typically occurs from October through May, peaking in January or February with yearly epidemics of varying severity. Although mild cases may be similar to a viral “cold,” influenza is typically much more severe. Influenza usually comes on suddenly; may include fever, headache, tiredness (which may be extreme), dry cough, sore throat, nasal congestion, and body aches; and can result in complications, such as pneumonia. Persons aged 65 years and older, those with chronic health conditions, pregnant women, and young children are at the highest risk for serious complications, including death.

4.3.4.2 PANDEMIC INFLUENZA

A pandemic influenza occurs when a new influenza virus, for which there is little or no human immunity, emerges and spreads on a worldwide scale, infecting a large proportion of the human population. The 20th century saw three such pandemics. The most notable pandemic was the 1918 Spanish influenza pandemic that was responsible for 20 to 40 million deaths throughout the world. There have been two pandemics in the 21st century: H1N1 in 2009 and the most recent COVID-19 outbreak in 2019. As demonstrated historically and recently, pandemic influenza has the potential to cause serious illness and death among people of all age groups and have a major impact on society. These societal impacts include significant economic disruption that can result due to death, loss of work time, and the costs of treating or preventing the spread of influenza.

4.3.4.3 H1N1 INFLUENZA

In 2009, a pandemic of H1N1 influenza, popularly referred to as “The Swine Flu,” resulted in many hospitalizations and deaths. Pandemic H1N1 influenza is spread in the same way as seasonal influenza, from person to person through coughing or sneezing by infected people. In April 2009, two children living more than 100 miles apart in Southern California came down with the flu. By mid-April, their illnesses had been diagnosed as being caused by a new strain of H1N1 influenza. Persons infected with H1N1 experienced fever and mild respiratory symptoms, such as coughing, runny nose, and congestion. In some cases, symptoms were severe and included diarrhea, chills, and vomiting, while in rare cases respiratory failure occurred. The H1N1 virus caused relatively few deaths in humans. In the United States, it caused fewer deaths (between 8,870 and

18,300) than seasonal influenza, which, based on data for the years 2014–2019, causes an average of about 40,000 deaths each year. The H1N1 virus was most lethal in individuals affected by chronic disease or other underlying health conditions.

4.3.4.4 COVID-19

As of 2022, the CDC is responding to a pandemic of respiratory disease spreading from person to person caused by a novel (new) coronavirus. The disease has been named “Coronavirus Disease 2019” (COVID-19). Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between individuals such as was the case with Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

According to the CDC, many of the patients at the epicenter of the outbreak in Wuhan, Hubei Province, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Person-to-person spread was subsequently reported outside Hubei and in countries outside China, including in the United States. Most international destinations now have ongoing community spread with the virus that causes COVID-19, as does the United States. On March 4th, 2020, Governor Gavin Newsom declared a state of emergency in California in response to the COVID-19 outbreak.

On March 19th, 2020, Governor Newsom issued an executive order directing all residents immediately to heed current State public health directives to stay home, except as needed to maintain continuity of operations of essential critical infrastructure sectors. This pandemic is an ongoing event that has demonstrated a lack of seasonality similar to influenza. COVID-19, as a result of variant strains of the virus, will likely continue to be endemic to human populations worldwide until such time as appropriate health measures and vaccines are administered globally.

4.3.4.5 AVIAN INFLUENZA

Avian Influenza, commonly referred to as “Bird Flu,” remains a looming pandemic threat. Avian Influenza primarily spreads from birds to birds and rarely to humans. Public health experts continue to be alert to the possibility that an avian virus may mutate or change so that it can be passed from birds to humans, potentially causing a pandemic in humans. Some strains of the Avian Influenza could arise from Asia or other continents where people have very close contact with infected birds. This disease could have spread from poultry farmers or visitors to live poultry markets who had been in very close contact with infected birds and contracted fatal strains of Avian Influenza. Thus far, Avian Influenza viruses have not mutated and have not demonstrated easy transmission from person to person; however, if Avian Influenza viruses were to mutate into a highly virulent form and become easily transmissible from person to person, the public health community would be very concerned about the potential for an influenza pandemic. Such a pandemic could disrupt all aspects of society and severely affect both the United States and world economies.

4.3.4.6 VECTOR-BORNE DISEASE

Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors. Every year, there are more than 700,000 deaths from diseases, such as malaria, dengue, schistosomiasis, trypanosomiasis, leishmaniosis, Chagas disease, yellow fever, Japanese encephalitis and

onchocerciasis. Vectors are living organisms that can transmit infectious pathogens between humans, or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later transmit it into a new host, after the pathogen has replicated within the insect. Often, once a vector becomes infectious, they can transmit the pathogen for the rest of their life during each subsequent bite/blood meal.

4.3.4.7 MOSQUITO-BORNE VIRUSES

Mosquito-borne viruses belong to a group of viruses commonly referred to as arboviruses (for arthropod-borne). Although 12 mosquito-borne viruses are known to occur in California, only West Nile virus (WNV), western equine encephalomyelitis virus (WEE), and St. Louis encephalitis virus (SLE) are significant causes of human disease. WNV continues to seriously affect the health of humans, horses, and wild birds throughout the State. Since 2003, there have been over 6,000 WNV human cases with 248 deaths, and over 1,200 equine cases. WNV first appeared in the United States in 1999 in New York and rapidly spread across the country to California in subsequent years. California has historically maintained a comprehensive mosquito-borne disease surveillance and control program, including the Mosquito-borne Virus Surveillance and Response Plan, which is updated annually in consultation with local vector control agencies.

Climate change will likely affect vector-borne disease transmission patterns. Changes in temperature and precipitation can influence seasonality, distribution, and prevalence of vector-borne diseases. A changing climate may also create conditions favorable for the establishment of invasive mosquito vectors in California. For most Californians, WNV poses the greatest mosquito-borne disease threat. Above-normal temperatures are among the most consistent factors associated with WNV outbreaks. Mild winters are associated with increased WNV transmission due, in part, to reduced mosquito and resident bird mortality. Warmer winter and spring seasons may also allow for transmission to start earlier. Such conditions also allow more time for virus amplification in bird-mosquito cycles, increasing the potential for mosquitoes to transmit WNV to people.

The effects of increased temperature are primarily through acceleration of physiological processes within mosquitoes, resulting in faster larval development and shorter generation times, more frequent mosquito biting, and shortening of the incubation period time required for infected mosquitoes to transmit WNV. During periods of drought, especially in urban areas, mosquitoes tend to thrive due to changes in storm water management practices. Mosquitoes in urban areas can reach higher abundance due to stagnation of water in underground storm water systems that would otherwise be flushed by rainfall. Runoff from landscape irrigation systems mixed with organic matter can also create ideal mosquito habitat. Drought conditions may also force birds to increase their utilization of suburban areas where water is more available, bringing these WNV hosts into contact with urban vectors.

4.3.4.8 VALLEY FEVER

Valley Fever is caused by *Coccidioides*, a fungus that lives in the soil in the southwestern United States and parts of Mexico, Central America, and South America. Inhaling the airborne fungal spores can cause an infection called coccidioidomycosis, which is also known as “cocci” or “Valley Fever.” Most people who are exposed to the fungus do not get sick, but some people develop flu-like symptoms that may last for weeks to months. In a very small proportion of people who get Valley Fever, the infection can spread from the lungs to other parts of the body and cause more severe conditions, such as meningitis or even death. Valley Fever cannot spread from person to person. Most cases of Valley Fever in the United States occur in people who

live in or have traveled to the southwestern United States, especially Arizona and California. The map below shows the areas where the fungus that causes Valley Fever is thought to be endemic, or native and common in the environment. The full extent of the current endemic areas is unknown and is a subject of further study.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.4.9 PREVIOUS OCCURRENCES OF EPV DISEASES IN THE CITY OF BURBANK** below.

4.3.4.9 PREVIOUS OCCURENCES OF EPV DISEASES IN THE CITY OF BURBANK

The City doesn't have specific records of previous cases; however, because the County of Los Angeles has been affected by outbreaks, it is assumed that Burbank has also. In the past century, Los Angeles County has been struck by pandemics. In 1918 Spanish Flu, a form of H1N1 swine flu, killed between 50 and 100 million people worldwide. In the US, the flu was reported simultaneously in the Midwest and New England and rapidly moved across the country, killing thousands on the West Coast. Of greatest concern to densely populated urban areas are influenza strains such as the avian flu (H5N1) and swine flu (H1N1).

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.4.10 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.4.10 LOCAL CONDITIONS** below.

4.3.4.10 LOCAL CONDITIONS

While a variety of influenza, vector borne, and mosquito borne diseases continue to affect the City, COVID-19 currently has the widest and most profound impact across all aspects of society. According to the County of Los Angeles Public Health Department, the City of Burbank has had 10,086 cases and 246 deaths as of August 15th, 2021. This virus has spread at an alarming rate due to its ease of transmission and, unfortunately, variants of the disease have displayed higher transmissibility and morbidity than the strain that initiated the outbreak; therefore, urban communities with dense, mobile populations, such as Burbank, are especially vulnerable to COVID-19.

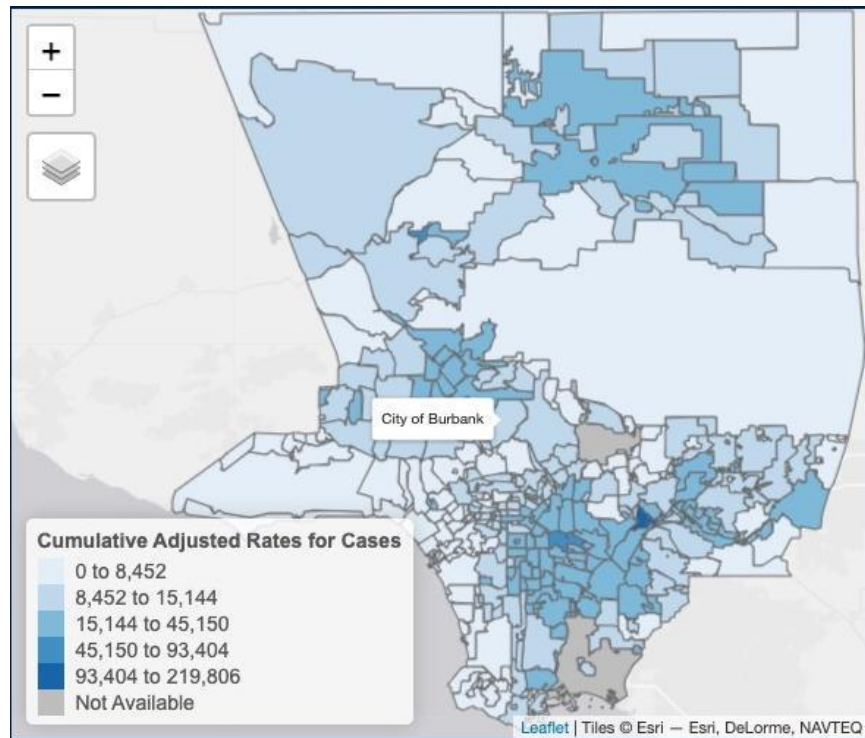


Figure 19 Adjusted COVID-19 Case Rate by City Within LA County*

*(Source LA County Public Health Dept.)

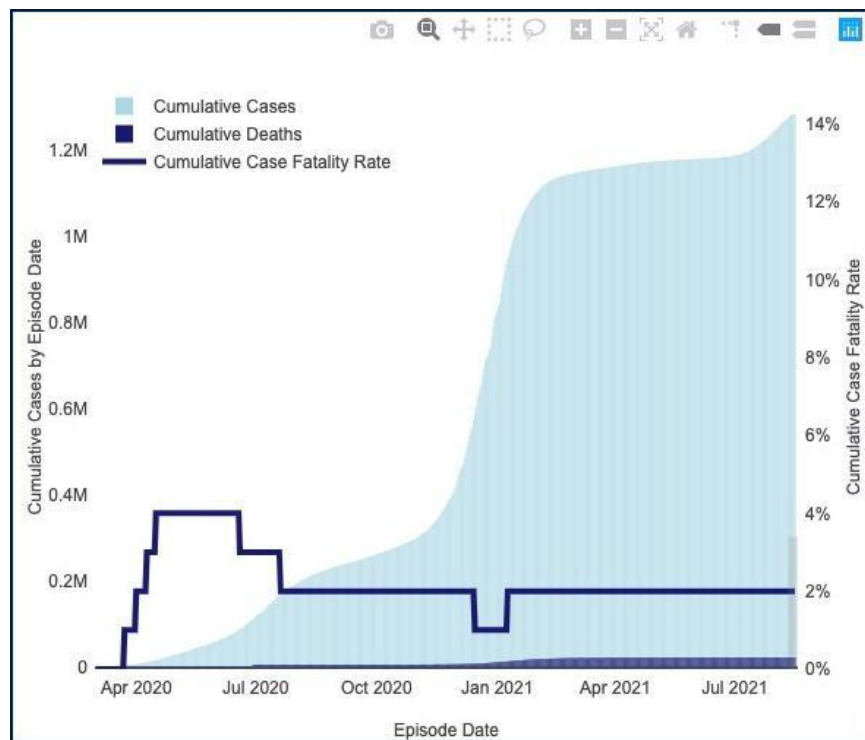


Figure 20 Cumulative Cases and Deaths Due to COVID-19 for LA County*

*(Source LA County Public Health Dept.)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.4.11 IMPACT OF EPV DISEASES IN THE CITY OF BURBANK** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.4.11 IMPACT OF EPV DISEASES IN THE CITY OF BURBANK** below.

4.3.4.11 IMPACT OF EPV DISEASES IN THE CITY OF BURBANK

Based on the risk assessment and recent real-world experience, it is evident that epidemics, pandemics, and vector-borne diseases will continue to have devastating human and economic impacts on the City of Burbank. Impacts that are not quantified, but can be anticipated in future events, include:

- ✓ Injury and loss of life
- ✓ Rapid and profound social structure impact
- ✓ Wide scale disruption of public infrastructure systems
- ✓ Extensive transportation system usage patterns changes
- ✓ Negative impact on commercial and residential property values
- ✓ Catastrophic economic downturn in terms of jobs, sales, and tax revenue
- ✓ Business operations may be closed or limited to essential and critical needs only

The vulnerability to and resultant impact of EPV diseases in Burbank is a consequence of a spectrum of reasons from environmental to the nature of the disease in question. In the case of the current EPV disease affecting the jurisdiction, COVID-19, it spread through the City rapidly due to many factors including the City's cosmopolitan nature, central role in the entertainment industry, proximity to several international airports, and the highly infectious nature of the disease. Impacts from the disease are still accruing but have included a massive economic downturn for local business, health considerations that range from lost work hours to death, extensive transportation system use pattern changes for both leisure and commute, considerable political fallout related to civic health care guidance, and widespread healthcare system modifications.

Given that these effects have been seen across adjoining jurisdictions and all levels of government with a disease for which an effective vaccine exists, it is frightening to consider the impact of such a disease if it had either a higher mortality or was more resistant to medical countermeasures. One can discuss impacts in terms of the financial costs, long term health consequences or other socioeconomic/health factors but the most black and white numbers relate to fatalities. The impact of COVID-19, in terms of age standardized mortality rate for the unvaccinated as of Jan, 2022 per the CDC was 7.8% for patients contracting the virus. That translates into more than 1M dead nationally (as of June, 2022) even considering an adjusted mortality of 0.1% with vaccination. LA County has had the highest numbers across the state for both cases at 3.03M and deaths at

32,201 (as of June, 2022). Total number of deaths for the City of Burbank has reached 327 per the LA County Public Health Dept. While, the pandemic is not over and the socioeconomic and health impacts from COVID-19 cannot be fully gauged as yet, it is clear that they will be felt for decades to come.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction?
(Requirement §201.6(c)(2)(i))

A: See **4.3.5 DROUGHT** below.

