



Water Resources Department

2025 Urban Water Management Plan

June 2026

Final Draft

RESOLUTION NO. 2026-31

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAKEWOOD ADOPTING THE 2025 URBAN WATER MANAGEMENT PLAN AND WATER SHORTAGE CONTINGENCY PLAN PURSUANT TO CALIFORNIA WATER CODE SECTIONS 10610 THROUGH 10657

WHEREAS, the City of Lakewood is an urban water supplier as defined by the California Water Code Section 10617; and

WHEREAS, the California Water Code Sections 10610 through 10657 require urban water suppliers to prepare and adopt an Urban Water Management Plan every five years; and

WHEREAS, the City of Lakewood has prepared the 2025 Urban Water Management Plan in compliance with the requirements of the Urban Water Management Plan Act; and

WHEREAS, the 2025 Urban Water Management Plan includes a Water Shortage Contingency Plan in accordance with California Water Code Section 10632; and

WHEREAS, the City of Lakewood has conducted a duly noticed public hearing in accordance with California Water Code Section 10642; and

WHEREAS, the City Council has reviewed and considered the 2025 Urban Water Management Plan and finds it to be consistent with applicable State laws and in the best interest of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKEWOOD DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1.

The City Council hereby adopts the 2025 Urban Water Management Plan and Water Shortage Contingency Plan.

SECTION 2.

The City Council authorizes the City Manager or designee, to file the adopted 2025 Urban Water Management Plan including the Water Shortage Contingency Plan with the California Department of Water Resources, the California State Library and any applicable local agencies within 30 days of adoption.

SECTION 3.

This resolution shall take effect immediately upon adoption.

ADOPTED AND APPROVED THIS 23RD DAY OF JUNE, 2026.

Mayor

ATTEST:

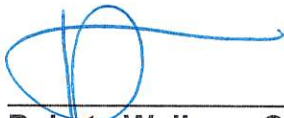
City Clerk

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)SS
CITY OF LAKEWOOD)

I, **Dakota Wallace**, City Clerk of the City of Lakewood, California, do hereby certify under penalty of perjury that the foregoing Resolution No. 2026-31 was duly passed, approved, and adopted by the City Council of the City of Lakewood at its Regular Meeting of the City Council on June 23, 2026, by the following vote to wit:

AYES: Council Members – Wood, Croft, Arellano, Rogers, and Mayor Chase

Dated: June 24, 2026



**Dakota Wallace, City Clerk
City of Lakewood, California**

(SEAL)



2025 Urban Water Management Plan

**Prepared for:
City of Lakewood
Water Resources Department
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LIST OF ACRONYMS

AB	Assembly Bill
AF	Acre-feet
AFY	Acre-feet per year
AWWA	American Water Works Association
CBMWD	Central Basin Municipal Water District
CBWQPP	Central Basin Water Quality Protection Program
CIMIS	California Irrigation Management Information System
City	City of Lakewood
CWC	California Water Code
DACs	Disadvantaged Communities
DOF	Department of Finance
DPW	Department of Public Works
DRA	Drought Risk Assessment
DWR	Department of Water Resources
ERP	Emergency Response Plan
ETo	Evapotranspiration
FY	Fiscal Year
GCMs	General Circulation Models
GIS	Geographical Information Systems
GPCD	Gallons per capita per day
gpm	Gallons per minute
GSP	Groundwater Sustainability Plan
GSWC	Golden State Water Company
GWMA	Gateway Water Management Authority
LACSD	Los Angeles County Sanitation Districts
LBWRP	Long Beach Water Reclamation Plant
LCWRP	Los Coyotes Water Reclamation Plant
LVL	Leo J. Vander Lans Advanced Water Treatment Facility
M&I	Municipal and Industrial
MCL	Maximum Contaminant Level
MOU	Memorandum of Understanding
MSL	Mean Sea Level
MWD	Metropolitan Water District of Southern California
PCE	Perchloroethylene
PFAS	Per- and Poly-Fluoroalkyl Substances
Plan	Urban Water Management Plan
RCP	Representative Concentration Pathway
RRA	Risk and Resilience Assessment
SB	Senate Bill
SCAG	Southern California Association of Governments
SGMA	Sustainable Groundwater Management Act

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SWRCB	State Water Resources Control Board
SWRCB-DDW	State Water Resources Control Board – Division of Drinking Water
SWP	State Water Project
TCE	trichloroethylene
TDS	Total Dissolved Solids
USEPA	U.S. Environmental Protection Agency
UWMP	Urban Water Management Plan
VOCs	Volatile Organic Compounds
WIN	Water Independence Now
WRCC	Western Regional Climate Center
WRD	Water Replenishment District of Southern California
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSRA	Water Supply Reliability Assessment
WUCA	Water Utility Climate Alliance
WUE	Water Use Efficiency

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CHAPTER 1

URBAN WATER MANAGEMENT PLAN INTRODUCTION AND OVERVIEW

LAY DESCRIPTION - INTRODUCTION

An urban water supplier is defined (pursuant to Section 10617 of the California Water Code¹) 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 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.”

The City of Lakewood (City) is classified as an urban water supplier because it serves more than 3,000 customers (i.e. individual metered accounts) and it supplies more than 3,000 acre-feet of water annually to its customers for municipal purposes.

In accordance with the “Urban Water Management Planning Act”, which was enacted by the California Legislature in 1983, every urban water supplier (including the City) is required to prepare and adopt an Urban Water Management Plan (UWMP), periodically review its UWMP, and incorporate updated and new information into an updated UWMP at least once every five years.

The City’s most recent update was its 2020 UWMP (or 2020 Plan) which was submitted to, and approved by, the California Department of Water Resources (DWR). Urban water suppliers (including the City) are required to complete and submit their 2025 UWMPs to DWR by July 1st, 2026.

¹ References to CWC Sections in this 2025 UWMP were obtained from <https://leginfo.legislature.ca.gov/>



The current requirements for preparing the UWMP are included in California Water Code (CWC) Sections 10608 through 10657. The City’s 2025 UWMP (or 2025 Plan) was prepared consistent with the CWC and the recommended organization provided in DWR’s Final “Urban Water Management Plan Guidebook 2025” (Final 2025 UWMP Guidebook), dated January 2026.

The UWMP provides urban water suppliers (including the City) with a reliable management action plan for long-term resource planning to ensure adequate water supplies are available to meet existing and future water supply needs. In addition, the 2025 Plan incorporates water supply reliability determinations resulting from potential prolonged drought, regulatory revisions, and/or changing climatic conditions.

The City’s 2025 Plan consists of the following Chapters:

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

A lay description is presented at the beginning of each of these Chapters.



LAY DESCRIPTION – CHAPTER 1

URBAN WATER MANAGEMENT PLAN INTRODUCTION AND OVERVIEW

Chapter 1 (Urban Water Management Plan Introduction and Overview) of the City's 2025 Plan discusses and provides the following:

- An overall lay description of the 2025 Plan, including California Water Code and Urban Water Management Plan Act requirements, is provided. The City is required to prepare an Urban Water Management Plan.
- The City's 2025 Plan was prepared consistent with the recommended organization provided in DWR's Final "Urban Water Management Plan Guidebook 2025", dated January 2026. A description regarding the organization of the 2025 Plan, including a summary of each Chapter, is provided. The City's Water Shortage Contingency Plan (discussed in Chapter 8) is also included in the 2025 Plan.
- The 2025 Plan incorporates DWR's water use and supply tables (standardized Submittal Tables) for the reporting and submittal of UWMP data. Relevant Submittal Tables are included at the end of each Chapter in this 2025 Plan and in Appendix A.
- The City's coordination efforts with other planning agencies are discussed, including coordination efforts with Central Basin Municipal Water District (CBMWD) and the Southern California Association of Governments
- The City's eligibility to receive grants and loans administered by the State of California and/or DWR, as a result of preparing the 2025 Plan, is discussed.
- Information is provided which demonstrates the City's prior, continued, and projected independence from imported water supplies obtained (either directly or indirectly) from the Sacramento-San Joaquin Delta (Delta).



- The checklist developed by DWR and used by the City to incorporate the specific UWMP requirements is discussed. The completed checklist is provided in Appendix B.

1.1 UPDATED GUIDANCE FOR 2025 URBAN WATER MANAGEMENT PLAN

The City's 2025 Plan was prepared consistent with the recommended organization provided in DWR's Final "Urban Water Management Plan Guidebook 2025", dated January 2026. DWR provided the following updated guidance for the preparation of the 2025 Plans (in comparison to the preparation of the 2020 Plans):

- There have been minor changes to the Water Code since the 2020 Plans were submitted; primarily, several definitions have been added (none of these change the requirements for 2025 Plans).
- DWR and the State Water Resources Control Board are using the same criteria to determine when a water supplier with multiple Public Water Systems is considered an Urban Water Supplier subject to UWMP requirements.
- DWR has updated its submittal tables to reflect the current reporting year, improve accuracy of reporting, and more clearly identify information required by Water Code and optional information.
- There has been no change to the Water Code regarding water loss standard reporting since the 2020 Plans were submitted. However, water suppliers can report progress toward compliance with their 2028 Water Loss Standard in the 2025 Plans (see Table 4-6).
- The State Water Resources Control Board has adopted regulations for the use of direct potable reuse (DPR) since the 2020 Plan reporting. To allow for reporting of DPR, minor changes have been made to the supply and demand tables in the 2025 Plans.



- While projections for lower-income housing were required in the 2020 Plans, additional guidance has been provided for optional reporting of the method used to project water use for lower-income housing.
- In previous years, the guidance for reporting water placed into storage did not differentiate between long-term storage (i.e., water placed into storage one year but extracted in a future year) and short-term storage (i.e., water that is placed into storage and extracted the same year). When a water supplier reports water placed into storage and then reports it was retrieved in the same year (short-term storage) it can cause a double counting error. Additional guidance has been provided recommending that water suppliers do not report water into and out of short-term storage.

1.2 SUBMITTAL TABLES

1.2.1 INCLUSION OF SUBMITTAL TABLES

CWC 10644.

(a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

The City's 2025 Plan includes the completion of DWR's standardized Submittal Tables for the reporting and submittal of UWMP data. Relevant Submittal Tables are included at the end of each Chapter in this 2025 Plan. In addition, all Submittal Tables are provided collectively in Appendix A.

1.2.2 OPTIONAL PLANNING TOOL



DWR has created an optional “Planning Tool Worksheet” for water suppliers to review and assess monthly water use trends. DWR has deemed the tool as optional and the City is not required by DWR to use the tool.

1.3 RECOMMENDED UWMP ORGANIZATION

The City’s 2025 Urban Water Management Plan (2025 Plan) was prepared consistent with the recommended organization provided in DWR’s Final “Urban Water Management Plan Guidebook 2025” (Final 2025 UWMP Guidebook), dated January 2026. The City’s 2025 Plan consists of the following Chapters:

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

Pursuant to CWC requirements, the City’s 2025 Plan incorporates DWR’s water use and supply tables (standardized Submittal Tables) for the reporting and submittal of UWMP data. DWR’s standardized Submittal Tables are provided within the body of the 2025 Plan text as well as in Appendix A.

The City’s 2025 Plan also provides supporting documents (appendices) including notification letters of the Plan update, public notice of the Plan hearing, and adoption



resolution from the City's governing body. Further discussions regarding these supporting documents are provided within the individual Chapters of the City's 2025 Plan.

1.4 UWMPs IN RELATION TO OTHER EFFORTS

The City is a sub-agency of Central Basin Municipal Water District, a wholesale water agency. CBMWD prepared a 2025 Plan which is incorporated in the City's 2025 Plan by reference. In addition, the City provided its 2025 Plan to CBMWD which includes water use projections in five-year increments for a normal year, a single dry year, and a five consecutive year drought over the next 25 years.

1.4.1 DEMONSTRATION OF CONSISTENCY WITH THE DELTA PLAN FOR PARTICIPANTS IN COVERED ACTIONS

1.4.1.1 DEMONSTRATION OF CONSISTENCY WITH THE DELTA PLAN FOR PARTICIPANTS IN COVERED ACTIONS

Pursuant to DWR, an urban water supplier that anticipates participating in or receiving water from a proposed project (or "covered action") such as a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta) should provide information in their Plans for use in demonstrating consistency with Delta Plan Policy WR P1, "*Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance*". In addition, pursuant to California Code of Regulations, Title 23, § 5003:

(c)(1) Water suppliers that have done all of 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 City does not rely on imported water supplies and has been fully supplied by groundwater sources for over 30 years. Accordingly, the City maintained zero reliance on imported water during Calendar Year (CY) 2015, CY 2020, and CY 2025, and is projected to continue operating without imported water through CY 2050. Additional discussion demonstrating the City's long-standing groundwater self-reliance and regional water independence is provided in Appendix C.

1.4.1.2 PERMITTING FOR OCEAN DESALINATION PROJECTS

The City is currently not considering the development of a desalinated water project. However, as discussed in Section 6.2.6, there may be opportunities for use of desalinated ocean water as a potential water supply source in the future, if needed, through coordination with other agencies that have ocean desalination programs.



1.5 DEPARTMENT OF WATER RESOURCES' REVIEW PROCESS

Section 10.5 discusses the process for a water supplier to submit the completed 2025 Plan to DWR, including electronic submittal through DWR's online Water Use Efficiency Data (WUEdata) portal. DWR will subsequently review the 2025 Plans to ensure that they address the California Water Code requirements. Following DWR's review, water suppliers will be notified of the results of the review via a formal review letter. These review letters will also be available to the public on DWR's WUEdata portal. In cases where DWR finds that a Plan does not properly address item(s) in the Water Code, DWR will reach out to the water supplier to discuss needed corrections and correction procedures.

1.6 UWMPs AND GRANT OR LOAN ELIGIBILITY

CWC 10608.56.

- (a) *On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.*
- (c) *Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.*
- (e) *Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.*
- (f) *The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely*



on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

CWC 10656.

An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

California Code of Regulations Title 23 Division 2 Chapter 5.1 Article 1, Section 596.1

(b)(2) "disadvantaged community" means a community with a median household income that is less than 80 percent of the statewide annual median household income.

Pursuant to DWR's Final 2025 UWMP Guidebook:

"For a Supplier to be eligible for any water grant or loan administered by DWR, the Supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the Water Code. A current UWMP must also be maintained by the Supplier throughout the term of any grant or loan administered by DWR. A UWMP may also be required to be eligible for other State funding, depending on the conditions that are specified in the funding guidelines. Suppliers are encouraged to seek guidance on the specifics of any State funding source from the respective funding agencies."

The City's 2025 UWMP has been prepared to meet eligibility requirements for grants and loans administered by the State and/or DWR.

1.7 TIPS FOR UWMP PREPARERS

The City's 2025 Plan (which includes the City's 2025 Water Shortage Contingency Plan (WSCP)) is considered an update to the City's 2020 UWMP. However, the 2025 Plan and the WSCP are considered stand-alone documents. As discussed in Section 1.3, the



City's 2025 Plan was prepared consistent with the recommended organization provided in DWR's Final 2025 UWMP Guidebook. The City's 2025 Plan was also prepared based on the tips provided in DWR's Final 2025 UWMP Guidebook including the use of information from previous Plans and following the required Plan notification and adoption process.

In addition, a checklist of specific UWMP requirements is included in Appendix B. The checklist includes the page number where the required elements are addressed to assist in DWR's review of the submitted Plan.



CHAPTER 2

URBAN WATER MANAGEMENT PLAN PREPARATION

LAY DESCRIPTION – CHAPTER 2

PLAN PREPARATION

Chapter 2 (Plan Preparation) of the City’s 2025 Plan discusses and provides the following:

- The basis for preparing an Urban Water Management Plan is provided. The City is required to prepare the 2025 Plan because it is an “urban water supplier” (the City serves more than 3,000 customers and it supplies more than 3,000 acre-feet of water annually to its customers for municipal purposes)
- The City is a “Public Water System” and is regulated by the State Water Resources Control Board - Division of Drinking Water. The City’s Public Water System number is provided in Table 2-1.
- The City’s Plan has been prepared as an “individual” plan rather than a “regional” plan in an effort to provide information specific to the City to best inform its employees, management and customers.
- Information presented in the City’s 2025 Plan is provided on “calendar year” basis which is from January 1 through December 31.
- Water quantities presented in the City’s 2025 Plan are provided on an “acre-foot” basis.
- The City’s coordination and outreach efforts with wholesale water agencies, other retail water agencies, and the community are described. The City coordinated the preparation of its 2025 Plan with the Cities of Cerritos, Long Beach, and Signal Hill, the County of Los Angeles, and Central Basin Municipal Water District.
- The City’s notification process to the cities and county within which the City provides water supplies to is discussed.



As discussed in Section 1.3, the City's 2025 Plan was prepared consistent with the recommended organization provided in DWR's Final 2025 UWMP Guidebook.

Pursuant to CWC requirements, the City's 2025 Plan incorporates DWR's water use and supply tables (standardized Submittal Tables) for the reporting and submittal of UWMP data.

2.1 BASIS FOR PREPARING A PLAN

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 10618.12.

(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.*

The City's 2025 Plan was prepared in accordance with the UWMP Act which was established in 1983. The UWMP Act requires every "urban water supplier" to prepare



and adopt a Plan, to periodically review its Plan at least once every five years and make any amendments or changes which are indicated by the review. An “Urban Water Supplier” is defined 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 acre-feet (AF) of water annually.

Section 10621(a) of the CWC states, “*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*”. As a result, DWR requires the 2025 Plans be submitted by July 1, 2026.

The City is an “urban water supplier” pursuant to Section 10617 of the CWC and directly serves potable water to more than 3,000 customers and supplies more than 3,000 acre-feet per year (AFY) at retail for municipal purposes. The City’s 2025 Plan is an update to the City’s 2020 Plan.

2.1.1 SUPPLIERS WITH BOTH WHOLESALE AND RETAIL SALES

The City is a retail water supplier (and not a wholesale water supplier). The City’s 2025 Plan was prepared based on the CWC requirements pertaining to retail water suppliers. The City relies on water supplies from wholesale water suppliers which are discussed in Section 2.4.1.

2.1.2 PUBLIC WATER SYSTEMS

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.



Pursuant to CWC requirements, the City’s 2025 Plan incorporates DWR’s standardized Submittal Tables for the reporting and submittal of UWMP data. The standardized Submittal Tables are provided within the body of the 2025 Plan text as well as in Appendix A. The City also submitted the UWMP data (from the Submittal Tables) electronically through DWR’s Online Submittal Tool.

In addition, the City is a Public Water System and is regulated by the State Water Resources Control Board - Division of Drinking Water (SWRCB-DDW). The SWRCB-DDW requires water agencies provide the number of connections, water usage, and other information annually. The information provided to SWRCB-DDW indicates the City serves potable water to more than 3,000 customers and supplies more than 3,000 AFY. Table 2-1 provides the City’s Public Water System name and number. As indicated in Table 2-1, the City serves only a single Public Water System.

2.2 INDIVIDUAL OR REGIONAL PLANNING

The City has developed its 2025 Plan reporting solely on its service area to address all requirements of the California Water Code. The City’s 2025 Plan was not developed as a Regional Plan.

As shown in Table 2-2, the City’s 2025 Plan is an “Individual UWMP”. The City has developed its 2025 Plan reporting solely on its service area to address all requirements of the California Water Code, including water use targets and baselines pursuant to SB X7-7 Water Conservation Act of 2009 reporting (discussed further in Chapter 5). The City notified and coordinated with appropriate regional agencies and constituents (See Section 2.4).



2.2.1 REGIONAL REPORTING

CWC 10620.

(d)(1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

As indicated in Table 2-2, the City's 2025 Plan was developed as an "Individual UWMP" and not part of a Regional Plan or a Regional Alliance.

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 or calendar year basis.

2.3.1 FISCAL OR CALENDAR YEAR

The data provided in the City's 2025 Plan is reported on a calendar year basis, unless noted otherwise, as shown in Table 2-3. A calendar year begins on January 1st of every year.

2.3.2 UNITS OF MEASURE

As shown in Table 2-3, the data provided in the City's 2025 Plan is reported in units of AF, unless noted otherwise.



2.4 COORDINATION AND OUTREACH

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).

2.4.1 WHOLESALE AND RETAIL COORDINATION

The City is a sub-agency of the wholesale water agency CBMWD. As indicated in Table 2-4, the City has provided its 2025 Plan to CBMWD which includes water use projections in five-year increments for normal, single dry, and a five consecutive year drought conditions over the next 25 years.

2.4.2 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...



The City is a retail water supplier that serves customers in the City of Lakewood. The City is required to coordinate the preparation of the Plan with appropriate agencies in the area, including appropriate water suppliers that share a common source. Therefore, the City coordinated the preparation of its 2025 UWMP with Central Basin Municipal Water District. As discussed in Section 10.2, the City notified the cities and county within which the City provides water supplies, at least sixty (60) days prior to the public hearing of the preparation of the 2025 Plan and invited them to participate in the development of the 2025 Plan. A copy of the notification letters sent to these agencies is provided in Appendix D.

2.4.3 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.

As discussed in Section 10.2, notification was provided to the cities and county within which the City provides water supplies that the City was reviewing and considering amendments (updates) to the previous 2020 Plan, and as a result prepare the 2025 Plan. The City provided notification to the Cities of Cerritos, Long Beach, and Signal Hill and the County of Los Angeles. Notification was provided at least 60 days prior to the public hearing (see Appendix D).



2.5 SUBMITTAL TABLES

The applicable standardized Submittal Tables referenced within Chapter 2 are provided below.

2.5.1 SUBMITTAL TABLE 2-1: PWSs

Table 2-1 Public Water Systems

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			
CA1910239	City of Lakewood	20,041	6,720
Total		20,041	6,720
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: Total volume of water supplied to City (6,720 AF) includes potable water (6,297 AF) and non-potable (423 AF) supplies, which includes recycled water and groundwater from Well 6 for agricultural purposes.			



2.5.2 SUBMITTAL TABLE 2-2: PLAN TYPE IDENTIFICATION

Table 2-2 Plan Identification Type

Submittal Table 2-2: Plan Identification		
Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
<input checked="" type="checkbox"/>	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		



2.5.3 SUBMITTAL TABLE 2-3: SUPPLIER INFORMATION

Table 2-3 Supplier Information

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesale supplier
<input checked="" type="checkbox"/>	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
<input checked="" type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
01/01	
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:	



2.5.4 SUBMITTAL TABLE 2-4: WATER SUPPLIER INFORMATION EXCHANGE

Table 2-4 Water Supplier Information Exchange

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name
Add additional rows as needed
Central Basin Municipal Water District
NOTES:



CHAPTER 3

SERVICE AREA DESCRIPTION

LAY DESCRIPTION – CHAPTER 3

SERVICE AREA DESCRIPTION

Chapter 3 (Service Area Description) of the City’s 2025 Plan discusses and provides the following:

- A description of the City’s service area is provided. The City’s water service area is approximately 9.5 square miles in size. The City borders the Cities of Long Beach, Hawaiian Gardens, Bellflower and Cerritos.
- The location of the City’s water service area is provided in Figure 1.
- A description regarding the City’s water service area climate is provided. The monthly historical average temperatures (including minimum and maximum), monthly historical average rainfall, and monthly evapotranspiration (ETo) in the vicinity of the City’s service area is summarized. The sources of the climate information are also discussed.
- The population within the City’s water service area is discussed and projected. The sources of the population information are also discussed. The City provides water service to an area with a current population of about 60,019. The City is projected to have a population of 64,781 by CY 2050.
- A discussion of land use information used by the City to develop the 2025 Plan is provided. The City reviewed the current and projected land uses within its service area. The City also reviewed data provided by the Southern California Association of Governments, the Department of Finance, and the United States Census Bureau and prepared for counties, cities, and unincorporated areas within Southern California.



3.1 GENERAL DESCRIPTION

CWC 10631.

- (a) *Describe the service area of the supplier, including current and projected population, climate, and 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. 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, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.*

The City of Lakewood was incorporated on March 9, 1954. The City of Lakewood is located about 20 miles southeast of the City of Los Angeles. The City has an area of about 9.5 square miles and is surrounded by Long Beach on its southwest and west sides, Cypress and Hawaiian Gardens on its east side, Cerritos on its northeast side, and Bellflower on its north side. In 1959, the City gained the rights to use and sustain the water system. The City's Department of Water Resources is responsible for managing the City's water system.

Water service to the City of Lakewood is provided by the City's Department of Water Resources and Golden State Water Company (GSWC). The City provides water service west of the San Gabriel River and GSWC provides water service east of the San Gabriel River. The location of the City's service area is provided in Figures 1 and 2, as well as the figure below.



The City currently produces potable water supply from ten (10) groundwater wells that produce water from the Central Basin (including Wells 2A, 4, 8, 10, 13A, 15A, 17, 18, 27 and 28). The City also produces water supply for non-potable agricultural purposes from the Central Basin (from Well 6). The City has two connections with Metropolitan Water District of Southern California (MWD) through CBMWD to purchase imported treated water (CENB-42 and CENB-49), however, the City only purchases imported water during emergency situations. The City also purchases recycled water from the Sanitation Districts of Los Angeles County through the City of Cerritos. A further discussion of the City’s sources of water supply is provided in Chapter 6.

3.2 SERVICE AREA BOUNDARY MAPS

As discussed in Section 3.1, the City’s service area covers approximately 9.5 square miles encompassing the majority of the City of Lakewood. A service area boundary map



is provided on Figure 1. The City’s water service area boundary relative to the City of Lakewood’s municipal boundary is also provided in Figure 2.

The City’s service area boundary was originally created in a Geographical Information Systems (GIS) shape file format and converted into a KML format. To the extent information was available, metadata was included in the KML file (including map projection, contact information, start and end dates for which the map is valid, constraints, attribute table definitions, and digitizing base).

3.3 SERVICE AREA CLIMATE

CWC 10631.

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

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.

The monthly historical average temperatures (including minimum and maximum), monthly historical average rainfall, and monthly ETo in the vicinity of the City’s service area is summarized in the tabulation below. Historical climate information was obtained from the Western Regional Climate Center (WRCC), Los Angeles County Department of Public Works (DPW), and from DWR’s California Irrigation Management Information System (CIMIS).



Service Area Climate Information

Month	Average Temperature (F)	Average Minimum Temperature (F)	Average Maximum Temperature (F)	Average Total Precipitation (Inches)	ETo (Inches)
January	58.6	47.8	69.6	3.2	2.0
February	60.2	48.8	71.4	3.2	2.5
March	61.6	50.4	72.9	2.2	3.9
April	65.5	53.3	77.6	1.0	4.6
May	68.3	57.3	79.4	0.2	5.0
June	72.5	60.9	84.0	0.1	5.2
July	76.5	64.2	88.6	0.0	5.8
August	77.2	65.1	89.5	0.1	5.7
September	75.6	63.6	87.7	0.3	4.6
October	70.6	58.5	82.9	0.5	3.3
November	63.4	51.5	75.4	1.4	2.2
December	59.0	47.4	70.5	2.0	1.7
Annual	67.0	55.3	79.1	14.5	46.5

Source:

Historical average monthly precipitation information was obtained from the Western Regional Climate Center (<http://www.wrcc.dri.edu/>) and is based on data collected from Station 049660 (Whittier City Yard, California) from 1949 through 2014. Historical average monthly temperature information was obtained from the Western Regional Climate Center (<http://www.wrcc.dri.edu/>) and is based on data collected from Station 045790 (Montebello, California) from 1979 through 2011. Historical monthly average ETo information was obtained from the California Irrigation Management Information Systems (<http://www.cimis.water.ca.gov>) and is based on the weighted average of data collected from Station 174 (Long Beach) and Station 159 (Monrovia).

The historical average rainfall in the vicinity of the City’s service area is 14.5 inches. The City’s service area has a dry climate and summers can reach average maximum daily temperatures in the high 80s. Although changes in climatic conditions may have an impact (as discussed in Section 4.5), the projected water supply demands will be based on average year, single dry year and a five consecutive year drought, based on historical data and projected demands. Precipitation within the vicinity of the City’s service area is discussed further in Section 7.2.



A discussion of the City's sources of supply, how those sources may be impacted by climate change, and the proactive actions the City and other local/regional water managers may take to address the potential climate change on water supplies is provided in Section 4.2.5.6.

3.4 SERVICE AREA POPULATION AND DEMOGRAPHICS

3.4.1 SERVICE AREA POPULATION

CWC 10631.

(a) Describe the service area of the supplier, including current and projected population... 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.

The City provides water service to an area with a current population of 60,019. Table 3-1 presents the current and projected population of the area encompassed by the City's service area from CY 2025 to CY 2050. The City is projected to have a population of 64,781 by CY 2050.

A GIS analysis using census tracts was performed to estimate the current population (CY 2025) within the City's service area. The City's service area is comprised of individual census tracts which represent smaller statistical areas for which population data is available. The smaller census tracts were combined to more accurately represent the total area within the City's service area.

