Upper San Gabriel Valley Municipal Water District

2025 Urban Water Management Plan - Vol. I

STETSON ENGINEERS INC.

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Northern California • Southern California • Arizona • Oregon

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

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LIST OF ACRONYMS

AB	Assembly Bill
AF	Acre-feet
AFY	Acre-feet per year
Annual Assessment	Annual Water Supply and Demand Assessment
AWE	Alliance for Water Efficiency
AWWA	American Water Works Association
BDCP	Bay Delta Conservation Plan
BMP	Best Management Practice
BPOU	Baldwin Park Operable Unit
CalWEP	California Water Efficiency Partnership
CAR	Conservation Action Roundtable
Carson Plant	LACSD Joint Water Pollution Control Plan, Carson
CEC	Constituent of Emerging Concern
Central District	Central Basin Municipal Water District
CIC	Covina Irrigating Company
CII	Commercial Industrial Institutional
CIMIS	California Irrigation Management Information System
Corps of Engineers	U.S. Army Corps of Engineers
CPUC	California Public Utilities Commission
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
CWEA	Cooperative Water Exchange Agreement
DDW	State Water Resource Control Board Division of Drinking Water
Delta	Sacramento-San Joaquin Delta
Department	Department of Water Resources
DMM	Demand Management Measures
DOF	Department of Finance
DPW	Los Angeles County Department of Public Works
DRA	Drought Risk Assessment
DWR	Department of Water Resources
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ETo	Evapotranspiration
FY	Fiscal Year
GCMs	General Circulation Models
GIS	Geographical Information Systems
GPCD	Gallons per capita per day
GSP	Groundwater Sustainability Plan

GSWC	Golden State Water Company
HECW	High Efficiency Clothes Washer
IRP	Integrated Resources Plan
IRRP	Indirect Reuse Replenishment Project
JWPCP	Joint Water Pollution Control Plant
Key Well	Baldwin Park Key Well
kWh	Kilowatt Hours
LACSD	Los Angeles County Sanitation District
LARWQCB	Los Angeles Regional Water Quality Control Board
lbs	pounds
M&I	Municipal and Industrial
MAAP	Member Agency Allocation Program
Main Basin	Main San Gabriel Basin
Metropolitan	Metropolitan Water District of Southern California
mg/L	Milligrams per liter
MGD	Million gallons per day
MSL	Mean Sea Level
Metropolitan	Metropolitan Water District of Southern California
MWELO	Model Water Efficient Landscape Ordinance
NCP	National Contingency Plan
NDMA	N-nitrosodimethylamine
NMFS	National Marine Fisheries Service
OSY	Operating Safe Yield
PHET	Premium High Efficiency Toilet
Plan	Urban Water Management Plan
PWS	Public Water System
RCP 4.5	Representative Concentration Pathway 4.5
RDA	Resource Development Assessment
RDM	Robust Decision Making
River Watermaster	San Gabriel River Watermaster
ROD	Record of Decision
RRA	Risk and Resilience Assessment
RRWP	Regional Recycled Water Program
SB	Senate Bill
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act of 2014
SGVMWD	San Gabriel Valley Municipal Water District
SGVWC	San Gabriel Valley Water Company
SJCWRP	San Jose Creek Water Reclamation Plant
SMS	Soil Moisture Sensor

SNMP	Salt and Nutrient Management Plan
SWP	State Water Project
SWRCB	State Water Resources Control Board
SWS	Suburban Water System
TDS	Total Dissolved Solids
TVWMD	Three Valleys Municipal Water District
U.S. Census	United States Census
Upper Water	Upper San Gabriel Valley Municipal Water District
USEPA	United States Environment Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VHWC	Valencia Heights Water Company
VOC	Volatile Organic Compounds
Watermaster	Main San Gabriel Basin Watermaster
WBIC	Weather Based Irrigation Controller
WEWAC	Water Education/Water Awareness Committee
WNWRP	Whittier Narrows Water Reclamation Plant
WRCC	Western Regional Climate Center
WRD	Water Replenishment District of Southern California
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDM	Water Surplus and Drought Management Plan
WSIP	Water Savings Incentive Program
WSRA	Water Supply Reliability Assessment
WUCA	Water Utility Climate Alliance

1.0 INTRODUCTION AND OVERVIEW

LAY DESCRIPTION

An urban water supplier is defined (pursuant to Section 10617 of the California Water Code) 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 Upper San Gabriel Valley Municipal Water District (Upper Water) is an "urban water supplier" and is required to prepare an Urban Water Management Plan (UWMP or Plan) in accordance with the Urban Water Management Planning Act (UWMP Act) which was enacted by the California Legislature in 1983. The UWMP Act requires every "urban water supplier" to prepare and adopt an UWMP, periodically review its UWMP at least once every five years, and make any amendments or changes which are indicated by the review. The primary objective of the UWMP Act is to direct urban water suppliers to evaluate their existing water conservation efforts and, to the extent practicable, review and implement alternative and supplemental water conservation measures. The UWMP Act requires water agencies to develop UWMPs to provide a framework for long-term water planning as well as information regarding long-term resource planning to ensure sufficient water supplies are available to meet existing and future demands. Urban water suppliers are required to report, describe, and evaluate water deliveries and uses, water supply sources, efficient water uses, demand management measures, and water shortage contingency planning. The UWMP Act is directed primarily at retail water purveyors where programs can be immediately affected upon the consumer.