4.3.5 DROUGHT

A drought is an extended interval with precipitation levels that are significantly below normal for a given area. Most commonly, this makes less water available for natural environments, causing plants to dry out resulting in their susceptibility to pests and/or disease. An abundance of dry plant matter increases the risk of wildfires or may cause fires to be more intense. Agricultural areas, particularly those that do not rely on irrigation, can suffer most acutely during drought conditions.

In more severe instances, droughts can impact urban areas. A significant drought can lead to water use shortages, which may force local water suppliers to institute mandatory restrictions on nonessential usage. In extreme cases, there may not be enough water to meet basic health and hygiene needs, requiring communities to find alternative water supplies. Since many communities in Southern California import water from non-local sources, such as the Sierra Nevada or Colorado River, it is common in for them to experience “long-distance droughts”. This is a situation where precipitation levels may be normal locally but reduced precipitation in the region of the community’s primary water source may result in shortages.

Counterintuitively, droughts can result in an increased flooding impact. Soil that has been dried out by drought conditions hardens and subsequently becomes less capable of readily absorbing water. When the precipitation eventually does occur, more water remains on the surface, increasing the amount of runoff and potentially exacerbating flooding events. Additionally, dry soils do not bind together as well as moist soils, which can increase the potential for landslides and/or erosion.

As droughts are large-scale events, risk and adverse conditions are generally equal across the City. However, it should be noted that the impacts to natural lands are generally different than those to urban areas. As these areas are generally not irrigated, the potential for damage to both flora and fauna is extensive and ongoing. Long term drought can result in land use changes as the quality of the land is degraded due to increasingly arid conditions related to shifting climatic conditions. While it is currently not possible to predict extended weather patterns with any reliability, there are global indications of temperatures increases that are leading to both more arid and variable weather patterns for the Western United States. Seasonal weather patterns over the last few decades have been notably drier than in the preceding half century and this does not bode well for either urban or natural environments should these conditions persist or degrade further.

There are many ways to measure drought conditions. One of the most sensible is the U.S. Drought Monitor Classification Scheme, which combines multiple scales into a single descriptive index. Figure 21 below shows the U.S. Drought Monitor Classification Scheme.

CATEGORY	DESCRIPTION	POSSIBLE IMPACTS
D0*	Abnormally dry	Slower growth of crops and pastures.
D1	Moderate drought	Some damage to crops and pastures. Water bodies and wells are low. Some water shortages may occur or may be imminent. Voluntary cutbacks to water use may be requested
D2	Severe drought	Likely crop and pasture losses. Water shortages are common, and mandatory impacts may be imposed.
D3	Extreme drought	Major crop and pasture losses. Widespread water shortages and mandatory restrictions.
D4	Exceptional drought	Exceptional, widespread crop and pasture shortages. Water shortages reach emergency levels.
*D0 areas are not technically in a drought, but are under "drought watch." These are areas that are potentially heading into drought conditions or are recovering from drought events but are not back to normal.		

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.5.1 PREVIOUS OCCURRENCES OF DROUGHT IN THE CITY OF BURBANK** below.

4.3.5.1 PREVIOUS OCCURENCES OF DROUGHT IN THE CITY OF BURBANK

Droughts are a regular feature of California's climate. They have occurred repeatedly in the State's recorded

Figure 21 U.S. Drought Monitor Classification Scheme*

* (Source U.S. Drought Monitor, Aug 2021)

history and frequently lead to changes in California's economy, infrastructure, or governing policies. One of the earliest recorded droughts, the "Great Drought" of 1863–1864, followed the largest flood in recorded history and caused widespread devastation to the cattle industry. Another series of droughts from 1928 to 1935, known as the "Dust Bowl Droughts," caused significant harm to California's agriculture and led to the creation of the Federal Central Valley Project to ensure a reliable source of water for Central Valley farmers. Further droughts from 1947 to 1950 and from 1959 to 1960 encouraged the creation of the State Water Project, which imports water from the Sierra Nevada to communities throughout the State, including Burbank. A drought from 1976 to 1977 created emergency-level conditions across most of California and resulted in strong water conservation practices that continue to this day. A drought from 1987 to 1992 caused significant statewide impacts, particularly to small rural communities and the timber industry, and led to stronger water conservation landscape standards. The statewide 2007 to 2009 drought caused further changes and helped spur regulation for groundwater basins (Cal OES 2013; Kotin and Marion 2014; DWR 2015).

The most severe drought in California's recorded history (and considered the most severe in the past 1,200 years) occurred from 2012 to 2017 (Griffin and Anchukaitis 2014). At its peak, virtually all of California experienced D2 (severe drought) conditions, and close to 60 percent of California was classified in D4 (exceptional drought) conditions (US Drought Monitor 2014). Burbank experienced D3 (extreme drought) conditions from July 2014 to January of 2017. Governor Brown declared a statewide emergency and water

conservation standards were strengthened throughout the State. The drought ended with the wet winter of 2016–2017, although a number of water conservation policies enacted during the drought remained in force.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.5.2 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.5.2 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.5.2 LOCAL CONDITIONS** below.

4.3.5.2 LOCAL CONDITIONS

Although the winter of 2016–2017 functionally ended California's most recent significant drought, a single year of above average precipitation was hydrologically insufficient to make up for five drought years. The following 2017–2018 winter also saw less precipitation than normal across the State (NOAA 2018a). Drought conditions had resumed. As of August 17th, 2021, some 98.5% of Los Angeles County was categorized as in extreme drought, and approximately 50% of California in a state of exceptional drought. Approximately 20% percent of LA County, including Burbank, was experiencing this latter drought condition (US Drought Monitor 2021). Figure 22 below shows the drought conditions in and around Burbank as of August 17th, 2021.

The primary concerns with local drought conditions are their tendency to create/enhance wildfire conditions and constrain the availability of potable water. The impact on wildfire conditions is touched on throughout sections 4.3.5 and 4.3.6. The availability of water and relevant City water rights is a topic beyond the scope of the mitigation plan. The City must approach water usage carefully by not only employing use restriction programs but engaging in water recycling for non-potable uses. Local requirements have prompted Burbank city planners to build and maintain costly water storage works as hydrological caches to ensure a steady supply to residents.

Drought conditions have exacerbated the City's vulnerability to wildfire during a period where storage works have improved resilience in the potable water supply. Unfortunately, emerging trends indicate a growing vulnerability to the potable water supply from regional droughts. These droughts have progressively



constrained water delivery across the western United States with their growing geographic extent and as a result of climatic change.

Figure 22 LA County Drought Conditions 2021*

*(Source U.S. Drought Monitor, Aug 2021)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.5.3 IMPACT OF DROUGHT IN THE CITY OF BURBANK** below.

4.3.5.3 IMPACT OF DROUGHT IN THE CITY OF BURBANK

Based on the risk assessment and the last decade of real-world experience, it is evident that drought will continue to have serious human and economic impacts on the City of Burbank. Impacts that are not entirely quantified, but can be anticipated in future events, include:

- ✓ Loss of life and injury
- ✓ Increase fire hazard regionally
- ✓ Profound land use planning changes
- ✓ Wide scale disruption of public infrastructure systems
- ✓ Negative impact on commercial and residential property values
- ✓ Economic downturn in terms of agricultural jobs, sales, and tax revenue

- ✓ Business operations may be closed or limited to essential and critical needs only

Drier conditions across the region over the last decade have resulted in ongoing issues for the citizens of Burbank ranging from inconvenient to hazardous: water use changes due to constrained water supplies and higher fire danger in both the natural and urban environment respectively. Burbank has established a six stage phased water use plan and can implement any of the stages in this approach as drought conditions dictate. The City has generally been in at least Stage II of water use restrictions since its enactment with intervals of stage III and IV. While restrictive water use laws are inconvenient, the danger that protracted dry periods pose with respect to fire, flooding, and environmental degradation may require their extensive use in the near future.

4.3.6 WILDFIRE

A wildfire is an uncontrolled conflagration which spreads through vegetative fuels and frequently damages or destroys structures in its path. Often beginning unnoticed and spreading quickly, wildland fires occur in areas in which development is generally limited to roads, railroads, power lines and similar facilities. A wildland-urban interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or areas with vegetative fuel sources.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2a

Q: Does the plan include information on **previous occurrences** of hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.6.1 PREVIOUS OCCURRENCES OF WILDFIRE IN THE CITY OF BURBANK** below.

4.3.6.1 PREVIOUS OCCURENCES OF WILDFIRE IN THE CITY OF BURBANK

Small wildland fires are relatively common in the Verdugo Hills adjacent to Burbank. The major historical fire events are summarized below for the wildland/urban interface in Burbank:

1927 Burbank Canyon Fire started in La Crescenta and jumped Foothill Boulevard into the Verdugo Hills. On day two, it came over a ridge and burned in Sunset Canyon, destroying about 100 homes.

1964 Verdugo Brush Fire occurred when power lines fell into brush in the Whiting Woods area. The fire quickly spread into the Sunset Canyon area and then into Scott Canyon and Cabrini Canyon. This fire was contained to undeveloped wildland with only minor damage to local structures.

1980 Verdugo Brush Fire started due to downed power lines in the La Tuna Canyon area. The City of Burbank suffered about \$1.5 million in damage to a water reservoir, as well as to electrical transmission facilities located outside of city limits, several residential buildings, and one restaurant.

2005 Harvard Fire was a brush fire that started on Harvard Road in Burbank on the De Bell Golf Course on September 29th. The fire quickly burned into steep terrain, impeding suppression efforts. The fire ultimately burned about 1,000 acres with fire suppression costs of about \$2 million. No structures were lost, but evacuations were implemented.

2017 La Tuna Fire was a wildfire that started on September 1st and burned 7,194 acres through the Verdugo Hills. It led to the destruction of five homes and the evacuations of over 300 more.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1d

Q: Does the plan include a description of the **location** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.6.2 LOCAL CONDITIONS** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B1e

Q: Does the plan include a description of the **extent** for all natural hazards that can affect each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.6.2 LOCAL CONDITIONS** below.

4.3.6.2 LOCAL CONDITIONS

The burn area for the 2005 Harvard Fire area subsequently experienced mudflows underscoring the domino effect of hazards. With somewhat worse fire conditions – fuel load, temperature, humidity, wind speed, and wind direction – this fire could easily have burned numerous structures. In the worst-case scenario fires, flames could reach into the heavily developed areas of Burbank. Wildfire hazard zones in Burbank have been mapped by the California Department of Forestry and Fire Protection (Cal Fire). Cal Fire identified high and very high fire hazard areas across some 30% of Burbank, with additional areas of high and moderate fire hazard on the borders of very high hazard areas. The largest such area is in northeastern Burbank, east of Interstate 5, with limited development; however, there are a large number of homes in both the foothills region and a smaller area in the southernmost part of Burbank, south of the Ventura Freeway and north of the Los Angeles River. The latter area includes studio buildings, as well as a residential area. The respective areas identified by Cal Fire are illustrated in Figure 23 below.

Please note that the map shown below reflects information from Cal Fire Office of the State Fire Marshal (OSFM), Fire Hazard Severity Zone maps for Burbank. At the time of this plan's development, the OSFM was in the process of revising and updating the Fire Hazard Severity Zone maps.

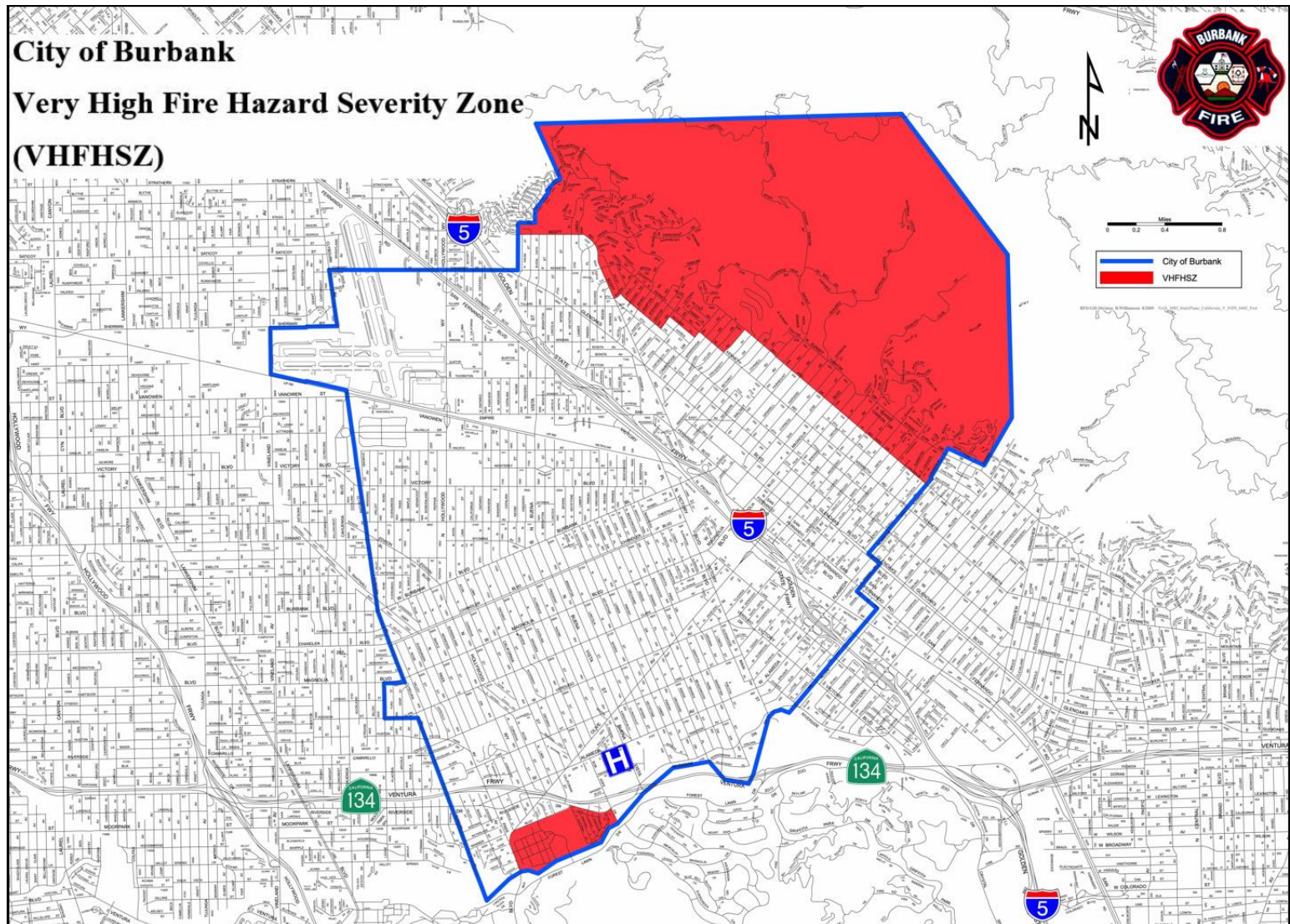


Figure 23 Burbank Very High Fire Hazard Severity Zone*

*(Cal Fire 2011)

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2b

Q: Does the plan include information on the **probability** of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **4.3.6.3 IMPACT OF WILDFIRE IN THE CITY OF BURBANK** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3a

Q: Is there a description of each hazard's impacts on each jurisdiction (what happens to structures, infrastructure, people, environment, etc.)? (Requirement §201.6(c)(2)(ii))

A: See **4.3.6.3 IMPACT OF WILDFIRE IN THE CITY OF BURBANK** below.