Current census tract information was obtained in a GIS format from the advanced demographics dataset developed by Esri which includes source material supplied by

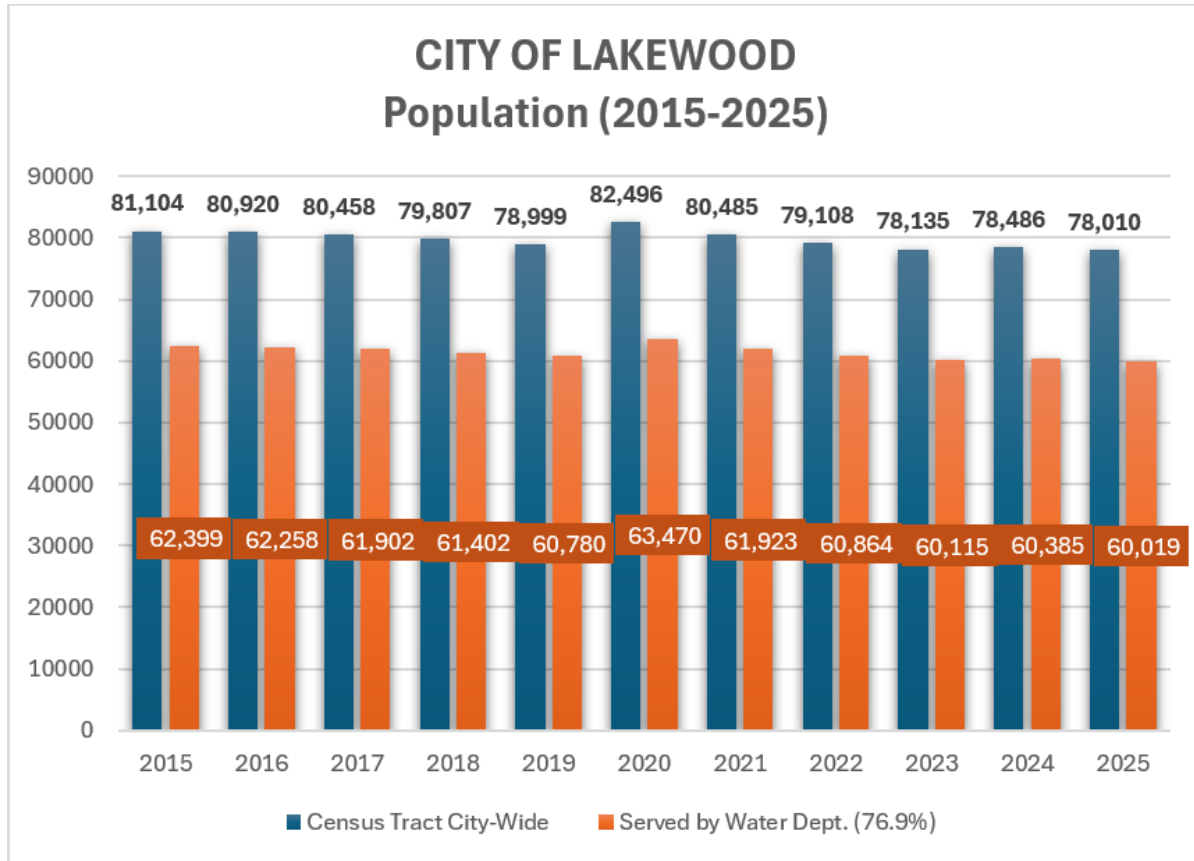


the U.S. Census Bureau and the U.S. Census Bureau's American Community Survey. The City's service area boundary in a GIS format was overlaid on the census tract GIS layer. Each census tract located within the City's service area was identified (including the entire census tract or a portion of). For a census tract located entirely within the service area, the entire population (i.e. 100 percent) associated with the census tract was incorporated. For a census tract located partially within the service area, the portion (or percentage) of the census tract located geographically within the service area was determined through GIS. The percentage was then applied to the census tract's population in order to estimate the population of the census tract within the service area. The total population within the City's service area was then estimated based on the sum of the populations within these census tracts.

The projected total population within the City's service area was based on growth rate projections included in the Southern California Association of Governments (SCAG) "Connect SoCal 2024, Demographics and Growth Forecast" report dated April 2024. The SCAG report incorporates demographic trends, existing land use, general plan land use policies, and input and projections through the year 2050 from the Department of Finance (DOF) and the U.S. Census Bureau for counties, cities and unincorporated areas within Southern California. Annual growth rate projections within the City's service area were estimated based on the SCAG report and applied to the City's current population to estimate projected populations through 2050. The figure below provides a depiction of the historical population within the City of Lakewood's municipal boundaries, compared with the population served by the City of Lakewood's Water Department.



City's Historical Population



The City’s service area is almost built out with predominantly single and multi-family residential units and some commercial, institutional, and industrial establishments. Moving forward, the City of Lakewood will continue planning for the Regional Housing Needs Assessment (RHNA) allocations and future planned developments including the addition of apartment units and accessory dwelling units (ADUs) as the means of affordable housing.

Pursuant to the California State Housing Law, every jurisdiction (including the City of Lakewood) is required to plan for its RHNA allocation in the Housing Element of its General Plan. RHNA is a representation of future housing needs for all income levels in a jurisdiction. SCAG’s “6th Cycle Final RHNA Allocation” was adopted March 2021 (and modified in July 2021) and covers the planning period from October 2021 through October



2029. The total RHNA allocation of housing within the City of Lakewood through 2029 is 3,922 units (including 1,296 “very-low” income units, 637 “low” income units, 653 “moderate” income units, and 1,336 “above moderate” income units). The City of Lakewood must identify adequate sites and establish policies and programs that will accommodate the estimated growth, however the City of Lakewood is not obligated to produce, construct, or develop these allocated units.

3.4.2 OTHER SOCIAL, ECONOMIC, AND DEMOGRAPHIC FACTORS

CWC 10631.

(a) Describe the service area of the supplier, including... other social, economic, and demographic factors affecting the supplier’s water management planning.

No other demographic factors affect the City’s water management planning. However, increased population will have an impact on water demand.



3.5 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...*

The City reviewed the current and projected land uses within its service area during the preparation of this 2025 Plan. The existing land uses within the City's service area include residential (single-family), commercial, and open space. The projected land uses within the City's service area are expected to remain similar to the existing land uses. In addition, although mostly built-out, the projected population within the City's service area is anticipated to increase (as discussed in Section 3.4). A discussion of the existing and projected water uses for the individual water use sectors within the City's service area, which includes the different land uses, is provided in Section 4.2. As discussed in Section 2.4, the City coordinated the preparation of the 2025 Plan with the Cities of Cerritos, Long Beach, and Signal Hill, the County of Los Angeles, and other agencies.

As discussed in Section 3.4, the City obtained data from the Southern California Association of Governments document entitled "Connect SoCal 2024, Demographics and Growth Forecast", dated April 2024. Projected populations in the City's service area were based on growth rate projections developed by SCAG. The data provided by SCAG incorporates demographic trends, existing land use, general plan land use policies, and input and projections through the year 2050 from the Department of Finance and the U.S. Census Bureau for counties, cities and unincorporated areas within Southern California.



3.6 SUBMITTAL TABLES

The applicable standardized Submittal Table referenced within Chapter 3 is provided below.

3.6.1 SUBMITTAL TABLE 3-1: POPULATION - CURRENT AND PROJECTED

Table 3-1 Population - Current and Projected

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	60,019	63,781	64,397	64,512	64,628	64,781
NOTES:						



CHAPTER 4

WATER USE CHARACTERIZATION

LAY DESCRIPTION – CHAPTER 4

WATER USE CHARACTERIZATION

Chapter 4 (Water Use Characterization) of the City’s 2025 Plan discusses and provides the following:

- The City provides water service to individual “water use sectors”. These water use sectors include single-family residential, multi-family residential, and commercial. Individual descriptions for these water use sectors are provided in Section 4.2.1.
- The City’s total water demands (including potable and non-potable water) over the past 15 years have ranged from 6,720 AFY to 8,893 AFY, with an average of 7,617 AFY. The City currently measures its water use through meter data and billing records.
- The City conducts an annual water loss audit to identify distribution system water losses. Water losses can result from pipeline leaks and inaccurate metering due to faulty meters. Water loss estimates are incorporated into the City’s projected water demands.
- The City’s current and projected water demands are provided in five-year increments over the next 25 years are provided (through Calendar Year 2050) as shown on Table 4-3.
- The City’s water demand projections incorporate passive savings from water savings which are the result of implementation of codes, water conservation standards, and/or ordinances.



- The projected water demands for lower income households are identified and are included in the City's total projected water demands
- The City's sources of water supply and how those sources may be impacted by climate change are discussed. The proactive actions the City and other local/regional water managers may take to address the potential climate change impacts on water supplies are also discussed.

4.1 NON-POTABLE VERSUS POTABLE WATER USE

The Water Code requires a description and quantification of water use within the City's service area, including both non-potable and potable water. Recycled water (non-potable) uses are addressed in Section 6.2.5; however, a summary is provided in Table 4-1 and 4-2. Furthermore, Chapter 4 addresses the City's potable water demands.

4.2 PAST, CURRENT, AND PROJECTED WATER USE BY SECTOR

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...*



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

(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.

(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.

The City's current and projected water demands are provided in five-year increments over the next 25 years (CY 2050) in Tables 4-1 and 4-2. The City's total water demands were projected based on a review of the "2020 Water Use Target" pursuant to SB X7-7 calculations (discussed in Section 5.2), current water use factors based on recent water demands, Urban Water Use Objective standards (discussed in Section 5.2.6), and the total population projections based on land use trends within the City (discussed in Section 3.4).

The City provides water service to individual "water use sectors" as identified by the California Water Code. The water use sectors supplied by the City are discussed in Section 4.2.1. The water use for each of these sectors during CY 2025 is provided in Table 4-1. The projected water use for each individual water use sector through CY 2050 is provided in Table 4-2 and is based on the percentage breakdown of water use from each individual water use sector in CY 2025 (the percentages were then applied to the projected total water use).



4.2.1 WATER-USE SECTORS LISTED IN WATER CODE

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.*

As shown in Table 4-1, the City's service area includes the following water use sectors listed in the California Water Code:

- Single-family residential
(A single-family dwelling unit is a lot with a free-standing building containing one dwelling unit that may include a detached secondary dwelling. Single-family residential water demands are included in retail demands)
- Commercial
(Commercial users are defined as water users that provide or distribute a product or service)



- Institutional (and governmental)
(Institutional users are defined as water users dedicated to public service. Institutional users include, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions)
- Landscape
(Landscape connections supply water solely for landscape irrigation. Landscapes users may be associated with multi-family, commercial, industrial, or institutional/governmental sites, but are considered a separate water use sector if the connection is solely for landscape irrigation. Landscape water demands are included in retail demands)
- Agricultural
(Water used for commercial agricultural practices including irrigation and other agronomic uses. Agricultural water demands are included in retail demands)
- Distribution system losses
(Distribution system losses represent the potable water losses from the pressurized water distribution system and water storage facilities, up to the point of delivery to the customers. Additional information is discussed in Section 4.2.4)

4.2.2 OPTIONAL WATER-USE SECTORS IN ADDITION TO THOSE LISTED IN WATER CODE

The City's service area does not include other water demand sectors which are not listed in the California Water Code (including exchanges, transfers, wetlands or wildlife habitat, and surface water storage).



4.2.3 PAST WATER USE

Chapter 6 provides a discussion of the sources of water supply the City uses to meet its water demands. Section 6.1 provides a tabulation of the City’s historical annual water demands for each water supply source. Over the past 15 years, the City’s total water demands (including potable and non-potable water) have ranged from 6,720 AFY to 8,893 AFY, with an average of 7,617 AFY. In addition, the City previously experienced a five consecutive year drought within its service area from CY 2012 to CY 2016. The City reviewed its historical water demands to determine the projected water demands and water supply reliability (discussed in Chapter 7). The City is able to provide sufficient water supplies to meet the projected water demands of its customers, including during a five consecutive year drought period.

4.2.4 CURRENT WATER USE

CWC 10631.

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

The City currently measures its water use through meter data and billing records. The water use for the City’s individual water use sectors during CY 2025 are provided in Table 4-1. Recycled water uses are addressed separately in Section 6.5; however, a summary of projected recycled water uses is provided in Table 4-2.

DWR has created an optional “Planning Tool Worksheet” for water suppliers to review and assess monthly water use trends. DWR has deemed the tool as optional and the City is not required by DWR to use the tool. Section 6.1 provides a tabulation of the City’s historical annual water uses for each water supply source. During the past 15 years, the



City experienced a five consecutive year drought within its service area from CY 2012 to CY 2016. Historical records indicate the City's annual water demands had been greater prior to CY 2011. The City has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands. In addition, the City has been able to provide water service to meet maximum day water demands for these years, including during the summer months. A further discussion regarding the reliability of the City's water supply sources is provided in Chapter 7.

4.2.5 PROJECTED WATER USE

4.2.5.1 GENERAL GUIDANCE ON PROJECTIONS

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...

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.

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...

As discussed above, the City's current and projected water demands are provided in five-year increments over the next 25 years (through CY 2050) in Tables 4-1 and 4-2. The City's total water demands were projected based on a review of the "2020 Water Use Target" pursuant to SB X7-7 calculations (discussed in Section 5.2), current water use factors based on recent water demands, Urban Water Use Objective state standards (discussed in Section 5.2.6), and the total population projections based on land use trends within the City (discussed in Section 3.4). Chapter 6 provides a discussion of the sources of water supply the City will use to meet the projected water demands (including recycled water use). The City's projected water demands and water supplies during a normal year, a single dry year, and a five consecutive year drought are provided in Chapter 7.

Because the City relies on wholesale water supplies, the City has provided its 2025 Plan to CBMWD as discussed in Section 2.4.

4.2.5.2 WATER-USE PROJECTIONS BY SECTOR

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),

The City provides water service to individual "water use sectors" as identified by the California Water Code. The water use sectors supplied by the City are discussed in Section 4.2.1. The water use for each of these sectors during CY 2025 is provided in



Table 4-1. The projected water use for each individual water use sector through CY 2050 is provided in Table 4-2 and is based on the percentage breakdown of water use from each individual water use sector in CY 2025 (the percentages were then applied to the projected total water use).

4.2.5.3 STANDARDS, CODES, ORDINANCES, AND PLANS

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.

(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.

The City's projected water demands are provided in five-year increments over the next 25 years (through CY 2050) in Table 4-2. The City's projected water demands and water supplies during a normal year, a single dry year, and a five consecutive year drought are provided in Chapter 7. The projected water demands for each of the City's water use sectors are provided in Table 4-2. As discussed in the following Section, the City's water demand projections incorporate "passive savings" which are the result of implementation of codes, standards, and/or ordinances.



4.2.5.4 RETAIL ONLY

The City's total water demands were projected based on a review of the "2020 Water Use Target" pursuant to SB X7-7 calculations (discussed in Section 5.2), current water use factors based on recent water demands, Urban Water Use Objective standards (discussed in Section 5.2.6), and the total population projections based on land use trends within the City (discussed in Section 3.4). The projected water demands for the water use sectors were based on the percentage breakdown of water demands from each individual water use sector in CY 2025 (the percentages were then applied to the projected total water demands). A discussion of the City's water supplies from CBMWD, a wholesaler, are discussed in Section 6.2. As discussed in Section 2.4, the City has coordinated its water demand projections with CBMWD for each water use sector.

The City's water demand projections incorporate water savings from "passive savings" which are the result of implementation of codes, standards, and/or ordinances. The City adopted Resolution 2014-54 in August 2014 which includes methods for current and ongoing reduction in water use and water waste. Prior to adoption of Resolution 2014-54, the City's water use rate ranged from approximately 109 gallons per capita day to 112 gallons per capita day (from CY 2002 to CY 2004). As identified in Section 5.2.2, the City's actual water use rate during CY 2025 was 94 gallons per capita per day which is a decrease of up to 18 gallons per capita per day from the recent historical water use and includes passive savings. The City's projected water demands, incorporate water use targets less than its established SB X7-7 water use target for 2020 and incorporate ongoing water passive savings and reduced water use. As indicated in Table 4-3, estimated future water savings have been considered as part of the City's water use projections.



4.2.5.5 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 requirement 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.*

The City's water demands projections provided in Table 4-2 include projected water demands for lower income single-family and multi-family households. A lower income household is defined as a household with an income less than 80 percent of the "area median income", adjusted for family size. For this evaluation, the entire Los Angeles County was used for the "area median income". The total number of lower income households within the City's service area was estimated based on billing records provided by the City, a review of median household income range statistics provided by the US Census Bureau (<https://data.census.gov/cedsci/>), and a review of GIS maps of Disadvantaged Communities² (DACs), including block groups, tracts, and places, provided by DWR. The estimated number of lower income households located within the City's service area is 27.5 percent of the total number of households. As indicated in Table 4-2, the total

² GIS information for DACs is based on data from the US Census showing census block groups, tracts, and places identified as disadvantaged communities (less than 80 percent of the State's median household income) or severely disadvantaged communities (less than 60 percent of the State's median household income)



projected residential (single and multi-family) water demands within the City in CY 2050 is estimated at about 5,727 AFY. Based on a 27.5 percent use factor of total residential (single and multi-family) water demands, the projected water demand for lower income households will be about 1,577 AFY by the CY 2050. The projected water demands for lower income households were included in the City's total projected water demands, as indicated in Table 4-3.

4.2.5.6 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) 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 is defined as “the average course or condition of the weather at a place usually over a period of years as exhibited by temperature, wind velocity and precipitation³”. A change in the climate which produces a greater amount of precipitation (i.e. more runoff and/or snowpack) and lower temperatures is generally a benefit to water supplies. However, drought conditions which may result in decreased precipitation, decreased runoff, and increased temperature may adversely affect an urban water supplier's ability to meet demands by potentially impacting supplies. Consequently, the focus of impacts of climate change is on these adverse consequences.

³ www.merriam-webster.com



Section 6.2 of this Plan describes the City's sources of water supply, management practices associated with those sources, and the long-term reliability of those sources. Section 7.3 includes a Drought Risk Assessment which considers the potential impacts of climate change to the City's water supply sources. Chapter 8 provides a detailed discussion of the City's Water Shortage Contingency Plan, including but not limited to, the six standard water shortage levels in the event climate change results in a reduction to water supplies associated with a periodic drought condition. The following is a discussion of the City's sources of supply, how those sources may be impacted by climate change, and the proactive actions the City and other local/regional water managers may take to address the potential climate change impacts on water supplies.

Imported Water Supplies

The City receives treated imported water as discussed in Section 6.2.1 and relies on the Water Replenishment District of Southern California (WRD) to manage groundwater supplies of the Central Basin. Consequently, the City directly and/or indirectly relies on the Metropolitan Water District of Southern California for those imported water supplies. MWD has prepared a Regional 2025 Urban Water Management Plan which includes a discussion (Section 2.4.1 in MWD's 2025 UWMP) of the reliability of its water supplies and the impacts of climate change and is incorporated by reference in this Plan. Furthermore, the City is a sub-agency of the Central Basin Municipal Water District which has also provided a discussion of climate change considerations and that discussion is included by reference. The following is a brief summary of MWD's efforts:

Resource Planning

- MWD has established the Robust Decision Making (RDM) approach to identify vulnerabilities to its water supplies. Climate change information was applied to



MWD's simulated water supply scenarios to demonstrate the vulnerability of water supplies to climate change.

- MWD altered the inflow hydrology scenarios on the Colorado River simulation model to reflect modified inflow to MWD's Colorado River aqueduct.

Knowledge Sharing and Research Support

- MWD is an active and founding member of the Water Utility Climate Alliance (WUCA) which includes 12 nationwide partners collaborating on climate change considerations. As such, MWD shares agency actions on climate change and adaptation. WUCA has also released numerous research papers on climate change.

Implementation of Programs and Policies

- MWD's programs include the use of solar energy, use of ride share programs, and reduction of greenhouse emissions. Collectively these actions are intended to impact the effects of climate change.

Groundwater Supplies – Central Basin

The City relies on groundwater produced from the Central Basin as noted in Section 6.2.2 of this UWMP. The Central Basin has been identified by DWR as a very low-priority groundwater basin partially due to the fact it is adjudicated. In that regard, the Central Basin is actively managed by the Water Replenishment District of Southern California which serves as the Central Basin Watermaster and those management activities are described in detail in Section 6.2.2.



Recognizing the potential impacts of climate change on the Central Basin groundwater supplies (decreased local runoff and replenishment, along with increased groundwater production, may lead to decreased groundwater levels), the City has used climate tools available on the California Energy Commission's Cal-Adapt website (<https://cal-adapt.org/>) to identify potential future climate change cycles for the Central Basin. The Cal-Adapt website has been developed by the Geospatial Innovation Facility at the University of California, Berkeley with funding and advisory oversight by the California Energy Commission and California Strategic Growth Council.

To address the uncertainty in future greenhouse gas emissions, Cal-Adapt has developed a Representative Concentration Pathway 4.5 (RCP 4.5) scenario and a Representative Concentration Pathway 8.5 (RCP 8.5) scenario. RCP 4.5 represents a scenario in which greenhouse gas emissions peak around 2040, then decline and stabilize. RCP 8.5 represents a scenario in which emissions continue to strongly rise through 2050 and plateau around 2100. RCP 4.5 is a "medium" emissions scenario that models a future in which there is an effort made by societies to reduce greenhouse gas emissions, whereas RCP 8.5 is a "business-as-usual" scenario. For the City's climate change analysis, the RCP 4.5 scenario was selected.

The Cal-Adapt climate tools also incorporate several General Circulation Models (GCMs), which represent physical processes in the atmosphere, ocean, and land surface. These GCMs projected future climates under conditions such as warm/dry, cooler/wetter, and average simulations. For the City's climate change analysis, the average condition GCM (CanESM2) was selected.

The climate tools available on the Cal-Adapt website were used to simulate projected annual precipitation and annual average maximum temperature in the Central Basin. An electronic boundary of the Central Basin was submitted online through the Cal-Adapt



website in a “KML” file format (i.e. Google Earth format) and data using several of the available climate tools was generated.

Based on the data generated by the Cal-Adapt simulations (see Appendix E), the average annual rainfall in the Central Basin is projected to be 16.5 inches through 2099, compared to historical average of 15.1 inches (from 1961 through 1990). In addition, the average maximum temperature is projected to be 80.3 degrees Fahrenheit compared to a historical average of 74.7 degrees Fahrenheit. Although there may be more precipitation in the future, it may be more likely to fall as rainfall compared to snowfall. The simulations do not denote the duration or intensity of storms contributing to the annual precipitation. Notwithstanding, the San Gabriel River watershed includes a complex and interconnected series of dams, reservoirs and replenishment basins to capture stormwater runoff. In an average to below average year of precipitation, over 95 percent of the precipitation in the watershed is retained within the watershed and is not lost to the ocean. Consequently, most if not all precipitation (whether it is rain or snowfall) likely will be captured for use in the Central Basin area and not adversely impacted by a potentially higher average annual temperature.

Recognizing these potential impacts to local hydrology resulting from climate change and the resultant impacts to the groundwater supplies, WRD has taken (and may reinstate as needed) the following proactive actions to anticipate and circumvent the potential impacts of climate change. These actions will enable the City to use rely on the Central Basin as a reliable source of supply.

Recycled Water Groundwater Replenishment

The WRD has actively used recycled water for groundwater replenishment for many decades. Historically the recycled water replenishment was supplemented with untreated imported water replenishment as part of Central Basin management. However, WRD has also established the Water Independence Now (WIN) program. The WIN program



includes a treatment facility (previously referred to as the Groundwater Reliability Improvement Program) which includes ultrafiltration, reverse osmosis, and ultraviolet disinfection and advanced oxidation to treat recycled water by significantly reducing the total dissolved solids concentration. This action will gradually help to improve the water quality of the Central Basin, plus reduce or eliminate the future need to purchase untreated imported water.

Water Storage Programs

The Central Basin Adjudication allows Parties to the Judgment to pump up to 20 percent more of its annual Allowed Pumping Allocation plus any carry-over water rights as described in Section 6.2.2. In addition, the Central Basin Judgment includes an amendment which implemented a water storage program. A party may store up to 50 percent of the party's Allowed Pumping Allocation in an Individual Storage Account and 150 percent of the party's Allowed Pumping Allocation in a Community Storage Account if space is available. The amendments also allow parties to convert unused Allowed Pumping Allocation to stored water and revised the amount of carryover to be equal to 60 percent of the party's Allowed Pumping Allocation minus the amount of carryover water set aside for storage. The purpose of the storage program creates an added reliability in water supply from the Central Basin.

4.3 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.*

4.3.1 PREVIOUS FIVE YEARS DISTRIBUTION SYSTEM LOSSES

Distribution system water losses represent the potable water losses from the pressurized water distribution system and water storage facilities, up to the point of delivery to the customers. Sources of distribution system water loss can include: inaccurate metering due to faulty meters; water use not metered such as firefighting, flushing of the water system; and pipeline leaks.

The California Water Code Section 10608.34 requires “On or before January 1, 2024, and on or before January 1 of each year thereafter, each urban retail water supplier shall submit a completed and validated water loss audit report for the previous calendar year or the previous fiscal year...” The water loss audits must follow American Water Works Association (AWWA) guidance and be validated by a certified water audit validator. The City has completed the annual water loss audit process through January 1, 2026, as required by the California Water Code. As shown in Table 4-5, the City has completed water loss audits for the past five years representing calendar years 2021, 2022, 2023, 2024, and 2025. The City’s water loss audits were prepared and validated pursuant to DWR requirements. The annual water loss audit reports submitted by retail water agencies in California, including the City, are available on DWR’s WUEdata website (https://wuedata.water.ca.gov/awwa_plans).



The City's annual water loss audits identify real water losses (e.g. leaks and main failures) and apparent water losses (e.g. customer meter inaccuracies, systematic data handling errors in customer billing systems, and unauthorized consumption). The City's distribution system water losses are based on the sum of the real and apparent water losses. Over the past five years, the City's average distribution system water losses represent approximately 3.7 percent of its total water demands. This average water loss factor was incorporated into the City's total potable water demand projections (Tables 4-2 and 4-3).

4.3.2 PROGRESS TOWARD MEETING THE WATER LOSS PERFORMANCE STANDARD

Consistent with the California Code of Regulations, Title 23, Sections 980 through 986, retail water suppliers are required to comply with Real Water Loss Performance Standards by January 1, 2028 (pursuant to SWRCB requirements). Until then, a supplier may, when calculating its Urban Water Use Objective (discussed further in Section 5.2.6), use real losses reported in the water loss audits provided to the Department of Water Resources (discussed in Section 4.3.1), rather than the standard-based budget calculated according to the equation described Section 970 of the California Code of Regulations.

Pursuant to the California Water Code Section 10631(d)(3)(C), a retail water supplier is required to provide data in its 2025 Plan demonstrating whether the retail water supplier met its Water Loss Performance Standard. The California Code of Regulations includes the following methods for compliance:

- Retail suppliers may have met their Real Water Loss Performance Standard if their 2025 or 2026 annual water loss audits show actual real water loss at or below the standard (California Code of Regulations Section 981[b]).



- Retail suppliers may still meet the Real Water Loss Performance Standard if, by January 1, 2028, their 2027 annual water loss audit shows actual real water loss at or below the standard (California Code of Regulations Section 981[a] and [b]).
- Apparent Water Loss Performance Standards are evaluated at the time compliance with the Real Water Loss Performance Standard is assessed (California Code of Regulations Section 981[d]).

Table 4-6 presents the City's Real Water and Apparent Loss Performance Standard, as well as the real and apparent water losses included in the City's most recent 2025 water loss audit. The City's real and apparent water losses included in the City's most recent 2025 water loss audit are below the Real and Apparent Water Loss Performance Standards.

The City will continue to improve data collection for assessing and reducing water losses while performing proactive measures to minimize real losses. City field personnel are trained to spot leaks and verify if water from fire hydrants is metered, permitted, or if the water is taken without authorization.

4.4 SUBMITTAL TABLES

The applicable standardized Submittal Tables referenced within Chapter 4 are provided below.

4.4.1 TABLE 4-1: TOTAL USES FOR POTABLE AND NON-POTABLE WATER-ACTUAL



Table 4-1 Total Uses for Potable and Non-Potable Water – Actual

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 WUdata online submittal tool		Potable or Non- Potable (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family		Potable	4,820
Multi-Family		Potable	240
Commercial	Includes institutional	Potable	855
Landscape		Potable	329
Landscape	Recycled Water	Non-Potable	364
Agricultural		Non-Potable	59
Other (optional)	Non-Residential	Potable	1
Distribution System Water Loss		Potable	52
		Subtotal Potable	6297
		Subtotal Non-Potable	423
		Total	6,720
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:			



4.4.2 TABLE 4-2: TOTAL USES OF POTABLE AND NON-POTABLE WATER—PROJECTED

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

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type <small>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</small>	Additional Description (as needed)	Projected Water Use (Report To the Extent that Records are Available)					
		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	5,340	5,392	5,401	5,411	5,424
Multi-Family		Potable	299	302	302	303	303
Commercial	Includes institutional	Potable	1,033	1,043	1,045	1,047	1,050
Landscape		Potable	136	137	137	138	138
Landscape	Recycled water	Non-Potable	430	430	430	430	430
Agricultural		Non-Potable	55	55	55	55	55
Other (optional)	Non-Residential	Potable	3	3	3	3	3
Distribution System Water Loss		Potable	262	264	265	265	266
Subtotal Potable			7,073	7,141	7,153	7,167	7,184
Subtotal Non-Potable			485	485	485	485	485
Total			7,558	7,626	7,638	7,652	7,669
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:							



4.4.3 TABLE 4-3: INCLUSION IN WATER-USE PROJECTIONS

Table 4-3 Inclusion in Water Use Projections

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. <i>Optional</i> Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	Section 4.2.5 and Chapter 8
Are Lower Income Residential Demands Included In Projections? Drop down list (y/n)	Yes
<i>Optional</i> If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES:	

4.4.4 OPTIONAL TABLE 4-4: PASSIVE WATER SAVINGS PROJECTION

DWR has deemed Table 4-4 to be optional.