The UWMP provides urban water suppliers with a reliable management action plan for long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. In compliance with the UWMP Act, Upper Water last updated its Plan in 2020. There have been revisions and some reorganization of the CWC sections since the Upper Water's last update. The current requirements for preparing the 2025 Plan are included in CWC Sections 10608 through 10657 and incorporate water supply reliability determinations resulting from prolonged drought, groundwater overdraft, regulatory revisions, and/or changing climatic conditions.

Pursuant to Section 10621(a) of the CWC, "*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.*" Each water supplier must update and submit its 2025 UWMP to the California Department of Water Resources (DWR) by July 1, 2026.

A lay description for each of these Chapters is presented below.

LAY DESCRIPTION – CHAPTER 1

URBAN WATER MANAGEMENT PLAN INTRODUCTION AND OVERVIEW

Chapter 1 (Urban Water Management Plan Introduction and Overview) of Upper Water'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. Upper Water is required to prepare an Urban Water Management Plan.
- Upper Water'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. Upper Water'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 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.
- Upper Water's coordination efforts with other planning agencies are discussed, including coordination efforts with the Metropolitan Water District of Southern California and the Southern California Association of Governments.
- Upper Water'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 Upper Water's prior, continued, and projected reduction on imported water supplies obtained (either directly or indirectly) from the Sacramento-San Joaquin Delta (Delta). Upper Water has reduced its reliance on the imported water supplies for fiscal year (FY) 2014-15, Fiscal Year 2019-2020, and Fiscal Year 2024-25. In addition, Upper Water is projected to continue reducing its reliance on the imported water supplies through FY 2049-50.
- The checklist developed by DWR and used by Upper Water 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 PLANS

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.

Upper Water'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 Upper Water is not required by DWR to use the tool.

1.3 RECOMMENDED UWMP ORGANIZATION

Upper Water'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.

Upper Water'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, Upper Water'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.

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

1.4 UWMP IN RELATION TO OTHER EFFORTS

Upper Water is a wholesale water agency and a member agency of the Metropolitan Water District of Southern California (Metropolitan). As a member agency, Upper Water has coordinated with Metropolitan for the preparation of Metropolitan's Integrated Resources Plan (IRP) and UWMP. In addition, Upper Water's 2025 Plan has been made available for use by its member agencies.

1.4.1 SPECIFIC CONSIDERATIONS

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).

Upper Water has reduced its reliance on the imported water supplies for FY 2014-15, FY 2019-20, and FY 2024-25. In addition, Upper Water is projected to continue reducing its reliance on the imported water supplies through FY 2049-50. Upper Water is involved in a regional program to deliver recycled water to the San Gabriel Valley to replenish the Main San Gabriel Basin which will contribute to regional self-reliance of water supplies. A further discussion which demonstrates Upper Water's measurable reduction in imported water reliance and improvement in regional self-reliance is provided in Appendix C.

1.4.1.2 PERMITTING FOR OCEAN DESALINATION PROJECTS

Upper Water 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 and partnering 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 UWMP 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.

(b) 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.*"

Upper Water's 2025 Plan has been prepared in order to meet eligibility requirements for grants and loans administered by the State and/or DWR.

1.7 TIPS FOR UWMP PREPARERS

Upper Water's 2025 Plan (which includes Upper Water's 2025 Water Shortage Contingency Plan (WSCP)) is considered an update to Upper Water's 2020 Plan.

However, the 2025 Plan and the WSCP are also considered stand-alone documents. As discussed in Section 1.3, Upper Water's 2025 Plan was prepared consistent with the recommended organization provided in DWR's Final 2025 UWMP Guidebook. Upper Water'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.

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.