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B3b

Q: Is there a description of each identified hazard's overall **vulnerability** (structures, systems, populations, or other community assets defined by the community that are identified as being susceptible to damage and loss from hazard events) for each jurisdiction? (Requirement §201.6(c)(2)(ii))

A: See **4.3.6.3 IMPACT OF WILDFIRE IN THE CITY OF BURBANK** below.

4.3.6.3 IMPACT OF WILDFIRE IN THE CITY OF BURBANK

Based on the current risk assessment and unfavorable climatic changes, it is clear that wildfires will continue to present serious human and economic risk to the City of Burbank. Impacts that are not easily quantified, but can be anticipated in future events, include:

- ✓ Loss of life and injury
- ✓ Increase mudflow hazard regionally
- ✓ Profound land use planning changes
- ✓ Commercial and residential structural damage
- ✓ Wide scale disruption of public infrastructure systems
- ✓ Secondary health hazards, e.g., air quality degradation
- ✓ Negative impact on commercial and residential property values
- ✓ Significant economic impact (jobs, sales, tax revenue) upon the community
- ✓ Significant disruption to citizens as temporary facilities and relocations would be needed

As in any city with a wildland-urban interface, Burbank is vulnerable to instances of wildfire. The degree to which it is vulnerable is challenging to assess as a result of competing factors which affect the likelihood, extent, and impact on Burbank's evolving geophysical environment. Factors which would result in a greater vulnerability and potential impact include ongoing drought, increasing instances of high wind events, accumulating vegetative fuel loads, and aging power transmission infrastructure. These factors are balanced by increased activity on the part of both the residents in the wildfire prone areas and government agencies working to mitigating the issue. Media coverage of wildfires across western states over the last decade has inspired residents to improve private property with defensible spaces, reduce vegetative fuel sources, and implement fire resistance construction/remediation work. Government actions, such as fire ordinances and policy enforcement, City and Fire Code updates that address historically prone structures, enhanced local fire service integration, and low-cost loan programs that fund local efforts are all actively aimed at reducing vulnerability to wildfire. While public and private work to reduce the likelihood of wildfire is ongoing, there is no guarantee that either will be sufficient in the face of the large-scale environmental variance resulting from climate change and subsequent increases in drought, windstorms, etc.

As the State Legislature continues to allow for expanded residential construction in the Wildland Urban Interface areas within the Burbank foothills in the form of sub-dividing existing lots to build additional homes or building Auxiliary Dwelling Units on existing property, the risk of life safety as well as property damage increases. Even in the best of circumstances, where no lives or structures are lost in these areas, air quality degradation from blowing smoke remains a health risk. This is particularly significant for vulnerable populations, such as individuals with asthma or more substantial respiratory/cardiovascular disease, the

elderly, and developing children. Furthermore, should an instance of extreme wildfire occur along the lines of the more devastating fires across the western United States in the last decade then we could see substantial loss of life/injury and economic impact. Using figures based on predicative modeling, employing a range between 1 and 1000 structures destroyed, and utilizing the median home value of \$1,249,000 (Spring, 2022 value), there is the potential for damages between \$1,249,000 and \$1,249,000,000 before commensurate public costs are considered.

Section 5 MITIGATION PLANNING PROCESS

Burbank has always considered natural hazards as part of ongoing community planning and development programs. This includes building code enforcement, zoning, land use planning, environmental planning, capital improvement planning, emergency planning, post-disaster recovery planning, and the safety element of the City's general plan. Burbank has also enforced special hazard mitigation provisions for FEMA-mapped 100-year floodplains and the Fire Severity Hazard Zone (formerly known as the Mountain Fire Zone).

Burbank has gone beyond Federal and State requirements and adopted municipal seismic retrofit ordinances for unreinforced masonry buildings, pre-1994 welded steel moment frame buildings, and pre-1976 reinforced masonry buildings. The City has evaluated the seismic vulnerability of all City owned buildings and implemented an aggressive seismic retrofit program for the most vulnerable and critical government buildings.

Q&A | ELEMENT C. MITIGATION STRATEGY | C3

Does the plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards?
(Requirement §201.6(c)(3)(i))

A: See **5.1 GOALS** below.

5.1 GOALS

The Planning Team identified the overall goal to guide the direction of future activities aimed at reducing risk and preventing loss from natural hazards. The Team agreed to maintain the overall goal, as well as the individual mitigation goals identified below. These goals are based on the risk assessment that represents a long-term vision for hazard reduction and enhanced mitigation capabilities. Each goal is supported by mitigation action items. These action items were developed through knowledge of the local area, risk assessment, review of past efforts, identification of mitigation activities, and qualitative analysis.

The mitigation goals and descriptions are listed below.

5.1.1 PROTECT LIFE AND PROPERTY

The primary goal is to implement activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to losses from natural, human-caused, and/or technological hazards. Additionally, there is an imperative to reduce losses and repetitive damages due to chronic hazard events along with promoting insurance coverage for catastrophic hazards. While being focused in this manner, there is also an imperative to improve hazard assessment information in order to make recommendations for avoiding new development in high hazard areas and encourage preventative measures for existing development in areas known to be vulnerable to specific hazards.

5.1.2 PUBLIC AWARENESS

In regard to the wider public awareness goal, the aim was to develop and implement education and outreach programs to increase jurisdictional resident understanding of the risks associated with natural hazards. Additionally, the focus was to provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities. Both the LHMP and public communications were provided in multiple languages based on current City demographics to reach the largest audience possible.

5.1.3 PARTNERSHIP AND IMPLEMENTATION

This area aims to strengthen communication and coordinate participation both among and within public agencies, citizens, non-profit organizations, business, and industry to achieve a greater vested interest in implementation. It also encourages leadership within public and private sector organizations to prioritize and implement local, county, and regional hazard mitigation activities.

5.1.4 EMERGENCY SERVICES

These services establish policy to ensure mitigation projects for critical facilities, services, and infrastructure. They strengthen emergency operations by increasing collaboration and coordination among public agencies, non-profit organizations, business, and industry. Finally, they coordinate and integrate natural hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Q&A | ELEMENT C. MITIGATION STRATEGY | C5a

Q: Does the plan explain how the mitigation actions and projects will be prioritized (including cost benefit review)? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))

A: See **5.1.5 BENEFIT/COST RATINGS** and **5.1.6 PRIORITY RATINGS** below.

5.1.5 BENEFIT/COST RATINGS

The benefits of proposed projects were weighed against estimated costs as part of the project prioritization process. The benefit/cost analysis was not of the detailed variety required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program. A less formal approach was used because some projects may not be implemented for up to 10 years, and as such the associated costs and benefits could change dramatically in that time frame. Therefore, a review of the apparent benefits versus the apparent cost of each project was performed. Parameters were established for assigning subjective ratings (high, medium, and low) to the costs and benefits of these projects.

Cost ratings were defined as follows:

High: Existing jurisdictional funding will not cover the cost of the action item such that other sources of revenue would be required.

Medium: The action item could be funded through existing jurisdictional funding but would require budget modifications.

Low: The action item could be funded under existing jurisdictional funding.

Benefit ratings were defined as follows:

High: The action item will provide short-term and long-term impacts that reduce risk exposure to life and property.

Medium: The action item will have long-term impacts that reduce risk exposure to life and property.

Low: The action item will only have short-term impacts that reduce risk exposure to life and property.

5.1.6 PRIORITY RATING

The Planning Team utilized the following rating tool to establish priorities. Designations of “High”, “Medium”, and “Low” priority have been assigned to all of the action items using the criteria below:

Does the Action...

- solve the problem?
- address multiple hazards?
- address Vulnerability Assessment?
- have benefits that equal or exceed costs?
- reduce the exposure or vulnerability to the highest priority hazard?
- implement a goal, policy, or project identified in the General Plan or CIP?

Can the Action...

- be implemented with existing funds?
- be implemented with currently available technologies?
- be completed within the 5-year life cycle of the LHMP?
- be implemented by existing State or Federal grant programs?

Will the Action...

- be accepted by the community?
- be supported by community leaders?
- positive or neutral impact on the environment?
- require a change in local ordinances or zoning laws?
- adversely impact segments of the population or neighborhoods?
- comply with all local, State and Federal environmental laws and regulations?

Is there...

- sufficient staffing to undertake the project?
- existing authority to undertake the project?

As mitigation action items were updated or written, the Planning Team representatives were provided worksheets for each of their assigned action items. Answers to the criteria above determined the priority according to the following scale.

- 1-6 = Low priority
- 7-12 = Medium priority
- 13-18 = High priority

Q&A | ELEMENT D. MITIGATION STRATEGY | D2

Q: Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))

A: See **5.2 MITIGATION ACTION ITEMS – 2011 PLAN** below.

5.2 MITIGATION ACTION ITEMS – 2011 PLAN

Hazard mitigation action items set forth in the previous Burbank LHMP, All-Hazard Mitigation Plan 2011 which were completed or discontinued are noted in *Table 11 2011 Burbank Mitigation Action Items* below.

Project #	Hazard(s) Addressed	Project/Action Description	Goal Addressed					Lead Department & Point of Contact	Status
			Life Safety	Property Protection	Response/Recovery	Public Awareness	Land Use		
N/A (2011)	Landslide/ Mudslide	Implement landslide mitigation actions for slides seriously threatening buildings or infrastructure	X	X	X		X	Community Development	0%
20-005 (2011)	Earthquake	Encourage owners of public and private buildings in Burbank to evaluate and implement structural and nonstructural mitigation measures and structural refits for seismically vulnerable residential buildings.	X	X	X	X		Building Division	100%
18-004 (2011)	Earthquake	Disseminate FEMA pamphlets to educate homeowners and business owners about structural and nonstructural retrofitting of vulnerable buildings and encourage retrofit.	X	X	X	X		Building Division	100%
20-006 (2011)	Flood	Complete detailed inventory of buildings and infrastructure in FEMA-mapped floodplains	X	X	X	X	X	Public Works, Community Development, Information Technology	100%
N/A (2011)	Flood	Increase public awareness of flood-prone areas, encourage mitigation and flood insurance.	X	X	X	X	X	Community Development, Public Works, Emergency Management Coordinator	0%
N/A (2011)	Windstorm	Ensure that all City and non-City critical facilities in Burbank have backup power.	X	X	X	X		Public Works, Burbank Water & Power	0%
20-008 (2011)	Wildfire	Evaluate and upgrade selected fire access roads in the Verdugo Mountains which are inadequate for emergency response vehicles and/or subject to repetitive damage.	X	X	X			Fire, Los Angeles County	100%
N/A (2011)	Wildfire	Provide periodic brush clearance around the perimeter of radio communication towers, Reservoir #3, and Mount Tom to minimize communication disruption during wildfire.	X	X	X			Fire, Public Works	0%
N/A (2011)	Wildfire	Develop financial assistance programs to aid Burbank residents with cost-effective solutions to comply with the city-wide wood roof ordinance and the Fire Hazard Reduction Program requirements for brush clearance in the Fire Severity Zone.	X	X	X	X		Fire, Building Division	0%

Table 13 2011 Burbank Mitigation Action Items

5.2.1 MITIGATION ACTION ITEM STATUS – 2011 PLAN

The status of the Mitigations Actions previously undertaken by the City are noted in both *Table 11 2011 Burbank Mitigation Action Items* above and **Appendix A – 2022 Burbank Mitigation Action Items** below. Table 11 contains mitigation actions that were either completed or, for a spectrum of reason including budgetary constraints, changing City goals or priorities, integration with other projects, or some combination of factors thereof, discontinued. In contrast, Appendix A contains 2011 mitigation items that are either ongoing in their status (as they require continuous attention) or are in progress toward completion. Those 2011 mitigation projects that have been reevaluated, re-funded, and/or extended into the current planning period have been assigned updated project numbers in City records and/or integrated into departmental maintenance schedules. This mitigation action continuity is reflected in the project numbers assigned to them where the first two numbers indicate the year in which the mitigation action was reinitiated under the current City project number system.

5.2.2 INTERIM MITIGATION ACTIONS

In addition to mitigation items set forth in the 2011 LHMP, a number of actions were undertaken and completed prior to publication of an updated LHMP. These actions show both a continuity of effort to mitigate potential hazards to the jurisdiction and highlight the direct relationship between cornerstone documents and implementation of goals outlined there. These actions are noted in *Table 12 Interim Mitigation Action Items* below.

Project #	Hazard(s) Addressed	Project/Action Description	Goal Addressed					Lead Department & Point of Contact	Status
			Life Safety	Property Protection	Response/Recovery	Public Awareness	Land Use		
19-005	Multi-Hazard (Universal)	Conduct educational campaigns for City residents that emphasize cost-effective mitigation efforts, making material available through multiple multilingual media routes in conjunction with the Ready Burbank Program.	X	X	X	X		Community Development, Emergency Management	100%
18-002	Multi-Hazard (Earthquake, Windstorm)	Conduct a seismic analysis of all key City owned facilities and retrofit vulnerable sites.	X	X			X	Engineering Division	100%
18-003	Flooding	Require new large developments and significant retrofits to use low-impact flood plain development strategies in accordance with Burbank Zoning Code.		X				Public Works Department, Community Development	100%
N/A*	Flooding	Conduct frequent cleanings of storm drain intakes, especially before and during rainy seasons.		X				Public Works Department, Water and Power Department	100%
19-006	Flooding	Identify areas with known ponding or poor drainage during rain events and increase storm drain capacity in these areas.		X			X	Public Works Department, Water and Power Department	100%
17-001	Flooding	Participate in FEMA's Community Rating System to reduce flood insurance premiums for Burbank property owners.		X	X		X	Public Works Department, Community Development	100%
17-002	Flooding	Work with the US Army Corps of Engineers and the Los Angeles County Flood Control District to support safety assessments and any needed retrofits to local water storage structures.	X	X			X	Engineering Division	100%
17-003	Multi-Hazard (Drought, Flood, Wildfire)	Use drought-tolerant plants or xeriscaping when installing new or significantly redoing City owned landscapes. Limit turf that is not drought tolerant to recreational fields and lawns, and only in instances where no feasible drought-tolerant alternatives exist.		X			X	Public Works Department	100%
17-004	Multi-Hazard (Drought, Flood)	Plant street trees and other vegetation to provide shade and green spaces throughout Burbank, particularly around senior and medical facilities. Emphasize drought-tolerant and wind-resistant species.		X			X	Public Works Department	100%

Table 14 Interim Burbank Mitigation Action Items

Q&A | ELEMENT C. MITIGATION STRATEGY | C1b

Q: Does the plan document each jurisdiction's ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))

A: See **5.3 HAZARD MITIGATION ACTIONS** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C4c

Q: Do the identified mitigation actions and projects have an emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))

A: See **5.3 HAZARD MITIGATION ACTIONS & APPENDIX A** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C5a

Q: Does the plan explain how the mitigation actions and projects will be prioritized (including cost benefit review)? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))

A: See **5.3 HAZARD MITIGATION ACTIONS & APPENDIX A** below.