Table 4-3 Passive Savings Projection



4.4.5 TABLE 4-5: WATER LOSS AUDIT REPORTING

Table 4-4 Water Loss Audit Report

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		
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
	2025	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES:		



4.4.6 TABLE 4-6: PROGRESS TOWARD 2028 WATER LOSS STANDARD

Table 4-5 Progress Toward 2028 Water Loss Standard

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	State Water Board Standard	Most Recent AWWA Water Loss Audit	Apparent Water Loss	State Water Board Standard	Most Recent AWWA Water Loss Audit	Apparent Water Loss		
		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)	Real Water Loss Per Unit per Day	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)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
CA1910239	Yes	9.5	Gallons per Service Connection per Day (GPSCD)	20,108	55.785	2.5	2.2	Gallons per Service Connection per Day (GPSCD)	20,108	46.885	2.1
								Gallons per Service Connection per Day (GPSCD)			
								Gallons per Service Connection per Day (GPSCD)			
<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:											



CHAPTER 5

SB X7-7 BASELINE, 2020 TARGETS, AND 2025 REPORTING

LAY DESCRIPTION – CHAPTER 5

SB X7-7 BASELINES, 2020 TARGETS, AND 2025 REPORTING

Chapter 5 (SB X7-7 Baselines, 2020 Targets, and 2025 Reporting) of the City’s 2025 Plan discusses and provides the following:

- The Water Conservation Act of 2009 (or SB X7-7) required the State of California achieve a 20 percent reduction in urban water use by the year 2020.
- SB X7-7 required urban water suppliers, including the City, to develop a “2020 Water Use Target” to assist the State of California to achieve the 20 percent reduction. The 2020 Water Use Target represents the amount of water each person should use per day (i.e. gallons per capita per day or GPCD) by the year 2020.
- The City previously determined its 2020 Water Use Target during the preparation of its 2015 Plan by completing standardized tables (or the SB X7-7 Verification Form) to demonstrate compliance with the Water Conservation Act of 2009. The City’s 2020 Water Use Target was 99 GPCD.
- The City’s 2020 Water Use Target was 99 GPCD. The City’s per-capita water use during CY 2025 was 94 GPCD which met the 2020 Water Use Target.



5.1 REPORTING REQUIREMENTS FOR WHOLESAL SUPPLIERS

CWC 10608.12.

- (aj) *“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 10608.36.

Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

The City is not a wholesale agency and is not required by DWR to complete Section 5.1.

5.2 REPORTING REQUIREMENTS FOR RETAIL SUPPLIERS

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.*

The Water Conservation Act of 2009 (or SB X7-7) required the State of California achieve a 20 percent reduction in urban water use by the year 2020. SB X7-7 required urban water suppliers, including the City, to develop a “2020 Water Use Target” to assist the



State of California to achieve the 20 percent reduction. The 2020 Water Use Target represents the amount of water each person should use per day (i.e. gallons per capita per day or GPCD) by the year 2020.

The City previously determined its 2020 Water Use Target during the preparation of its 2015 Plan by completing standardized tables (or the SB X7-7 Verification Form) to demonstrate compliance with the Water Conservation Act of 2009. The City's 2020 Water Use Target was 99 GPCD.

5.2.1 SUPPLIER WAS NOT AN URBAN RETAIL WATER SUPPLIER

Section 5.2.1 is not applicable to the City.

The City was an urban retail water supplier during and before the 2020 Plan cycle.

5.2.2 SUPPLIER MET 2020 TARGET IN 2020

The City previously calculated its "2020 Water Use Target" in its 2015 Plan pursuant to the methodology provided by DWR. The City's 2020 Water Use Target was confirmed to be 99 GPCD.

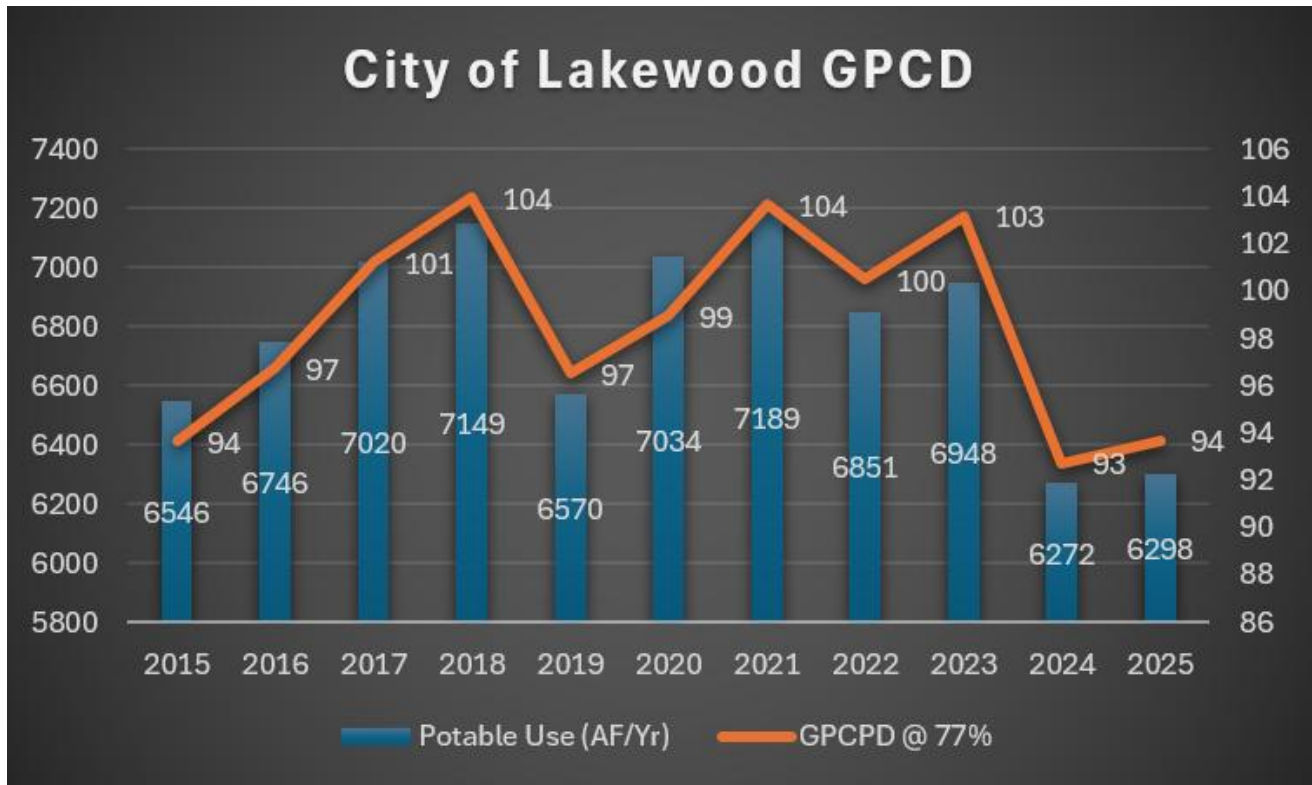
As discussed in the City's 2020 Plan, the City's per-capita water use during CY 2020 was 106 GPCD. As shown in Table 5-1, the City's per-capita water use during CY 2020 did not meet the 2020 Water Use Target⁴. However, as discussed in Section 5.2.3 (and as shown in Table 5-1), the City's per-capita water use during CY 2025 was 94 GPCD which met the 2020 Water Use Target. The calculations showing the City's per-capita water use

⁴ Based upon properly recalculating the City's 2020 population in the 2025 Plan, it was determined that the City had a 2020 GPCD of 99 which would have been in compliance. Nonetheless, the City also met the 2020 Target in 2025. The updated SB X7-7 2025 compliance tables are provided in Appendix F.



during CY 2025 are provided in the 2025 SB X7-7 Compliance Form provided in Appendix F. The figure below provides the City’s GPCD values over the past 10 years.

City’s Historical GPCD Factors



5.2.3 SUPPLIER DID NOT MEET 2020 TARGET IN 2020—NO CHANGE TO SERVICE AREA

As indicated in Section 5.2.2, the City’s per-capita water use during CY 2020 did not meet the 2020 Water Use Target. However, as shown in Table 5-1, the City’s per-capita water use during CY 2025 was 94 GPCD which met the 2020 Water Use Target. The calculations showing the City’s per-capita water use during CY 2025 are provided in the 2025 SB X7-7 Compliance Form provided in Appendix F.



5.2.4 SUPPLIER DID NOT MEET 2020 TARGET—CHANGE TO SERVICE AREA SINCE 2020

Section 5.2.4 is not applicable to the City.

5.2.5 FUNDING ELIGIBILITY

CWC 10608.56.

(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

If a retail water supplier does not achieve its 2020 Water Use Target, the retail water supplier is not eligible to receive a water grant or loan from the State of California until it complies. The following two exceptions to this are provided:

- Water Code Section 10608.56(c) states that a water supplier shall be eligible for a water loan or grant if it “has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per-capita reductions.”
- Water Code Section 10608.56(e) states that a water supplier can also be eligible for a water loan or grant if it “has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.”

As indicated in Section 5.2.3, the City met its 2020 Water Use Target as part of the 2025 Plan.



5.2.6 NEXUS TO STATE WATER BOARD URBAN WATER-USE OBJECTIVES (NOT REQUIRED FOR UWMPs)

SWRCB’s “Making Conservation A Way of Life Regulation” (under the California Code of Regulations, Title 23, Section 965 et seq) requires urban retail water suppliers to annually calculate and comply with an Urban Water Use Objective (UWUO); carry out commercial, industrial, and institutional (CII) performance measures; and provide progress reports. The regulation is expected to reduce inefficient water use and protect water supplies from the effects of rising temperatures and drier conditions due to climate change.

The Urban Water Use Objective is the sum of standard-based water use budgets for efficient residential indoor use, residential outdoor use, CII landscapes with dedicated irrigation meters (DIMs), and real water losses. Each budget is the product of the applicable standard and the water supplier’s unique characteristics (e.g., population). Water suppliers will be assessed for compliance with their overall objective, not each standards-based budget.

The residential indoor water use standard is based on 55 GPCD (until December 31, 2024), 47 GPCD (from January 1, 2025, to January 1, 2030), and 42 GPCD (beginning January 1, 2030). The residential outdoor water standard is based on a landscape efficiency factor (representing plant factors and irrigation efficiency) of 0.80 (until June 30, 2035), 0.63 (from July 1, 2035, to June 30, 2040), and 0.55 (beginning July 1, 2040). The standard for commercial, industrial, and institutional (CII) landscapes is based on a landscape efficiency factor of 0.80 (until June 30, 2035), 0.63 (from July 1, 2035 to June 30, 2040), and 0.45 (beginning July 1, 2040). Urban retail water suppliers are also required to comply with real water loss standards by January 1, 2028.

DWR has indicated that compliance with the Urban Water Use Objective requirements are under the authority of the SWRCB and that the requirements are not part of Urban Water Management Plan content requirements. However, the SWRCB uses the 2020



Water Use Targets as a back stop for the Urban Water Use Objective calculations. The Urban Water Use Objectives, together with excluded demands, are to be more efficient than the 2020 Water Use Targets.



5.3 SUBMITTAL TABLES

The applicable standardized Submittal Table referenced within Chapter 5 is provided below.

Table 5-1 SB X7-7 2020 Target Progress

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
<input type="checkbox"/>	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	99	106	No	94	Yes
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: The City reported a 2020 GPCD of 106 in the City's 2020 Plan which was greater than the 2020 Target on 99 GPCD. Based upon properly recalculating the City's 2020 population in the 2025 Plan, it was determined that the City had a 2020 GPCD of 99 which would have been in compliance. Nonetheless, the City also met the 2020 Target in 2025. The updated SB X7-7 2025 compliance tables are provided in Appendix F.						



CHAPTER 6

NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

LAY DESCRIPTION – CHAPTER 6

NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

Chapter 6 (Normal-Year Water Supply Characterization) of the City's 2025 Plan discusses and provides the following:

- The City's water supply sources include: groundwater pumped from the Central Basin, imported water purchased from MWD through CBMWD, and recycled water purchased from the Sanitation Districts of Los Angeles County through CBMWD.
- A tabulation of the City's historical water supplies is provided in Section 6.1.
- A discussion regarding the City's imported water supplies from CBMWD is provided. Information regarding imported water connections, capacities, reliability, and historical production is provided.
- A discussion regarding the City's groundwater supplies from the Central Basin is provided. Information regarding basin location, adjudication, management, water levels, water quality, water rights, and historical production is provided.
- A discussion regarding the City's recycled water supplies is provided. The City's recycled water supplies are produced by the Sanitation Districts of Los Angeles County. The City uses recycled water for landscape irrigation at schools, medians, and parks.
- The City's proposed future projects to maximize its water supply resources are discussed.
- The City's "energy intensity" is discussed and represents the quantity of energy consumed, measured in kilowatt hours, divided by the volume of water, measured



in acre-feet over a one-year period. The total energy intensity associated with the City's water management processes was estimated during CY 2025.

In this Chapter, the City will identify and describe each of its sources of water supply. In addition, the City will describe the following:

- Management of each water supply source;
- Current provisions of a basin adjudication or Groundwater Sustainability Plan (GSP), as applicable, pertaining to management of groundwater supplies;
- Measures the City is taking to develop potential new sources of water supply (as applicable); and
- Opportunities for exchanges and transfers on a long- or short-term basis.

The characterization of the City's water supply sources will account for the anticipated availability during a normal year, a single dry year, a five consecutive year drought, along with projections through CY 2050.

6.1 WATER SUPPLY ANALYSIS OVERVIEW

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:*
- (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.*

CWC 10631.

- (h) *... 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).*

The City's source of water supply includes: groundwater pumped from the Central Basin; treated, imported water from Metropolitan Water District of Southern California through Central Basin Municipal Water District; and recycled water purchased from the Sanitation Districts of Los Angeles County through the City of Cerritos. The City's main source of water supply is groundwater pumped from the Central Basin. In addition, the City has not purchased treated, imported water supplies in over 30 years. A tabulation of the City's historical water supplies is provided below.

City of Lakewood

Calendar Year	System Water Supply Sources (AF)							Total
	Potable Water				Non-Potable Water			
	Central Basin Groundwater	Imported Water (CBMWD)	Sales to Long Beach ¹	Subtotal	Central Basin Groundwater ²	Recycled Water	Subtotal	
2011	7,839	0	0	7,839	43	438	481	8,320
2012	8,370	0	(270)	8,101	28	469	498	8,598
2013	9,998	0	(1,673)	8,325	40	529	569	8,893
2014	10,190	0	(2,372)	7,818	35	510	545	8,364
2015	7,664	0	(1,117)	6,547	34	472	506	7,053
2016	6,788	0	(42)	6,746	34	504	538	7,284
2017	7,997	0	(977)	7,020	41	469	510	7,531
2018	9,520	0	(2,371)	7,149	35	478	512	7,662
2019	9,816	0	(3,245)	6,570	37	435	472	7,042
2020	8,025	0	(991)	7,034	42	446	488	7,522
2021	10,112	0	(2,923)	7,190	52	465	517	7,707
2022	9,842	0	(2,991)	6,851	55	457	512	7,363
2023	8,818	0	(1,870)	6,948	50	451	502	7,450
2024	7,404	0	(1,131)	6,273	59	414	472	6,745
2025	7,504	0	(1,206)	6,298	59	364	423	6,720

Notes:

Data provided by City

¹ Groundwater produced by the City and sold to Long Beach counts only towards Long Beach's water rights (or Allowed Pumping Allocation). CY 2017 includes approximately 4.5 AF sold to Golden State Water Company.

² Includes groundwater production from Well No. 6 in the Central Basin for agricultural purposes.

6.1.1 SPECIFIC ANALYSIS APPLICABLE TO ALL WATER SUPPLY SOURCES

The section below provides a discussion of the following information to the extent practical:

- The City’s existing and planned sources of water supply are identified;
- Each source of supply is quantified in five-year increments through CY 2050;
- The anticipated supply availability under normal, single dry, and five consecutive dry years, and any other water year conditions included in the Drought Risk Assessment (see Chapter 7) are described;



- The management of each water supply in correlation with other identified supplies is described.
- Information pertinent to the reliability analysis, including climate change effects, is considered.

The City historically has relied on groundwater pumped from the Central Basin; treated, imported water from Metropolitan Water District of Southern California through Central Basin Municipal Water District; and recycled water purchased from the Sanitation Districts of Los Angeles County through the City of Cerritos. The following descriptions summarize the City's sources of supply (detailed descriptions are provided in Section 6.2).

Existing and Planned Sources of Supply

Purchased Treated Imported Water

The City has historically purchased treated imported water from the Central Basin Municipal Water District, as described in Section 6.2.1. In addition, Section 6.2.1 provides a detailed discussion of the existing and planned supply of the treated imported water, including a description of the management and reliability of those treated imported water supplies. Table 6-8 summarizes the actual treated imported water supply for CY 2025. In addition, Table 6-9 summarizes the projected water supply, in five-year increments, through FY 2050 under varying water supply conditions.

Groundwater



The City has historically pumped groundwater directly from the Central Basin as described in Section 6.2.2. In addition, Section 6.2.2 provides a detailed discussion of the existing and planned supply of the groundwater, including a description of the management and reliability of those groundwater supplies. Table 6-8 summarizes the actual groundwater supplies for CY 2025. In addition, Table 6-9 summarizes the projected water supply, in five-year increments, through CY 2050 under varying water supply conditions.

Storm Water

The City has historically received groundwater from the Central Basin. Management and use of the stormwater runoff by WRD, which is crucial to groundwater management, is described in Section 6.2.4. However, the City currently does not have its own program to beneficially use stormwater runoff as a direct source of supply.

Wastewater and Recycled Water

The City has historically purchased recycled water supplies from Sanitation Districts of Los Angeles County through the City of Cerritos as described in Section 6.2.5. In addition, Section 6.2.5 provides a detailed discussion of the existing and planned use of the recycled water, including a description of the management and reliability of those recycled water supplies. Table 6-8 summarizes the actual recycled water supplies for CY 2025. In addition, Table 6-9 summarizes the projected recycled water supply, in five-year increments, through CY 2050 under varying water supply conditions.

6.1.2 SPECIAL CONDITIONS



The City considered the issues described below when developing its planned sources of water supply.

6.1.2.1 CLIMATE CHANGE EFFECTS

Climate change has the possibility of impacting the availability of planned water supplies, particularly during a drought period. Section 4.2.5.6 of this Plan provides a discussion regarding climate change effects on the City's various sources of supply.

6.1.2.2 REGULATORY CONDITIONS AND PROJECT DEVELOPMENT

The City has considered the implications of emerging regulatory conditions and project development on the availability of planned water supplies. Section 1.4 provides a discussion on the reduced reliance on imported water supplies as well as the proposed Pure Water Southern California recycled water project.

6.1.2.3 OTHER LOCALLY APPLICABLE CRITERIA

There are no locally applicable criteria which applies to the City.

6.1.2.4 WHOLESALE AND RETAIL SUPPLIERS COORDINATION

Because the City relies on wholesale water supplies, the City has provided its 2025 Plan to CBMWD as discussed in Section 2.4.1.

6.2 WATER SUPPLY CHARACTERIZATION



6.2.1 PURCHASED OR IMPORTED WATER

CENTRAL BASIN MUNICIPAL WATER DISTRICT

As a wholesale agency, MWD distributes imported water to 26 member agencies throughout Southern California. CBMWD is one of the member agencies served by MWD. CBMWD distributes water to its retail agencies, including the City of Lakewood. The City can purchase imported water from CBMWD through its CENB-43 and CENB-49 connections, which each having a capacity of 15 cubic feet per second. The City placed the CENB-43 connection in an inactive status as of 2017. As tabulated in Section 6.1, the City has not purchased water from CBMWD over the past five years. The City's projected water purchases from CBMWD, over the next 25 years in five-year increments, is provided in Table 6-9.

The City's treated imported water supplies from MWD, through CBMWD, may be impacted during a multi-year drought or other conditions which limit MWD from delivering sufficient water supplies to all its member agencies, and consequently to the City. In anticipation of such a reduction in supplies, MWD developed a Water Supply Allocation Plan (WSAP) which is briefly described below. The WSAP provides a means of equitably providing reduced water supplies to each of MWD's member agencies for up to 10 levels of reduction representing up to a 50 percent reduction.

During calendar year 2007, critically dry conditions impacted MWD's water supply sources. In addition, a ruling in the Federal Courts in August 2007 provided protective measures for the Delta Smelt (and subsequently other aquatic species) in the Sacramento-San Joaquin River Delta resulting in restrictions on the availability of State Water Project water. As a result, MWD adopted a Water Supply Allocation Plan in February 2008 to allocate available water supplies to its member agencies. MWD revised the WSAP in December 2014.



The WSAP establishes ten different shortage levels and a corresponding Allocation to each member agency. Based on the shortage levels established by MWD, the WSAP provides a separate reduced Allocation to a member agency for its 1) Municipal and Industrial (M&I) retail demand and 2) replenishment demand. The WSAP formula considers historical local water production, full service treated water deliveries, agricultural deliveries and water conservation efforts when calculating each member agency's Allocation.

In general, the WSAP process calculates total historical member agency demand. That historical demand is then compared to member agency projected local supply for a specific Allocation year. The balance required from MWD, less an Allocation reduction factor, is the member agency's "Water Supply Allocation" of imported water from MWD. When a member agency reduces its local demand through conservation or other means, the Allocation of imported water will increase. Depending on MWD's available supply, MWD can establish a specific WSAP shortage level. The shortage level causes a regional reduction and calculates an allocation for each member agency. Additional information about MWD's WSAP is provided in MWD's Regional 2025 UWMP which is incorporated by reference. The following is a summary of MWD's water shortage levels:

- Level 1 – Regional Percent Reduction of 5%
- Level 2 – Regional Percent Reduction of 10%
- Level 3 – Regional Percent Reduction of 15%
- Level 4 – Regional Percent Reduction of 20%
- Level 5 – Regional Percent Reduction of 25%
- Level 6 – Regional Percent Reduction of 30%
- Level 7 – Regional Percent Reduction of 35%
- Level 8 – Regional Percent Reduction of 40%
- Level 9 – Regional Percent Reduction of 45%
- Level 10 – Regional Percent Reduction of 50%



In response to a fourth consecutive year of below average rainfall and critically dry conditions, MWD declared a WSAP Allocation Level 3 for fiscal year 2015-16, which represented a regional reduction of 15 percent. MWD rescinded the WSAP for fiscal year 2016-17 and has not reinstated the WSAP since that time.

6.2.2 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.*

CENTRAL BASIN



Central Basin - Sustainable Groundwater Management Act

The Central Basin is a subbasin of the Coastal Plain of Los Angeles Groundwater Basin pursuant to DWR Bulletin 118, Basin Number 4-11.04. Pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), the Central Basin was named as an adjudicated groundwater basin and is exempt from the requirements of developing a Groundwater Sustainability Plan and subsequently was designated a very-low-priority basin in DWR's 2019 SGMA Basin Prioritization report. In compliance with SGMA, the Central Basin Watermaster submits its Annual Report to DWR.

Central Basin - Adjudication

On January 2, 1962, the Central and West Basin Water Replenishment District (now the Water Replenishment District of Southern California) filed Case No. 786,656 in the Superior Court, County of Los Angeles, naming more than 700 parties as defendants. It sought to adjudicate water rights of groundwater and regulate pumping from the Central Basin. By September 1962, a proposed agreement had been approved by a sufficient number of water producers (producers owning over 75 percent of the Assumed Relative Rights within Central Basin) to guarantee control over groundwater pumping in Central Basin. On September 28, 1962, the Court signed the "Order Pursuant to Stipulation and Interim Agreement and Petition for Order" and appointed the Department of Water Resources as Watermaster.

Subsequently, a stipulated judgment was drafted. Approval was received by public utility water companies and other producers representing well over 200,000 AF, or 75 percent, of the total rights within Central Basin. This was a prerequisite to filing the stipulated judgment with the Court. On May 17, 1965, the case went to trial before Judge Edmund M. Moor. Following testimony on engineering, geology, hydrology, and safe yield of Central Basin and arguments on water right entitlement, the case was continued to August 25, 1965. Shortly thereafter, Judge Moor appointed DWR as Watermaster. The



final Judgment was signed on October 11, 1965, and became effective on October 1, 1966.⁵

The Judgment was amended on March 21, 1980, to provide for a transition in the administrative year from a water year (October 1 to September 30) to a fiscal year (July 1 to June 30). Under the Judgment, this transition in turn contained a “short” administrative year of nine months (from October 1, 1980 to June 30, 1981). The administrative year starting July 1, 1981 was on a fiscal year basis.

The Judgment was again amended on July 19, 1985, modifying the annual budget (\$20 minimum assessment) and exchange pool provisions. The second amended Judgment of May 6, 1991, modified the carryover and overproduction provisions (to 20 percent of allowed pumping allocation or 20 AF, whichever is greater, from 10 percent of allowed pumping allocation or 10 AF), and defined drought carryover, and provided for exemptions for extractors of contaminated groundwater.

In December 2013, the Central Basin Judgment was amended (“Third Amended” Central Basin Judgment) to confirm the retirement of DWR as the Watermaster of Central Basin. The Judgment established three separate bodies to assist the Court in the administration and enforcement of the provisions and stipulations of the Judgment. The first body is the Administrative Body, which administers Watermaster accounting and financial reporting activities. The Water Replenishment District of Southern California was appointed by the Court for this role. The second body is the Water Rights Panel, which enforces issues related to groundwater production rights as defined by the Judgment. The Water Rights panel comprises seven elected water rights holders within the Central Basin. The third administrative body is the Storage Panel, which reviews and approves groundwater

⁵ Central and West Basin Water Replenishment District, etc. v. Charles E. Adams, et al, Los Angeles County Case No. 786,656.



storage efforts. The Storage Panel is comprised of the Water Rights Panel and the WRD Board of Directors. A copy of the Central Basin Judgment is provided in Appendix G.

The Court approved 2013 Judgment amendments also implemented a water storage program. The amendment states, "...a party may store up to 200 percent of the party's Allowed Pumping Allocation, if space is available." In addition, the amendments allow parties to convert unused Allowed Pumping Allocation to stored water and revised the amount of carryover to be equal to 100 percent of the party's Allowed Pumping Allocation minus the amount of carryover water set aside for storage, as noted above. The purpose of the storage program creates added reliability in water supply from the Central Basin. In addition, the amendments allow for transfer of water between Central Basin and West Basin by permitting parties with water rights in Central Basin to increase production in Central Basin, while another party decreases production in West Basin by the corresponding amount.

Under the Judgment, water rights are fixed and do not vary year to year. Water producers cannot exceed their water rights by more than 20 percent or 20 AF, whichever is greater, in any year and an adjustment is made the following year. In addition, water producers cannot carry over more than 20 percent or 20 AF, whichever is greater, of their water rights for use in the following year. In addition, the Central Basin Judgment includes an amendment which implemented a water storage program. A party may store up to 50 percent of the party's Allowed Pumping Allocation in an Individual Storage Account indefinitely and 150 percent of the party's Allowed Pumping Allocation in a Community Storage Account for 10 years if space is available. The amendments also allow parties to convert unused Allowed Pumping Allocation to stored water and revise the amount of carryover to be equal to 60 percent of the party's Allowed Pumping Allocation minus the amount of carryover water set aside for storage. The purpose of the storage program creates added reliability in water supply from the Central Basin.

Central Basin - Description



Central Basin is one of two groundwater basins in the Coastal Plain of Los Angeles County. It is comprised of Quaternary-age sediments (less than 1.8 million years old) of gravel, sand, silt, and clay that were deposited from the erosion of nearby hills and mountains, and from historical beaches and shallow ocean floors that covered the area in the past. Underlying these Quaternary sediments are basement rocks such as the Pliocene Pico Formation that generally do not provide sufficient quantities of groundwater for pumping. Separating the Central Basin from the West Coast Basin is the NIU, a series of discontinuous faults and folds that form a prominent line of northwest trending hills including the Baldwin Hills, Dominguez Hills, and Signal Hill.

Central Basin covers approximately 270 square miles and is bounded on the north by the Hollywood Basin and the Elysian, Repetto, Merced, and Puente Hills, to the east by the Los Angeles County/Orange County line, and to the south and west by the NIU. The location of the Central Basin is provided in Figure 3. DWR divided the Central Basin into four sections: the Los Angeles Forebay, the Montebello Forebay, the Whittier Area, and the Pressure Area. Pursuant to DWR Bulletin 118 (for Basin Number 4-11.04), the total storage capacity of the Central Basin is estimated at approximately 13,800,000 AF.

The aquifers of Central Basin received their water supply primarily from the surface and subsurface inflow of water from the San Gabriel Valley. The water originates as rainfall in the San Gabriel Mountains, the runoff from which is conveyed to the Los Angeles River, the Rio Hondo, and the San Gabriel River. The Los Angeles River enters Central Basin through the Los Angeles Narrows, crosses the Los Angeles Forebay Area, and proceeds south across Central Basin, exiting Central Basin through the Dominguez Gap in West Basin. The Rio Hondo, enters Central Basin at Whittier Narrows parallel to the San Gabriel River, proceeds southwesterly across the Montebello Forebay Area and joins the Los Angeles River midway across the Basin. The San Gabriel River also enters Central Basin through the Whittier Narrows, crosses the Montebello Forebay, and runs south to the Pacific Ocean near Long Beach at the Orange County line.