2.0 URBAN WATER MANAGEMENT PLAN PREPARATION

LAY DESCRIPTION – CHAPTER 2

PLAN PREPARATION

Chapter 2 (Plan Preparation) of Upper Water's 2025 Plan discusses and provides the following:

- The basis for preparing an Urban Water Management Plan is provided. Upper Water is required to prepare the 2025 Plan because it is an "urban water supplier" (Upper Water indirectly serves more than 3,000 retail customers and it directly or indirectly supplies more than 3,000 acre-feet of water annually to its member agencies for municipal purposes).
- Upper Water's Plan has been prepared as an "individual" plan rather than a "regional" plan in an effort to provide information specific to Upper Water to best inform its member agencies.
- Information presented in Upper Water's 2025 Plan is provided on "Fiscal Year" basis which is from July 1 through June 30 of the following year.
- Water quantities presented in Upper Water's 2025 Plan are provided on an "acre-foot" basis.
- Upper Water's coordination and outreach efforts with Metropolitan, its member agencies, and the community are described.
- Upper Water's notification process to the cities and county within which Upper Water provides water supplies to is discussed.

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

Pursuant to California Water Code (CWC) requirements, Upper Water'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.

(f) "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.

Upper Water'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.

Upper Water is an "urban water supplier" pursuant to Section 10617 of the CWC and indirectly 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. Upper Water's 2025 Plan is an update to Upper Water's 2020 Plan.

2.1.1 SUPPLIERS WITH BOTH WHOLESALE AND RETAIL SALES

Upper Water is a wholesale water supplier (and not a retail water supplier). Upper Water's 2025 Plan was prepared based on the CWC requirements pertaining to wholesale water suppliers. Upper Water's water supply sources include: untreated and treated imported surface water purchased from Metropolitan and recycled water, as discussed in Chapter 6.

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.

As a wholesale water agency, Upper Water is not defined as a Public Water System (PWS) and is not required by DWR to provide PWS information.

2.2 INDIVIDUAL OR REGIONAL PLANS

Upper Water has developed its 2025 Plan reporting solely on its service area to address all requirements of the California Water Code. Upper Water's 2025 Plan was not developed as a Regional Plan. However, Upper Water's UWMP draft is available for use and reference by its member agencies.

Metropolitan coordinates with its member agencies regarding the development of their UWMP. Likewise, Metropolitan's 2025 UWMP draft is available for use and reference by its member agencies and urban water suppliers within those member agencies.

2.2.1 REGIONAL UWMP

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, Upper Water's 2025 Plan was developed as an "Individual UWMP" and not part of a Regional Plan. However, Upper Water's 2025 Plan is available for use and reference by its member agencies.

In addition, Metropolitan's 2025 Plan is available for use and reference by its member agencies and urban water suppliers within those member agencies.

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 Upper Water's 2025 Plan is reported on a fiscal year basis, unless noted otherwise, as shown in Table 2-3. A fiscal year begins on July 1 of every year.

2.3.2 UNITS OF MEASURE

As shown in Table 2-3, the data provided in Upper Water's 2025 Plan is reported in units of acre-feet, 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

Upper Water is a wholesale agency serving 24 member agencies in its service area. The following is a list of Upper Water's member agencies:

- Amarillo Mutual Water Company
- California American Water Company (Duarte System and San Marino)
- California Domestic Water Company
- City of Arcadia
- City of Azusa
- City of Covina
- City of El Monte
- City of Glendora
- City of Industry Public Works
- City of Monrovia
- City of South Pasadena
- City of Whittier
- Covina Valley Water Company
- Del Rio Mutual Water Company

- Golden State Water Company (San Gabriel District)
- Hemlock Mutual Water Company
- La Puente Valley County Water District
- San Gabriel County Water District
- San Gabriel Valley Water Company
- Sterling Mutual Water Company
- Suburban Water Systems
- Sunny Slope Water Company
- Valley County Water District
- Valley View Mutual Water Company

As indicated in Table 2-4, Upper Water has provided its 2025 Plan to its member agencies which includes water use projections in five-year increments for normal, single dry, and five consecutive year drought conditions over the next 20 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…

Upper Water is a wholesale water supplier that provides treated imported water to its member agencies and untreated imported water to replenish groundwater supplies of the

Main San Gabriel Basin (Main Basin). The Main San Gabriel Basin Watermaster (Watermaster) is a Court appointed agency which has the authority to manage Main Basin surface and groundwater supplies. Upper Water notified its member agencies (including Cities within its service area) and public agencies that share a common source of supply of the preparation of Upper Water's 2025 Urban Water Management Plan. As discussed in Section 10.2, Upper Water notified these agencies 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 letter 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 Upper Water provides water supplies that Upper Water was reviewing and considering amendments (updates) to the previous 2020 Plan, and as a result prepare the 2025 Plan. 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 2-2: PLAN TYPE IDENTIFICATION

Table 2-1 Plan Type Identification

Submittal Table 2-2: Plan Identification		
Select One	**Type of Plan**	**Name of Regional Alliance or RUWMP** (Drop Down List)
☑	**Individual UWMP**	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
☐	**Regional Urban Water Management Plan (RUWMP)**	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