Q&A | ELEMENT D. MITIGATION STRATEGY | D1

Q: Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))

A: See **5.3 HAZARD MITIGATION ACTIONS & APPENDIX A** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C6c

Q: The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts. (Requirement §201.6(c)(4)(ii))

A: See **5.3 HAZARD MITIGATION ACTIONS & APPENDIX A** below.

5.3 HAZARD MITIGATION ACTIONS

Based on the criteria and evaluation process described above, the Planning Team prepared a list of hazard mitigation actions that are consistent with the City's goals and designed to improve resilience to hazard events. These actions collectively form Burbank's hazard mitigation strategy. Details noted in the Appendices below list the mitigation actions by the hazard they are intended to mitigate, completion status at the time of this plan's preparation, responsible agency, project number, and expected implementation time frame. The actions include preparedness activities, which are intended to improve emergency response for the City and community members when hazard events occur or are imminent. Although these actions are not strictly considered mitigation activities, they are expected to decrease the danger the community faces from hazard events and as such will support the same goals as mitigation actions.

Additionally, items noted in the Appendices will be implemented congruent to ongoing jurisdictional plans and processes detailed in, and as an extension of, official City and State policy documents. The documents and

official programs that give the Burbank LHMP wider context include the *Burbank2035 General Plan*, *Burbank Zoning Code*, *Burbank Emergency Operations Plan*, and the Ready Burbank Program. The planning noted in these documents affects and will in turn be influenced by the mitigation actions noted in the Appendices. How each of these documents aligns with the Burbank LHMP is as follows:

GENERAL PLAN

The Burbank2035 General Plan (BGP) is a state mandated policy document adopted on February 19th, 2013. It provides direction to City governance on resources allocation, physical structure, and the nature of community development. The BGP is detailed in its goals while remaining sufficiently flexible to incorporate new ideas and methods that support best practice approaches to reaching stated goals and meeting new challenges. Overarching areas articulated in the BGP include physical, economic, and environmental goals. More specifically, it discusses the following planning elements: Air Quality and Climate Change, Land Use, Mobility, Noise, Open Space and Conservation, Plan Realization, and Safety.

The Safety element expands on goals and policies to preserve the welfare of residents, businesses, and visitors and incorporates the current LHMP as if it were part of the BGP draft. Importantly, the General Plan makes it clear that safety is its paramount concern as it states that “in the event of any conflict between the provisions of the All-Hazard Mitigation Plan and the provisions of Burbank2035, the provisions of the All-Hazard Mitigation Plan shall control.” The BGP is undergoing revision to comply with State legislative changes and to address climatic, social, and economic challenges with expected implementation in 2022. In this revision, the BGP maintains the primacy of the LHMP with respect to the Safety element for the City, its property, environment, and residents.

ZONING CODE

Title 10 of the Burbank Municipal Code documents terms and requirements for City land use and development. While the BGP applies broad policy to land use, the Burbank Zoning Code (BZC) is highly specific in its guidance for development. The first item noted in section 10-1-202 Purpose of Ordinance clearly states the direction the Code will take: “1. Provide a precise guide for the physical development of the City in such manner as to achieve progressively the arrangement of land uses depicted in the General Plan”. Furthermore, this section makes it clear that the Code’s purpose “is to promote the public health, safety, peace, comfort, convenience, prosperity and welfare of the City and its inhabitants”. Examples of Code that align with Mitigation Actions of the LHMP as it implements the BGP are found throughout the BZC: 10-1-107 wherein all aspects of the Code are required to align with the General Plan overall, 10-1-620-3-J requiring appropriate access for fire and EMS in new development, and 10-1-620-3-M specifying property brush clearance regulations in the Burbank Fire Department’s Mountain Fire Zones. The Zoning Code is a living document and revisions by the City Council relevant to safety will be incorporated as guidance from the Local Hazard Mitigation Plan is available.

EMERGENCY OPS PLAN (EOP) / STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)

The Burbank Emergency Operations Plan (EOP) was updated in July of 2020. The plan’s purpose, in its own words, is to describe “the methods for carrying out emergency operations, the process for rendering mutual aid, the emergency services of governmental departments and agencies, how resources are mobilized, how the public will be informed and the process to ensure continuity of government during an emergency or disaster.” In accordance with Title 19 section 2443 of the California Code of Regulations, the Standardized

Emergency Management System (SEMS) is used to implement the Burbank EOP. As noted in the EOP, the mitigation actions documented in the LHMP realize the SEMS ideology related to a unified approach to moderating hazard impacts regardless of type or scale. In short, the Burbank EOP implements aspects of this LHMP plan via SEMS in accordance with Federal, State, and Local mandates.

READY BURBANK PROGRAM

The Ready Burbank Program is designed to empower Burbank's residents on the specifics of preparing for, reacting to, and getting information about hazards that may affect their lives. Based on the premise that a well-informed population can act as a force multiplier for mitigation efforts across all hazard types, Ready Burbank enables residents to work in concert with local governance plans rather than be wholly reliant on them. Mitigation actions outlined in the LHMP speak directly to supporting Ready Burbank and its goals. It cannot be sufficiently underscored that an engaged citizenry is substantially safer and more likely to provide direct input on their current and ongoing safety needs such that it may be embodied in updates to both Mitigation and General Plans.

CORNERSTONE DOCUMENT AND MITIGATION ACTIONS

Specific Mitigation Actions that reference the cornerstone documents as each pertains to implementation are detailed below. These actions include but are not limited to the following: *Appendix A, Community Preparedness Action*: Conduct evacuation studies for foothill developments, include looking at opportunities to provide secondary access particularly in accordance with the **Burbank Zoning Code**; *Appendix A, Community Preparedness Action*: Expand participation in the Burbank Community Emergency Response Team (CERT) program for residents and businesses in conjunction with **Ready Burbank Program**; *Appendix A, Community Preparedness Action*: Ensure that information is accessible to persons with disabilities and functional needs as outlined in the **General Plan**; *Appendix A, Multi-Hazard Action*: Conduct educational campaigns for City residents that emphasize cost-effective mitigation efforts, making material available through multiple multilingual media routes in conjunction with the **Ready Burbank Program** – recently completed City project 19-005; *Appendix A, Multi-Hazard Action*: Promote water conservation, drought tolerant landscaping, and defensible space practices in accordance with the **Burbank Zoning Code**; *Appendix A, Multi-Hazard Action*: Work with community groups to increase awareness of hazard events and resiliency opportunities across the whole community in conjunction with the **Ready Burbank Program**; *Appendix A, Multi-Hazard Action*: Monitor changes in boundaries for mapped hazard areas due to land use or climate change and revise mitigation actions to ensure continued resiliency routes in conjunction with **Burbank Zoning Codes**; *Appendix A, Multi-Hazard Action*: Improve waste and runoff water systems against hazardous events in conjunction with **General Plan** conservation priorities; *Appendix A, Multi-Hazard Action*: Integrate policy direction and details from this Plan into City documents, including the **General Plan, Emergency Operations Plan**, and Capital Improvements Program; *Appendix A, Seismic Action*: Explore amending the **Burbank Zoning Code** to incorporate standards requiring new buildings to retain habitability and functionality following seismic events; *Appendix A, Flooding Action*: Require new large developments and significant retrofits to use low-impact flood plain development strategies in accordance with **Burbank Zoning Code**; *Appendix A, Flooding Action*: Discourage new schools, child care centers, and adult and senior assisted living facilities from locating in any flood prone areas in conjunction with the **Burbank Zoning Code**; *Appendix A, Windstorm Action*: Encourage significant retrofits to existing buildings to meet wind speed design specifications in the **Burbank Zoning Code**; *Appendix A, Windstorm Action*: Explore amending the **Burbank Zoning Code** to incorporate wind loading provisions such as those contained in the ASCE 7 Standard as a

central part of the impact reduction effort; *Appendix A, Human Caused Action*: Discourage or prohibit new hazardous material facilities from locating near sensitive land uses in conjunction with the **Burbank Zoning Code**.

Q&A | ELEMENT D. MITIGATION STRATEGY | D3

Q: Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))

A: See **5.3.1 MITIGATION ACTION PRIORITY CHANGES** below.

5.3.1 MITIGATION ACTION PRIORITY CHANGES

As with any plan, the mitigation actions proposed for implementation are a response to the known and/or expected hazards for the jurisdiction. The actions are oriented with respect to a hazard analysis snapshot and reflect many considerations including social, technological, demographic, and geographic factors to name but a few. The 2011 LHMP included consideration of a wide spectrum of hazards while the current plan is less speculative and focuses more directly on hazards the City has experienced within the last 25 years. This was a conscious choice to focus on real-world hazard experiences from across the City, State, and Region pragmatically.

Hazards that were identified as a lower priority in the current plan included landslides, windstorms, and flooding. This was the case as each of these hazards, while still a possibility either on their own or as a result of other hazards that enhance their occurrence, had not significantly affected the jurisdiction in recent years. The priority of earthquakes has not changed for the jurisdiction as Burbank is located in a highly active seismic zone. Occurrences of small quakes are common and larger instances in nearby cities are frequent enough (Northridge M6.7-1994, Antelope Valley M6.0-2021, etc.) to act as a clear reminder of this hazard.

Hazards that have seen greater emphasis in this plan are drought, wildfire, and EPV diseases. Droughts are not an uncommon hazard for Burbank but have gained greater focus as a result of their increasing duration, expanded geographic scope, and enhancement of wildfire conditions. The lack of dependable precipitation has extended the wildfire season to a greater proportion of the year with an increasing number of red flag days and “extreme” fire weather conditions in which hazard events are likely. As climatic conditions have deteriorated, there have been a growing number and increased severity of wildfire across the region. This acts as a reminder that even with ongoing zoning, fuel reduction, and regulatory measures that fire hazard remains a clear and present danger to the jurisdiction. The COVID19 pandemic is an ongoing disaster that has resulted in more than 1 million deaths in the US at the time of this mitigation plan’s update. As a result, this and similar diseases that fall under this hazard type have been addressed for the first time in the jurisdiction’s Plan with attention given not only to personal loss but to the socioeconomic impacts felt by Burbank and its residents.

Q&A | ELEMENT A: PLANNING PROCESS | A1c

Q: Does the plan identify who represented each jurisdiction? (At a minimum, it must identify the jurisdiction represented and the person’s position or title and agency within the jurisdiction.) (Requirement §201.6(c)(1))

A: See **5.4 HAZARD MITIGATION PLANNING TEAM** below.

5.4 HAZARD MITIGATION PLANNING TEAM

To guide development of Burbank's LHMP, the City utilized an extended Hazard Mitigation Planning Team with representatives from key City departments designated as Department Disaster Liaisons, as well as representatives from major community organizations contributing both their unique perspective and material. The City also reached out to representatives from diverse external organizations for input. The members contributing as part of the extended Planning Team included:

City Departments

- ✓ Fire Department
- ✓ City Clerk's Office
- ✓ Police Department
- ✓ City Attorney's Office
- ✓ City Manager's Office
- ✓ Treasurer's Office
- ✓ Public Works Department
- ✓ Library Services Department
- ✓ Water and Power Department
- ✓ Financial Services Department
- ✓ Parks and Recreation Department
- ✓ Management Services Dept.
- ✓ Information Technology Department
- ✓ Community Development Department

Associated External Organizations

- ✓ American Red Cross – Territory Representative for Disaster Management Area C
- ✓ Burbank Unified School District
- ✓ California Army National Guard – Local Armory
- ✓ Providence St. Joseph's Medical Center
- ✓ Burbank, Glendale, Pasadena Airport Authority
- ✓ LA County Public Works (Flood Control District)

Other External Organizations

- ✓ YMCA – Burbank YMCA
- ✓ NBC Universal Studios – Emergency Services
- ✓ Warner Brothers Studios – Crisis Management & Security
- ✓ Burbank Temporary Aid Center (BTAC)

Q&A | ELEMENT A: PLANNING PROCESS | A1a

Q: Does the plan document the planning process, including how it was prepared (with a narrative description, meeting minutes, sign-in sheets, or another method)? (Requirement §201.6(c)(1))

A: See **5.4.1 FORMATION OF THE PLANNING TEAM, 5.4.2 PLANNING TEAM MEETINGS AND TASKS** below.

5.4.1 FORMATION OF THE PLANNING TEAM

The planning process has been interrupted several times with the most recent revision of the City's HMP previously expected in 2016. Efforts were renewed in 2018 resulting in progress that was disrupted first by staff departures and then critically by COVID-19 in 2020. Currently, the Emergency Management Coordinator for the City of Burbank, is leading the process to create an updated, financially responsible LHMP that adheres to guidelines published by Cal OES and FEMA.

5.4.2 PLANNING TEAM MEETINGS AND TASKS

As a result of healthcare guidelines and the ongoing nature of the pandemic, many of the traditional meetings associated with a whole community process were severely impacted during the draft phase of Burbank's LHMP update. Meetings and contributions were arranged through teleconferencing and email to maintain social distancing. Tasks assigned to contributors included material inclusion suggestions, topic revision/extension requests relevant to their area of expertise, and a general request for commentary (RFC) across the draft LHMP.

5.5 PUBLIC ENGAGEMENT

The goal of public engagement is to inform, educate, and motivate members of the community served by the LHMP to take part in the process of its creation. To foster this engagement, copies of the First Draft LHMP were initially posted to the Ready Burbank website on 06/29/2020 and the Final Draft posted on 10/04/2021 (see Section 5.5.1 Public Notices). Interested citizens were directed to provide comments and discuss concerns via email submission. In 2020, a link to a survey regarding public awareness of hazards identified in Burbank's Local Hazard Mitigation Plan, as well as community preparedness and insurance levels was circulated through social media. The results helped guide the strategic efforts of the Fire Department's Emergency Management Division (survey results are located in Appendix D). In addition, in 2021, a townhall-style meeting was held at the Burbank Fire Training Center. This meeting was held to present the second draft of the plan to the public, as well as educate the public on the purpose of the plan and receive constructive feedback for the ongoing development of the plan. While direct dialog via townhall forums has been limited, opportunities for dissemination of details and a broad discussion of public interest remains available through virtual methods.

5.5.2 PUBLIC WORKSHOPS

Two public townhall-style meetings were held to gather comments and ideas from the community about mitigation planning and priorities for mitigation plan goals. Initially, a single meeting was planned however attendance was lower than expected. As a result of the poor attendance, notice was posted for and a second meeting . In addition to the general public, community stakeholders were engaged through regularly scheduled planning meetings. Moving forward, the City of Burbank will look at additional avenues to engage the public.

Q&A | ELEMENT A: PLANNING PROCESS | A4

Q: Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))

A: See **5.6 INCORPORATION OF EXISTING PLANS** below.