As the Rio Hondo and San Gabriel River flow through the Upper San Gabriel Valley toward Whittier Narrows, much of their flow percolates into the Main Basin. This water crosses the Whittier Narrows and enters Central Basin as subsurface flow into the aquifers of Central Basin. At the same time, the surface flows of the Rio Hondo and the San Gabriel River percolate downward into the aquifers of Central Basin in the Montebello Forebay. In the Montebello Forebay, the underground aquifers merge and are unconfined, and thus are capable of receiving large quantities of water from percolation through the sand and gravel surface of the forebay area.

The Los Angeles Forebay area is also favorably situated for percolation from the flows of the Los Angeles River, but the Los Angeles Forebay has been largely eliminated as a source of freshwater replenishment to Central Basin, due to lining of the Los Angeles River channel and the impervious surface in the forebay area. In the Montebello Forebay area, by contrast, flood flows have been largely controlled through the construction of the Whittier Narrows Dam, and the river channels have not been lined in the area, so percolation still occurs.

Groundwater in the Central Basin provides a substantial portion of the water supply needed by residents and industries in the overlying area. Groundwater occurs in the pore spaces of the sediments in the basin. The major aquifers identified in Central Basin include the following, from shallowest to deepest: a) the Gaspar and semi-perched aquifers of the Holocene Alluvium Formation; b) the Exposition, Artesia, Gage, and Gardena aquifers of the Upper Pleistocene Lakewood Formation; c) the Hollydale, Jefferson, Lynwood, and Silverado aquifers of the Lower Pleistocene Upper San Pedro Formation; and d) the Sunnyside Aquifer of the Lower Pleistocene Lower San Pedro Formation.

WRD's Leo J. Vander Lans Advanced Water Treatment Facility (LVL) was built in 2003 and expanded in 2014. The facility is located in the City of Long Beach and currently

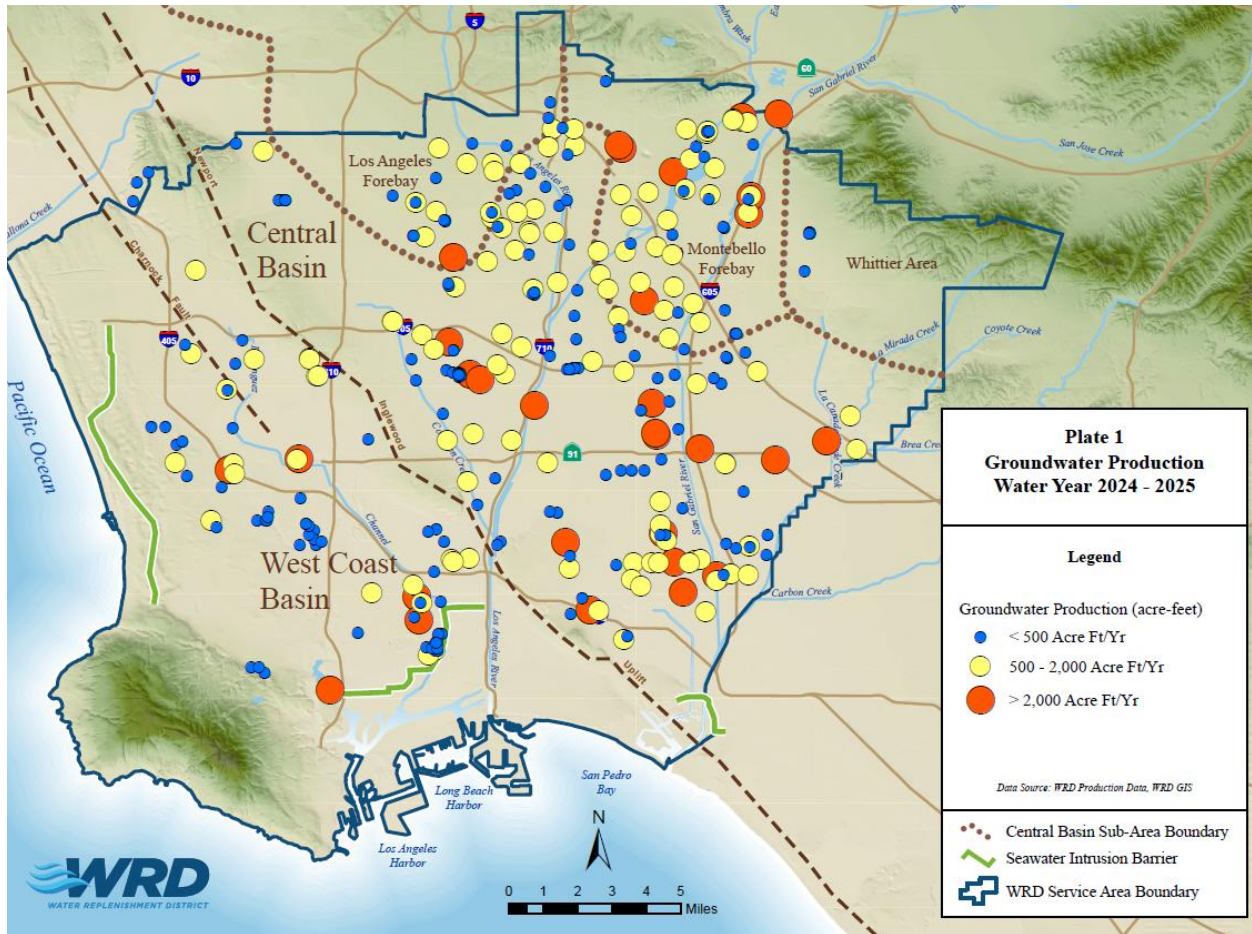


produces about 8 MGD of advanced treated water for injection at the Alamitos Barrier in Long Beach. The LVL also injects tertiary treated recycled water from the Los Angeles County Sanitation District's Long Beach Water Reclamation Plant. By injecting the LVL's advanced treated water and effluent from the Long Beach Water Reclamation Plant, groundwater supply is replenished and seawater intrusion is prevented.

The WRD Board of Directors established the Water Independence Now program in 2003 to protect the security of the region's groundwater supplies. The WIN program is comprised of various projects that include expansions to existing water treatment facilities, spreading activities, and stormwater capture. The largest component of the WIN program is the Albert Robles Center for Water Recycling & Environmental Learning (formerly the Groundwater Reliability Improvement Program), which was completed in 2019. The purpose of the Albert Robles Center is to reduce demand for imported water at the Rio Hondo and San Gabriel Coastal Spreading Grounds. The Albert Robles Center includes ultrafiltration, reverse osmosis, and ultraviolet disinfection and advanced oxidation to treat recycled water by significantly reducing the total dissolved solids concentration.

Groundwater quality is monitored by WRD. Groundwater in the Central Basin is currently contaminated with natural metals such as arsenic, iron and manganese, Volatile Organic Chemicals (VOCs), including trichloroethylene (TCE) and perchloroethylene (PCE), 1,4-Dioxane, Perchlorate, and Per- and Poly-Fluoroalkyl Substances (PFAS). In addition, Total Dissolved Solids (TDS) concentrations exceed drinking water quality standards. Wellhead treatment is necessary in these areas to allow delivery of the groundwater for potable purposes.

As previously discussed, DWR divided the Central Basin into four sections: the Los Angeles Forebay, the Montebello Forebay, the Whittier Area, and the Pressure Area. The locations of these sections is shown below.



Source: WRD's 2026 Engineering Survey and Report, Plate 1

Below is a discussion of groundwater level changes, pursuant to WRD's 2026 Engineering Survey and Report.

- In the Los Angeles Forebay, the water level high was observed in 1938 with an elevation of approximately 70 feet above mean sea level (msl) and by 1962, the water levels had fallen by 180 feet to an elevation of 109 feet below msl due to over pumping and lack of recharge. Water levels have improved since then due to pumping rights adjudication and managed aquifer recharge. In 2023, the groundwater levels were at an elevation of 12.65 feet below msl.



- In the Montebello Forebay, the water level high was observed in 1942 with an elevation of approximately 137.8 feet above mean sea level (msl) and by 1958, the water levels had fallen by 117 feet to an elevation of 20.9 feet above msl due to over pumping and lack of recharge. Water levels have improved since then due to pumping rights adjudication and managed aquifer recharge. In 2025, the groundwater levels were at an elevation between 69.25 and 116.72 feet above msl.
- In the Pressure Area, the water level high was observed in 1935 at about 10 feet above msl when they began to continually decline by over 110 feet until the observed low of about 120 feet below msl in 1961 due to over pumping and lack of recharge. Groundwater levels improved during the early 1960s due to replenishment operations. Between 1995 and 2007, there were 100-foot swings in water levels because of seasonal pumping from producers. Water levels have improved since then due to pumping rights adjudication and managed aquifer recharge. In 2025, the groundwater levels were at elevations between 42.86 and 71.33 feet below msl.
- Long-term hydrographs and records were not maintained for the Whittier Area; however, groundwater levels have been tracked from recently constructed monitoring wells. Overall, groundwater elevations increased within the Whittier Area.

Central Basin - Historical and Projected Basin Production

The City currently produces groundwater from the Central Basin. The City's current Allowed Pumping Allocation in the Central Basin is 9,432.00 AFY. The City's production over the past five years has been tabulated in Section 6.1. Over the past five years, the City has produced 6,332 AFY to 7,242 AFY, with an average of 6,767 AFY from the



Central Basin⁶. The City's projected production from the Central Basin, over the next 25 years in five-year increments, is provided in Table 6-9.

6.2.3 SURFACE WATER

The City does not use surface water supplies to meet its water demands.

6.2.4 STORMWATER

The City does not directly use stormwater to meet its water demands.

6.2.5 WASTEWATER AND RECYCLED WATER

CWC 10633R.

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, potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.*

⁶ Production includes groundwater produced from Well 6 for agricultural purposes.



- (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.*

Discussion of wastewater collection, treatment, and recycled water use is included in this chapter. Municipal recycled water is municipal wastewater that has been treated from a municipal wastewater facility to a specified quality to enable it to be used again for a beneficial purpose. Municipal wastewater must meet two requirements; it must be reused beneficially pursuant to Title 22 of the California Code of Regulations and it must be reused in accordance with a Regional Water Quality Control Board permit. Title 22 of the California Code of Regulations defines beneficial reuse of recycled water as "the use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to water of the State."

Recycled water is used within the City's service area for landscape irrigation at schools, medians, and parks.

6.2.5.1 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 City's 2025 Plan was prepared in coordination with local water, wastewater, groundwater, and planning agencies within its service area to analyze the current and projected wastewater supply for collection, treatment, disposal, and distribution. Wastewater from the City's service area is collected and treated primarily at the Long Beach WRP and the A.K. Warren Water Resource Facility (formerly known as the Joint Water Pollution Control Plant) owned and operated by LACSD.

6.2.5.2 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.*

Wastewater generated by the City is treated by LACSD. Wastewater is collected within the City's local sewer collection system. The City's local sewers tie into LACSD's regional trunk sewers at multiple locations within the City's service area. The regional trunk sewer lines deliver wastewater to the Long Beach WRP and the A.K. Warren Water Resource Facility owned by LACSD for treatment.

Municipal wastewater is collected from residential and commercial customers within the City's service area. The water reclamation plants serving the City include the Long Beach WRP and the A.K. Warren Water Resource Facility; however, the percentage breakdown between these two plants in treating the City's wastewater is unknown. Based on information provided by LACSD, it is estimated that approximately 69 gallons per person per day of wastewater is generated within LACSD's service area. Based on a CY 2025 population of 60,019 within the City's service area, the estimated amount of wastewater



collected within the City's service area is approximately 4,638 AFY, as shown in Table 6-2.

The Long Beach WRP, located in the City of Long Beach, was completed in 1973 and expanded in 1984 to its current design capacity of 25 MGD. Treatment at the Long Beach WRP includes primary, secondary, and tertiary treatment. Untreated wastewater from the Long Beach WRP is conveyed to the A.K. Warren Water Resource Facility for further treatment.

The A.K. Warren Water Resource Facility is downstream of the Los Coyotes WRP in the City of Carson. The A.K. Warren Water Resource Facility, which began operation in 1928, currently has a treatment capacity of about 400 MGD. The treatment level is primary and secondary treatment with disinfection. The plant serves a population of approximately 4.8 million people. Solids collected in primary and secondary treatment are processed in anaerobic digestion tanks where bacteria break down organic material and produce methane gas. Treated wastewater is ultimately disinfected prior to being discharged to the Pacific Ocean. Though highly treated, effluent from the A.K. Warren Water Resource Facility does not meet recycled water standards and is therefore not re-used for such purposes. However, all water discharged to the ocean is monitored to ensure compliance with applicable local, state, and federal standards for discharge water.

The City's wastewater is treated and disposed of outside of the City's service area as shown in Table 6-3.

6.2.5.3 RECYCLED WATER SYSTEM DESCRIPTION

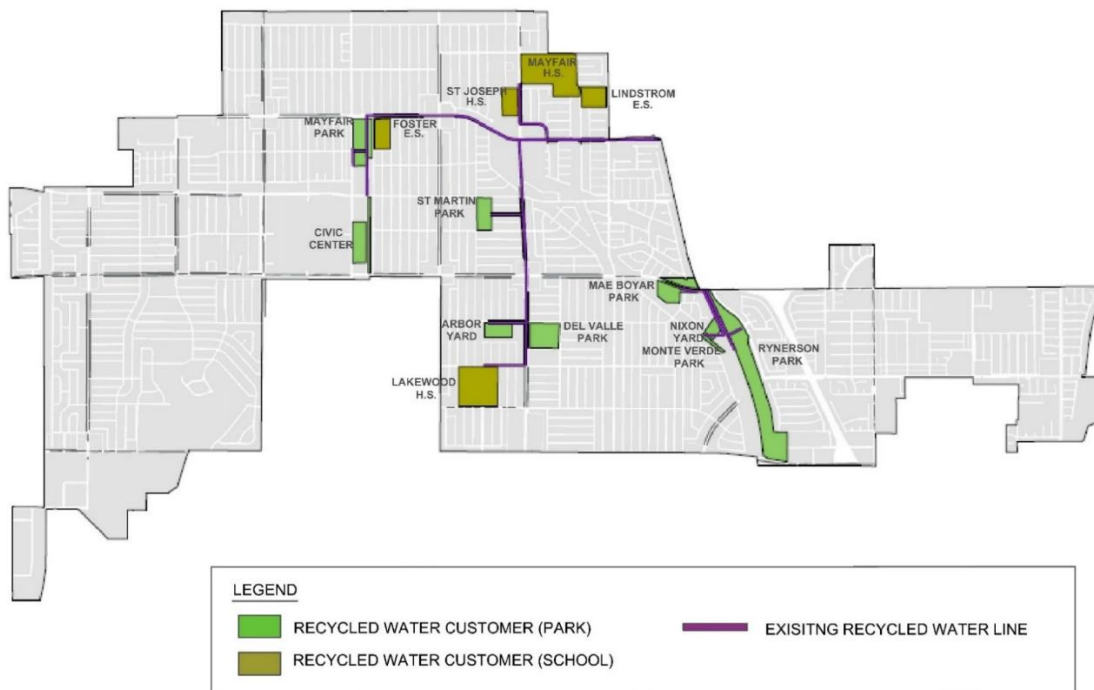


CWC 10633.

(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.

The City purchases recycled water from LACSD through the City of Cerritos. The City started using recycled water in 1989. The recycled water is used for landscape irrigation at schools, medians, and parks. The figure below shows the City's recycled water customers. Recycled water use over the past 15 years is presented at the beginning of Chapter 6.

City's Existing Recycled Water System



6.2.5.4 CURRENT, POTENTIAL, AND PROJECTED RECYCLED WATER USES

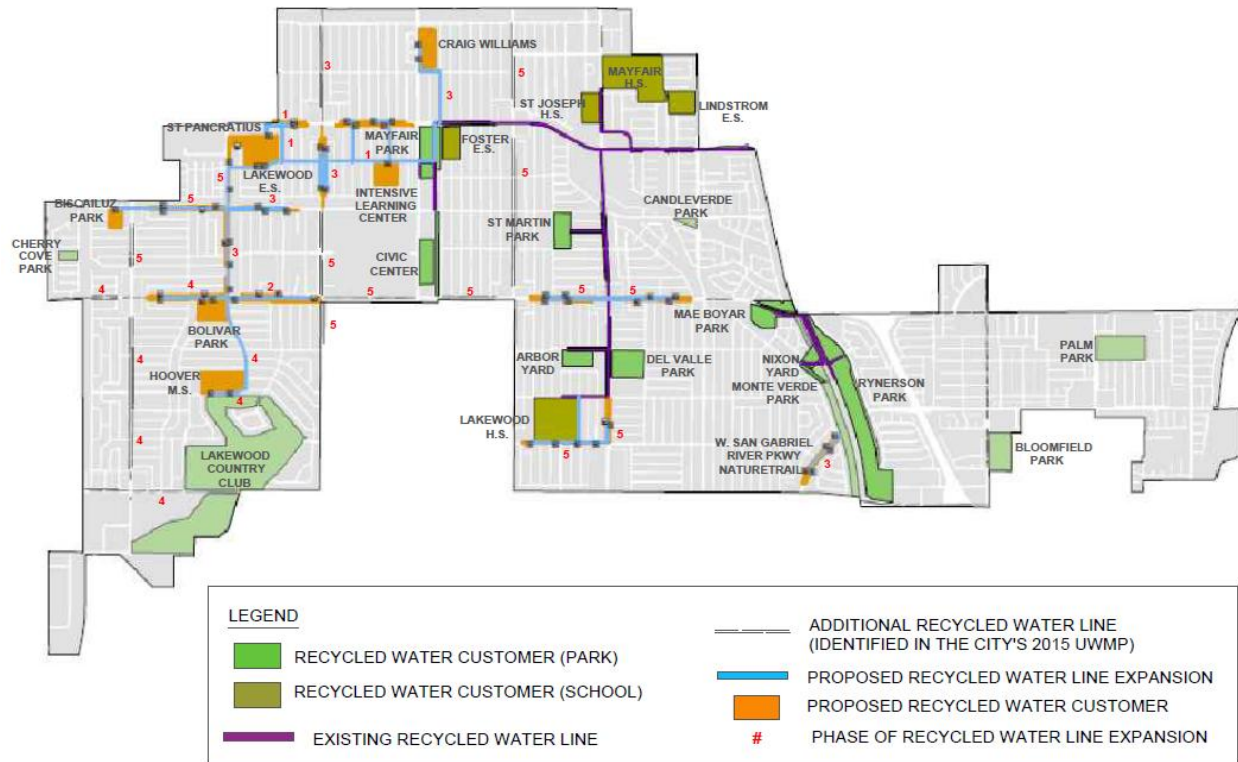
CWC 10633.

- (b) *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. 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.*



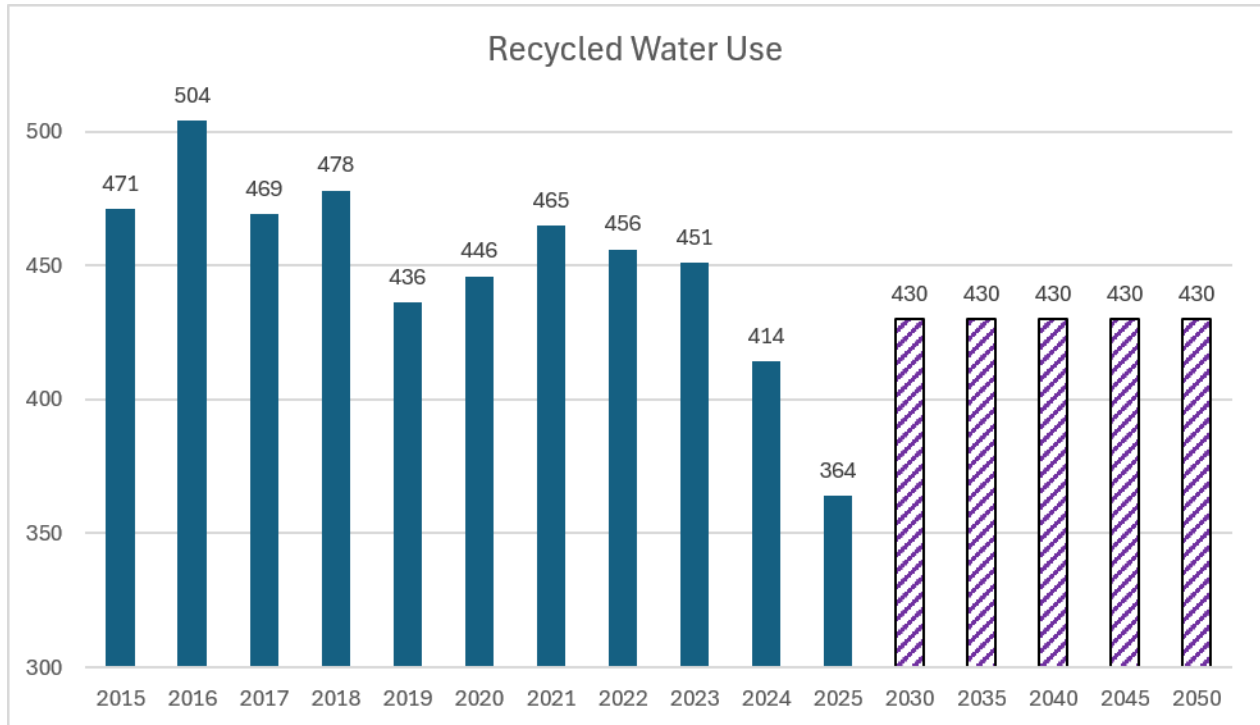
As shown in Table 6-4, the City uses recycled water for landscape irrigation at schools, medians, and parks. The City previously examined potential expansion of the recycled water system through feasibility study prepared in 2009. The proposed recycled water system expansion is shown in the figure below. Based on the feasibility study, the cost for an expansion of the City's recycled water system would be too cost prohibitive. As of the 2025 Plan, the City continues to have no immediate plans to expanding the recycled water system.

City's Existing and Proposed Recycled Water System





City's Historical and Projected Recycled Water Use



6.2.5.5 ACTIONS TO ENCOURAGE AND OPTIMIZE FUTURE RECYCLED WATER USE

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:

- (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.*



The City provides incentives by setting recycled water rates below potable water rates to encourage recycled water use. There is also no minimum amount of recycled water available for purchase. The City continues to support the establishment of funding sources for further planning studies for future projects to increase recycled water demands. The City will also continue to support seeking funding for regional water recycling projects and programs.

6.2.6 DESALINATED WATER OPPORTUNITIES

CWC 10631.

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

Central Basin

The average TDS concentrations for the Central Basin groundwater is less than its secondary Maximum Contaminant Level (MCL) of 1,000 mg/l, based on most recent available data in the City's groundwater wells. Consequently, the City has not needed to investigate the use of desalination to develop or reestablish a new long-term supply. However, there may be opportunities for use of desalinated ocean water as a future potential water supply source, if needed, through coordination with other agencies that have ocean desalination programs.

6.2.7 WATER EXCHANGES AND TRANSFERS



CWC 10631.

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

6.2.7.1 EXCHANGES

Pursuant to DWR’s 2025 Final Guidebook, *“Water exchanges are typically water delivered by one water user to another water user, with the receiving water user providing water in return at a specified time or when the conditions of the parties’ agreement are met. Water exchanges can be strictly a return of water on a basis agreed upon by the participants or it can include payment and the return of water.”*

The City does not have any current or planned water exchanges.

6.2.7.2 TRANSFERS

Pursuant to DWR’s 2025 Final Guidebook, *“The Water Code defines a water transfer as a temporary or long-term change in the point of diversion, place of use, or purpose of use due to a transfer, sale, lease, or exchange of water or water rights.”*

Pursuant to the Central Basin Judgment (discussed in Section 6.2), parties to the Judgments are allowed to assign, transfer, license, or lease their water rights. The Judgment also allows for the transfer of stored water between parties. The City is able to utilize the transfer opportunities available for Central Basin water if necessary.

A summary of the City’s leases within the Central Basin over the past five (5) fiscal years is tabulated below.



Fiscal Year	Leases To		Leases From		Net Leases
	Agency	Volume	Agency	Volume	
2022	City of Cerritos	(500.00)			
	Golden State Water Company	(1,840.00)			
	Total	(2,340.00)			(2,340.00)
2022	City of Long Beach	(1,946.59)			
	Total	(1,946.59)			(1,946.59)
2023	City of Cerritos	(750.00)	City of Whittier	2,000.00	
	City of Compton	(1,500.00)			
	Total	(2,250.00)	Total	2,000.00	(250.00)
2024	City of Cerritos	(700.00)			
	City of Compton	(1,500.00)			
	City of Whittier	(3,500.00)			
	Total	(5,700.00)			(5,700.00)
2025	City of Cerritos	(700.00)			
	City of Compton	(1,500.00)			
	City of Whittier	(2,000.00)			
	Total	(4,200.00)			(4,200.00)

6.2.7.3 EMERGENCY INTERTIES

Emergency interties (or interconnections) are distribution system interconnections between water agencies for use during critical situations where one system or the other is temporarily unable to provide sufficient potable water to meet its water demands and/or fire protection needs. An emergency interconnection will allow a water system to continue serving water during critical situations such as local water supply shortages as a result of earthquakes, fires, prolonged power outages, and droughts.

The City maintains four emergency water supply interconnections with adjacent water purveyors including the Cities of Cerritos, Signal Hill, and Long Beach, and GSWC. Both connections to the City of Cerritos and GSWC are bi-directional, and the other two connections with the Cities of Long Beach and Signal Hill are one-way interconnections.



6.2.8 SUPPLY FROM STORAGE

Section 6.2.8 is not applicable. The City does not remove water from either surface storage or underground storage for use (including surface water placed into storage each year and retrieved in the following year).

6.2.9 OTHER

The City does not rely on any additional water supply sources.

6.2.10 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 implementation timeline for each project or program.*

The City produces groundwater from the Central Basin to provide sufficient water service now, and in the future. The City will construct new groundwater production wells to replace existing wells when necessary (See Table 6-7).



6.3 ENERGY USE

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.*

“Energy intensity” is defined as the quantity of energy consumed, measured in kilowatt hours (kWh), divided by the volume of water, measured in AF for a water management process over a one-year period. The information used to calculate the estimated energy intensity associated with the City’s water system is provided below. The energy intensity information is based on readily obtainable energy and water use data for the following water management processes: 1) extraction or diversion of water supplies; 2) placement into storage; 3) conveyance to distribution; 4) treatment; and 5) water system distribution.

The City has tabulated its energy intensity using readily obtainable energy consumption data obtained from monthly electricity bills from Southern California Edison (SCE) for the whole water system and the corresponding water use data obtained from available water meter readings. The City has reported the energy intensity associated with the water management processes which occur within its operational control. Because the City does



not track individual energy usage for each water management process identified above, the City has estimated the energy intensity using the “total utility approach” (i.e. sum of all water management processes). The total energy consumed was approximately 3,937,989 kWh during CY 2025. Although the total energy consumption reported includes electricity usage for general administration (e.g. at the City’s headquarters) which is not associated with any water management processes, the general administration energy usage is considered negligible compared to overall water system use and has not been netted out.

The total volume of water entering the potable water system was approximately 6,297 AF during CY 2025 and is consistent with the total volume of water provided in Table 4-1 (less recycled water supplies).

The total energy intensity associated with the City’s water management processes is estimated at 1,919 kWh per million gallons. The energy intensity data and calculations based on the “total utility approach” are provided in Table O-1B below.

The City’s water management processes do not include “consequential hydropower generation” where the energy generation is a direct consequence of water delivery (i.e. all water passing through the energy generation devices is delivered to users). The City’s water management processes do not include “non-consequential hydropower generation” where the energy generation is not a direct consequence of water delivery (i.e. energy could be generated even if no water was being delivered to water users). In addition, the City’s water management processes do not include any substantial “self-generated energy sources” including solar, wind, geothermal, biomass, co-generation, and diesel generator sources.



Table O-1B. Recommended Energy Reporting — Total Utility Approach

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		6,297		6,297
Energy Consumed (kWh)		3,937,989		3,937,989
Energy Intensity (kWh/vol. converted to MG)		1,919	-	1,919
DWR NOTES:				
<p>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.</p>				
Quantity of Self-Generated Renewable Energy				
0 kWh				
Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)				
Combination of Estimates and Metered Data				
Data Quality Narrative:				
The total energy consumed was identified based on Southern California Edison (SCE) billing records. Although the total energy consumed includes electricity usage for general administration (which is not an identified water management process), general administration energy use is considered to be negligible compared to overall water system use and has not been netted out.				
Narrative:				
The total energy consumption includes energy associated with operating groundwater production wells and booster pumps to deliver water in the distribution system. Energy consumption is associated with operating groundwater water treatment. Energy consumption is also associated with plant lighting and air conditioning, and operating the Supervisory Control and Data Acquisition (SCADA) system and chlorination injection pumps.				
NOTES:				



6.4 SUBMITTAL TABLES

The applicable standardized Submittal Tables referenced within Chapter 6 are provided below.