2.5.2 SUBMITTAL TABLE 2-3: SUPPLIER INFORMATION

Table 2-2 Supplier Information

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☑	Supplier is a wholesale supplier
☐	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☐	UWMP Tables are in calendar years
☑	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
7/1	
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:	

2.5.3 SUBMITTAL TABLE 2-4: WATER SUPPLIER INFORMATION EXCHANGE

Table 2-3 Water Supplier Information Exchange

Submittal Table 2-4 Wholesale: Water Supplier Information Exchange Water Code Section 10631(h)	
☑	Check the box if the Supplier has informed more than 10 other water suppliers of water supplies available. **Completion of the table below is optional. If not completed, include a list of the water suppliers that were informed.**
10-3, 10-4	Provide page number for location of the list.
☐	Check the box if the Supplier has informed 10 or fewer other water suppliers of water supplies available. **Complete the table below.**
Water Supplier Name	
Add additional rows as needed	
NOTES:	

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).

3.0 SERVICE AREA DESCRIPTION

LAY DESCRIPTION – CHAPTER 3

SERVICE AREA DESCRIPTION

Chapter 3 (Service Area Description) of Upper Water's 2025 Plan discusses and provides the following:

- A description of Upper Water's service area is provided. Upper Water provides wholesale water service to its 24 member agencies. Upper Water's service area covers approximately 144 square miles in the San Gabriel Valley, overlying the Main San Gabriel Basin. Figure 1 shows Upper Water's service area boundaries.
- Upper Water's water service area encompasses an area of approximately 144 square miles. The location of Upper Water's service area is provided in Figure 1.
- A description regarding Upper Water'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 Upper Water's service area is summarized. The sources of the climate information are also discussed.
- The population within Upper Water's water service area is discussed and projected. The sources of the population information are also discussed. Upper Water provides wholesale water service to an area with a current population of 855,010. Upper Water is projected to have a population of 887,954 by FY 2049-50.
- A discussion of land use information used by Upper Water to develop the 2025 Plan is provided. Upper Water reviewed the current and projected land uses within its service area. Upper Water also reviewed data provided by the Southern California of Association Governments, the Department of Finance, and the United

States Census Bureau and prepared for counties, cities, and unincorporated areas within Southern California Association 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.

Upper Water is a wholesale water agency and was incorporated on January 7, 1960 under the Municipal Water District Act. The Municipal Water District Act provides for, "The people of any county or counties, or of any portions thereof, whether such portions include unincorporated territory only or incorporated territory of any city or cities, or both such incorporated and unincorporated territories…" to organize municipal water districts. With respect to water supply, the Municipal Water District Act allows such a district to "…acquire, control, distribute, store, spread, sink, treat, purify, reclaim, recapture, and salvage any water, including sewage and storm waters, for the beneficial use or users of the District, its inhabitants, or the owners of rights to water in the District." Upper Water is located within San Gabriel Valley in Los Angeles County and overlies the Main Basin. The boundaries of Upper Water are shown on Figure 1. Upper Water is governed by a five-member Board of Directors and is broken down into five divisions, which are shown on Figure 2. Upper Water employs a general manager and office staff and retains an

attorney and consulting engineer. As a wholesaler, Upper Water supplies supplemental imported water, from Metropolitan, and recycled water to its member agencies.

Metropolitan is comprised of 24 member agencies that receive imported water from the State Water Project and/or the Colorado River. Upper Water is a member agency of Metropolitan.

While Upper Water is a water wholesaler with no retail customers of its own, Upper Water's member agencies provide water to retail customers. Upper Water's member agencies include several urban water suppliers that are required to prepare Management Plans. As a wholesaler, Upper Water provides imported water service to member agencies through Metropolitan's distribution system and recycled water service through a local distribution system. Upper Water does not have its own imported water distribution system and relies on Metropolitan's distribution system for delivery of treated and untreated imported water to Upper Water's member agencies. The majority of the imported water delivered from Upper Water to its member agencies is used for groundwater replenishment and delivered through service connection USG-3. Imported water can also be delivered, as necessary, through service connections CENB-48 and USG - SGP, although the majority of untreated imported water is delivered through USG-3.

Upper Water supplies treated imported water from Metropolitan through the following service connections:

- USG-1: Golden State Water Company
- USG-2: City of South Pasadena
- USG-4: Suburban Water Systems
- USG-5: City of Alhambra*
- USG-6: City of Arcadia
- USG-7: City of Monrovia
- USG-8: Azusa Light and Water

- USG-9: Valley County Water District

*Note: The City of Alhambra is not an Upper Water member agency and not considered to be within Upper Water's service area. Upper Water delivers water to the City of Alhambra under the Cooperative Water Exchange Agreement, which addresses historical overproduction of groundwater in the western portion of the Main Basin.