5.6 INCORPORATION OF EXISTING PLANS

During the planning process, numerous sources were incorporated into the Burbank LHMP. Information from studies, reports, and technical sources, as well as relevant City, County, and State hazard mitigation plans were reviewed. In addition to the sources noted in Section 3.10, the following HMPs from geographically proximate cities and other agencies were referenced:

- City of Glendale, Hazard Mitigation Plan (2018)
- City of San Fernando, Hazard Mitigation Plan (2020)
- City of Pasadena, Draft Hazard Mitigation Plan (2018)
- County of Los Angeles, Hazard Mitigation Plan (2019)
- State of California, Hazard Mitigation Plan (2018)

Section 6 PLAN MAINTENANCE

This section details the process to ensure that Burbank's Hazard Mitigation Plan remains both effective and relevant while integrating ongoing public participation. The maintenance process includes monitoring and evaluating the Plan annually and producing a revision every five years. Additionally, an outline of how the City's government intends to incorporate outlined mitigation strategies with existing planning mechanisms, such as the General Plan, Capital Improvement Plans, and Building and Safety Codes, is discussed.

6.1 ADOPTION AND REVIEW PROCESS

Burbank's City Council is responsible for adopting the Mitigation Plan. The Council has the mandate to promote sound public policy regarding hazards. Once adopted, it will be submitted to the State Hazard Mitigation Officer at the California Office of Emergency Services. Following Cal OES approval, they will submit the plan to the Federal Emergency Management Agency for review and approval. This review will address the requirements set forth in 44 C.F.R. Section 201.6 (Local Mitigation Plans). Upon acceptance by FEMA, the City of Burbank will have gained eligibility for Hazard Mitigation Grant Program funding.

Q&A | ELEMENT A: PLANNING PROCESS | A6a

Q: Does the plan identify how, when, and by whom the plan will be monitored (how will implementation be tracked) over time? (Requirement §201.6(c)(4)(i))

A: See **6.2 MONITORING** below.

6.2 MONITORING

The hazard mitigation plan team leadership, the Emergency Management Coordinator will hold annual meetings with representatives from the coordinating City departments in order to gather status updates on the mitigation action items. These meetings will provide an opportunity to discuss the progress of the action items and maintain the partnerships that are essential for the sustainability of the mitigation plan. The focus of the annual meeting will be on the progress and changes to the Mitigation Action Items, as well as significant changes to identify hazards indicated in the plan.

Q&A | ELEMENT C. MITIGATION STRATEGY | C6a

Q: Does the plan identify the local planning mechanisms where hazard mitigation information and/or actions may be incorporated? (Requirement §201.6(c)(4)(ii))

A: See **6.3 IMPLEMENTATION** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C6b

Q: Does the plan describe each community's process to integrate the data, information, and hazard mitigation goals and actions into other planning mechanisms? (Requirement §201.6(c)(4)(ii))

A: See **6.3 IMPLEMENTATION** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C6c

Q: The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts. (Requirement §201.6(c)(4)(ii))

A: See **6.3 IMPLEMENTATION** below.

6.3 IMPLEMENTATION

The City of Burbank addresses civic, county and statewide mitigation goals and legislative requirements through the General Fund, Capital Projects, and Grants. The Mitigation Plan provides a series of recommendations - many of which are closely related to the goals and objectives of existing planning programs. The City will implement recommended mitigation action items through existing programs and procedures. Burbank is responsible for adhering to the State of California's Building and Safety Codes. In addition, the City may work with other agencies at the State level to review, develop, and ensure Building and Safety Codes are adequate to mitigate or prevent damage from hazard incidents. This is to ensure that life safety criteria are met for both new construction and retrofit structures.

Some of the goals and action items in the Mitigation Plan will be achieved through activities recommended in the strategic and other budget documents. The various departments involved in developing it will review the Plan on an annual basis. Upon review, the Planning Team will work with the various departments to identify areas where the Mitigation Plan action items are consistent with strategic and budgetary documents to ensure the Plan goals and action items are implemented in a timely fashion.

Upon FEMA approval, the Planning Team leadership will initiate incorporation of risk information and mitigation action items into existing planning mechanisms including the General Fund (Operating Budget and Capital Projects - see Appendix A below for links between individual action items and associated planning mechanism). Meetings of the Planning Team will provide an opportunity for members to report back on the progress made on the integration of mitigation planning elements into the City of Burbank's planning documents and procedures. Specifically, the Planning Team will utilize the updates of the following documents to guide the Mitigation Plan implementation:

- ✓ Risk Assessment, City Profile, Planning Process – EOP, Climate Action Plan, etc.
- ✓ Appendix A – General Fund, Capital Projects, Grants

6.4 ANNUAL IMPLEMENTATION REPORT

Upon approval and adoption of the Plan, the schedule for an Annual Implementation Report will be added to the Plan's Attachments. An integral aspect of the monitoring process is the need to maintain a strategic planning process which should include funding and organizational support. In that regard, at least one year in advance of the FEMA-mandated 5-year update submission requirement, the Emergency Management Coordinator will communicate with the Planning Team to discuss funding and timing of the update planning process. In the fourth year of the planning cycle, the Planning Team will broaden its scope to include discussions and research on all of the sections within the Plan with particular attention given to goal progress and public participation.

6.5 ECONOMIC ANALYSIS OF MITIGATION PROJECTS

In order to identify the costs and benefits associated with hazard mitigation strategies/measures/projects, FEMA uses two methods: benefit-cost analysis (BCA) and cost-effectiveness analysis (CEA). Implementing a BCA can assist in determining whether a project is worth undertaking presently in order to avoid disaster-related damages in the future. CEAs evaluate how best to spend a given amount of money to achieve a mitigation goal.

Determining the economic feasibility through these analyses can provide decision-makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternatives. Given Federal funding, the Planning Team will use a FEMA-approved benefit-cost analysis approach to prioritize mitigation action items. For other projects and funding sources, the Planning Team will use other locally accepted methodologies to understand the costs and benefits of each action item and develop a prioritized list. The benefit, cost, and overall priority of each mitigation action item was included in the Mitigation Actions above. A more technical assessment will be required in the event grant funding is pursued through the Hazard Mitigation Grant Program. FEMA Benefit-Cost Analysis Guidelines are discussed below.

6.5.1 FEMA BENEFIT-COST ANALYSIS GUIDELINES

The Stafford Act authorizes the President to establish a program to provide technical and financial assistance to state and local governments to assist in the implementation of hazard mitigation measures. These measures are mandated to be cost effective and designed to substantially reduce injuries, loss of life, hardship, or the risk of future damage and destruction of property. To evaluate proposed hazard mitigation projects prior to funding, FEMA requires a BCA completion to validate cost effectiveness. BCAs are the method by which the future benefits of a mitigation project are estimated and compared to its cost. The end result is a benefit-cost ratio (BCR), which is derived from a project's total net benefits divided by its total project cost.

The BCR is a numerical expression of the cost effectiveness of a project. A project is considered to be cost effective when the BCR is 1.0 or greater, indicating the benefits of a prospective hazard mitigation project are sufficient to justify the costs. Although the preparation of a BCA is a technical process, FEMA has developed software, written materials, and training to support the effort and assist with estimating the expected future benefits over the useful life of new mitigation or a retrofit project. It is imperative to conduct a BCA early in the project development process to ensure the likelihood of meeting the cost-effective eligibility requirement in the Stafford Act. The BCA program consists of guidelines, methodologies, and software modules for major natural hazards, protective measures, and review processes as listed below:

- ✓ Flood
- ✓ Wildfire
- ✓ Earthquake
- ✓ Hurricane Wind
- ✓ Tornado Safe Room
- ✓ Hurricane Safe Room
- ✓ Damage-Frequency Assessment

The BCA program provides up-to-date program data, default, and standard values, user manuals and training. Overall, the program makes it easier for users and evaluators to conduct and review BCAs and to address multiple buildings and hazards in a single BCA module instance.

Q&A | ELEMENT A: PLANNING PROCESS | A6b

Q: Does the plan identify how, when, and by whom the plan will be evaluated (assessing the effectiveness of the plan at achieving stated purpose and goals) over time? (Requirement §201.6(c)(4)(i))

A: See **6.6 EVALUATION** below.

6.6 EVALUATION

At the annual Implementation Meeting, the Emergency Management Coordinator will guide discussion with the Planning Team on the progress of the Mitigation Plan to meet the plan goals. Progress toward realization of plan goals will be evaluated with respect to allocated funding, initiation of work, and completion of projects. The results of that discussion will be added to the Evaluation section of the Semi-Annual Implementation Report for subsequent inclusion in the five year update to the Plan. Efforts will be initiated promptly by the Planning Team to address unrealized plan goals by noting roadblocks to progress, solution(s) available, and expectations for realization of reviewed goals. These updates will form the basis of mitigation project progress in both the current projects, as well as modified or subsequent projects for the following LHMP.

Q&A | ELEMENT A: PLANNING PROCESS | A6c

Q: Does the plan identify how, when, and by whom the plan will be updated during the 5-year cycle? (Requirement §201.6(c)(4)(i))

A: See **6.7 UPDATE PROCESS** below.

6.7 UPDATE PROCESS

As noted above, the Mitigation Action Items will be monitored for status on an annual basis and updated as conditions warrant. The Emergency Management Coordinator or designee will be responsible for contacting the Planning Team members and organizing the annual meeting which will, preferably, take place annually during the anniversary month of the Plan's FEMA approval. Planning Team members will be responsible for participating in the formal update to the Plan every fifth year of the planning cycle. The Planning Team will begin the update process with a review of the goals and mitigation action items to determine their relevance to changing situations within the City of Burbank, as well as changes in State or Federal policy to ensure they are addressing current and expected conditions.

The Planning Team will also review the Plan's Risk Assessment to determine if this information should be updated as a result of new data. The coordinating organizations responsible for the various action items will report on the status of their projects, including the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised. Amendments will be made to the Mitigation Actions and other sections in the Plan as deemed necessary by the Planning Team.

	YEAR 1*	YEAR 2	YEAR 3	YEAR 4	YEAR 5
MONITOR	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
EVALUATE					
Planning Team Evaluation	Annually in the anniversary month of FEMA's plan approval	Annually in the anniversary month of FEMA's plan approval	Annually in the anniversary month of FEMA's plan approval	Annually in the anniversary month of FEMA's plan approval	Month to month with goal of final preparation of updated plan to CalOES & FEMA
CalOES/FEMA Evaluation					Submission of plan update for evaluation as early as practicable in year 5
UPDATE	Apply local, state, or Federally relevant changes to draft update	Apply local, state, or Federally relevant changes to draft update	Apply local, state, or Federally relevant changes to draft update	Apply local, state, or Federally relevant changes to draft update	Completion expected by anniversary date of FEMA approval of current plan
*Monitoring begins following initial FEMA plan approval such that Year 1 is the immediately following 12 month period.					

Q&A | ELEMENT A: PLANNING PROCESS | A5

Q: Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))

A: See **6.8 EXTENDED PUBLIC INVOLVEMENT** below.

6.8 EXTENDED PUBLIC INVOLVEMENT

The City of Burbank Hazard Mitigation Planning Team is committed to involving the public in the ongoing review of and updates to the Local Hazard Mitigation Plan. Copies of the plan will be made available at the City of Burbank City Hall in print version and on the City's website electronically. The availability and location of these copies will be publicized via press release and on the website. This site will also contain an email address, phone number, and address where residents can direct their comments and concerns. At the discretion of the Emergency Management Coordinator, a public meeting may be held after the Annual Implementation Meeting. The meeting would provide the public a forum in which interested individuals and/or agencies could express their concerns, opinions, or ideas about the Plan. The Emergency Management Coordinator will be responsible for using City resources to publicize any public meetings and to maintain community involvement through the public access channels of social, web page, and traditional media.

Q&A | ELEMENT C. MITIGATION STRATEGY | C4a

Q: Does the plan identify and analyze a comprehensive range (different alternatives) of specific mitigation actions and projects to reduce the impacts from hazards? (Requirement §201.6(c)(3)(ii))

A: See **APPENDIX A** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C4b

Q: Does the plan identify mitigation actions for every hazard posing a threat to each participating jurisdiction? (Requirement §201.6(c)(3)(ii))

A: See **APPENDIX A** below.

Q&A | ELEMENT C. MITIGATION STRATEGY | C5b

Q: Does the plan identify the position, office, department, or agency responsible for implementing and administering the action/project, potential funding sources and expected timeframes for completion? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))

A: See **APPENDIX A** below.

APPENDICIES

APPENDIX A: 2022 Burbank Mitigation Action Items and Status

Project #	Hazard Addressed	Project/Action Description	Goal Addressed					Lead Department & Point of Contact	Estimated Timeline	Status	Potential Funding Sources	LHMP Origin
			Life Safety	Property Protection	Response/Recovery	Public Awareness	Land Use					
20-001	Multi-Hazard	Install adequate back up power for emergency shelters (McCambridge Recreation Center, Verdugo Recreation Center, Joslyn Adult Center, Olive Recreation Center) and Burbank's EOC.	X		X			Public Works	1-2 Years	0%	General Fund and/or Grants	2011
Pending	Multi-Hazard	Maintain a continuing role for the Mitigation Planning Committee to develop a sustainable process to encourage, implement, monitor, and evaluate citywide mitigation actions.	X	X	X	X	X	Emergency Management Coordinator	Ongoing	N/A*	General Fund	2011
19-001 (2011)	Multi-Hazard	Enhance education and outreach programs to increase public awareness of natural hazards and emergency preparedness and to provide information on how individuals and businesses can mitigate their vulnerability to hazards.	X	X	X	X	X	Emergency Management Coordinator	Ongoing	N/A*	General Fund	2011
20-002	Multi-Hazard	Integrate the Mitigation Plan findings into planning and regulatory documents and programs, including emergency planning.	X	X	X	X	X	Emergency Management Coordinator	Ongoing	N/A*	General Fund	2011

Pending	Multi-Hazard	Create and maintain a comprehensive citywide database for tracking declared and non-declared natural disaster and other emergency events.			X	X		Emergency Management Coordinator and Information Technology	Ongoing	N/A*	General Fund	2011
21-003	Multi-Hazard	Create a comprehensive GIS mapping database in cooperation with other agencies to identify high hazard areas within Burbank and overlay with critical and important buildings and facilities.	X	X	X	X	X	Emergency Management Coordinator and Information Technology	2-3 Years	10%	General Fund	2011
Pending	Multi-Hazard	Create and maintain an electronic database of all stakeholders involved in planning for and responding to natural disasters.			X	X	X	Emergency Management Coordinator and Information Technology	Ongoing	N/A*	General Fund	2011
20-003	Drought	Continue and enhance water conservation measures.			X	X	X	Burbank Water & Power	Ongoing	N/A*	General Fund, Utility Enterprise Funds and/or Grants	2011
20-004	Drought	Expand recycled water use and capacity commensurate with demand and funding availability.			X	X	X	Burbank Water & Power, Public Works	Ongoing	N/A*	General Fund, Utility Enterprise Funds and/or Grants	2011
18-001	Landslide/ Mudslide	Enhance emergency notification and evacuation procedures.	X	X	X	X		Public Information Officer, Emergency Management Coordinator, Police	1-2 Years	80%	General Fund	2011
18-002	Earthquake	Complete the remaining seismic retrofits on the important city-owned buildings as tabulated in Ch6 2011 Burbank LHMP.	X	X	X			Public Works	5 Years	75%	General Fund and/or Grants	2011