6.4.1 TABLE 6-1: GROUNDWATER VOLUME PUMPED

Table 6-1 Groundwater Volume Pumped

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)							
<input type="checkbox"/>		Check the box if the Supplier does not pump groundwater. Proceed to the next table.					
<input type="checkbox"/>		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	Central Basin	7190	6851	6948	6273	6298
Alluvial Basin	Non-Potable	Central Basin	52	55	50	59	59
Total			7,242	6,906	6,998	6,332	6,357
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							



6.4.2 TABLE 6-2: WASTEWATER COLLECTED WITHIN SERVICE AREA

Table 6-2 Wastewater Collected Within UWMP Service Area

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area				
Water Code Section 10633(a)				
<input type="checkbox"/>	Check the box if there is no wastewater collection system. Proceed to the next table.			
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)			
	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				
LACSD	Estimated	4,365	A.K. Warren Water Resource Facility, Place ID 234156	No
LACSD	Estimated	273	Long Beach WRP, Place ID 238562	No
Total Wastewater Received from UWMP Service Area in 2025:		4,638		
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:				



6.4.5 TABLE 6-5: 2020 UWMP RECYCLED WATER-USE PROJECTION COMPARED TO 2025 ACTUAL

Table 6-5 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
<input type="checkbox"/>	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)	450	364
Total	450	364
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:		



6.4.6 TABLE 6-6: METHODS TO ENCOURAGE FUTURE RECYCLED WATER USE

Table 6-6 Methods to Encourage Future Recycled Water Use

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
<input checked="" type="checkbox"/>	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.		
Section 6.2.5.5	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			
Total (AF)			0
Unit Conversion to AF			0
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:			



6.4.7 TABLE 6-7: EXPECTED FUTURE WATER SUPPLY PROJECTS OR PROGRAMS

Table 6-7 Expected Future Water Supply Projects or Programs

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)							
<input type="checkbox"/>	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.						
<input checked="" type="checkbox"/>	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.						
Section 6.2.10	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:							

6.4.8 TABLE 6-8: WATER SUPPLIES—ACTUAL

As discussed in Section 6.2, the City's water supply sources consist of treated imported water purchased from MWD through CBMWD (see Section 6.2.1), groundwater from the Central Basin (see Section 6.2.2), and recycled water (see Section 6.2.5). The actual quantities of the water supply sources available to the City during CY 2025 are summarized in Table 6-8. The reliable quantities of projected water supply sources available to the City in five-year increments through CY 2050 during normal or average years are summarized in Table 6-9. The reliability of these sources of supply are



addressed in Section 7.2.3, including during normal years, single dry years, and five consecutive year droughts.

The order of use of the City's projected reliable water supplies from CY 2025 through CY 2050 in five-year increments is based on historical practices, water supply availability, and the cost of water. It is anticipated the City will initially use groundwater produced from the Central Basin. At the same time, the City will continue to use recycled water for non-potable demands. The City will also use treated imported water if necessary. It is important to note that although the Central Basin is adjudicated (as discussed in Section 6.2.2), there is a limit to the amount of groundwater which can be produced annually as water rights are fixed and do not vary year to year.

The City's projected quantities of treated imported water supplies are based on historical long-term averages and available supplies during previous dry year conditions. The City's projected quantities of recycled water supplies to meet non-potable demands are based on historical long-term averages. The City's projected quantities of groundwater supplies from Central Basin are based on meeting the remainder of the City's total water demands. It is anticipated the City will have sufficient water supplies available to meet projected demands.



Table 6-8 Water Supplies – Actual

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				
Groundwater (not desalinated)	Central Basin	Potable	6,297	
Groundwater (not desalinated)	Central Basin	Non-Potable	59	
Recycled Water		Non-Potable	364	
		Subtotal Potable	6,297	0
		Subtotal Non-Potable	423	0
		Total	6,720	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:				

6.4.9 OPTIONAL TABLE 6-8DS: SOURCE DESALINATION BY SUPPLIER

As discussed in Section 6.2.6, the City is currently not considering the development of a desalinated water project. As a result, optional Table 6-8DS is not included.

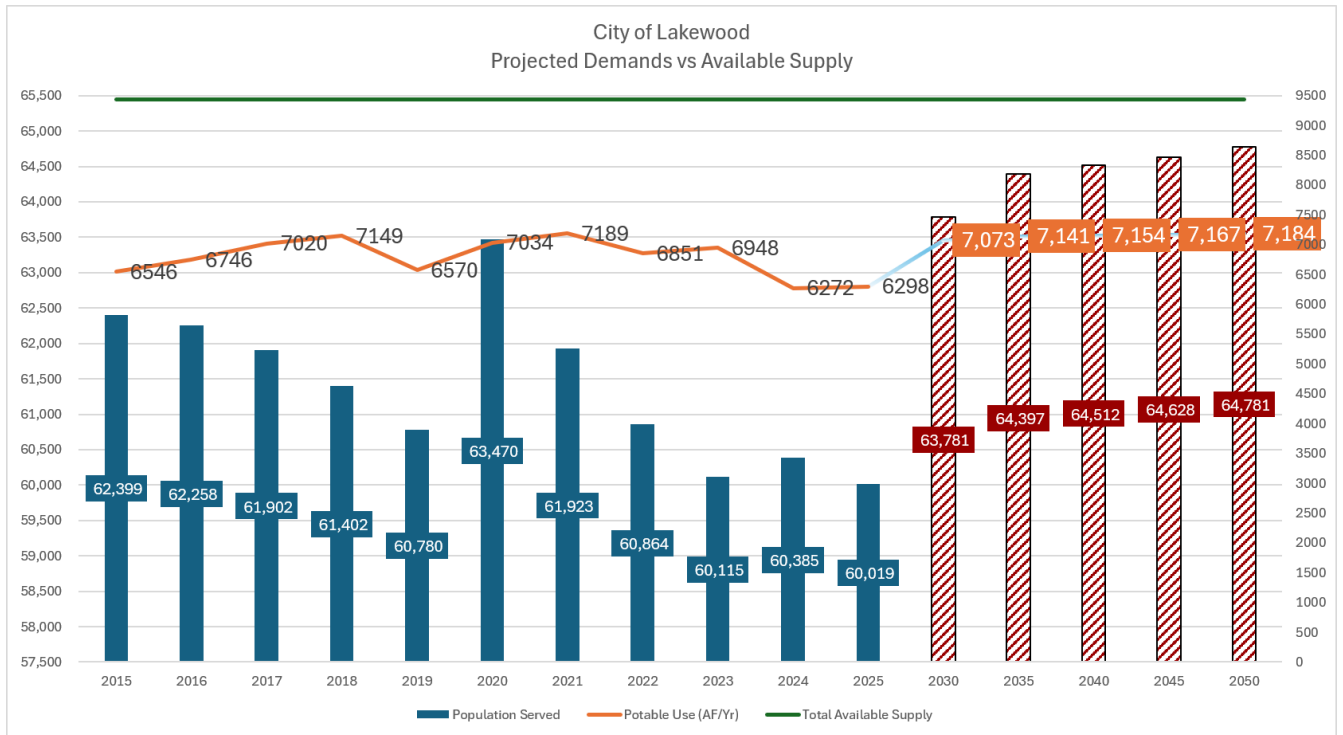
6.4.10 TABLE 6-9: WATER SUPPLIES—PROJECTED



Table 6-9 Water Supplies – Projected

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)									
			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												
Groundwater (not desalinated)	Central Basin	Potable	7,073		7,141		7,153		7,167		7,184	
Groundwater (not desalinated)	Central Basin	Non-Potable	55		55		55		55		55	
Recycled Water		Non-Potable	430		430		430		430		430	
Subtotal Potable			7,073	0	7,141	0	7,153	0	7,167	0	7,184	0
Subtotal Non-Potable			485	0	485	0	485	0	485	0	485	0
Total			7,558	0	7,626	0	7,638	0	7,652	0	7,669	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:





CHAPTER 7

WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

LAY DESCRIPTION – CHAPTER 7

WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

Chapter 7 (Water Service Reliability and Drought Risk Assessment) of the City’s 2025 Plan discusses and provides the following:

- Calendar Year 2018 represents an “average” or “normal” water year for the City in which the total amount of rainfall was similar to the historical average rainfall.
- A “single dry” year for the City was represented in Calendar Year 2017, in which the total amount of rainfall was below the historical average rainfall.
- A “five consecutive year drought” period for the City is represented from Calendar Year 2012 to Calendar Year 2016, where the total amount of rainfall during each of these years was less than the historical average rainfall.
- The City’s current and projected water supplies available during normal years in five-year increments over the next 25 years are provided (through Calendar Year 2050) as shown on Table 7-2.
- The City’s current and projected water supplies available during single dry years in five-year increments over the next 25 years are provided (through Calendar Year 2050) as shown on Table 7-3.
- The City’s current and projected water supplies available during each year of a five consecutive year drought in five-year increments over the next 25 years are provided (through Calendar Year 2050) as shown on Table 7-4.
- The reliability of the City’s water supply sources, including a review of water supply constraints, is provided. A single dry year or a five consecutive year drought period



will not compromise the City's ability to provide a reliable supply of water to its customers.

- A Drought Risk Assessment (or DRA) is provided which includes an assessment of the City's water supply reliability over a five consecutive year drought period. The City's DRA assumes a five consecutive year drought from Calendar Year 2026 through Calendar Year 2030 and includes a review of water supplies, water uses, and water supply reliability for each water supply source during this period. The City's water system has experienced a prior five consecutive year drought with no limitation to its collective water supplies. However, the cost of those water supplies may have increased based on the mix of water supplies which are used. Consequently, the City has the ability to enact varying water shortage levels (see Chapter 8) to help educate its customers and provide an economic incentive for the retail customers to reduce their water consumption.

This section of the City's Plan describes the City's ability to meet retail customer water demands by analyzing a variety of factors which affect the City's water supply. This section assesses the City's water service reliability during average years, single dry years, and during a five consecutive year drought period to meet the water needs of its customers. This section also includes the discussion of a Drought Risk Assessment which provides a mechanism for the City to evaluate the risk to its water supply under a drought lasting for the next five consecutive years.



7.1 CONSTRAINTS ON WATER SOURCES CONSIDERATIONS

7.1.1 SERVICE RELIABILITY – 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.

Water Code Section 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.

Water Code Section 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.

Water Code Section 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.

The City's sources of supplies consist of imported water purchased from MWD through CBMWD, groundwater from the Central Basin, and recycled water as described in Section 6.2. Although all of these supplies are managed, the following constraints may occur which the City has considered in this reliability analysis.



Imported Water

The City receives treated surface water from MWD through CBMWD. Water quality from MWD relating to supply reliability is addressed separately in MWD's 2025 Regional Urban Water Management Plan.

Central Basin

The City produces groundwater from the Central Basin. The groundwater has been impacted by contamination, including by iron and manganese. However, the City has developed and implemented appropriate treatment (two permitted treatment facilities) which have been approved by SWRCB-DDW. These groundwater supplies are considered reliable both from a water quality and quantity standpoint.

7.2 WATER SERVICE RELIABILITY 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.*

Information regarding the reliability of the City's water supplies is based on the historical precipitation data in the Central Basin area. Historical annual precipitation in the Central Basin area is discussed in Section 3.3 and is based on historical data collected from Station 049660 (Whittier City Yard, California). Furthermore, Section 4.2.5.6 of this Plan



notes that potential future climate change impacts may result in an increase in the average annual precipitation within the City's service area, thus indicating use of historical data is a reasonable and conservative approach. As indicated in Section 3.3, the historical average rainfall in the vicinity of the City's service area is 14.5 inches. CY 2018 represents an average or normal water year for the City in which the total amount of rainfall was similar to the historical average rainfall. A single dry year for the City was represented in CY 2017, in which the total amount of rainfall was below the historical average rainfall. A five consecutive year drought period for the City is represented from CY 2012 to CY 2016, where the total amount of rainfall during each of these years was less than the historical average rainfall. Table 7-1 summarizes these "base years" for average, single dry, and five consecutive year drought and provides the total amount of water supplies available to the City during those base years. The following discussion assesses the water service reliability of the City's water supply sources.

Water Service Reliability - Imported Water

The City's treated imported water supplies from MWD, through CBMWD, may be impacted during a multi-year drought or other conditions which limits MWD from delivering sufficient water supplies to all of its member agencies, and consequently to the City. In anticipation of such a reduction in supplies, MWD developed a WSAP which is briefly described below. The WSAP provides a means of equitably providing reduced water supplies to each of MWD's member agencies for up to 10 levels of reduction representing up to a 50 percent reduction.

During calendar year 2007, critically dry conditions impacted MWD's water supply sources. In addition, a ruling in the Federal Courts in August 2007 provided protective measures for the Delta Smelt (and subsequently other aquatic species) in the Sacramento-San Joaquin River Delta resulting in restrictions on the availability of State Water Project water. As a result, MWD adopted a WSAP in February 2008 to allocate



available water supplies to its member agencies. MWD revised the WSAP in December 2014.

The WSAP establishes ten different shortage levels and a corresponding Allocation to each member agency. Based on the shortage levels established by MWD, the WSAP provides a separate reduced Allocation to a member agency for its 1) Municipal and Industrial retail demand and 2) replenishment demand. The WSAP formula considers historical local water production, full service treated water deliveries, agricultural deliveries and water conservation efforts when calculating each member agency's Allocation.

In general, the WSAP process calculates total historical member agency demand. That historical demand is then compared to member agency projected local supply for a specific Allocation year. The balance required from MWD, less an Allocation reduction factor, is the member agency's "Water Supply Allocation" of imported water from MWD. When a member agency reduces its local demand through conservation or other means, the Allocation of imported water will increase. Depending on MWD's available supply, MWD can establish a specific WSAP shortage level. The shortage level causes a regional reduction and calculates an allocation for each member agency. Additional information about MWD's WSAP is provided in MWD's Regional 2025 UWMP which is incorporated by reference. The following is a summary of MWD's water shortage levels:

- Level 1 – Regional Percent Reduction of 5%
- Level 2 – Regional Percent Reduction of 10%
- Level 3 – Regional Percent Reduction of 15%
- Level 4 – Regional Percent Reduction of 20%
- Level 5 – Regional Percent Reduction of 25%
- Level 6 – Regional Percent Reduction of 30%
- Level 7 – Regional Percent Reduction of 35%
- Level 8 – Regional Percent Reduction of 40%



Level 9 – Regional Percent Reduction of 45%

Level 10 – Regional Percent Reduction of 50%

In response to a fourth consecutive year of below average rainfall and critically dry conditions, MWD declared a WSAP Allocation Level 3 for fiscal year 2015-16, which represented a regional reduction of 15 percent. MWD rescinded the WSAP for fiscal year 2016-17 and has not reinstated the WSAP since that time.

Water Service Reliability - Groundwater

Central Basin Groundwater Production

The Central Basin groundwater supplies are managed by the Central Basin Watermaster (WRD), as discussed in Section 6.2.2. During a normal year (CY 2018), the City met about 95 percent of its total demands with supplies from the Central Basin. During a single dry year (CY 2017), the City met about 94 percent of its total demands with supplies from the Central Basin. During a five consecutive year drought multiple dry year period (CY 2012 to CY 2016), the City met between 93 and 95 percent of its total demands with supplies from the Central Basin.

Water Service Reliability Summary

Table 7-1 shows the water supplies during the base years (for average year, single dry year and a five consecutive year drought). As a result of the City's diverse water supply portfolio, water supplies may be re-apportioned during a five consecutive year drought to meet the City's water demands.



7.2.1 WSRA YEAR-TYPE CHARACTERIZATION

7.2.1.1 TYPES OF YEARS

The City's base years for an average year, a single dry year, and a five consecutive year drought are discussed in Section 7.2 and are summarized in Table 7-1. As indicated in Chapter 6, the City's water supplies sources have been sufficient in meeting the City's historical water demands during an average year, a single dry year, and a five consecutive year drought. An average year was based on a historical year during the past 15 years with a total precipitation similar to the historical average precipitation in the vicinity of the City's service area. Because a single dry year or a five consecutive year drought period will not compromise the City's ability to provide a reliable supply of water to its customers, a single dry year in this Plan was selected based on the driest years during the past 15 years. The five consecutive year drought period was based on a period of five consecutive dry years during the past 15 years.

As indicated in Section 3.3, the historical average rainfall in the vicinity of the City's service area is 14.5 inches. CY 2018 represents an average or normal water year for the City in which the total amount of rainfall was similar to the historical average rainfall. A single dry year for the City was represented in CY 2017, in which the total amount of rainfall was less than the historical average rainfall. A five consecutive year drought period for the City is represented from CY 2012 to CY 2016, where the total amount of rainfall during each of these years was less than the historical average rainfall. Table 7-1 summarizes these "base years" for an average year, a single dry year and a five consecutive year drought period and provides the total amount of water supplies available to the City during those base years.



7.2.1.2 SOURCES FOR WATER DATA

The monthly historical average temperatures (including minimum and maximum), monthly historical average rainfall, and monthly ETo in the vicinity of the City's service area are discussed in Section 3.3. Historical climate information was obtained from the WRCC, DPW, and from DWR's CIMIS.

7.2.2 WSRA SUPPLY AND DEMAND COMPARISON

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.*

The City primarily obtains its water supplies from groundwater wells located in the Central Basin. As discussed in Section 7.3 and shown in Table 7-2, Table 7-3, and Table 7-4, each of the City's water supply sources share the same base years. As previously discussed in Section 7.2.1, a single dry year or a five consecutive year drought period will not compromise the City's ability to provide a reliable supply of water to its customers.

The City's projected normal year water demands over the next 25 years are discussed in Section 4.2.6. The ratio of total water supplies (including potable and non-potable water supplies) available to the City during a historical average year in CY 2018 (or 7,662 AF) and during a historical single dry year in CY 2017 (or 7,531 AF) was used to estimate the City's projected water demands during single dry years. The ratio of water supplies available to the City during a historical average year in CY 2018 (or 7,662 AF) and a



historical a five consecutive year drought period from CY 2012 to CY 2016 (or 8,598 AF, 8,893 AF, 8,364 AF, 7,053 AF, and 7,284 AF respectively) was used to estimate the City's projected water demands during a five consecutive year drought period. The City's projected dry year water supplies over the next 25 years were based on the minimum supplies needed by the City to meet projected single-dry year demands. Table 7-2, Table 7-3, and Table 7-4 summarize the City's projected water demands and supplies over the next 25 years in five-year increments, including during normal year, single dry year, and five consecutive year drought periods. These tables indicate that the City can meet water demands during normal years, single dry years, and a five consecutive year drought periods over the next 25 years.

7.2.2.1 NORMAL YEAR

Table 7-2 summarizes the City's projected water demands and supplies over the next 25 years in five-year increments during normal years. Table 7-2 indicates the City can meet water demands during normal years over the next 25 years.

7.2.2.2 WATER SERVICE RELIABILITY – SINGLE DRY YEAR

Table 7-3 summarizes the City's projected water demands and supplies over the next 25 years in five-year increments during single dry years. Table 7-3 indicates the City can meet water demands during single dry years over the next 25 years.

7.2.2.3 FIVE CONSECUTIVE DRY YEARS

Table 7-4 summarizes the City's projected water demands and supplies over the next 25 years in five-year increments during five consecutive year drought periods. Table 7-4 indicates the City can meet water demands during five consecutive year drought periods over the next 25 years.



7.2.3 WSRA DESCRIPTION OF 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.*

As noted in Section 6.2.2, the Central Basin is managed by the WRD. During the period of management under the Judgment, significant drought events have occurred. In each drought cycle the Central Basin has been managed to maintain water levels. Therefore, based on historical and on-going management practices, the City will be able to rely on the Central Basin for adequate supply over the next 25 years under single dry years and a five consecutive year drought periods.

Section 6.2.2 provides a description of the management of groundwater resources in the Central Basin, as well as information on basin management. Chapter 6 also demonstrates the management structure of the Central Basin provides a reliable source of groundwater supply for the City during a normal year, a single-dry year and a five consecutive year drought. Historical data indicates the Central Basin has been well managed for the full period of the adjudication, resulting in a stable and reliable water supply. Basin management changes are discussed in Section 6.2.2 and include increased direct use of recycled water (see Section 6.2.5) and the planned use of treated recycled water for groundwater replenishment in the Central Basin to reduce the need to import water from other regions. Therefore, the groundwater supplies in the Central Basin are deemed reliable.



7.3 DROUGHT RISK ASSESSMENT

CWC 10612.

“Drought Risk Assessment” means a method that examines water shortage risks based on the driest five-year historic sequence for the agency’s water supply, as described in subdivision (b) of Section 10635.

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.*

The City’s source of supplies consists of groundwater from the Central Basin (which is managed by the Central Basin Watermaster), treated imported water purchased through CBMWD and managed by the Metropolitan Water District of Southern California, and recycled water. The following discussion provides a Drought Risk Assessment which assesses the City’s water supply reliability over a five consecutive year drought period. The City’s DRA incorporates a five consecutive year drought from CY 2026 through CY 2030 and includes a review of water supplies, water uses, and water supply reliability.



7.3.1 DRA, DATA, METHODS, AND BASIS FOR WATER SHORTAGE CONDITIONS

The City's DRA was prepared using historical production data from the City's water supply sources. The following assumptions were considered during the preparation of the City's DRA for each year of the five consecutive year drought.

- The five consecutive year drought period associated with the 2025 Plan is based on five consecutive dry years from CY 2026 through CY 2030.
- The projected water supplies available during each year of this five consecutive year drought are assumed to be identical to the water supplies produced during each year between CY 2012 to CY 2016 (which represents the most recent and historical five consecutive year drought).
- The projected demands during this five consecutive year drought are based on water demands from CY 2018 (a normal year) which were adjusted based on projected population over the next five years along with the ratio of the normal year demands to actual demands over each year of the most recent and historical five consecutive year drought period (from CY 2012 to CY 2016).
- The projected demands were compared to the projected supplies to identify potential water supply deficits which may require implementation of the Water Shortage Contingency Plan (discussed further in Chapter 8).

The following methodologies were considered during the preparation of the City's DRA during each year of the five consecutive year drought:

- Drought Year 1: The region had experienced an average to above average year of precipitation in the prior year. Water use in the prior year had been below average due to a reduced need for outdoor water use, the groundwater basin had



been replenished from above average local stormwater runoff, and imported water supplies were not restricted.

- Drought Year 2: The region experienced a second year of below average precipitation and runoff. Retail customers increase water use for outdoor irrigation to compensate for lack of precipitation. Groundwater and imported water supplies have not been impacted.
- Drought Year 3: The region experienced a third year of below average precipitation and runoff. Retail customers increase water use for outdoor irrigation to compensate for lack of precipitation. Groundwater and imported water supplies have not been impacted. However, there is an increased demand on both groundwater and treated imported water.
- Drought Year 4: The region experienced a fourth year of below average precipitation and runoff. Groundwater supplies have not been impacted. However, there is an increased demand for groundwater.
- Drought Year 5: Fifth year of below average precipitation and runoff. Groundwater supplies have not been impacted. However, there is an increased demand on groundwater.

7.3.2 DRA INDIVIDUAL WATER SOURCE RELIABILITY

The City's DRA incorporates a five consecutive year drought based on five consecutive dry years commencing in CY 2026. The quantity of water supplies available for each year during this five consecutive year drought period included in the City's DRA is assumed to be the same as the quantity of water supplies produced by the City (i.e. demands) during the most recent and historical five consecutive year drought which occurred from CY 2012 to CY 2016. Production data for those years have been tabulated in Section 6.1. The following describes the anticipated reliability of each water source for each year of the five consecutive year drought based on recent experience.



Groundwater

The City produces groundwater supplies from the Central Basin which is actively managed by the Central Basin Watermaster, as described in Section 6.2. The Central Basin is adjudicated; however, the water rights are fixed each year. Consequently, a Central Basin producer cannot produce in excess of its own water rights or rights it may have leased from others. The City also has access to water supplies from treated imported water and recycled water. The quantity of groundwater used (and reliably available) during the most recent and historical five consecutive year drought period have been tabulated in Section 6.1. The City manages its water supply portfolio to optimize the water supplies available each year and to avoid a water supply shortage. The City also had the ability to systematically implement aspects of its Water Shortage Contingency Plan (see Chapter 8). As a result of these collective actions (and experience during prior consecutive five-year droughts), the City does not anticipate a water supply shortage.

Imported Water

The City can obtain imported water from the Metropolitan Water District of Southern California through CBMWD. Section 6.2.1 describes the planning conducted by the Metropolitan Water District of Southern California regarding treated imported water supplies available to the City. The reliability of MWD's supplies is also discussed in its 2025 Regional UWMP and is incorporated by reference. The City purchases treated imported water which is delivered directly within its distribution system. The City's purchases of treated, imported water over the past 15 years have been tabulated in Section 6.1. In the event of a drought which limits imported water supplies, the City will rely on its groundwater production.

The imported water purchases by the City during the most recent and historical five consecutive year drought period have been tabulated in Section 6.1. Because the City's DRA assumes the most recent and historical five consecutive year drought scenario will



be repeated over the next five years, it is assumed the quantity of treated imported water supplies purchased during the most recent and historical five consecutive year drought scenario will be available. Furthermore, this constitutes the minimum amount of treated imported water which may be available in a future five consecutive year drought absent MWD's programs which it has since implemented.

Recycled Water

The City has a recycled water distribution system which it has developed over the years to reduce demands for its potable water supplies as described in Section 6.2.5. The availability of recycled water supplies is not adversely impacted by drought conditions and are locally available.

The quantity of recycled water used during the most recent and historical five consecutive year drought period has been tabulated in Section 6.1. The quantity of recycled water available during each year of the most recent and historical five consecutive year drought is expected to be available during a future five consecutive year drought.

Summary

The City's water system has experienced a prior five consecutive year drought with no limitation to its collective water supplies. However, the cost of those water supplies may have increased based on the mix of supplies which are used. Consequently, the City has the ability to enact varying Demand Management Measures (see Chapter 9) to help educate its customers and provide an economic incentive for the retail customers to reduce their water consumption.



7.3.3 DRA TOTAL WATER SUPPLY AND USE COMPARISON

Gross water use for the projected five consecutive year drought is shown on Table 7-5. Section 7.3.2 describes the water source reliability for each source of supply the City will rely on during a five consecutive year drought. The annual quantities are summed and are also provided on Table 7-5. When necessary, the City can implement various water shortage levels of its Water Shortage Contingency Plan (as discussed in Chapter 8) in order to reduce its water demands. As shown in Table 7-5, assuming no additional water supply benefits will be available from groundwater supplies, the City can implement various stages of its Water Shortage Contingency Plan to balance water demands with available supplies during each year of the projected five consecutive year drought.

OPTIONAL PLANNING TOOL WORKBOOK

DWR has deemed the “Planning Tool Worksheet” as optional and the City is not required by DWR to use the tool. The City has provided sufficient water supplies to its customers, including during long-term droughts and years with historically high-water demands. The City has also been able to provide water service to meet maximum day water demands for these years, including during the summer months. The City obtains the majority of its water supplies from a managed groundwater basin which is not subject to seasonal fluctuation. Consequently, an evaluation regarding water supplies on a monthly basis was not considered.

7.4 SUBMITTAL TABLES

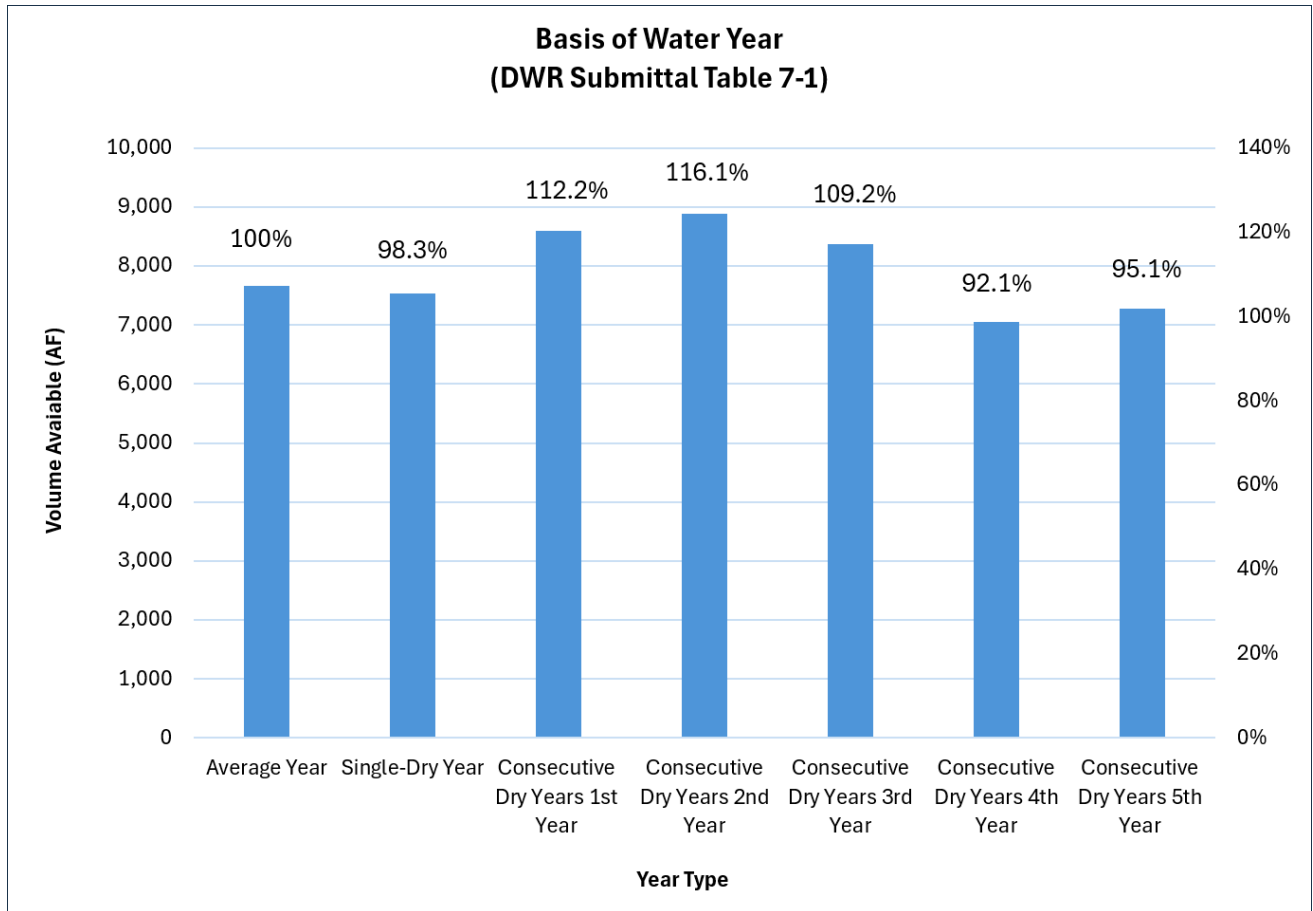
The applicable standardized Submittal Tables referenced within Chapter 7 are provided below.