Upper Water's service area is about 144 square miles and includes all or portions of the Cities of Arcadia, Azusa, Baldwin Park, Bradbury, Covina, Duarte, El Monte, Glendora, Industry, Irwindale, La Puente, Monrovia, Rosemead, San Gabriel, South El Monte, South Pasadena, Temple City, and West Covina. The service area of Upper Water is largely urbanized consisting of mainly residential, light industrial and commercial uses.

3.2 SERVICE AREA BOUNDARY MAPS

As discussed in Section 3.1, Upper Water's current service area covers approximately 144 square miles and overlies the Main San Gabriel Basin. A service area boundary map is provided in Figure 1.

Upper Water'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 evapotranspiration (ETo) in the vicinity of Upper Water's service area is summarized in the tabulation below. Historical climate information was obtained from the Western Regional Climate Center (WRCC) and from DWR's California Irrigation Management Information System (CIMIS).

Month	Average Temperature	Average Min. Temperature	Average Max. Temperature	Average Total Precipitation	ETo
	(F)	**(F)**	**(F)**	**(Inches)**	**(Inches)**
January	55.6	42.1	69.2	3.6	2.15
February	57.0	43.8	70.3	3.8	2.54
March	58.9	46.1	71.7	3.0	3.85
April	62.1	49.3	75.0	1.1	4.61
May	65.7	53.7	77.7	0.3	5.21
June	69.9	57.4	82.4	0.1	6.00
July	74.9	61.2	88.5	0.0	6.58
August	75.6	61.7	89.5	0.2	6.38
September	73.9	59.7	88.1	0.3	4.95
October	68.2	54.0	82.2	0.5	3.55
November	61.0	46.6	75.4	1.6	2.48
December	55.9	42.1	69.7	2.3	1.90

Annual	64.7	51.2	78.3	17.1	50.20

Historical average monthly precipitation and temperature information was obtained from the Western Regional Climate Center (http://www.wrcc.dri.edu/) and is based on data collected from Station 047785 (San Gabriel Fire Department) from 1939 through 2025. Historical monthly average ETo information was obtained from the California Irrigation Management Information Systems (http://wwwcimis.water.ca.gov) and is based on data collected from Station 159 (Monrovia).

Upper Water's service area in the San Gabriel Valley has a dry climate and summers can reach average monthly temperatures in the high 80s. The average monthly precipitation taken from Station 047785 at the San Gabriel Fire Department is approximately 17.1 inches. Although changes in climatic conditions will have an impact, 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.

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.

Upper Water provides water service to an area with a current population of about 855,010. Table 3-1 presents the current and projected population of the area encompassed by Upper Water from FY 2024-25 to FY 2049-50. Upper Water's service area is projected to have a population of approximately 887,954 by FY 2049-50. Projected populations in Upper Water's service area were based on projections obtained from Metropolitan. Metropolitan determined its growth projects based on Southern California Association of

Government's (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 2024 and San Diego Association of Government's (SANDAG) 2025 Regional Plan Series 15. The RTP/SCS 2024 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 US Census Bureau for counties, cities and unincorporated areas within Southern California.

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 Upper Water's water management planning. However, increased population will have an impact on water demand.

3.5 LAND USES WITHIN THE SERVICE AREA

Upper Water is a wholesale water agency which provides both treated and untreated imported water and recycled water to its retail member agencies. However, Upper Water does not provide water directly to retail customers. Upper Water obtains a five-year projection of both treated and imported water demands from its customers, which is updated annually. As discussed in Section 3.4, Upper Water also obtained data from the Southern California Association of Governments document "*Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 2024*". Projected populations in Upper Water'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 US Census Bureau for counties, cities and unincorporated areas within Southern California. The projected population was used to project future demand through the year 2050, As discussed in Section 2.4, Upper Water coordinated the preparation of the 2025 Plan with its member agencies.

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 Wholesale: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	855,010	867,835	882,604	886,994	889,824	887,954
NOTES:						

4.0 WATER USE CHARACTERIZATION

LAY DESCRIPTION – CHAPTER 4

WATER USE CHARACTERIZATION

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

- Upper Water provides water service to one water use sector: sales to other agencies, discussed in Section 4.2.1.
- Upper Water's total water demands (excluding recycled water) over the past 15 years have ranged from approximately 15,563 AF to 56,582 AF, with an average of about 35,000 AF. Upper Water currently measures its water use through metered data.
- Upper Water's current and projected water demands are provided in five-year increments over the next 25 years are provided (through FY 2049-50) as shown on Table 4-3.
- Upper Water's sources of water supply and how those sources may be impacted by climate change are discussed. The proactive actions Upper Water 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 uses within Upper Water'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 Table 4-2.