18-003	Earthquake	Develop programs to help homeowners implement nonstructural mitigation measures and structural retrofits for seismically vulnerable residential buildings.	X	X		X		Building Division	5 Years	75%	Grants	2011
Pending	Earthquake	Develop and implement a long term plan for nonstructural mitigation for City buildings and facilities.	X	X	X			Building Division, Public Works	Ongoing	N/A*	General Fund and/or Grants	2011
Pending	Flood	Increase public awareness of flood-prone areas, encourage mitigation and flood insurance.	X	X	X	X	X	Community Development, Public Works, Emergency Management Coordinator	5 Years	0%	General Fund and/or Grants	2011
20-007	Flood	Identify locations where storm water drainage are needed and implement mitigation measures.	X	X		X		Public Works	5 Years	80%	General Fund and/or Grants	2011
Pending	Flood	Continue to enforce fully all of the NFIP requirements to ensure full compliance.	X	X	X	X	X	Public Works	Ongoing	N/A*	General Fund and/or Grants	2011
Pending	Windstorm	Ensure that all City and non-City critical facilities in Burbank have backup power.	X	X	X	X		Public Works, Burbank Water & Power	3 Years	0%	General Fund and/or Grants	2011
19-002	Windstorm	Maintain tree trimming efforts especially for transmission lines and trunk distribution lines.	X	X	X			Burbank Water & Power, Parks Recreation and Community Services	Ongoing	N/A*	General Fund, Utility Enterprise Funds and/or Grants	2011
19-003	Windstorm	Encourage property owners to trim trees near service drops to individual customers.	X	X	X	X		Burbank Water & Power	Ongoing	N/A*	General Fund, Utility Enterprise Funds and/or Grants	2011

22-001	Wildfire	Develop and disseminate informational materials to residents in the Fire Severity Zone to enhance awareness and encourage fire safe practices, including fuel reduction, defensible space, and fire-safe construction.	X	X	X	X		Fire	1-2 Years	25%	General Fund, Utility Enterprise Funds and/or Grants	2011
22-002	Wildfire	Identify evacuation routes and procedures for high risk areas and educate the public.	X		X	X		Police, Fire, Emergency Management Coordinator	1-2 Years	75%	General Fund and/or Grants	2011
22-003	Wildfire	Implement fuel reduction/ management including demonstrator projects in the Fire Severity Zone.	X	X	X	X	X	Fire	1-3 Years	25%	General Fund, Utility Enterprise Funds and/or Grants	2011
20-009	Community Preparedness	Identify a new primary location for the Emergency Operations Center.	X	X	X			Emergency Management	5 Years	25%	General Fund and/or Grants	2022
Pending	Community Preparedness	Conduct evacuation studies for foothill developments, include looking at opportunities to provide secondary access particularly in accordance with the Burbank Zoning Code.	X		X			Emergency Management, Development Services, Community Services	5 Years	0%	General Fund and/or Grants	2022
21-004	Community Preparedness	Develop an emergency telephonic notification system for City employees.	X	X	X	X		Emergency Management	3 Years	90%	General Fund	2022
Pending	Community Preparedness	Conduct regular emergency preparedness drills and training exercises for City staff.	X		X	X		Emergency Management	Ongoing	N/A*	General Fund	2022
Pending	Community Preparedness	Continue to coordinate with local school districts to ensure that school facilities can act as evacuation sites during major emergencies.	X		X		X	Emergency Management	Ongoing	N/A*	General Fund, School District Funds/Bonds and/or Grants	2022

20-010	Community Preparedness	Work with Burbank business groups to provide hazard mitigation and preparedness information to reduce loss.	X	X	X	X		Emergency Management	Ongoing	N/A*	General Fund and/or Grants	2022
19-004	Community Preparedness	Expand participation in the Burbank Community Emergency Response Team (CERT) program for residents and businesses in conjunction with Ready Burbank program.	X	X	X	X		Emergency Management	5 Year	50%	General Fund and/or Grants	2022
Pending	Community Preparedness	Store and maintain critical emergency supplies and equipment in strategic locations across the community.	X		X			Emergency Management	1-2 Years	0%	General Fund and/or Grants	2022
21-005	Community Preparedness	Ensure that community evacuation plans include provisions for community members who lack access to private vehicles or are otherwise transportation challenged.	X		X	X		Emergency Management, Development Services, Community Services	5 Years	20%	General Fund and/or Grants	2022
Pending	Community Preparedness	Continue to ensure effective emergency notifications through multiple media, in English and Spanish, about pending, imminent, or ongoing emergency events. Ensure that information is accessible to persons with disabilities and functional needs as outlined in the General Plan.	X	X	X	X		Emergency Management, Development Services, Community Services	Ongoing	N/A*	General Fund and/or Grants	2022
22-004	Multi-Hazard (Universal)	Improve Fire Station locations and facilities against hazard events.	X	X	X			Fire Department	5 Years	0%	General Fund and/or Grants	2022

Pending	Multi-Hazard (Universal)	Improve emergency power systems at water processing facilities and harden them against hazard events.	X	X	X			Water and Power Department	5 Years	0%	General Fund, Enterprise Utility Funds and/or Grants	2022
22-005	Multi-Hazard (Universal)	Install backup generators at community facilities that serve as cooling or evacuation centers	X		X			Community Development, Emergency Management	5 Years	0%	General Fund and/or Grants	2022
20-010	Multi-Hazard (Drought, Wildfire)	Promote water conservation, drought tolerant landscaping, and defensible space practices in accordance with the Burbank Zoning Code.			X	X	X	Engineering Division, Fire Department	2-3 Years	75%	General Fund, Enterprise Utility Funds and/or Grants	2022
22-006	Multi-Hazard (Earthquake, Windstorm)	Work with community groups to increase awareness of hazard events and resiliency opportunities across the whole community in conjunction with the Ready Burbank Program.	X	X	X	X		Community Development, Emergency Management	Ongoing	N/A*	General Fund and/or Grants	2022
Pending	Multi-Hazard (Universal)	Ensure that key City-owned facilities are hardened against hazards beyond minimum building requirements/mitigation standards.	X	X	X			Community Development	5 Years	0%	General Fund and/or Grants	2022
Pending	Multi-Hazard (Universal)	Install backup power systems for key City-owned water pumps.		X	X			Water and Power Department	5 Years	0%	General Fund, Enterprise Utility Funds and/or Grants	2022
Pending	Multi-Hazard (Universal)	Coordinate with regional social service agencies and nonprofit care providers to obtain temporary shelters in advance of hazard events.	X		X	X		Community Development	Ongoing	0%	General Fund	2022
Pending	Multi-Hazard (Earthquake)	Work with Caltrans and railroad operators to harden bridges against hazard events.	X	X		X		Engineering Division	5 Years	0%	N/A Staff Time	2022

22-007	Multi-Hazard (Flood, Wildfire)	Monitor changes in boundaries for mapped hazard areas due to land use or climate change and revise mitigation actions to ensure continued resiliency routes in conjunction with Burbank Zoning Codes.		X			X	Engineering Division, Planning Division	Ongoing	N/A*	N/A Staff Time	2022
21-006	Multi-Hazard (Universal)	Improve waste and runoff water systems against hazardous events in conjunction with Burbank2035 conservation priorities.		X	X			Water and Power Department, Public Works Department	5 Years	0%	General Fund, Enterprise Utility Funds and/or Grants	2022
20-011	Multi-Hazard (Universal)	Integrate policy direction and details from this Plan into City documents, including the General Plan, Emergency Operations Plan, and Capital Improvements Program.	X	X	X			Engineering Division, Community Development, Emergency Management	5 Years	50%	N/A Staff Time	2022
Pending	Multi-Hazard (Universal)	Monitor funding sources for hazard mitigation activities opportunities.		X	X			Emergency Management	Ongoing	N/A*	General Fund, Enterprise Utility Funds and/or Staff Time	2022
21-007	Multi-Hazard (Earthquake, Windstorm)	Conduct an inventory of seismically vulnerable buildings and structures and pursue funding to incentivize retrofits of buildings and structures not covered by the existing state and local seismic strengthening ordinances to be more resilient to seismic events.	X	X			X	Community Development, Planning Division, Public Works Department	2-3 Years	50%	General Fund and/or Staff Time	2022
21-008	Multi-Hazard (Earthquake, Windstorm)	Promote small-scale seismic retrofits, such as window films to minimize shattering, anchors for rooftop-mounted equipment, and bracing for masonry chimneys.	X	X			X	Community Development	2-3 Years	50%	General Fund and/or Grants	2022

Pending	Multi-Hazard (Earthquake , Wildfire)	Consider the use of flexible water pipes, particularly across known faults, to enhance seismic resiliency.		X	X			Water & Power Department	5 Years	0%	General Fund and/or Grants	2022
Pending	Earthquake	Explore amending the Burbank Zoning Code to incorporate standards requiring new buildings to retain habitability and functionality following seismic events.		X	X			Community Development, Planning Division	5 Years	0%	General Fund, Staff Time and/or Grants	2022
Pending	Earthquake	Encourage community groups and industry representatives to conduct outreach about earthquake insurance to Burbank community members, including renters.		X	X	X		Financial Services	Ongoing	N/A*	NA Staff Time	2022
18-002	Flooding	Use permeable paving and landscaped swales for new and replacement City owned hard-scape areas.		X			X	Public Works Department	1-2 Years	80%	General Fund and/or Grants	2022
18-004	Flooding	Develop incentives to harden private buildings and structures against flooding.	X	X				Public Works Department, Community Development	5 Years	0%	General Fund and/or Grants	2022
Pending	Flooding	Discourage new schools, child care centers, and adult and senior assisted living facilities from locating in any flood prone areas in conjunction with the Burbank Zoning Code.	X	X		X	X	Community Development	Ongoing	N/A*	General Fund and/or Grants	2022
Pending	Flooding	Encourage renters in flood prone areas to obtain rental insurance that includes flood protection.		X	X	X		Financial Services	Ongoing	N/A*	General Fund and/or Grants	2022
Pending	Flooding	Secure funding for storm drain system improvements.		X	X			Public Works Department	Ongoing	N/A*	General Fund and/or Grants	2022

21-009	Multi-Hazard (Drought, Flood, Wildfire)	Aggressively search for and repair leaks in Burbank's water infrastructure.		X			X	Water and Power Department, Public Works Department	2-3 Years	25%	General Fund, Enterprise Utility Funds and/or Grants	2022
Pending	Multi-Hazard (Windstorm, Earthquake, Wildfire)	Survey and improve power lines.	X	X			X	Water & Power Department	5 Years	0%	General Fund, Enterprise Funds and/or Grants	2022
Pending	Multi-Hazard (Windstorm, Earthquake)	Encourage significant retrofits to existing buildings to meet wind speed design specifications in the Burbank Building Zoning Code.	X	X		X		Community Development	Ongoing	N/A*	General Fund and/or Grants	2022
Pending	Windstorm	Explore amending the Burbank Zoning Code to incorporate wind loading provisions such as those contained in the ASCE 7 Standard as a central part of the impact reduction effort.	X	X			X	Community Development, Planning Division	5 Years	0%	General Fund and/or Grants	2022
Pending	Multi-Hazard (Windstorm, Earthquake)	Encourage enforcement and inspection by local building officials of new and existing California Building Code requirements in areas of higher risk to wind borne hazards.	X	X		X		Public Works Department, Community Development	Ongoing	N/A*	N/A Staff Time	2022
Pending	Human Caused	Discourage new sensitive land uses, including schools, parks, child care centers, adult and senior assisted living facilities, and community centers, from locating near identified hazardous material facilities. Discourage or prohibit new hazardous material facilities from locating near sensitive land uses in conjunction with the Burbank Zoning Code.	X	X		X	X	Community Development	Ongoing	N/A*	N/A Staff Time	2022

Pending	Human Caused	Work with solid waste service contractors to educate Burbank residents and businesses on safe disposal of small quantities of hazardous materials.	X	X		X		Public Works Department	Ongoing	N/A*	N/A Staff Time	2022
Pending	Human Caused	Maintain and improve relationships with both air and rail operators within City limits with respect to transportation safety.	X	X	X			City Manager	Ongoing	N/A*	N/A Staff Time	2022

N/A* - Marked items under the Status column are mitigation actions that are ongoing and not expected to reach completion over the course of foreseeable mitigation plans. Items marked N/A in the Potential Funding column indicates that funding is not expected to originate outside personnel salaries. Examples of this include environmental actions such as vegetation clearance or community relations actions such as educational programs.

APPENDIX B: Place Holder For City of Burbank Adoption Resolution

Final plan will be submitted to City Council for adoption. A copy of the City Council Resolution for adoption will be inserted here upon submission to City Council for adoption.

APPENDIX C: Place Holder For FEMA Approval Letter



U.S. Department of Homeland Security
FEMA Region 9
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

January 26, 2023

Eric Baumgardner
Emergency Management Coordinator
City of Burbank Fire Department
311 E Orange Grove Avenue
Burbank, CA 91502

Dear Eric Baumgardner:

The Federal Emergency Management Agency (FEMA) has completed its review of the *City of Burbank Local Hazard Mitigation Plan 2022* and has determined that this plan is eligible for final approval pending its adoption by the City of Burbank.

Formal adoption documentation must be submitted to FEMA Region 9 within one calendar year of the date of this letter, or the entire plan must be updated and resubmitted for review. FEMA will approve the plan upon receipt of the documentation of formal adoption.

If you have any questions regarding the planning or review processes, please contact the FEMA Region 9 Hazard Mitigation Planning Team at fema-r9-mitigation-planning@fema.dhs.gov.

Sincerely,

Alison Kearns
Planning and Implementation Branch Chief
Mitigation Division
FEMA Region 9

Enclosure (1)

City of Burbank Plan Review Tool, dated January 26, 2023

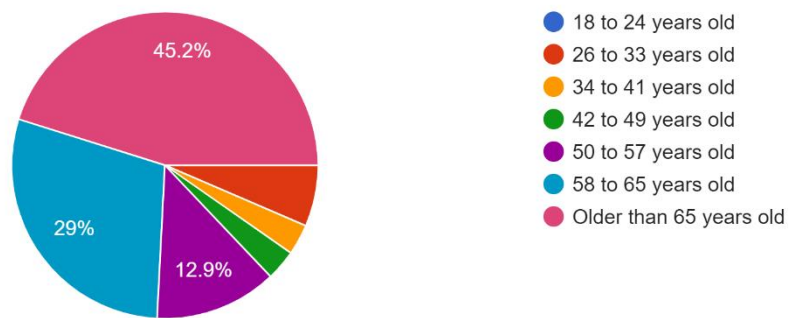
cc: Victoria LaMar-Haas, Hazard Mitigation Planning Chief, California Governor's Office of
Emergency Services
Jacy Hyde, Acting State Hazard Mitigation Officer, California Governor's Office of
Emergency Services

www.fema.gov

APPENDIX D: Hazard Mitigation Public Survey

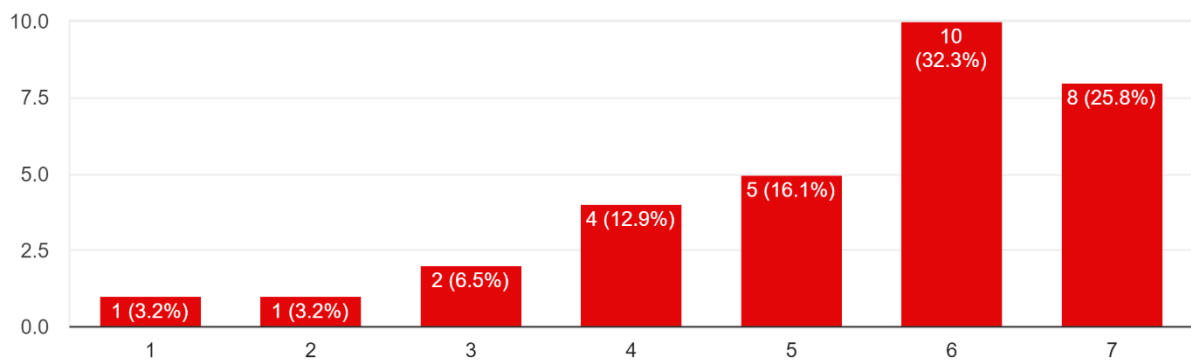
Which age range best describes you?