7.4.1 OPTIONAL TABLE 7-1: BASIS OF WATER-YEAR DATA (WSRA)

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

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	
		<input type="checkbox"/>	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	2018	7662	100%
Single-Dry Year	2017	7531	98.3%
Consecutive Dry Years 1st Year	2012	8598	112.2%
Consecutive Dry Years 2nd Year	2013	8893	116.1%
Consecutive Dry Years 3rd Year	2014	8364	109.2%
Consecutive Dry Years 4th Year	2015	7053	92.1%
Consecutive Dry Years 5th Year	2016	7284	95.1%
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:			





7.4.2 TABLE 7-2: NORMAL-YEAR SUPPLY AND USE COMPARISON

Table 7-2 Normal-Year Supply and Use Comparison

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)	7,558	7,626	7,638	7,652	7,669
Use totals (autofill from Submittal Table 4-2 R)	7,558	7,626	7,638	7,652	7,669
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:					



7.4.3 TABLE 7-3: SINGLE-DRY-YEAR SUPPLY AND USE COMPARISON

Table 7-3 Single-Dry-Year Supply and Use Comparison

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	7,429	7,495	7,507	7,521	7,538
Use totals	7,429	7,495	7,507	7,521	7,538
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 See Section 7.2.2 for an explanation of supply fluctuations by year.					



7.4.4 TABLE 7-4: MULTIPLE DRY YEARS SUPPLY AND USE COMPARISON

Table 7-4 Multiple Dry Years Supply and Use Comparison

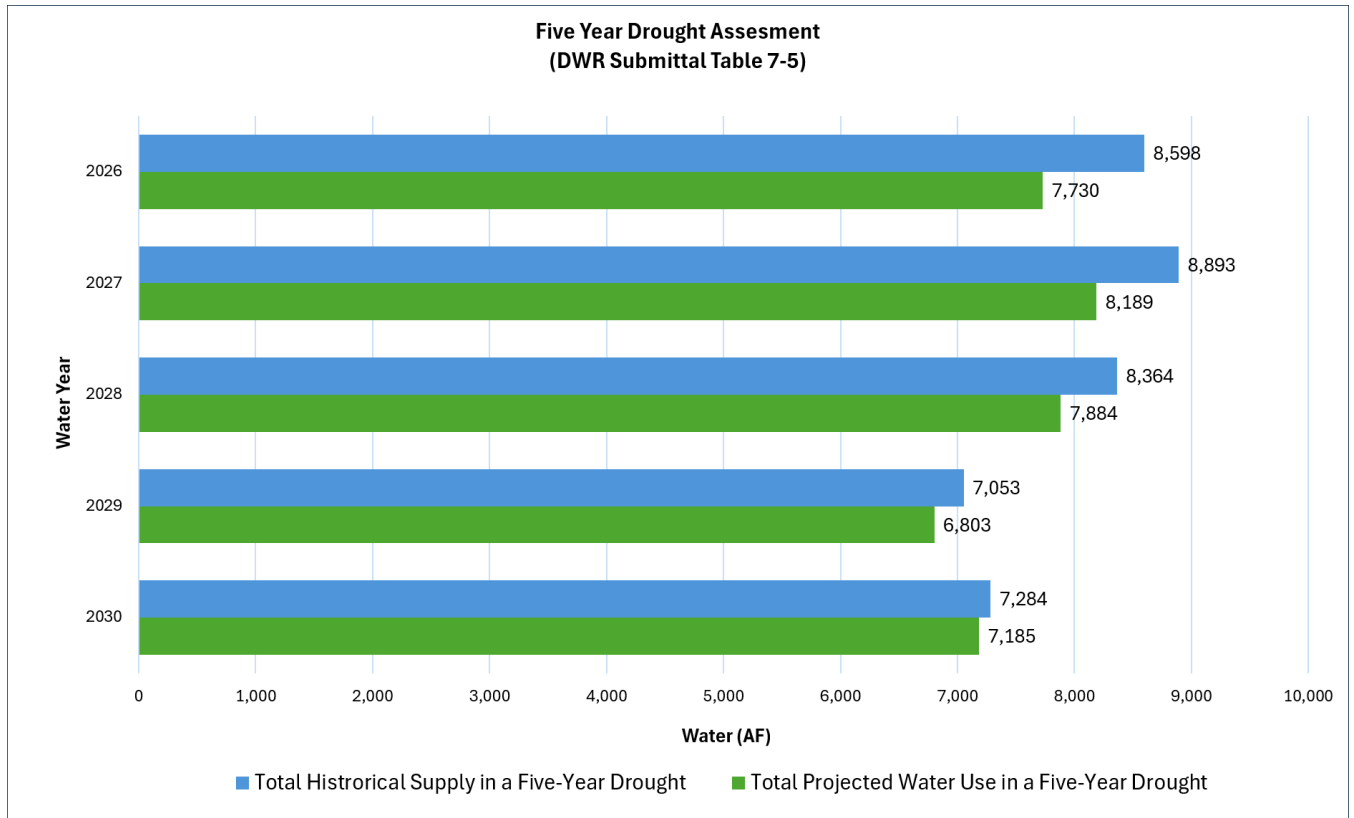
Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	8,482	8,558	8,572	8,587	8,606
	Use totals	8,482	8,558	8,572	8,587	8,606
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)						
Second year	Supply totals	8,773	8,852	8,866	8,882	8,902
	Use totals	8,773	8,852	8,866	8,882	8,902
	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	8,250	8,324	8,338	8,353	8,371
	Use totals	8,250	8,324	8,338	8,353	8,371
	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	6,957	7,020	7,031	7,044	7,060
	Use totals	6,957	7,020	7,031	7,044	7,060
	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	7,185	7,250	7,261	7,275	7,291
	Use totals	7,185	7,250	7,261	7,275	7,291
	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: See Section 7.2.2 for an explanation of supply fluctuations by year.						



7.4.5 TABLE 7-5: FIVE-YEAR DROUGHT RISK ASSESSMENT

Table 7-5 Five-Year Drought Risk Assessment

2026		Total
Total Water Use (AF)		7,730
Total Supplies (AF)		8,598
Surplus/Shortfall w/o WSCP Action		868
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)		8,189
Total Supplies (AF)		8,893
Surplus/Shortfall w/o WSCP Action		704
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)		7,884
Total Supplies (AF)		8,364
Surplus/Shortfall w/o WSCP Action		480
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)		6,803
Total Supplies (AF)		7,053
Surplus/Shortfall w/o WSCP Action		250
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)		7,185
Total Supplies (AF)		7,284
Surplus/Shortfall w/o WSCP Action		99
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:		





CHAPTER 8

WATER SHORTAGE CONTINGENCY PLAN

LAY DESCRIPTION – CHAPTER 8

WATER SHORTAGE CONTINGENCY PLAN

Chapter 8 (Water Shortage Contingency Plan) of the City’s 2025 Plan discusses and provides the following:

- The City’s Water Shortage Contingency Plan is a detailed approach which presents how the City intends to act, or respond, in the case of an actual water shortage contingency.
- Preparation of the City’s “Annual Water Supply and Demand Assessment” (or Annual Assessment) is discussed. The City is required to submit annually an Annual Assessment. The Annual Assessment includes a review of the City’s “unconstrained” water demands for the current year and for a potential upcoming single dry year. Unconstrained water demands represent the City’s water demands prior to any “response actions” the City may invoke pursuant to the City’s Water Shortage Contingency Plan.
- The City will manage water supplies to minimize the adverse impacts of water shortages. The City’s plan for water usage during periods of shortage is designed to incorporate six standard water shortage levels corresponding to progressive ranges from up to a 10, 20, 30, 40, and 50 percent shortage, and greater than a 50 percent shortage.
- For each declared water supply shortage level, customers will be required to reduce their consumption by the percentage specified in the corresponding water supply shortage level.



- For each declared water supply shortage level, the City has established response actions to reduce demand on water supplies and to reduce any shortage gaps in water supplies. These demand reduction actions include irrigation and other outdoor use restrictions, rate structure changes, and other water use prohibitions.
- The operational changes the City will consider in addressing water shortages on a short-term basis are discussed and include improved monitoring, analysis, and tracking of customer water usage to enforce demand reduction measures.
- The City's Emergency Response Plan is summarized. The Emergency Response Plan provides the management, procedures, and designated actions the City and its employees will implement during emergency situations (including catastrophic water shortages) resulting from natural disasters, system failures, and other unforeseen circumstances.
- The preparation of the City's seismic risk assessment and mitigation plan is discussed. The locations of earthquake faults in the vicinity of the City's water service area are provided.
- The effectiveness of the shortage response actions for each of the City's standard water shortage levels is presented. The City has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands.
- The communication protocols implemented by the City when it declares any water shortage level are presented.
- The compliance and enforcement procedures associated with City's standard water shortage levels are presented.
- The legal authorities associated with City's standard water shortage levels are presented.
- The financial consequences associated with City's standard water shortage levels are presented.
- The City will evaluate the need for revising the Water Shortage Contingency Plan in order to resolve any water shortage gaps, as necessary. The steps necessary



for the City to adopt and amend its Water Shortage Contingency Plan are presented.

The following Water Shortage Contingency Plan includes references to Chapters and Sections from the City of Lakewood's 2025 Urban Water Management Plan:

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.

The City's sources of supply were discussed in Section 6.2 of the 2025 Plan and consist of groundwater produced from the Central Basin, treated imported water purchased from MWD through CBMWD, and recycled water supplies. The reliability of the various sources of supply are discussed in Chapter 7 of the 2025 Plan. Imported water supplies (treated) may be impacted in the event MWD implements its WSAP due to a water supply shortage. Finally, recycled water is locally generated and is not impacted by drought conditions. A seismic risk assessment and mitigation plan is discussed in Section 8.4.6.



8.2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

CWC 10632.

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

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.



By July 1st of every year, the City is required to submit an “Annual Water Supply and Demand Assessment” (Annual Assessment) in accordance with DWR’s guidance and requirements. The Annual Assessment includes a review of the City’s unconstrained water demands (i.e. water demands prior to any projected response actions the City may trigger under this Water Shortage Contingency Plan) for the current year and the upcoming (potential single dry) year. The Annual Assessment also includes also include information regarding anticipated shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the City’s Water Shortage Contingency Plan.

During the preparation of each Annual Assessment, the City will evaluate the adequacy of its water supplies for the current and upcoming years. The evaluation will include a review of water supplies for at least a single dry year.

8.2.1 DECISION-MAKING PROCESS

The City produces groundwater supplies from the Central Basin as its primary source of water supply. Consequently, during the third quarter of each fiscal year the City will review its water demands from the initial six months along with the current groundwater basin conditions and local hydrology. This information will be used to help develop the Annual Assessment. A draft of the Annual Assessment will be circulated internally within the City for peer review and comment. Based on comments received, a redraft will be prepared and provided to City managers during the Spring of each year. The draft will subsequently be provided to the General Manager for final review. If necessary, a final draft of the Annual Assessment will be provided to the City Council for review and included in the agenda as part of a City meeting such that it can be approved and any recommended specific shortage response actions may be enacted. The final Annual Assessment will be provided to DWR no later than July 1 of each year.



The Annual Assessments will be instrumental in providing guidance to the City for decisions regarding potential declarations of a water supply shortage and implementation of water reduction stages, instituting mandatory water restrictions, promoting water use efficiency and conservation programs, water rates and drought rate surcharges, and the necessity of pursuing alternative water supplies. This process will help ensure adequate water supplies resources are available to the City.

8.2.2 DATA METHODOLOGIES

The key data inputs and methodologies which will be evaluated by the City during the preparation of the Annual Assessment will include the following:

- 1) Evaluation Criteria: The locally applicable evaluation criteria used to prepare the Annual Assessment will be identified. The evaluation criteria will include, but is not limited to, an analysis of current local hydrology (including rainfall and groundwater levels), current water demands, a review of water system improvement plans which may impact infrastructure availability, and water quality regulations which may impact groundwater availability.
- 2) Water Supply: A description of each available water supply source will be provided. The descriptions will include a quantification of each available water supply source and will be based on review of current production capacities, historical production, Urban Water Management Plans, and prior water supply studies (including Water Supply Assessments and/or Master Plans).
- 3) Unconstrained Water Demand: The potential unconstrained water demands during the current year and the upcoming (potential single dry) year will be reviewed. The review will include factors such as weather, existing and projected land uses and populations, actual customer consumption and water use factors, monthly Urban



Water Supplier Monthly Reports, existing water shortage levels (see Section 8.3), and existing water conservation ordinances (see Section 9.1).

- 4) Planned Water Use for Current Year Considering Dry Subsequent Year: The water supplies available to meet the demands during the current year and the upcoming (potential single dry) year will be considered and identified by each type of supply. The evaluation will include factors such as estimated water demands, weather, groundwater basin operating safe yields, water quality results, existing available pumping capacities, imported water allocations, contractual obligations, regulatory issues, use of emergency interconnections, and the costs associated with producing each water supply source.

- 5) Infrastructure Considerations: The capabilities of the water distribution system infrastructure to meet the water demands during the current year and the upcoming (potential single dry) year will be considered. Available production capacities (e.g. groundwater well capacities) and distribution system water losses (see Section 4.3) will be reviewed. In addition, capital improvement and replacement projects, as well as potential projects which may increase water system and production capacities (see Section 6.2.10), will be considered.



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.

(a)(3)(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 City will manage water supplies prudently to minimize the adverse impacts of water shortages. The City's plan for water usage during periods of shortage is designed to incorporate six standard water shortage levels corresponding to progressive ranges from up to 10, 20, 30, 40, and 50 percent shortages and greater than a 50 percent shortage.

The City Council previously adopted ordinances which implemented the Water Conservation Ordinance (Section 7511.1) of the City's Municipal Code (see Appendix H). The Water Conservation Ordinance includes five (5) water shortage levels. In accordance with the California Water Code in which urban water suppliers are required to define six standard water shortage level, the City has developed the crosswalk illustrated below (also included in the City's 2020 Plan) that translated the City's previously established shortage levels to the mandated standard shortage levels. Table 8-1 also provides a cross-reference between the City's previously established shortage levels and the mandated standard shortage levels.



Corresponding Relationships Between Supplier's Established Shortage Levels and the WSCP Mandated Shortage Levels

Established Level	Supply Condition/Shortage		WSCP Standard Level	Shortage Level
1	Up to 10%	→	1	≤ to 10%
2	Up to 20%	→	2	10 to 20%
3	Up to 30%	→	3	20 to 30%
4	Up to 40%	→	4	30 to 40 %
5	Up to 50%	→	5	40 to 50 %
		→	6	> 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.

Shortage response actions are dependent on the severity of a declared shortage level. Response actions implement varying improvements and regulations of system



infrastructure and operations, water supply augmentation, demand reduction initiatives and other water use functions to conserve water supplies.

8.4.1 SUPPLY AUGMENTATION

The City does not plan to add a new source of water supply to address customer demands, but instead will consider increased supplies from existing sources. Table 8-2 reflects this approach and does not identify any new supplies. Instead, the City will focus on demand reduction measures in the event existing sources of supply are not sufficient to meet customer demands. As discussed in Chapter 6, the City's sources of water supply include groundwater produced from the Central Basin, imported surface water purchased from MWD through Central Basin Municipal Water District, and recycled water supplies provided by LACSD. As noted in Section 8.2, the City is required to annually prepare and submit an Annual Assessment which will include a review of water supplies available to meet water demands for the current and upcoming years. If the City is currently in, or considers entering into, one of the standard water shortage levels identified in Section 8.3, the City will consider the water supply (augmentation) actions shown below.

For each water shortage level discussed in Section 8.3, the City will consider supplementing its existing water supplies through purchase of additional imported water supplies. Due to previous critically dry conditions, MWD developed the "Water Supply Allocation Plan" whereby available supplies are equitably allocated to its member agencies, including Central Basin Municipal Water District. The WSAP establishes ten different shortage levels and a corresponding drought allocation to each member agency. Based on the shortage level established by MWD, the WSAP provides a reduced drought allocation to a member agency for its M&I retail demand. The ratio of MWD water supply drought allocation to local water supply will change based on the WSAP stage. Any Full Service water delivered in excess of a drought allocation is subject to a penalty rate in addition to the normal rate paid for the water.



In addition to the WSAP, MWD describes supply augmentation actions in its Regional 2025 UWMP, which is incorporated by reference. MWD's primary first response to any gap between core supplies (from the State Water Project and Colorado River) and demand is to make optimal use of its supply augmentation options, consisting of drawing from flexible supply programs and storage reserves. MWD has developed and actively manages a portfolio of water supply programs including water transfer, storage, and exchange agreements. MWD pursues voluntary water transfer and exchange programs to help mitigate supply/demand imbalances and provide additional dry-year supply sources. In addition, MWD has developed significant storage capacity in reservoirs, conjunctive use, and other groundwater storage programs totaling approximately 6.0 million AF. Based on MWD's historical and on-going water supply and storage programs and management practices, the City can potentially continue relying on purchased imported water supplies from MWD through CBMWD for adequate supply augmentation in response to each of the standard water shortage levels identified in Section 8.3.

8.4.2 DEMAND REDUCTION

The City may establish water shortage response actions to reduce demand on water supplies. These demand reduction actions include irrigation and other outdoor use restrictions, rate structure changes, and other water use prohibitions. Depending on the percent reduction in the City water supply and corresponding water shortage level, regulations are made to conserve water and reduce the shortage gap in normal supply levels. Many demand reduction actions, identified as voluntary or mandatory conservation measures, are applicable to all levels of water shortages. The structure of water shortage levels are designed to strongly encourage customers with high per capita usage to achieve proportionally greater reduction than those with low usage. Violations of these demand reduction actions will be considered waste and an unreasonable use of water. Table 8-3 describes each demand reduction action and its effect on reducing the shortage gap.



A full listing of the restrictions/prohibitions associated with each shortage level is provided below.

General Requirements

The following water conservation practices shall be implemented when water supply meets normal demand as declared by resolution of the City Council. The following water use practices shall be maintained and no person shall violate the same:

- A. Decorative fountains, or other structures using water for aesthetic purposes shall be shut off unless such fixture operates on a recirculating system.
- B. No person shall permit leaks or waste of water. A leak shall be defined as any water not used for beneficial use that wastes more than .5 gallons of water per minute. All known leaks from indoor and outdoor plumbing fixtures shall be repaired within seven (7) days upon receipt of written notice of observed water leak.
- C. Drinking water shall not be served at any restaurant, motel, cafe, or other drinking or eating establishment unless expressly requested.
- D. Installation of single pass cooling systems shall be prohibited in buildings requesting new water service.
- E. Hotels, motels and other commercial lodging establishments must provide customers the option to refuse daily towel and linen service. Commercial lodging establishments shall prominently display notice of this option in each guest room.
- F. Installation of non-re-circulating commercial car washes and laundry systems shall be prohibited.



- G. New eating and drinking establishments and existing eating and drinking establishments that remodel more than 50 percent of the kitchen area shall install water conserving dish wash spray valves.

The following conservation practices are suggested when water supply meets normal demand:

- A. The use of water to wash walkways, driveways, parking areas and other hard surfaces should occur only as necessary to alleviate safety or sanitary hazards, and then only with a hose equipped with a positive shut off nozzle, a handheld bucket or similar container, or a low volume/high pressure water broom. Excessive water runoff into gutters is discouraged.
- B. Washing of vehicles and any other mobile equipment should be done only with a bucket or a hose equipped with a positive shut off nozzle for quick rinses. Commercial car washes are exempt from this provision.
- C. Voluntary water conservation field examination, herein referred to as water audits, are encouraged for all Lakewood water customers.
- D. The retrofit of water conserving devices, including but not limited to ultra low flow toilets and low flow showerheads, is encouraged.
- E. The installation of water efficient landscapes and irrigation devices, such as drip irrigation and moisture sensors, is encouraged. A drip irrigation system shall be defined as an irrigation system consisting of individual emitters installed at permanent plantings with a capacity to emit no more than two (2) gallons of water per hour of operation.



Measures instituted during a Voluntary Phase water supply shortage may be declared by Resolution of the City Council finding it necessary to conserve up to ten percent (10%) of the City's water supply. The following water conservation practices are recommended during a Voluntary Phase water shortage:

- A. The following restrictions on the use of water shall be in effect during a Voluntary Phase of a water shortage and no person shall fail to comply with the following:
 - a. Leaks from indoor and outdoor plumbing fixtures shall be repaired within six (6) days upon receipt of written notice of observed water leak.
- B. The following water conservation practices are recommended during a Voluntary Phase water shortage:
 - a. Water used to wash sidewalks, driveways, parking lots, building exteriors, streets and gutters should be minimized and should be limited to no more than (2) times during a calendar month to alleviate safety or sanitary hazards, and then only with a hose equipped with a positive shut off nozzle, a handheld bucket or similar container, or a low volume/high pressure water broom.
 - b. Watering lawns and landscaped areas should be limited to between the hours of 5:00 p.m. and 9:00 a.m. Watering using a handheld bucket or similar container, a hose equipped with a shut off nozzle, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs or adjustments are exempt from this provision.



Water Shortage Level 1

The following restrictions on the use of water shall be in effect during Water Shortage Level 1 and any additional phases implemented during the course of a water shortage and no person shall fail to comply with the following:

- A. Water used to wash down driveways, sidewalks, parking lots, building exteriors, streets and gutters shall be limited to no more than two (2) times during a calendar month to alleviate safety or sanitary hazards, and then only with a hose equipped with a positive shut off nozzle, a handheld bucket or similar container, or a low volume/high pressure water broom. Water used in this manner to protect the public health is exempt from this provision.
- B. Washing of vehicles and any other mobile equipment shall be done only with a bucket or a hose equipped with a positive shutoff nozzle for quick rinses. Commercial car washes are exempt from this provision.
- C. Leaks from indoor and outdoor plumbing fixtures shall be repaired within five (5) days upon receipt of written notice of observed water leak.
- D. Sprinklers shall be adjusted to minimize water runoff from landscape on to hardscape areas. No person shall allow excess water runoff after notice from the City to desist therefrom. Excess water runoff is defined as water accumulation in the street, gutters, neighboring properties or in other amounts sufficient to cause a flow of water off of landscape areas on to hardscape areas.

The following water conservation practices are also recommended during a Water Shortage Level 1:



- A. Landscape irrigation is recommended during the early morning hours for no more than 10 minutes at a time. Irrigation should be avoided between the hours of 9:00 a.m. and 5:00 p.m. Landscape irrigation for commercial nurseries and growers, active parks and playing fields, school grounds, golf course greens, landscaping for fire and erosion protection, protecting endangered species, environmental mitigation projects, and properties using reclaimed water shall be exempt from this provision. Watering using a handheld bucket or similar container, a hose equipped with a shut off nozzle, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are also exempt from this provision.

Water Shortage Level 2

The following additional restrictions shall be in effect during a Water Shortage Level 2:

- A. Residential and commercial landscape areas shall be watered no more than three (3) times during a seven (7) day period for no more than ten (10) minutes at a time during the months of June, July, August and September, and prohibited during the hours of 9:00 a.m. and 5:00 p.m. Landscape irrigation shall be restricted to twice (2) during a seven (7) day period for no more than ten (10) minutes at a time during the months of October, November, December, January, February, March, April and May, and prohibited during the hours of 9:00 a.m. and 5:00 p.m. Landscape irrigation for commercial nurseries and growers, active parks and playing fields, school grounds, golf course greens, landscaping for fire and erosion protection, protecting endangered species, environmental mitigation projects, and properties using reclaimed water shall be exempt from this provision. Watering using a handheld bucket or similar container, a hose equipped with a shut off nozzle, a drip irrigation system emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent



(70%) efficiency standard, or running an irrigation system for short durations to make repairs are also exempt from this provision.

- B. Non-residential water customers with a consumption in excess of 25,000 cubic feet in any billing period during the prior year, shall prepare a written water conservation plan within sixty (60) days of the effective date of a declared water shortage. The customer shall submit said plan to the Director of Water Resources for approval. The customer shall then implement the approved plan to meet the specific conservation goals stated therein.
- C. Leaks from indoor and outdoor plumbing fixtures shall be repaired within four (4) days upon receipt of written notice of observed water leak.

Water Shortage Level 3

The following additional restrictions shall be in effect during a Water Shortage Level 3:

- A. Residential and commercial landscape areas shall be watered no more than two (2) times during a seven (7) day period for no more than ten (10) minutes at a time during the months of June, July, August and September, and prohibited during the hours of 8:00 a.m. and 8:00 p.m. Landscape irrigation shall be restricted to once during a seven (7) day period for no more than ten (10) minutes at a time during the months of October, November, December, January, February, March, April and May, and prohibited during the hours of 9:00 a.m. and 5:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are also exempt from this provision.



B. Irrigation of commercial nurseries and growers, active parks and playing fields, school grounds, golf course greens, landscaping for fire and erosion protection, protecting endangered species, environmental mitigation projects, shall be restricted to no more than three (3) times during a seven (7) day period for no more than ten (10) minutes at a time. Irrigation shall be prohibited during the hours of 9:00 a.m. and 4:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are exempt from this provision.

C. Leaks from indoor and outdoor plumbing fixture shall be repaired within three (3) days upon receipt of written notice of observed water leak.

Water Shortage Level 4

The following additional restrictions shall be in effect during a Water Shortage Level 4:

A. Residential and commercial landscape areas shall be watered no more than one (1) time during a seven (7) day period for no more than ten (10) minutes at a time during the months of June, July, August and September, and prohibited during the hours of 8:00 a.m. and 8:00 p.m. Landscape irrigation shall be restricted to one (1) time during a fourteen (14) day period for no more than ten (10) minutes at a time during the months of October, November, December, January, February, March, April and May, and prohibited during the hours of 9:00 a.m. and 5:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or



running an irrigation system for short durations to make repairs are exempt from this provision.

- B. Irrigation of commercial nurseries and growers, active parks and playing fields, school grounds, golf course greens, landscaping for fire and erosion protection, protecting endangered species, environmental mitigation projects, shall be restricted to no more than twice (2) during a seven (7) day period for no more than ten (10) minutes at a time. The irrigation shall be prohibited during the hours of 9:00 a.m. and 4:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are exempt from this provision.
- C. Leaks from indoor and outdoor plumbing fixture shall be repaired within two (2) days upon receipt of written notice of observed water leak.

Water Shortage Level 5

The following additional restrictions shall be in effect during a Water Shortage Level 5:

- A. Residential and commercial landscaping shall be restricted to watering only permanent trees and shrubs with a handheld bucket or similar container, or a drip irrigation system with emitters producing no more than two (2) gallons per hour one (1) time during a seven (7) day period during the months of June, July, August and September, and prohibited during the hours of 8:00 a.m. and 8:00 p.m. Landscape irrigation shall be restricted to watering only permanent trees and shrubs with a handheld bucket or similar container, or a drip irrigation system with emitters producing no more than two (2) gallons per hour one (1) time during a



fourteen (14) day period during the months of October, November, December, January, February, March, April and May, and prohibited during the hours of 9:00 a.m. and 5:00 p.m.

- B. Irrigation of commercial nurseries and growers shall be restricted to one (1) time during a seven (7) day period for no more than ten (10) minutes at a time and prohibited during the hours of 9:00 a.m. and 6:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are exempt from this provision.

- C. Irrigation of active parks and playing fields, golf course greens, school grounds, landscape for fire protection and the support of protected species, and environmental mitigation projects shall be restricted to no more than twice (2) during a seven (7) day period for no more than ten (10) minutes at a time. The irrigation shall be prohibited during the hours of 9:00 a.m. and 4:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are also exempt from this provision.

- D. Leaks from indoor and outdoor plumbing fixtures shall be repaired within 24 hours upon receipt of written notice of observed water leak.



Water Shortage Level 6

The following additional restrictions shall be in effect during a Water Shortage Level 6:

- A. Residential and commercial landscaping shall be restricted to watering only permanent trees and shrubs with a handheld bucket or similar container, or a drip irrigation system with emitters producing no more than two (2) gallons per hour one (1) time during a seven (7) day period during the months of June, July, August and September, and prohibited during the hours of 8:00 a.m. and 8:00 p.m. Landscape irrigation shall be restricted to watering only permanent trees and shrubs with a handheld bucket or similar container, or a drip irrigation system with emitters producing no more than two (2) gallons per hour one (1) time during a fourteen (14) day period during the months of October, November, December, January, February, March, April and May, and prohibited during the hours of 9:00 a.m. and 5:00 p.m.
- B. Irrigation of commercial nurseries and growers shall be restricted to one (1) time during a seven (7) day period for no more than ten (10) minutes at a time and prohibited during the hours of 9:00 a.m. and 6:00 p.m. Watering using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are exempt from this provision.
- C. Irrigation of active parks and playing fields, golf course greens, school grounds, landscape for fire protection and the support of protected species, and environmental mitigation projects shall be restricted to no more than twice (2) during a seven (7) day period for no more than ten (10) minutes at a time. The irrigation shall be prohibited during the hours of 9:00 a.m. and 4:00 p.m. Watering



using a handheld bucket or similar container, a drip irrigation system with emitters producing no more than two (2) gallons per hour, weather based controllers or stream rotor sprinklers meeting a seventy percent (70%) efficiency standard, or running an irrigation system for short durations to make repairs are exempt from this provision. Those properties using reclaimed water are also exempt from this provision.