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.

(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.

Upper Water is a wholesale water provider which provides water to retail urban water suppliers but does not directly use water. Consequently, Upper Water cannot segregate sales by type of sectors. Upper Water has in its records total sales of treated imported water for direct use, total sales of untreated imported water for groundwater replenishment, and total sales of recycled water to its member agencies.

Upper Water's current and projected water demands from its member agencies are provided in five-year increments over the next 25 years (through FY 2049-50) in Tables 4-1 and 4-2. Upper Water's total water demands were projected based on current water use factors incorporating recent water demands from its member agencies and the total population projections based on land use trends within Upper Water's service area. Upper Water's total water demand projections are also based on Metropolitan's estimated demands for Upper Water's service area. The development of Metropolitan's demand forecast is discussed in detail in Section 2.2. of Metropolitan's 2025 UWMP.

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, Upper Water's service area includes the following water demand sectors listed in the California Water Code:

- Sales to other agencies (treated imported water for direct use, untreated imported water for groundwater replenishment)

Within Upper Water's service area, there are eight treated imported water service connections with eight of its member agencies for direct use. The member agencies with treated imported water service connections for direct use rely on both the water supply from Upper Water and the water produced from the Main Basin and/or Raymond Basin as their total supply for direct use. The total treated imported water sale for direct use for FY 2024-25 was 3,374 acre-feet.

As discussed in Section 6.2.2, Upper Water is one of the Responsible Agencies from which the Watermaster purchases Supplemental Water, which is used for groundwater replenishment purposes. Upper Water delivers untreated imported water for groundwater replenishment primarily through its service connection, USG-3, but also through service connections CEN B-48 and USG-SGP. The untreated imported water sale as replenishment water for FY 2024-25 was 29,466 acre-feet.

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

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

PAST 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…

Chapter 6 provides a discussion of the sources of water supply Upper Water uses to meet its water demands. Section 6.1 provides a tabulation of the Upper Water's historical annual water demands for each water supply source. Over the past 15 years, Upper Water's annual imported water demands have ranged from 15,563 AF to 56,582 AF, with an average of about 35,000 AF. In addition, Upper Water recently experienced a five consecutive year drought within its service area from FY 2011-12 to FY 2015-16. Upper Water also reviewed its historical water demands from its member agencies to determine the projected water demands and water supply reliability (discussed in Chapter 7). Upper Water is able to provide sufficient water supplies to meet the projected water demands of its member agencies, including during long-term drought periods.

4.2.3 CURRENT WATER USE

Upper Water currently measures its water use through meter data and billing records. The water use for Upper Water's individual water use sectors during FY 2024-25 are provided in Table 4-1. Recycled water uses are also included in Table 4-1.

DWR has created an optional "Planning Tool Worksheet" for water suppliers to review and assess monthly water use trends. However, DWR has deemed the tool as optional and Upper Water is not required by DWR to use the tool. However, Section 6.1 provides a tabulation of Upper Water's historical annual water uses for each water supply source. During the past 15 years, Upper Water experienced a five consecutive year drought within its service area from FY 2011-12 to FY 2015-16. Upper Water 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, Upper Water 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 Upper Water's water supply sources is provided in Chapter 7.

4.2.4 PROJECTED WATER USE

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…

4.2.4.1 GENERAL GUIDANCE ON PROJECTIONS

Upper Water's projected water demands are provided in five-year increments over the next 25 years (through FY 2049-50) in Table 4-2. Upper Water'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 Upper Water's water use sectors are provided in Table 4-2.

As a wholesaler, Upper Water's water demand projections are not required by DWR to incorporate water savings, or "passive savings", which are the result of implementation of new plumbing codes along with consumer awareness of the need to conserve water. In addition, Upper Water is not required by DWR to project water uses by sectors and not required to include lower-income household water use.

4.2.4.2 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 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…

(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 precipitation[1]". 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.

Section 6.2 of this Plan describes Upper Water'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 Upper Water's water supply sources. Chapter 8 provides a detailed

[1] www.merriam-webster.com

discussion of Upper Water'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 Upper Water's sources of supply, how those sources may be impacted by climate change, and the proactive actions Upper Water and other local/regional water managers may take to address the potential climate change impacts on water supplies.