31 responses



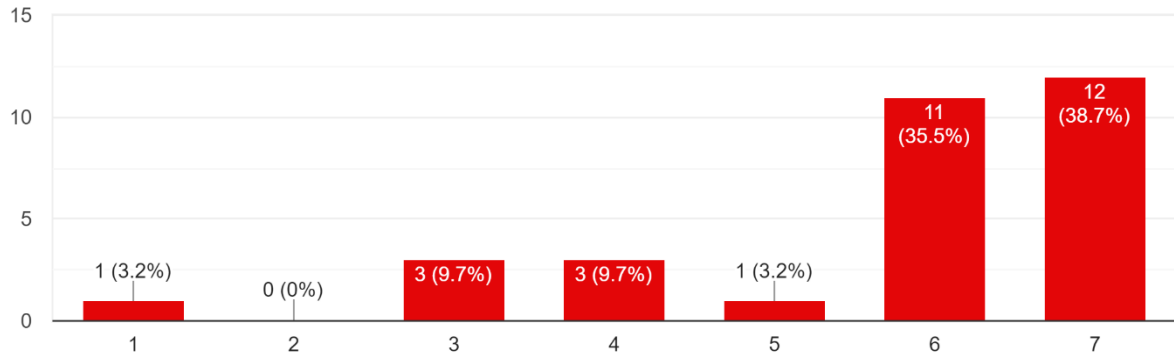
How familiar are you with the potential threat of EARTHQUAKES specific to the CITY of BURBANK

31 responses



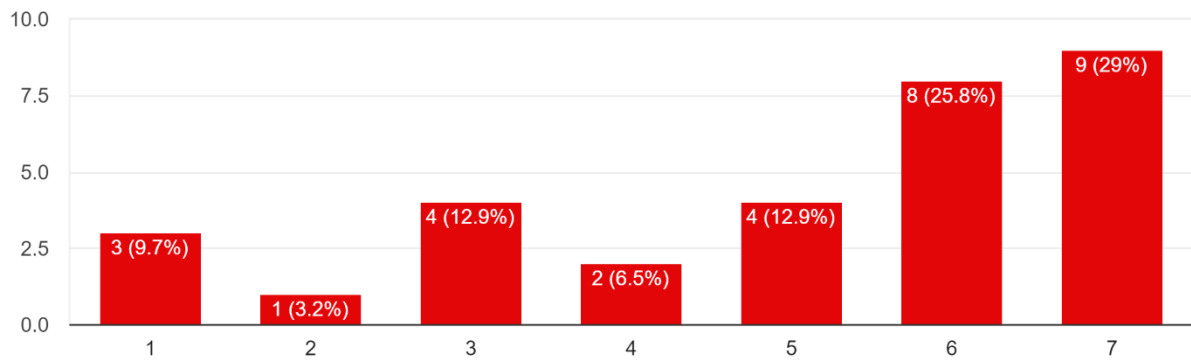
How familiar are you with the potential threat of WILDLAND (brush) FIRES specific to the CITY of BURBANK

31 responses



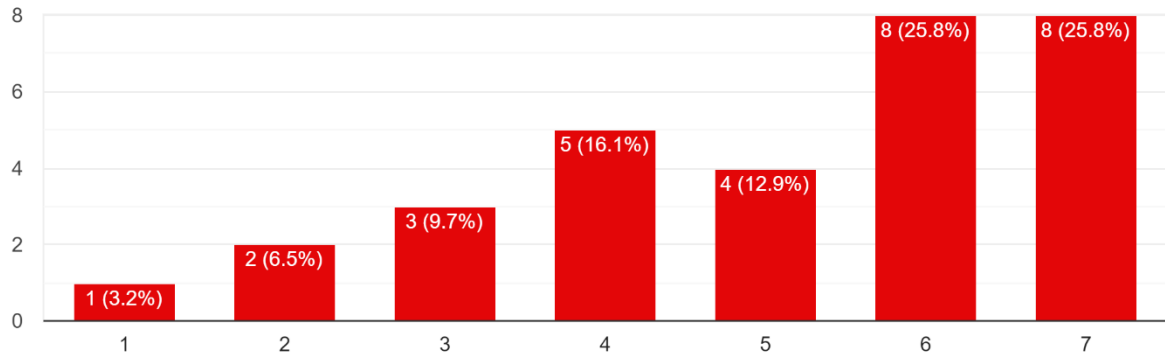
How familiar are you with the potential threat of WINDSTORMS (winds of a damaging speed for prolonged period) specific to the CITY of BURBANK

31 responses



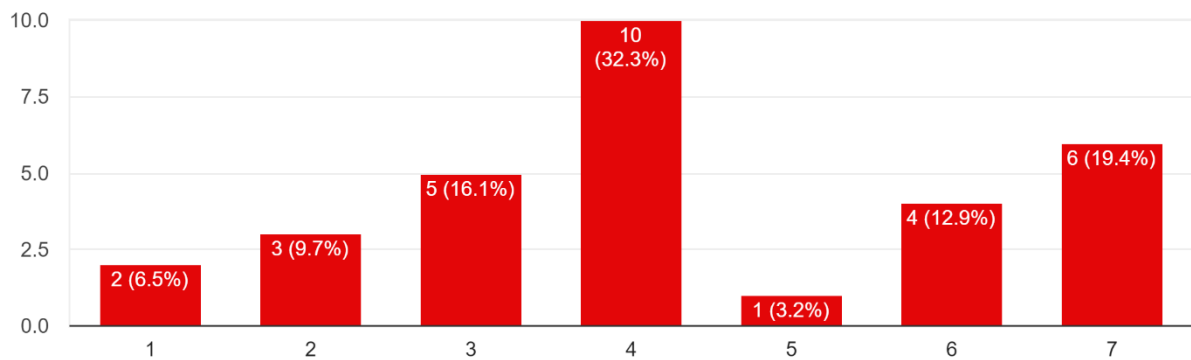
How familiar are you with the potential threat of MUD & DEBRIS FLOWS specific to the CITY of BURBANK

31 responses



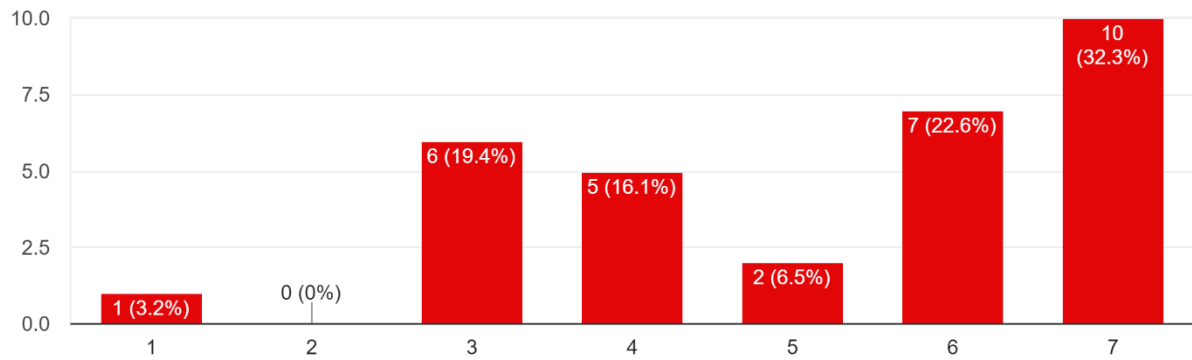
How familiar are you with the potential threat of FLOODS & URBAN FLOODING specific to the CITY of BURBANK

31 responses



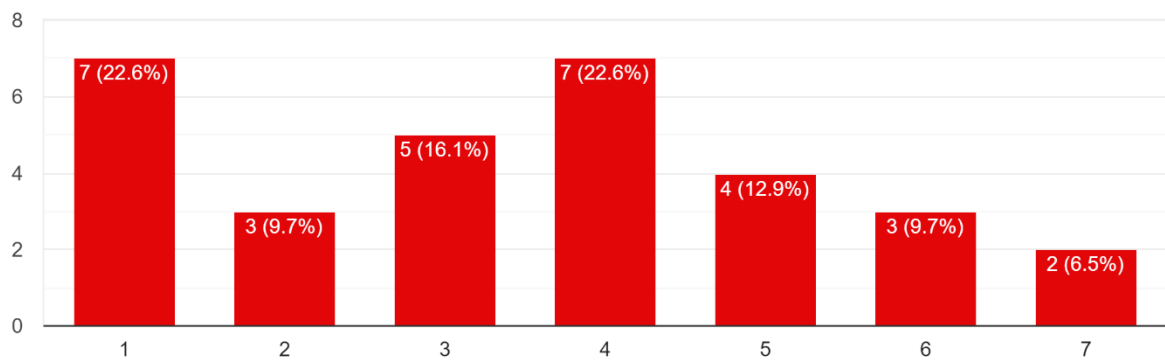
How familiar are you with the potential threat of DROUGHT or CLIMATE CHANGE specific to the CITY of BURBANK

31 responses



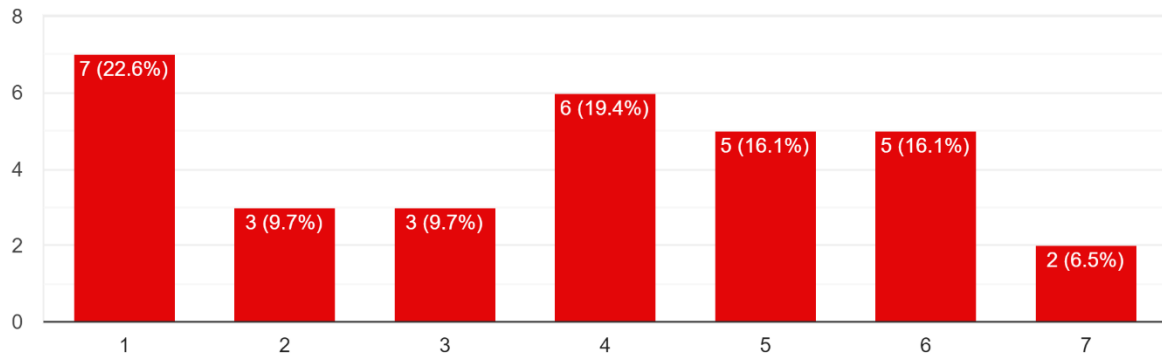
How familiar are you with the potential threat of HAZARDOUS MATERIALS specific to the CITY of BURBANK

31 responses

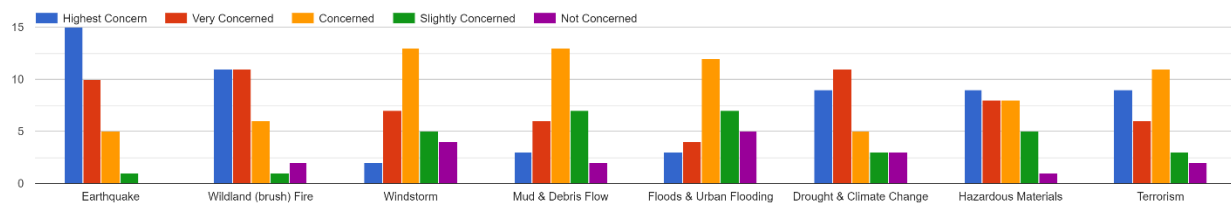


How familiar are you with the potential threat of TERRORISM specific to the CITY of BURBANK

31 responses

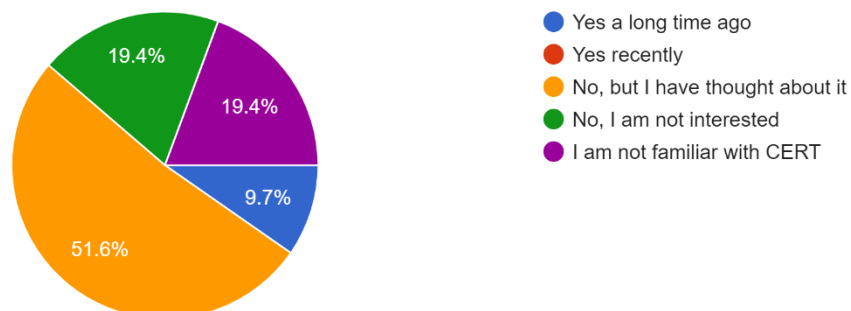


Which identified hazards are you most concerned with



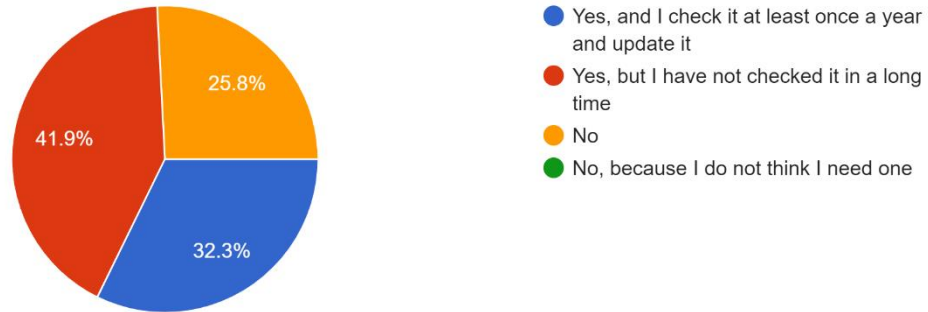
Have you taken a Community Emergency Response Team (CERT) training class

31 responses



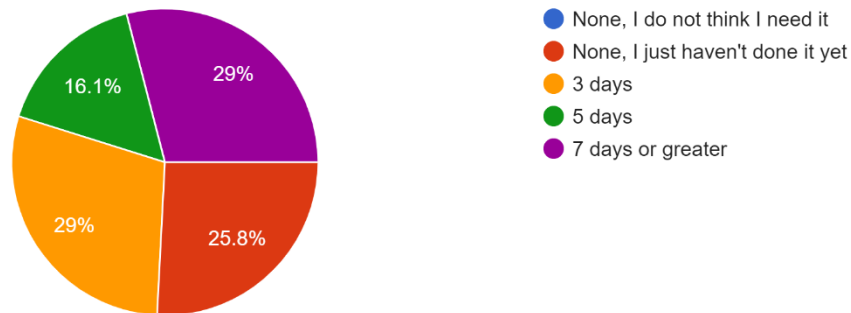
Do you have an emergency kit at home

31 responses



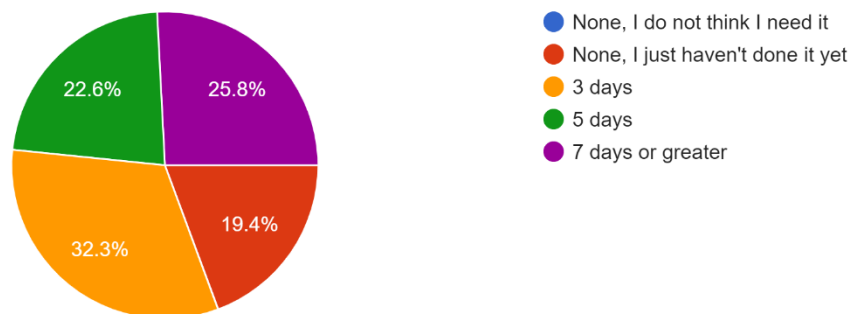
How many days of emergency food do you have at home for each member of the family (this can be either specific emergency rations such as Meal...e just for an emergency, not normal pantry items)