- D. Leaks from indoor and outdoor plumbing fixtures shall be repaired within 24 hours upon receipt of written notice of observed water leak.

8.4.3 OPERATIONAL CHANGES

During a water supply shortage situation, the City will manage its water supply resources to provide sufficient water supplies capable of meeting the demands of its customers. Section 8.4.2 describes the City's standard water shortage levels and associated demand reduction measures. Section 8.4.1 describes the City's water supply sources and water supply augmentation actions available. The supply augmentation actions and demand reduction measures, when implemented, may potentially result in short-term operational changes which are necessary to allow the City to utilize all available water supply sources in response to water shortage situations.

As noted in Section 8.2, the City is required to annually prepare and submit an Annual Assessment which will include a review of the water supplies available to meet water demands for the current and upcoming years. Preparation of the Annual Assessment will assist the City in determining any potential operational changes. In addition, the City's standard water shortage levels and the associated demand reduction measures, in conjunction with the City's existing Demand Management Measures (discussed in Chapter 9), will be essential to the City in reducing water demands during any water



shortage period. The operational changes the City will consider in addressing non-catastrophic water shortages on a short-term basis include the following:

- Improved monitoring, analysis, and tracking of customer water usage to enforce demand reduction measures
- Optimized production from existing available water supply sources
- Potential use of emergency supply sources, including emergency interconnections
- Potential blending of water supply resources
- Improved monitoring, maintenance, and repairs to reduce water distribution system losses

8.4.4 ADDITIONAL MANDATORY RESTRICTIONS

The mandatory restrictions which are implemented by the City to reduce customer demands are discussed in Section 8.4.2. There are no additional mandatory restrictions planned at this time.

8.4.5 EMERGENCY RESPONSE PLAN

Catastrophic water shortages are incorporated in the City's standard water shortage levels (identified in Section 8.3) and the associated demand reduction measures (described in Section 8.4.2). In addition to the water supply augmentation actions (Section 8.4.1) and potential operational changes (Section 8.4.3) which the City may consider in order to continue providing sufficient water supplies, the City will review and implement any necessary steps included in its "Emergency Response Plan".

As part of the "America's Water Infrastructure Act of 2018", community water systems serving a population greater than 3,300 people, including the City, are required to review and update their "Risk and Resilience Assessment" (RRA) and the associated



“Emergency Response Plan” (ERP) every five (5) years. However, due to security concerns regarding the submitting of these reports, water systems are required to submit certifications to the United States Environment Protection Agency (USEPA), from March 31, 2025 and December 31, 2026, confirming the current RRA and ERP have been reviewed and updated.

The City’s RRA, updated in 2026, evaluates the vulnerabilities, threats, and consequences from potential hazards to the City’s water system. The City prepared its RRA (which is incorporated by reference) by evaluating the following items:

- Natural hazards and malevolent acts (i.e., all hazards);
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution facilities, and electronic, computer and other automated systems);
- Monitoring practices;
- Financial systems (e.g., billing systems);
- Chemical storage and handling; and
- Operation and maintenance.

The City’s RRA evaluated a series of potential malevolent acts, natural hazards, and other threats in order to estimate the potential “monetized risks” (i.e. associated economic consequences to both the water system and surrounding region, and the likelihood of occurrence) associated with the City’s water facility assets. The cost-effectiveness of implementing potential countermeasures to reduce risks was also reviewed.

The City’s ERP, updated in 2026, provides the management, procedures, and designated actions the City and its employees will implement during emergency situations (including catastrophic water shortages) resulting from natural disasters, system failures and other unforeseen circumstances. The City’s ERP (which is incorporated by reference) provides



the guidelines for evaluating an emergency situation, procedures for activating an emergency response, and details of the different response phases in order to ensure that customers receive a reliable and adequate supply of potable water. The scope of the ERP includes emergencies which directly affect the water system and the ability to maintain safe operations (such as a chlorine release, and earthquake or a threat of contamination). The ERP also incorporates the results of City's RRA and includes the following:

- Strategies and resources to improve resilience, including physical and cybersecurity
- Plans and procedures for responding to a natural hazard or malevolent act
- Actions and equipment to lessen the impact of a natural hazard or malevolent act
- Strategies to detect natural hazards or malevolent act

The City will review the ERP for procedures regarding the utilization of alternative water supply sources in response to water supply shortages, including during the standard water shortage levels. The City will also review applicable procedures described in the ERP regarding any necessary temporary shutdown of water supply facilities, including appropriate regulatory and public notifications.

8.4.6 SEISMIC RISK ASSESSMENT AND MITIGATION PLAN

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.*
- (b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.*
- (c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan*



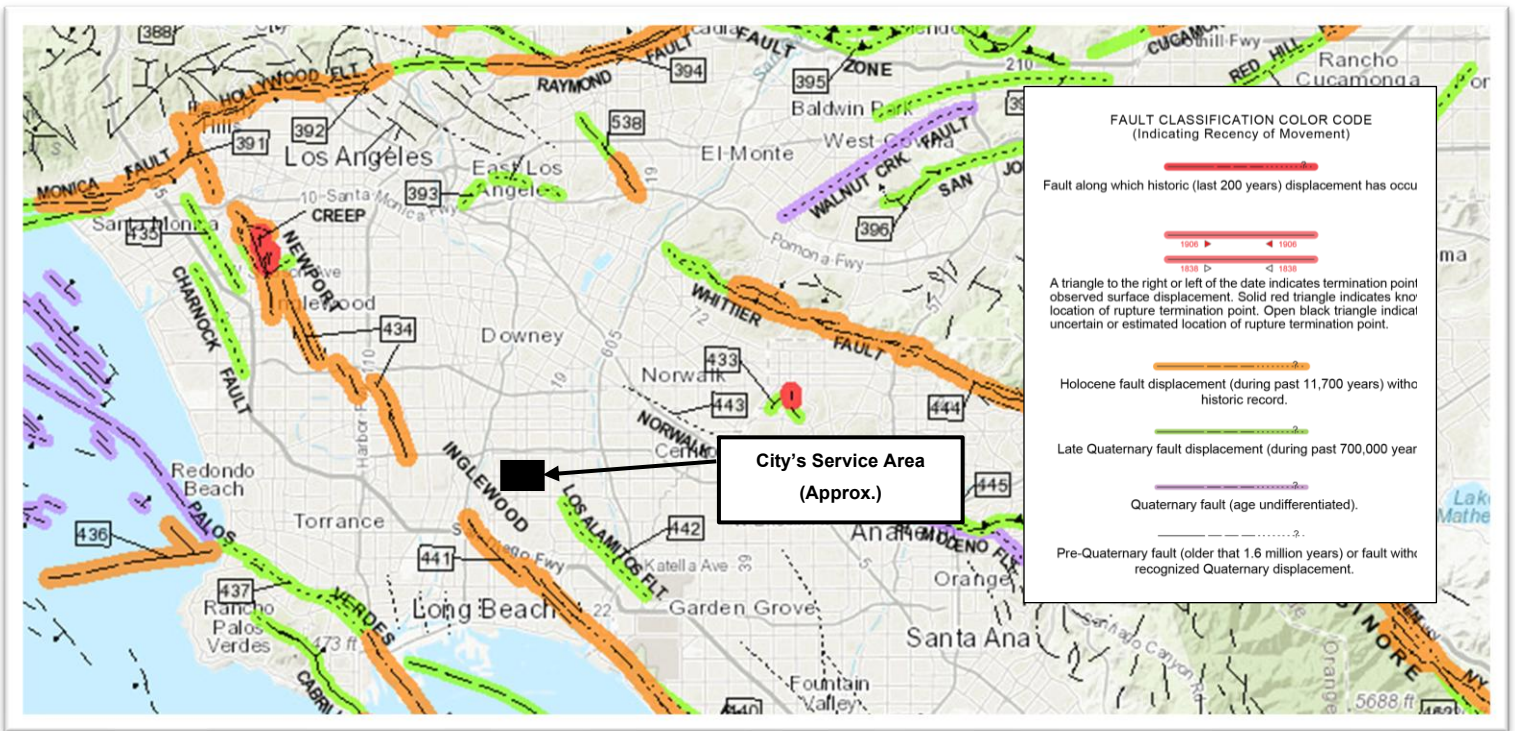
under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

The City prepared a local “Natural Hazards Mitigation Plan” which identifies effective ways to assess the significant natural hazards (including earthquakes) that may affect the City and its residents. The Hazard Mitigation Plan provides resources, information, and strategies to reduce the City’s vulnerability to these hazards, while providing guidance for the coordination of mitigation activities throughout the City. The Hazard Mitigation Plan includes mitigation projects necessary to reduce seismic risk to the City’s water distribution system facilities (including its distribution system pipelines, groundwater wells, booster pumps, and storage reservoirs) and potential disruptions in providing water service.

The County of Los Angeles prepared a “All-Hazards Mitigation Plan” in 2025 which identified methods to assess significant natural hazards (including earthquakes) affecting areas throughout Los Angeles County, and the mitigation strategies necessary to reduce risks, including seismic risk. The County’s All-Hazards Mitigation Plan is provided in Appendix I.

The California Geological Survey has published the locations of numerous faults which have been mapped in the Southern California region. Although the San Andreas fault is the most recognized and is capable of producing an earthquake with a magnitude greater than 8 on the Richter scale, some of the lesser-known faults have the potential to cause significant damage. The locations of these earthquake faults in the vicinity of the City’s water service area are provided in the figure below. The faults that are located in close proximity to and could potentially cause significant shaking in the City’s water service area include the San Andreas fault, the Los Alamitos fault, the Newport-Inglewood-Rose Canyon fault zone, and the Norwalk fault.

Location of Earthquake Faults



Source: <https://maps.conservation.ca.gov/cgs/fam/App/>

The California Geological Survey provides earthquake hazard maps⁷ based on the Modified Mercalli Intensity (MMI) scale, which measures earthquake shaking intensity and its impacts on people, objects, and buildings. The area within the City’s service area has an MMI of approximately 9.4 calculated based on the level of shaking that has a 2 percent chance of being exceeded in 50 years (or the level of shaking with an approximate 2,500-year average repeat time). An MMI at this intensity (violent shaking) can result in buildings shifted off foundations, cracked, or tilted, the ground cracked, and underground pipes broken. As discussed in Section 8.4.5, the City has prepared an Emergency Response Plan which provides the management, procedures, and designated actions the City and its employees will implement during emergency situations resulting from natural

⁷ <https://conservation.ca.gov/cgs/sh/earthquake-shaking-potential>



disasters, including during earthquakes, to ensure that customers receive a reliable and adequate supply of potable water. The City's ERP is incorporated by reference.

8.4.7 SHORTAGE RESPONSE ACTION EFFECTIVENESS

The effectiveness of the shortage response actions for each of the standard water shortage levels identified in Section 8.3 is evident in the City's historical ability to meet its customer's water demands in response to a water supply shortage. In addition, the City imposes water consumption regulations and restrictions, and supports local agencies in efforts to enforce regulations and prohibitions on water use. The effectiveness of each of the City's shortage response actions, in order to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction provided in Table 8-2 and Table 8-3.

Section 6.1 provides a tabulation of the City's historical annual water demands for each water supply source. During the past 15 years, the City experienced a five consecutive year drought within its service area from CY 2012 to CY 2016. Throughout this extended dry year period, the City's annual water production ranged from 7,053 AF to 8,893 AF, with an average of approximately 8,038 AF. The City has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands. In addition, the City has been able to provide water service to meet maximum day water demands for these years, including during the summer months.

The City's water demands during the most recent five years (from CY 2021 to CY 2025), including potable and non-potable water demands, averaged approximately 7,179 AFY. Due to conservation efforts and demand management measures (discussed in Chapter 9), the City's recent water demands have been less than its historical water demands, including during long-term droughts. The City's projected water demands (during normal, single dry, and multiple dry years) are provided in Section 7.2.3 and are anticipated to



incorporate similar reductions in water use rates because of the shortage response actions, ongoing conservation efforts, and demand management measures. Because the City's projected water demands are similar to or less than its historical water demands, it is anticipated the City will be able to continue providing sufficient water supplies to its customers to meet projected water demands, including during long-term droughts. In addition, as discussed in Section 8.4.2, based on historical and on-going management practices, the City will be able to continue relying on its water supply sources from the Central Basin for adequate supply augmentation in response to each of the standard water shortage levels identified in Section 8.3.

Based on the City's ability in meeting water demands during past water supply shortages, adopted water shortage levels, adjusted operating safe yields, and long-term droughts, it is anticipated that the City will be able to continue providing sufficient water supplies to its customers during any of its standard water shortage levels. Although adequate supplies are anticipated, the cost of those water supplies may become incrementally more expensive. The City will enact varying levels of its water shortage contingency plan to encourage retail customers to reduce water consumption and at the same time reduce the need to use the more expensive water supplies. Notwithstanding, the effectiveness of each of the City's shortage response actions, to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction provided in Table 8-2 and Table 8-3. The effectiveness of the City's shortage response actions is based on the City's water demands prior to 2015 (unconstrained demands). The City reduced its water demands in 2015 in response to the Governor's April 1, 2015 Executive Order B-29-15, which mandated statewide reduction in water use of 25 percent. The City's actual water demand reduction during this period was used to estimate the extent of water use reductions for the City's Water Shortage Levels. The City's Water Shortage Levels 1, 2, 3, 4, 5, and 6 are expected to reduce water demands by up to 10%, 20%, 30%, 40%, 50%, and greater than 50%, respectively.



Emergency regulations previously adopted by the SWRCB pursuant to Executive Order N-7-22 (issued on March 28, 2022, by California Governor Gavin Newsom) required urban water suppliers to implement Level 2 of their Water Shortage Contingency Plans meant to address up to a 20% shortage of water supplies. The regulations also required urban water suppliers to establish a ban on irrigating non-functional turf at commercial, industrial, and institutional properties (including grass in front of or next to large industrial or commercial buildings). The ban did not include watering turf that is used for recreation or other community purposes, water used at residences or water to maintain trees. Pursuant to Executive Order N-5-23 issued on March 24, 2023, by California Governor Gavin Newsom, the requirement for urban water suppliers to implement Level 2 of their Water Shortage Contingency Plans was removed. As of June 5, 2024, SWRCB statewide water conservation emergency regulations have expired. In October 2023, however, the California State Legislature passed Assembly Bill 1572, which phases in a ban on decorative grass watering in commercial, industrial, and institutional areas permanently beginning January 2027.

8.5 COMMUNICATION PROTOCOLS

CWC 10632.

- (a)(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.*



In the event of an emergency water shortage or any City, State, or Federal water conservation mandates, the City will inform customers, the public, and the necessary local, regional, and state government entities regarding these current or predicted events.

The City's communication protocol consists of the different channels of communication the City will use to convey important messages regarding water shortage allocations and/or regulations and any voluntary or mandatory actions that go along with any potential water shortages.

City public outreach programs can aid in increasing awareness of such shortages, while customer services and workshops can help encourage customers to actively participate in demand reduction strategies.

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.

Pursuant to the provisions set forth in the City's Municipal Code Section 7511.1.L, "any person who fails to comply with any of the mandatory water conservation measures imposed by the implementation of this section shall be subject to an improper water users fee or charge as hereinafter set forth."

The following charges are not imposed as a penalty but as a charge for excessive or improper use of water. The charges are necessary in order to recover the reasonable



cost of enforcement of the mandatory water provisions and to obtain the goals of water conservation measures:

- (a) First Violation. The City of Lakewood shall issue a written warning to the customer for the first violation.

- (b) Second and Third Violations. The City of Lakewood shall issue a written notice and assess an improper water use fee of \$100.00. If the fee is not paid in full within fifteen (15) days of issuance the amount will be added to the customer's bimonthly water bill.

- (c) Fourth Violation. The City of Lakewood shall issue a written notice, charge an improper water use fee of \$200.00 and install a flow restricting device on the customer's water service for a period of not less than twenty-four (24) hours. Such flow restricting device shall reduce water flow to one (1) gallon per minute for metered services one and one half inch (1½") or under. Similar devices will be placed on larger meters. The fee shall be paid prior to the resumption of normal water service.

- (d) Fifth Violation. The City of Lakewood shall issue a written notice, charge an improper water use fee of \$500.00 and install a flow restricting device on the customer's water service for a period of not less than forty-eight (48) hours. Such flow restriction device shall reduce water flow to one (1) gallon per minute for the metered service, one and one-half inch (1½") or under. A similar device shall be placed on larger meters. The fee shall be paid prior to resumption of normal water service.



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. [see below]*
- (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 Division 1, Section 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.

If the demand of water consumers cannot be satisfied without depleting a substantial amount of water supply needed for human consumption, sanitation, and fire protection, the City shall declare a water shortage emergency (in accordance with Water Code Chapter 3 commencing with Section 350 of Division 1 regarding water shortage emergencies). the City shall coordinate with any city or county within its service area for possible declaration of a local emergency, as defined in Section 8588 of the Government Code.

The City Council previously adopted ordinances which implemented the Water Conservation Ordinance (Section 7511.1) of the City's Municipal Code (see Appendix H). The Water Conservation Ordinance provides a mechanism for the City to implement a water conservation plan based on the severity of a water supply shortage.



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. [retail urban suppliers only]*

During periods of water supply shortages, state-mandated water use restrictions, or emergency conditions, the City may require its customers to reduce demands below levels projected under the current water rate structure. Under any of these circumstances, the City may experience a decrease in revenues that may result in insufficient funds to meet projected expenses.

As the City progresses through increased water shortage levels pursuant to the WSCP, a proportional decrease in water revenue may be realized and City Council could be required to enact emergency water conservation rates in order to stabilize revenue. Steps can, however, be taken that would aid in alleviating some of the strain on water revenues caused by voluntary or mandatory water conservation, including the following:

- The City can analyze and consider reducing current operation and maintenance expenses
- The City can analyze and consider reducing future projected operation and maintenance expenses
- The City can analyze and consider prioritizing and deferring specific capital improvement projects



- The City can analyze and consider enacting an emergency water conservation rate structure
- The City can implement the use of the Water Rate Stabilization Fund to help offset the decrease in revenue.

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.

The City is required to submit an Annual Assessment in accordance with DWR's guidance and requirements. The Annual Assessment will include a review of the City's unconstrained water demands (i.e. water demands prior to any projected response actions the City may trigger under this WSCP) for the current year and the upcoming (potential single dry) year. The City will also include information regarding anticipated shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the City's WSCP. See Section 8.2 for further discussion of the Annual Assessment.

The City utilizes a full-AMI smart meter system for all customers across all account types, and uses the hourly data transmitted from these AMI meters to determine the consumption of water, possible internal leaks, and abnormal water uses throughout the City's service area.

In the event of a water shortage or the implementation of City, State, or Federal water conservation mandates, the City will analyze daily, weekly, and rolling four-week average



consumption totals to measure the effectiveness of water conservation efforts in all water shortage levels of the WSCP.

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.

The City's Water Shortage Contingency Plan has been prepared as an adaptive management plan. As discussed in Section 8.9, the City will monitor and report on the implementation of the Water Shortage Contingency Plan. The City will review the implementation results for any current or potential shortage gaps between water supplies and demands. The City will evaluate the need for revising the Water Shortage Contingency Plan to resolve any shortage gaps, as necessary. The City will consider the following potential revisions in the event of a potential shortage gap:

- Implementation of additional public outreach, education, and communication programs (in addition to the programs discussed in Chapter 9).
- Implementation of more stringent water use restrictions under the standard water shortage levels (discussed in Section 8.4)
- Implementation of stricter enforcement actions and penalties (discussed in Section 8.6)
- Improvements to the water supply augmentation responses (discussed in Section 8.4.1), as well as any associated operational changes (discussed in Section 8.4.3) which may be required



- Incorporation of additional actions recommended by City staff or other interested parties

The City will use the monitoring and reporting data to evaluate the ability for these potential revisions to resolve any shortage gaps which may occur within the standard water shortage levels.

This Water Shortage Contingency Plan is adopted as part of the City's 2025 Urban Water Management Plan adoption process discussed in Section 10.3. It is anticipated the City will review, revise, and adopt an updated Water Shortage Contingency Plan as part of preparing its 2030 Urban Water Management Plan as necessary. However, the City will continue to review the monitoring and reporting data, and if needed, update the Water Shortage Contingency Plan more frequently. Any updates to the City's Water Shortage Contingency Plan will include a public hearing and adoption process by the City Council (see Section 8.12).

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.

The City's Water Shortage Contingency Plan defines "decorative water features" as water features which are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, but excluding pools and spas. In general, there are additional health and safety considerations in the water supplied to pools and spas compared to decorative water features. As a result, the City's Water Shortage Contingency Plan has reviewed the



response actions, enforcement actions, and monitoring and reporting programs separately for decorative water features and for pools and spas, as applicable.

8.12 PLAN ADOPTION, SUBMITTAL, AVAILABILITY, AND AMENDMENT PROCEDURES

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.

The City's Water Shortage Contingency Plan is adopted as part of the City's 2025 Urban Water Management Plan adoption process discussed in Chapter 10. The process for adopting the City's Water Shortage Contingency Plan includes the following:

- The City will conduct a public hearing and make the Water Shortage Contingency Plan available for public inspection.
- The City will provide notification of the time and place of the public hearing to any city or county in which water is provided.
- The City will publish notice of public hearing in a newspaper once a week, for two successive weeks (with at least five days between publication dates).
- The City Council will adopt the 2025 Urban Water Management Plan and the Water Shortage Contingency Plan
- As part of submitting the 2025 Urban Water Management Plan to DWR, the City will also submit the Water Shortage Contingency Plan (electronically through DWR's online submittal tool) within 30 days of adoption and by July 1, 2026. The City will submit a copy of the Water Shortage Contingency Plan to the California State Library and to any city or county in which water is provided within 30 days of



adoption. In addition, the City will make the Water Shortage Contingency Plan available for public review within 30 days of adoption.

If there are any subsequent amendments required, the process for adopting an amended Water Shortage Contingency Plan includes the following:

- The City will conduct a public hearing and make the amended Water Shortage Contingency Plan available for public inspection.
- The City Council will adopt the amended Water Shortage Contingency Plan
- The City will submit the amended Water Shortage Contingency Plan to DWR (electronically through DWR's online submittal tool) within 30 days of adoption

Additional information regarding the adoption, submittal, and availability of the City's Water Shortage Contingency Plan (and 2025 Urban Water Management Plan) is provided in Chapter 10.

8.13 RESOURCES AND REFERENCES

DWR's Final 2025 UWMP Guidebook provides a listing of resources and references which can be helpful during the preparation of a Water Shortage Contingency Plan.

8.14 SUBMITTAL TABLES

The applicable standardized Submittal Tables referenced within Chapter 8 are provided below.



8.14.1 TABLE 8-1: CROSS REFERENCE FOR STANDARD VS. SUPPLIER SHORTAGE LEVELS

Table 8-1 Cross-Reference for Standard vs. Supplier Shortage Levels

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
<input type="checkbox"/>	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%	1	Up to 10%
2	Up to 20%	2	Up to 20%
3	Up to 30%	3	Up to 30%
4	Up to 40%	4	Up to 40%
5	Up to 50%	5	Up to 50%
6	>50%	5	50%
NOTES:			



8.14.2 TABLE 8-2: SUPPLY AUGMENTATION AND OTHER ACTIONS

Table 8-2 Supply Augmentation and Other Actions

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
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 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				
1	Transfers	Volume	0	Not applicable (see Notes)
2	Transfers	Volume	0	Not applicable (see Notes)
3	Transfers	Volume	0	Not applicable (see Notes)
4	Transfers	Volume	0	Not applicable (see Notes)
5	Transfers	Volume	0	Not applicable (see Notes)
6	Transfers	Volume	0	Not applicable (see Notes)
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES: The City will consider increased production from the Central Basin using existing facilities to address increased demands. As noted on Table 8-3, the City plans to implement demand reduction measures in the event water supplies from existing sources are not sufficient to meet anticipated demands.				



8.14.3 TABLE 8-3: DEMAND-REDUCTION ACTIONS

Table 8-3 Demand Reduction Actions

Submittal Table 8-3 Retail: Demand Reduction Actions					
Water Code Section 10632(a)(4)(B),(D), and (E)					
Yes	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	Other - Prohibit use of potable water for washing hard surfaces	Volume	Collective reduction from all Shortage Level 1 actions is up to 390 AFY		Yes
1	Other - Require automatic shut of hoses	Volume	Collective reduction from all Shortage Level 1 actions is up to 390 AFY		Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from all Shortage Level 1 actions is up to 390 AFY	Repair within five days	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Volume	Collective reduction from all Shortage Level 1 actions is up to 390 AFY		Yes
2	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 2 actions is up to 780 AFY	Prohibited between 9:00am and 5:00pm	Yes
2	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 2 actions is up to 780 AFY	No more than three times per week during June-September. No more than two times per week the rest of the year.	Yes
2	Other - Require automatic shut of hoses	Volume	Collective reduction from all Shortage Level 2 actions is up to 780 AFY		Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from all Shortage Level 2 actions is up to 780 AFY	Repair within four days	Yes



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3	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 3 actions is up to 1,171 AFY	Residential and commercial. No more than two times per week during June-September. No more than once per week the rest of the year.	Yes
3	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 3 actions is up to 1,171 AFY	Commercial nurseries and parks. No more than three times per week.	Yes
3	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 3 actions is up to 1,171 AFY	Residential and commercial. Prohibited between 8:00am and 8:00pm per week during June-September. Prohibited between 9:00am and 5:00pm the rest of the year.	Yes
3	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 3 actions is up to 1,171 AFY	Commercial nurseries and parks. Prohibited between 9:00am and 4:00pm.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from all Shortage Level 3 actions is up to 1,171 AFY	Repair within three days	Yes
4	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,561 AFY	Residential and commercial. No more than once per week during June-September. No more than once per two weeks the rest of the year.	Yes
4	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,561 AFY	Commercial nurseries and parks. No more than two times per week.	Yes
4	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,561 AFY	Residential and commercial. Prohibited between 8:00am and 8:00pm per week during June-September. Prohibited between 9:00am and 5:00pm the rest of the year.	Yes
4	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,561 AFY	Commercial nurseries and parks. Prohibited between 9:00am and 4:00pm.	Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,561 AFY	Repair within two days	Yes
5	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Residential and commercial. Water permanent trees and shrubs only. No more than once per week during June-September. No more than once per two weeks the rest of the year.	Yes
5	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Commercial nurseries. No more than once per week.	Yes
5	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Parks. No more than two times per week.	Yes



5	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Residential and commercial. commercial. Water permanent trees and shrubs only. Prohibited between 8:00am and 8:00pm per week during June-September. Prohibited between 9:00am and 5:00pm the rest of the year.	Yes
5	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Commercial nurseries. Prohibited between 9:00am and 6:00pm.	Yes
5	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Parks. Prohibited between 9:00am and 4:00pm.	Yes
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,951 AFY	Repair within 24 hours	Yes
6	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Residential and commercial. Water permanent trees and shrubs only. No more than once per week during June-September. No more than once per two weeks the rest of the year.	Yes
6	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Commercial nurseries. No more than once per week.	Yes
6	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Parks. No more than two times per week.	Yes
6	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Residential and commercial. commercial. Water permanent trees and shrubs only. Prohibited between 8:00am and 8:00pm per week during June-September. Prohibited between 9:00am and 5:00pm the rest of the year.	Yes
6	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Commercial nurseries. Prohibited between 9:00am and 6:00pm.	Yes
6	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Parks. Prohibited between 9:00am and 4:00pm.	Yes
6	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Volume	Collective reduction from Shortage Level 5 plus all Shortage Level 6 actions is greater than 1,951 AFY	Repair within 24 hours	Yes

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



CHAPTER 9

DEMAND MANAGEMENT MEASURES

LAY DESCRIPTION – CHAPTER 9

DEMAND MANAGEMENT MEASURES

Chapter 9 (Demand Management Measures) of the City’s 2025 Plan discusses and provides the following:

- The City has implemented “Demand Management Measures” to reduce its water demands and achieve its water use targets (discussed in Chapter 5)
- The City’s Demand Management Measures include adoption of an ordinance to prevent water waste.
- The City’s Demand Management Measures include metering of all customer connections, including separate metering for single-family residential, multi-family residential, commercial, industrial, large landscape and institutional/governmental facilities.
- The City’s Demand Management Measures include conservation pricing. The City’s current water rate structure promotes water conservation by customers.
- The City’s Demand Management Measures include public education and outreach programs regarding water conservation.
- The City’s Demand Management Measures include various actions to assess and manage water distribution system losses.
- Additional Demand Management Measures including rebate, conservation, and educational programs are discussed.
- A summary of the Demand Management Measures the City has implemented over the past five (5) years is provided.



9.1 DEMAND MANAGEMENT MEASURES FOR RETAIL SUPPLIERS

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.*

9.1.1 IMPLEMENTATION OVER THE PAST FIVE YEARS

The City is committed to implementing water conservation programs and works collaboratively with CBMWD to provide water conservation programs for its customers. As a sub-agency of CBMWD, the City's customers have the benefit of participating in CBMWD's conservation efforts. The highlights of DMM implementation over the past five years are described below.