Upper Water receives treated imported water as discussed in Section 6.2.1 and relies on the Watermaster to manage the groundwater supplies of the Main Basin through the replenishment of untreated imported water. Consequently, Upper Water directly and/or indirectly relies on the Metropolitan for those imported water supplies. Metropolitan has prepared a Regional 2025 Urban Water Management Plan which includes a discussion (Chapter 2 in Metropolitan 's 2025 UWMP) of the reliability of its water supplies and the impacts of climate change and is incorporated by reference in this Plan. The following is a brief summary of Metropolitan's efforts:

Resource Planning

- Metropolitan has established the Robust Decision Making (RDM) approach to identify vulnerabilities to its water supplies. Climate change information was applied to Metropolitan 's simulated water supply scenarios to demonstrate the vulnerability of water supplies to climate change.

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

Knowledge Sharing and Research Support

- Metropolitan 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, Metropolitan shares agency actions on climate change and adaptation. WUCA has also released numerous research papers on climate change.

Quantification of Current Research

- Metropolitan incorporates current climate change science into its planning efforts and attempts to explicitly reflect uncertainty.

Implementation of Programs and Policies

- Metropolitan'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.

Although Upper Water does not produce groundwater, its member agencies rely on groundwater produced from the Main San Gabriel Basin (Main Basin) to meet their demands. The Main Basin (which is included as a subbasin of the San Gabriel Valley Basin, Basin Number 4-13 pursuant to DWR Bulletin 118) has been identified by DWR as a very low-priority groundwater basin partially due to the fact it is adjudicated. In that regard, the Main Basin is actively managed by the Main Basin Watermaster, and those management activities are described in detail in Section 6.2.2.

Recognizing the potential impacts of climate change on the Main Basin groundwater supplies (decreased local runoff and replenishment, along with increased groundwater

production, may lead to decreased groundwater levels), Upper Water 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 Main 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 (updated 2024).

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 Upper Water'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 Upper Water'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 Main Basin. An electronic boundary of the Main 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 Main Basin is projected to be 21.7 inches through 2099, compared to historical average of 20.1 inches (from 1961 through 1990). In addition, the average maximum temperature is projected to be 84.7 degrees Fahrenheit compared to a historical average of 78.3 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 Main 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, the Watermaster has taken (and may reinstate as needed) the following proactive actions to anticipate and circumvent the potential impacts of climate change.

Judgment Amendments

Since FY 2011-12 the Watermaster has become more pro-active by implementing provisions of the Judgment, and developing and instituting new studies, programs and plans to address the drought conditions as they progressively worsened. As a direct result of a multiple-year drought (from 2006 to 2009), the 2012 Judgment Amendments provided Watermaster with increased management flexibility and adaptability; and provided more discretion in making Basin management decisions. A key component of the Judgment Amendments was the new Water Resource Development Assessment

(RDA) to be levied on all production. The RDA was designed to help address the potential future unavailability of imported replenishment water supplies, by allowing the Watermaster to collect RDA funds and purchase replenishment water for storage in the Basin to offset a future Replacement Water obligation (discussed in Section 6.2.2).

Reduce Operating Safe Yield

The adjudicated water rights in the Main Basin are approximately 200,000 AF. Through adoption of an annual Operating Safe Yield the Main Basin Watermaster has the ability to reduce the amount of water rights available to Producers before they must pay an assessment for expensive imported water. The Operating Safe Yield has previously been set at 150,000 AF which has been about 75 percent of the adjudicated total. This action provides producers with an economic incentive to reduce demands.

Cyclic Storage

Cyclic Storage allows a producer who anticipates a Replacement Water obligation to also pre-purchase imported water and store it in the Main Basin to meet its future Replacement Water obligation. The use of Cyclic Storage helps increase groundwater levels; however, wet Replacement Water deliveries are deferred. Consequently, Cyclic Storage water will be applied to Replacement Water obligations for the short-term (one to three years), significantly reducing actual deliveries of Replacement Water. Therefore, with significant amounts of water stored in Cyclic Storage, setting “lower” Operating Safe Yields will have almost no short-term impacts on Basin water levels/supplies.

Metropolitan Letter Agreement

Since 2017, Watermaster, Upper Water, and Metropolitan entered into a series of letter agreements to pre-deliver untreated imported water in support of Basin management

programs (Letter Agreement). Through these agreements, Metropolitan has delivered a cumulative total of 405,517.5 acre-feet of imported water. While deliveries have varied depending on hydrological conditions and local stormwater capture, these agreements have provided a critical means of supplementing the Basin's supplies over time. This program allows Upper Water to deliver large amounts of water during wet periods and use the stored water during dry periods when water supplies are limited.

During fiscal year 2023–24, Watermaster and Upper Water entered into a fourth agreement with Metropolitan to pre-deliver an additional 87,000 acre-feet of untreated imported water during calendar year 2024. During fiscal year 2024–25, Watermaster and Upper Water entered into a fifth agreement with Metropolitan to pre-deliver an additional 86,000 acre-feet of untreated imported water during calendar year 2025.