31 responses



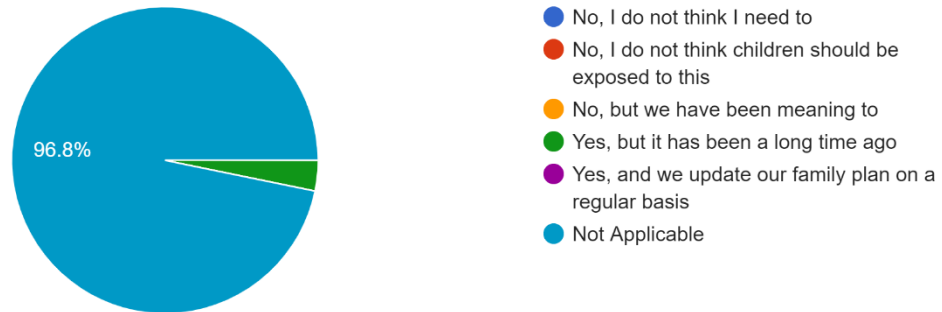
How many days of emergency drinking water do you have at home for each member of the family (this should be equal to 1 gallon of water per person per day)

31 responses



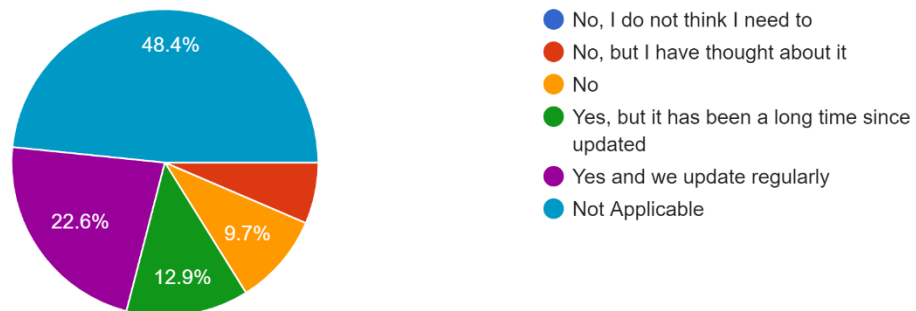
If there are children living in your household, have you discussed the risk of hazards and threats and made a family emergency response plan

31 responses



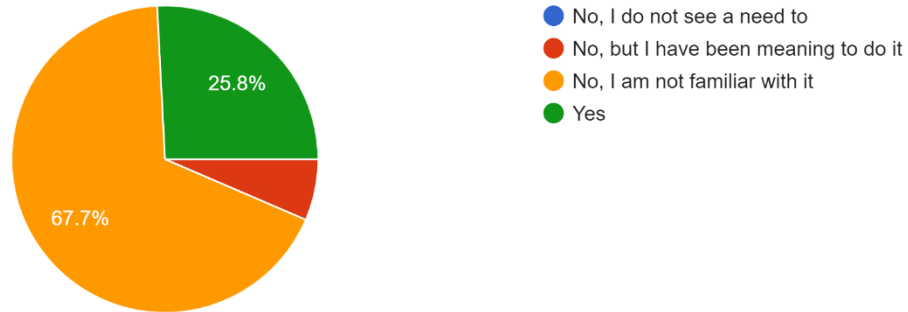
If you have pets at home, do you have emergency supplies (including extra food and water) and an emergency plan for your pets?

31 responses



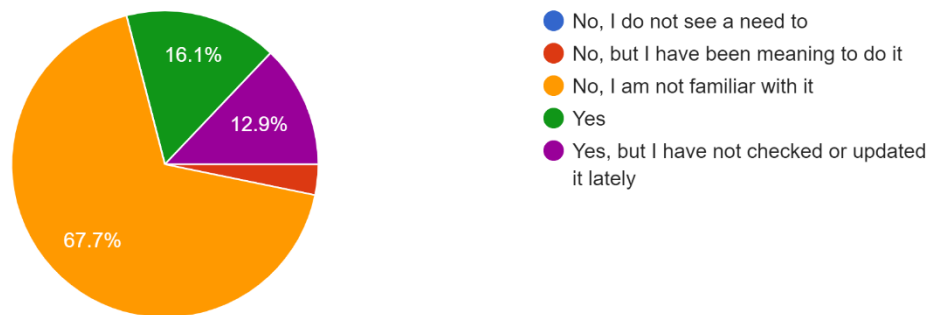
Have you subscribed to the Burbank Police Department's NIXLE notification system

31 responses

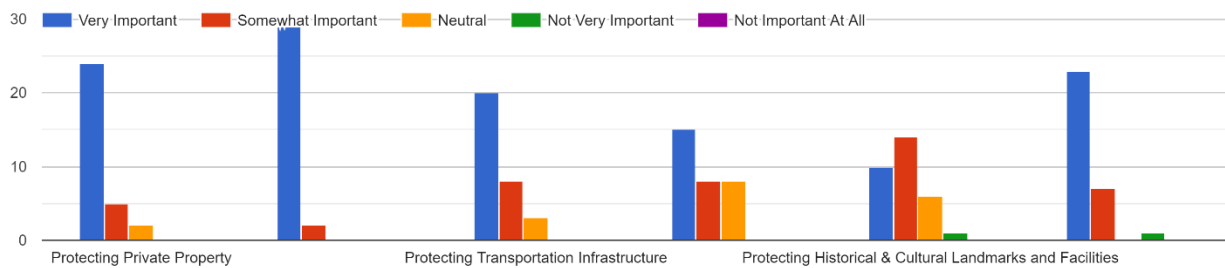


Have you subscribed and registered with Burbank Community Alerts (the City of Burbank electronic emergency mass notification system)

31 responses

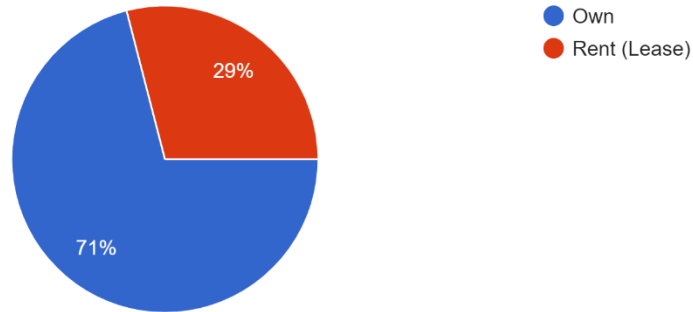


Natural and human caused disasters can have a significant impact on the community, but planning for these events can help lessen the impact. How important do you feel it is to plan for each category below.



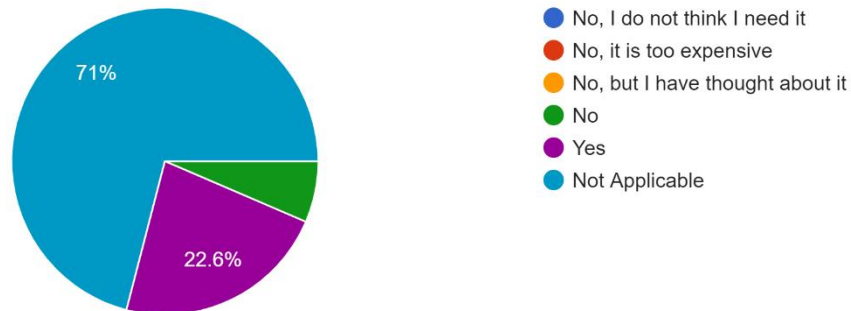
Do you own or rent where you live

31 responses



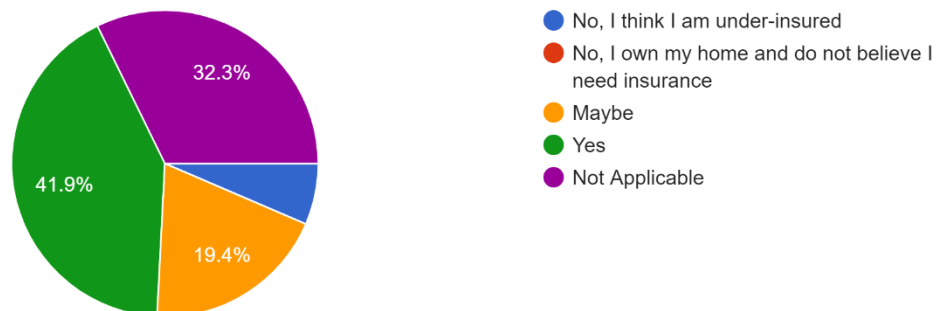
If you rent, do you have Renter's Insurance

31 responses



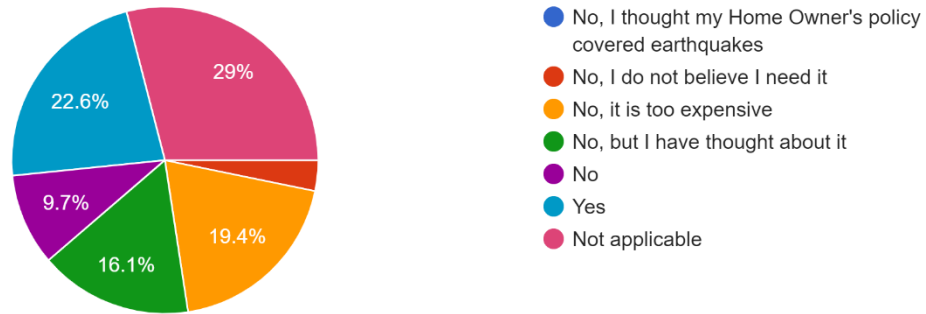
If you own, do you believe you have adequate Home Owner's Insurance coverage to replace your home if severely damaged or totally lost as a result of a disaster or similar situation

31 responses



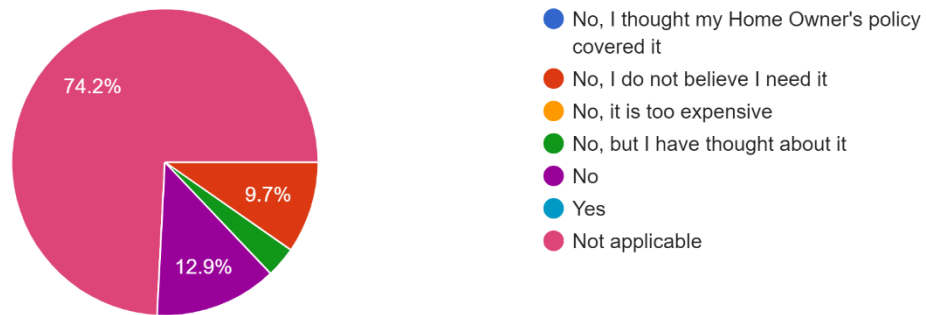
If you own your home, do you have supplemental Earthquake Insurance (FYI regular Home Owner's Insurance does not cover earthquake damage)

31 responses



If you own your home and live in an identified flood risk area, do you have supplemental Flood Insurance (FYI regular Home Owner's Insurance may not cover flood damage)

31 responses



APPENDIX E: California Building Codes 9-1-2-G102.2 & 9-1-2-G103.10

See: <https://www.codepublishing.com/CA/Burbank/html/Burbank09/Burbank0901.html#9-1-2-G102.2>

See: <https://www.codepublishing.com/CA/Burbank/html/Burbank09/Burbank0901.html#9-1-2-G103.10>

Appendix G: Resolution to Adopt UWMP

RESOLUTION NO. 26-29,717

A RESOLUTION OF THE COUNCIL OF THE CITY OF
BURBANK APPROVING AND ADOPTING THE 2025 URBAN
WATER MANAGEMENT PLAN AND THE WATER
SHORTAGE CONTINGENCY PLAN

THE COUNCIL OF THE CITY OF BURBANK FINDS:

A. The Urban Water Management Planning Act (Cal. Water Code Section 10610 *et seq.*; hereinafter “the Act”) mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare and adopt an Urban Water Management Plan (“UWMP”), the primary objectives of which are to evaluate water supplies and demands, including the reliability of supplies, to plan for the conservation and efficient use of water, and to prepare for water shortages. Further, urban water suppliers must prepare and adopt a Water Shortage Contingency Plan (“WSCP”) as part of the UWMP to address potential water supply shortages from drought or other impacts to water supply availability.

B. The City of Burbank is an urban water supplier providing water to a population of over 100,000 through over 26,000 water service connections and is required to prepare and adopt a UWMP and WSCP pursuant to the Act.

C. The Act provides that the UWMP and WSCP be reviewed and updated at least once every five years, in years ending in five and zero, and that the City make any changes or amendments to the Plans which are indicated by the review.

D. Any such changes or amendments to the UWMP and WSCP must be adopted by July 1, 2026, after public review and hearing, and filed with the California Department of Water Resources, the California State Library and the County of Los Angeles within thirty (30) days of adoption.

E. The City has prepared and circulated for public review the draft 2025 UWMP, which updates and replaces the 2020 Plan, and includes the City’s updated 2025 WSCP as required by statute.

F. A duly noticed public hearing regarding such changes or amendments to the proposed 2025 UWMP and WSCP was held by the City Council on June 16, 2026. Notice of the hearing was published in accordance with California Water Code Section 10642.

G. The City Council considered the staff report and recommendations therein, and the evidence and testimony presented at such hearing.

H. Pursuant to California Water Code Section 10652, no further environmental review is required under the California Environmental Quality Act (“CEQA”) because CEQA does not apply to the preparation or adoption of plans pursuant to Part 2.6 of

Division 6 of the California Water Code, including UWMPs and WSCPs.

THE COUNCIL OF THE CITY OF BURBANK RESOLVES:

1. The findings above are true and correct, and incorporated herein.
2. The 2025 Urban Water Management Plan and the 2025 Water Shortage Contingency Plan, attached to the Staff Report dated June 16, 2026, are hereby adopted and ordered filed with the City Clerk.
3. The General Manager of Burbank Water and Power is hereby authorized and directed to file the 2025 Urban Water Management Plan and the 2025 Water Shortage Contingency Plan with the California Department of Water Resources, the California State Library, and the County of Los Angeles within thirty (30) days of adoption.
4. The City Clerk shall certify to the passage and adoption of this Resolution.

PASSED and ADOPTED this 16th day of June, 2026.

s/Tamala Takahashi

Tamala Takahashi
Mayor

Approved as to Form:
Office of the City Attorney

Attest:

s/Linda Thai
Linda Thai, Assistant City Clerk

By: s/Lisa Kurihara
Lisa Kurihara
Senior Assistant City Attorney

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.
CITY OF BURBANK)

I, Linda Thai, Assistant City Clerk of the City of Burbank, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by a vote of the Council of the City of Burbank at its regular meeting held on the 16th day of June, 2026 by the following vote:

AYES: Anthony, Perez, Rizzotti, and Takahashi.

NOES: None.

ABSENT: Mullins.

s/Linda Thai
Linda Thai, Assistant City Clerk