As discussed in Section 9.1.3.1, the City Council previously adopted ordinances which implemented the Water Conservation Ordinance (Section 7511.1) of the City's Municipal Code. The Water Conservation Ordinance provides a mechanism for the City to implement a water conservation plan based on the severity of a water supply shortage.

As discussed in Section 9.1.3.2, the City metered all customer connections, including separate metering for single-family residential, multi-family residential, commercial, large landscape and institutional/governmental facilities during the past five years.

As discussed in Section 9.1.3.3, the City's rate structure includes water consumption rates for residential (including three tiers), commercial customers, and recycled water users designed to encourage conservation, while reducing the burden on those already conserving

As discussed in Section 9.1.3.4, the City participates in public information events to deliver information regarding water conservation. The City also delivers water conservation messaging through periodic articles in various publications, marketing tools and speaking engagements.

As discussed in Section 9.1.3.5, the City tracks the difference between water produced or purchased and the amount of water sold to its customers. The City's computer billing program enables the City to log water use data and history of each service. The City can monitor unaccounted for water and perform repairs to fix leaks as necessary.

As described in Section 9.1.3.6, the conservation coordinator's duties are performed by the City's Water Administration Manager. The Water Administration Manager acts as the Conservation Coordinator who manages the provisions in the water conservation program and implements the public relations. With the help of key department staff, the



Water Administration Manager helps coordinate the development of the water conservation rebate program.

As described in Section 9.1.3.7, the City participates in MWD's "SoCal Water\$mart" regional rebate program, which is available to the City's residential and commercial customers. There are rebates available for indoor plumbing including high-efficiency clothes washers and toilets. Rebates are also available for outdoor plumbing include those for weather-based irrigation controllers, rotating sprinkler nozzles, and replacement of irrigated lawn with drought tolerant plants or other approved landscape options. The City offers water audit surveys to customers to check for leaks and check water using fixtures for irrigation and landscape. The City also offers rebate programs for eligible residential turf removal and subsurface irrigation projects for water customers.

9.1.2 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 measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

The Demand Management Measures implemented by the City are discussed in Section 9.1.3. Descriptions regarding the nature and extent of these Demand Management Measures implemented by the City over the past five years are discussed in Section 9.1.1. The City will continue to implement these Demand Management Measures and other water conservation programs and work collaboratively with Central Basin Municipal Water District to provide water conservation programs for its residents.



9.1.3 REQUIRED DEMAND MANAGEMENT MEASURES

9.1.3.1 WATER WASTE PREVENTION ORDINANCES

The City Council previously adopted ordinances which implemented the Water Conservation Ordinance (Section 7511.1) of the City's Municipal Code (see Appendix H). The Water Conservation Ordinance provides a mechanism for the City to implement a water conservation plan based on the severity of a water supply shortage. As discussed in Section 8.2, measures to prevent water waste include landscape irrigation during specified hours and days, use of recirculated water in decorative water features, and prohibition of washing down hard or paved surfaces.

9.1.3.2 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... located within its service area.

CWC 527.

(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.

The City is fully metered for all customer sectors, including separate meters for single family residential, multi-family residential, commercial, large landscapes, and all institutional/governmental facilities. In 2018, the City implemented a full-AMI smart



metering system encompassing the entire water system. Along with a full-AMI smart meter system came an online portal, where residents could pay their utility bills, access their daily water usage data, set leak parameters, and many other amenities. The actual benefits of this system to residents are quantifiable, aiding them in conserving water by tracking their daily usage to stay within a specific parameter and alerting City staff if they feel their usage is abnormal, or their bill is too high. Further information regarding the City's service fees and conservation pricing is provided in Section 9.1.3.3.

9.1.3.3 CONSERVATION PRICING

The City's water rate structure includes a minimal charge for basic water service. After the minimum charge, every unit of water used by residential and commercial/industrial customers are charged a water consumption rate. The City's water consumption rates for residential uses include three tiers. The City's water rate structure also includes a reduced water rate for recycled water use. These water rates are designed to encourage conservation, while reducing the burden on those already conserving. A water rate sheet showing current rates is provided in Appendix J.

9.1.3.4 PUBLIC EDUCATION AND OUTREACH

Public Information Events

City staff participate in large community events to promote water conservation. The City of Lakewood hosts multiple community outreach events. The City staffs a booth to distribute water conservation and water quality information to customers. Over 2,000 individuals receive conservation information through the City hosted events each year.

One of the City hosted events is the Earth Walk encourages children and their parents to learn about the environment through interactive displays. The City's Department of Water



Resources puts the participants through their paces by testing their knowledge about water conservation. The department's display also provides information to parents regarding the earth-friendly advances implemented by the City, including the use of recycled water and solar energy to operate production facilities. Approximately 200 children and parents received water conservation, waste recycling and gardening information from local and regional agencies.

In 2003 the City dedicated a 17-acre nature trail called the West San Gabriel River Open Space. This trail contains California native plantings. The Phase 2 project, which expanded the West San Gabriel River Open Space area an additional 2.5 acres, was completed in 2007. The final phase, Phase 3 was completed in 2014, and the entire project now encompasses 25 acres.

Publications

The City uses numerous printed materials to send information to the community. City of Lakewood Recreation Catalogs and the Annual Water Quality Report incorporate water quality, conservation and infrastructure improvement information. The Water Quality Report publication on the City's website is advertised to all residential and business water customers via their utility bill. Lakewood Connect, the City's e-magazine, is also a tool used by the City to highlight water conservation.

Public Information Program

The Public Information Program demand management measures require water purveyors to educate the public about water conservation through speaking to community groups and the media, advertising, billing inserts, consumer's water use comparison to previous year(s) on a local and regional level.



The City of Lakewood continues to spread the word about water conservation through periodic articles in various publications, marketing tools and speaking engagements.

9.1.3.5 PROGRAMS TO ASSESS AND MANAGE DISTRIBUTION SYSTEM REAL LOSS

The City's estimated water system losses are discussed in Section 4.3. The City tracks the difference between water produced or purchased and the amount of water sold to its customers. All water delivered to the City is recorded on master meters connected to each well. The City's computer billing program enables the City to log water use data and history of each service. Data for each service includes an account number, address, meter size and charges along with the water usage. With this data, the City can monitor unaccounted for water and perform repairs to fix leaks as necessary.

9.1.3.6 WATER CONSERVATION PROGRAM COORDINATION AND STAFFING SUPPORT

The City's Water Administration Manager is a member of the Department of Water Resources staff that fills the function of the water conservation coordinator. The Water Administration Manager spends approximately ten percent of the time managing the provisions in the water conservation program and implementing the public relations programs. With the help of key department staff, the Water Administration Manager helps coordinate the development of the water conservation rebate program.

During periods of declared drought, the time allocated to conservation duties increases to approximately 50 percent. The duties related to conservation coordination were developed in 1991.



9.1.3.7 OTHER DEMAND MANAGEMENT MEASURES

The City participates in MWD’s “SoCal Water\$mart” rebate program. Through MWD’s SoCal Water\$mart, residential and commercial customers are eligible for rebates to help encourage water efficiency and conservation. The SoCal Water\$mart program offers rebates on a wide variety of water-saving technologies including high efficiency clothes washers and toilets. Rebates are also available for outdoor plumbing include those for weather-based irrigation controllers, rotating sprinkler nozzles, and replacement of irrigated lawn with drought tolerant plants or other approved landscape options.

Since Lakewood is primarily a residential community and most water use is outside the home for landscape irrigation, the Lakewood City Council approved the implementation of two programs aimed at increasing the effectiveness of water use for landscape irrigation. The program provides residential customers with rebates for the installation of water conserving irrigation devices and the removal of high-water use turf areas. The rebate program was launched in February 2011, and applications for the rebates began on May 1, 2011. The City Council has allocated \$25,000 annually for the program.

Single-family residential customers in the City’s service area can purchase and install a variety of water conserving devices including:

- Retrofit or installation of rotor nozzle/sprinkler heads
- Installation of weather-based irrigation controllers
- Installation of irrigation controllers equipped with rain sensors or moisture sensors
- Installation of rain sensors or moisture sensors on existing irrigation controllers
- Installation or retrofit of irrigation system with drip irrigation kits
- Installation of hose end timers

The City’s turf removal rebate program pays \$1.00 per square foot of turf removed and replaced with drought tolerant plants, water conserving irrigation and water permeable



ground cover such as rock, bark or pavers. The project must be a minimum of 40 square feet and up to 800 square feet is eligible for the rebate. Unlike the device rebates, the turf removal program requires the submittal of a pre-application and a landscape plan for the proposed project. Once approval is received the resident has six months to complete the project. The water customer must commit to keeping the area turf free for five years to receive the rebate. Residents can combine this rebate program with the device rebate offerings. For customers who wish to maintain their lawn but significantly decrease water runoff, overspray, and overwatering, the City offers a subsurface irrigation rebate program. The rebate amount is \$0.50 per square foot with a minimum of 40 and maximum of 800 square feet. Because the turf removal rebate program began in 2011, over \$135,000 in rebates have been made to City water customers. All rebates are awarded as credit on the water bill.

9.2 DEMAND MANAGEMENT MEASURES FOR WHOLESALE SUPPLIERS

CWC 10631.

- (e) *Provide a description of the supplier's water demand management measures. This description shall include all of the following:*
- (2) *For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.*

The City is not a wholesale agency and is not required by DWR to complete Section 9.2.



CHAPTER 10

PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

LAY DESCRIPTION – CHAPTER 10

PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

Chapter 10 (Plan Adoption, Submittal, and Implementation) of the City's 2025 Plan discusses and provides the following:

- The steps the City has performed to adopt and submit its 2025 Plan are detailed
- The steps the City has performed to adopt and submit its Water Shortage Contingency Plan are detailed
- The City coordinated the preparation of its 2025 Plan with the Cities of Downey, Norwalk, Santa Fe Springs, Whittier, the County of Los Angeles, and CBMWD. The City notified these agencies at least sixty (60) days prior to the public hearing of the preparation of the 2025 Plan and invited these agencies to participate in the development of the 2025 Plan.
- The City provided a notice of the public hearing to the same agencies regarding the time, date, and place of the public hearing.
- The City published a newspaper notification of the public hearing, once a week for two successive weeks
- The City conducted a public hearing to discuss and adopt the City's 2025 Plan and City's Water Shortage Contingency Plan.
- Within 30 days of adoption, the City submitted the 2025 Plan and Water Shortage Contingency Plan to the California Department of Water Resources.
- Within 30 days of adoption, the City submitted all data tables associated with the 2025 Plan to the California Department of Water Resources.



- Within 30 days of adoption, the City submitted a copy of the 2025 Plan to the State of California Library.
- Within 30 days of adoption, the City submitted a copy of the 2025 Plan (and Water Shortage Contingency Plan) to the County of Los Angeles Registrar- Recorder/ Clerk's office and the City Clerk's Office.
- Within 30 days after submittal of the 2025 Plan to the California Department of Water Resources, the City made the 2025 Plan (including the Water Shortage Contingency Plan) available at the City Clerk's Office and on the City's website.
- The steps the City will perform to amend the 2025 Plan and/or the Water Shortage Contingency Plan, if necessary, are provided.

10.1 PLAN COMPLETION TIMELINE

The data provided in the City's 2025 Plan and the Water Shortage Contingency Plan is provided on a CY basis through December 31, 2025 (as discussed in Section 2.5).

10.2 NOTICE OF PLAN PREPARATION

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 waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

As discussed in Section 2.4.2, the City coordinated the preparation of the 2025 Plan with Central Basin Municipal Water District. The City notified this agency, as well the cities and county within which the City provides water supplies, at least sixty (60) days prior to



the public hearing of the preparation of the 2025 Plan and invited them to participate in the development of the Plan. A copy of the notification letters sent to these agencies is provided in Appendix D.

10.3 NOTICE OF PUBLIC HEARING

CWC 10642.

...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. 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. 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.

Government Code 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.

The City provided a notice of the public hearing to the Cities of Cerritos, Long Beach, and Signal Hill and the County of Los Angeles. The notice includes the time and place of the public hearing. Copies of the notice of the public hearing are provided in Appendix D. Table 10-1 summarizes the agencies which were provided notifications by the City.

The City encouraged the active involvement of the population within its service area prior to and during the preparation of the Plan. Pursuant to Section 6066 of the Government Code, the City published a notice of public hearing in the newspaper during the weeks of June 8, 2026, and June 15, 2026. A notice of public hearing was also provided to the City Clerk's office and was posted throughout the City of Lakewood and on the City's website. A copy of the published notice is provided in Appendix D. To ensure the draft



2025 Plan and the draft Water Shortage Contingency Plan were available for review, the City placed a copy at the City Clerk's Office located at City Hall and made a copy available for review on its website.

10.4 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.

Government Code Section 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.

Prior to adopting the draft 2025 Plan and the draft Water Shortage Contingency Plan, the City held a public hearing on June 23, 2026 which included input from the community regarding the City's draft 2025 Plan and the draft Water Shortage Contingency Plan.

Following the public hearing, the City adopted both the draft 2025 Plan and the draft Water Shortage Contingency Plan (included in Chapter 8). A copy of the resolution adopting the 2025 Plan and the Water Shortage Contingency Plan is provided in Appendix K.



10.5 PLAN SUBMITTAL

CWC 10621.

- (e) *.Each urban water supplier shall update and submit its 2025 plan to the department by July 1, 2026...*

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.*

The City's submittal process for its 2025 Plan and the Water Shortage Contingency Plan is discussed below.

10.5.1 SUBMITTING A UWMP AND WATER SHORTAGE CONTINGENCY PLAN TO DWR

Within 30 days of adoption of the 2025 Plan by the City Council, the City submitted the adopted 2025 Plan (including the Water Shortage Contingency Plan) to DWR. The 2025 Plan and Water Shortage Contingency Plan were submitted through DWR's "Water Use Efficiency (WUE) Data Portal" website.

DWR developed a checklist which was used by the City to assist DWR with its determination that the City's 2025 Plan has addressed the requirements of the California Water Code. The City has completed the DWR checklist by indicating where the required CWC elements can be found within the City's 2025 Plan (See Appendix B).



10.5.2 ELECTRONIC DATA SUBMITTAL

CWC 10644.

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

Within 30 days of adoption of the 2025 Plan, the City submitted all data tables associated with the 2025 Plan through DWR’s “Water Use Efficiency Data Portal” website.

10.5.3 SUBMITTING A UWMP, INCLUDING WSCP, TO THE CALIFORNIA STATE LIBRARY

Within 30 days of adoption of the 2025 Plan by the City Council, a copy (CD or hardcopy) of the 2025 Plan was submitted to the State of California Library. A copy of the letter to the State Library will be maintained in the City’s file. The 2025 Plan will be mailed to the following address if sent by regular mail:

California State Library
Government Publications Section
Attention: Coordinator, Urban Water Management Plans
P.O. Box 942837
Sacramento, CA 94237-0001



The 2025 Plan will be mailed to the following address if sent by courier or overnight carrier:

California State Library
Government Publications Section
Attention: Coordinator, Urban Water Management Plans
900 N Street
Sacramento, CA 95814

10.5.4 SUBMITTING A UWMP TO CITIES AND COUNTIES

Within 30 days of adoption of the 2025 Plan (including the Water Shortage Contingency Plan) by the City Council, a copy of the 2025 Plan was submitted to the County of Los Angeles Registrar / Records office and the City Clerk's Office. A copy of the letter to the County of Los Angeles will be maintained in the City's file.

10.6 PUBLIC AVAILABILITY

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.*

Within 30 days after submittal of the 2025 Plan to DWR, the City made the 2025 Plan (including the Water Shortage Contingency Plan) available at the City Clerk's Office located at City Hall during normal business hours and on the City's website.



10.7 NOTIFICATION TO PUBLIC UTILITIES COMMISSION

CWC 10621.

(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.

The City is not regulated by the California Public Utilities Commission.

10.8 PLAN IMPLEMENTATION

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.

The City will implement any schedules set forth in the adopted 2025 Plan.

10.9 AMENDING AN ADOPTED UWMP OR WATER SHORTAGE CONTINGENCY PLAN

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 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.

The City's amendment process for its 2025 Plan is discussed below.

10.9.1 AMENDING A UWMP OR WSCP

If the City amends the adopted 2025 Plan, the City will conduct a similar notification and public hearing process for the amended 2025 Plan as discussed in Sections 10.2, 10.3, and 10.4. The amended Plan will then be submitted to DWR, the State of California Library, the County of Los Angeles Registrar / Records office, and the City Clerk's Office.

10.9.2 SUBMITTING REVISED WATER SHORTAGE CONTINGENCY PLAN

CWC 10644.

(a) 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.

If the City amends the adopted 2025 Plan (including the Water Shortage Contingency Plan), the amended Plan (and Water Shortage Contingency Plan) will undergo adoption by the City's governing board. Within 30 days of adoption, the amended Plan (and Water Shortage Contingency Plan) will then be submitted to DWR, the State of California



Library, the County of Los Angeles Registrar / Records office, and the City Clerk's Office.

10.10 CALIFORNIA DEPARTMENT OF WATER RESOURCES REVIEW OF SUBMITTED PLANS

As discussed in Section 1.5, DWR will review the 2025 Plans to ensure that they address the California Water Code requirements. Following DWR's review, water suppliers will be notified of the results of the review via a formal review letter. These review letters will also be available to the public on DWR's WUEdata portal. In cases where DWR finds that a Plan does not properly address item(s) in the Water Code, DWR will reach out to the water supplier to discuss needed corrections and correction procedures.

10.11 SUBMITTAL TABLES

The applicable standardized Submittal Tables referenced within Chapter 10 are provided below.

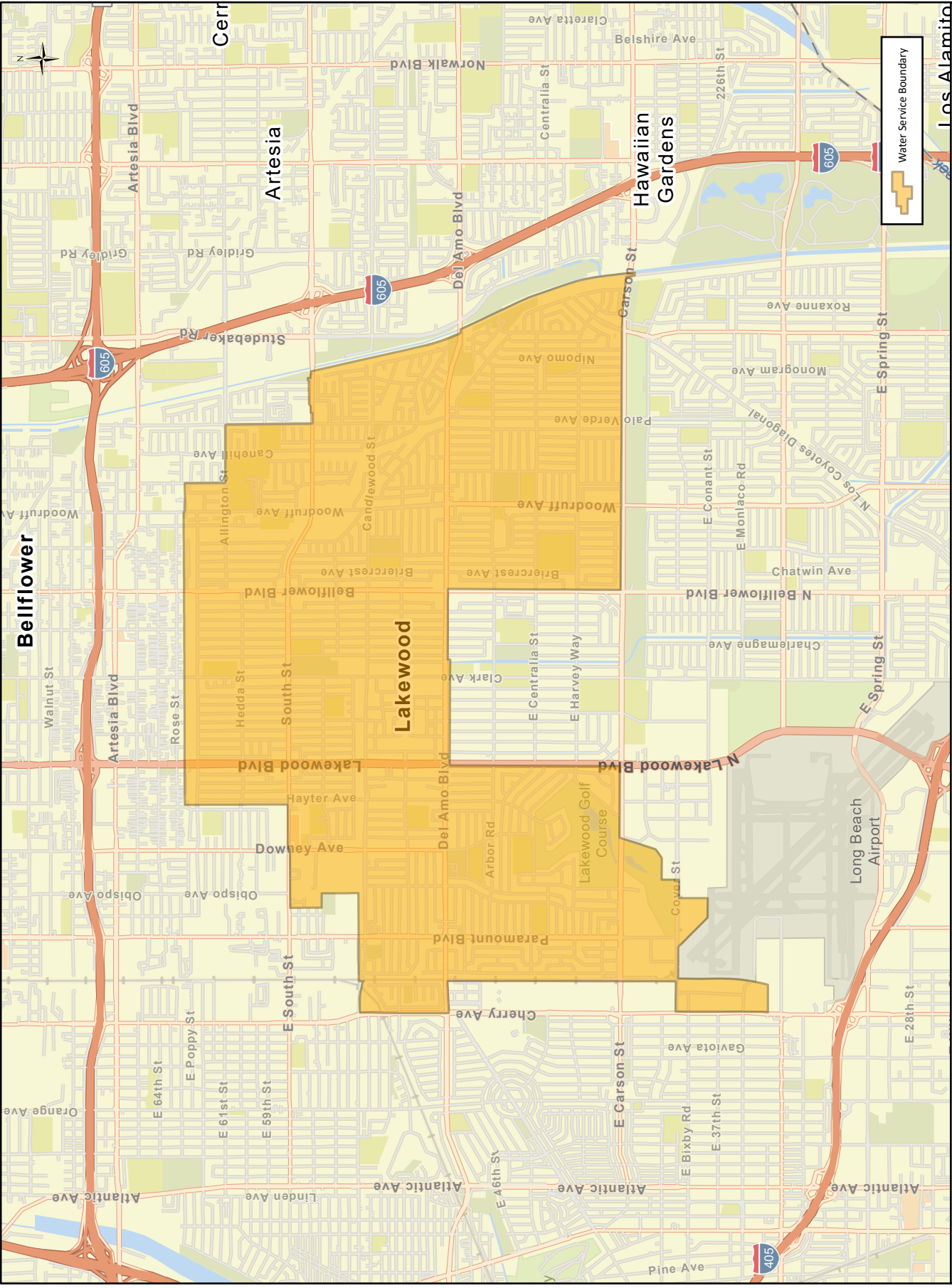


10.11.1 SUBMITTAL TABLE 10-1: NOTIFICATION TO CITIES AND COUNTIES

Table 10-1 Notification to Cities and Counties

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 Cerritos	Yes	Yes
City of Long Beach	Yes	Yes
City of Signal Hill	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:		

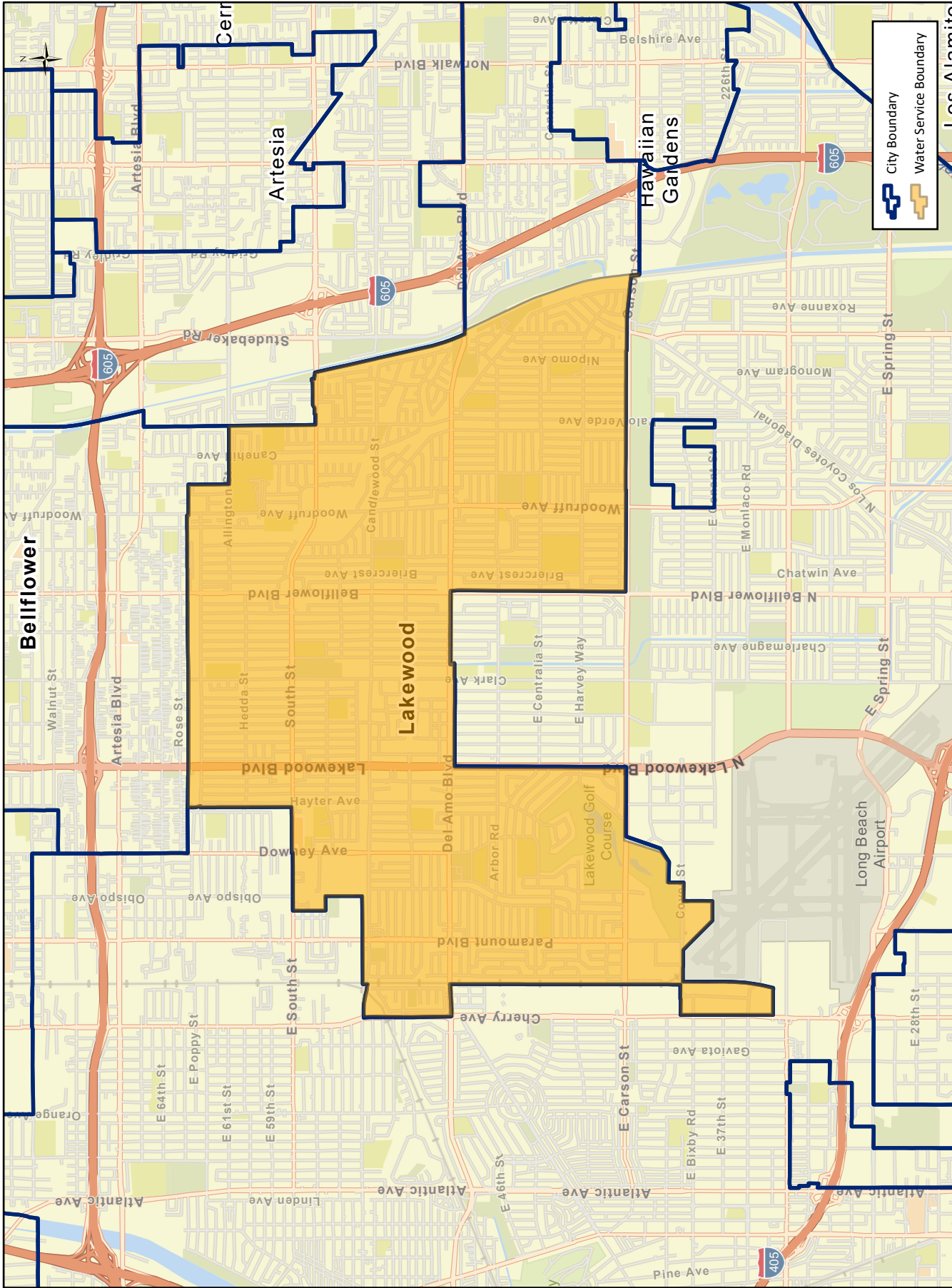
FIGURE 1



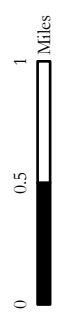
**CITY OF LAKEWOOD
WATER SERVICE AREA**

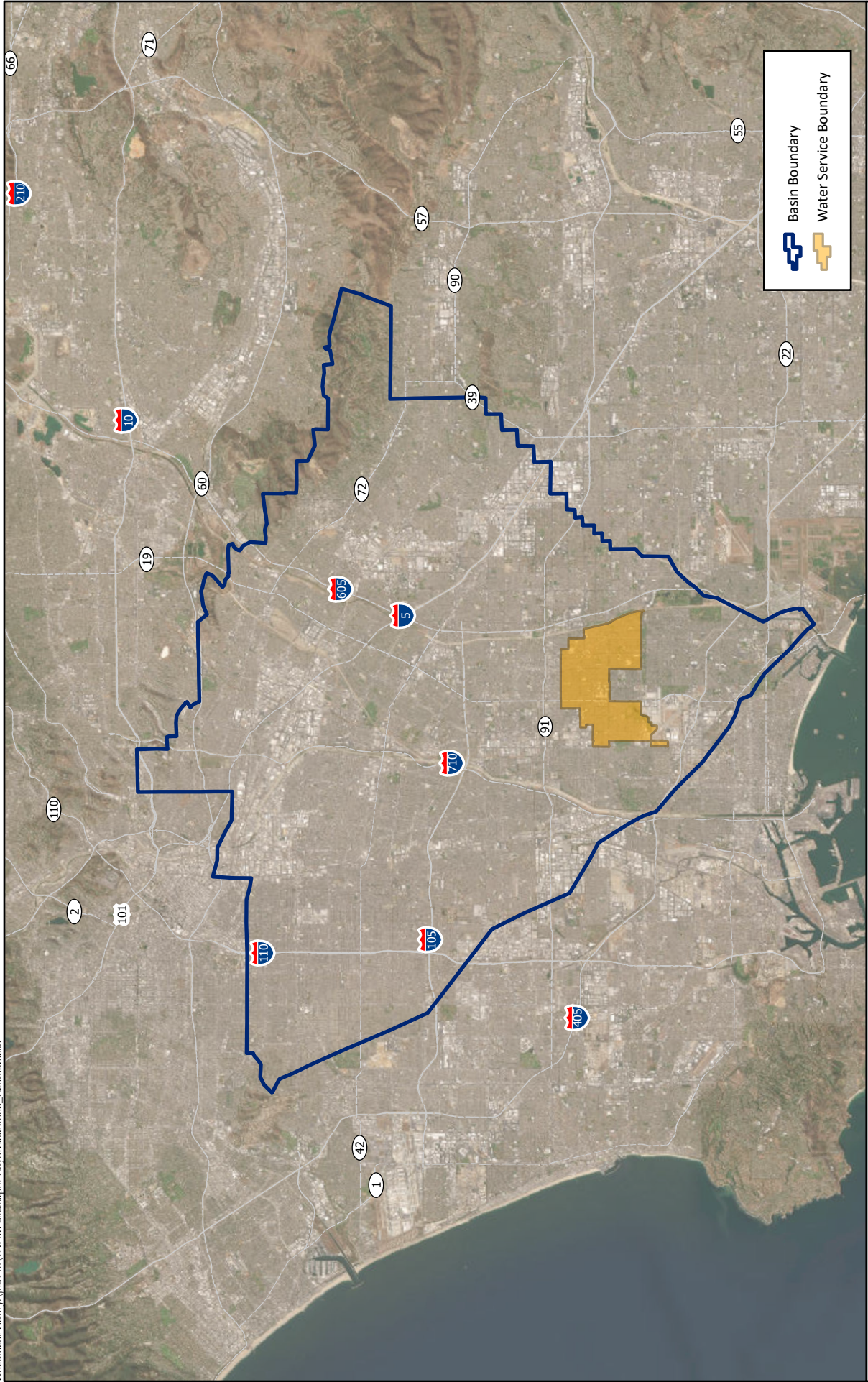


FIGURE 2



**CITY OF LAKEWOOD
WATER SERVICE AREA AND CITY BOUNDARIES**





CITY OF LAKEWOOD
CENTRAL BASIN LOCATION