Conservation

Watermaster passed Resolution No. 03-14-260 declaring "drought conditions" and encouraged all Basin water producers to adopt reduced pumping and water conservation activities at the retail level. Due to conservation efforts in the Main Basin, production decreased from 242,900 AF in FY 2012-13 to 168,400 AF in FY 2022-23, a total of 74,500 AF. Groundwater production was 189,300 AF in FY 2024-25. With less water being pumped from the Main Basin, this has helped maintain groundwater levels in the Main Basin.

Recycled Water for Replenishment

The Main Basin Watermaster has declared its support for a new recycled water supply project for Main Basin replenishment. When completed, the project could supply up to 100 percent of the overall imported replenishment water requirements.

Basinwide Low Water Vulnerability Assessment

During FY 2013-14, the Main Basin Watermaster initiated an evaluation of the potential impacts to groundwater production wells and local potable water supplies. The Watermaster also updated the basinwide information on water purveyor inter-connections in the event water supply from groundwater wells are reduced.

In-Lieu Program

During FY 2014-15, the Main Basin Watermaster re-instated the In-Lieu Program, where Watermaster funded a Producer's cost difference to take direct delivery of Metropolitan imported water "in-lieu" of pumping from its groundwater wells. The In-Lieu Program provided imported water to the Basin, and preserved groundwater supply in the Basin.

Stormwater Augmentation Program

During FY 2015-16, the Main Basin Watermaster evaluated other ways to help manage the Main Basin water supplies. While Southern California remained in extreme drought, northern California received above-average precipitation. As a result, replenishment water was made available. The Watermaster determined that during the previous five consecutive year drought from FY 2011-12 through 2015-16, nearly 400,000 acre-feet had been pumped from the Basin and not replaced by local rainfall and local runoff replenishment.

The Water Resource Development Assessment for Stormwater Augmentation Program was developed by the Main Basin Watermaster to help manage Main Basin water supplies under the perceived "worst case" hydrologic conditions, which was assumed to be two additional consecutive five-year droughts, using the same hydrologic conditions as the recent FY 2011-12 through 2015-16 severe drought. Based upon ten (10)

additional consecutive years of drought, the new Program is intended to purchase imported replenishment water (when available), for stormwater augmentation, to maintain the Baldwin Park Key Well (Key Well) elevation above 180 feet by the end of the tenth year. This Key Well elevation essentially ensures continued Main Basin water supply to the Main Basin Producers under a worst case, 15-year sustained drought. The RDA II Program has an assessment of $175 per AF on all FY 2024-25 production and is planned to be $175 per AF on all FY 2025-26 production, with a potential to increase in the next three to five years. Main Basin Watermaster will use the funds to purchase untreated imported water to replenish the Basin for the "general benefit" of all Producers within the Main Basin. The untreated imported water will supplement local stormwater replenishment, enhance overall Main Basin conditions, and have "no right of recovery" using a water right, by any Main Basin producer.

Funding for the Program is based on the current year's production. For example, assessments on FY 2024-25 production were levied in August 2025 and received by Watermaster by September 20, 2025. Main Basin Watermaster has entered into a Letter Agreement with Upper Water, Metropolitan and Three Valleys District where Watermaster can purchase pre-delivered water over 10 years. This pre-delivered Metropolitan water is purchased out of Metropolitan's Cyclic Storage account, and will be paid for by the Main Basin Watermaster, primarily using funds from the Resource Development Assessments from Upper Water and Three Valleys District producers.

4.3 DISTRIBUTION SYSTEM WATER LOSS

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…

(J) Distribution system water loss.

CWC 10631.

(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.

As a wholesale supplier, Upper Water is not required by DWR to perform water loss audits and report distribution system water loss.

Each treated imported water connection has only one meter reported by Metropolitan to Upper Water. Therefore, from an accounting standpoint for Upper Water, there are no unaccounted-for system losses. However, Metropolitan and Upper Water's member agencies may experience unaccounted-for water system losses which would be discussed in their own individual UWMPs. Likewise, USG-3 has only one reading reported by Metropolitan to Upper Water. Therefore, from an accounting standpoint for Upper Water, there are no unaccounted-for water system losses.

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

Optional Submittal Table 4-1 Wholesale: Total Uses for Potable and Non-PotableWater — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Sales to other agencies	USG-3, CenB-48, Canyon Basin	Non-Potable	29,466
Sales to other agencies	USG-1, USG-2, USG-4, USG-5, USG-6, USG-7, USG-8, USG-9	Potable	3,374
Sales to other agencies	Recycled Water Direct Use	Non-Potable	2,148
		Subtotal Potable	3,374
		Subtotal Non-Potable	31,614
		Total	34,988
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:			

10631(d) (1) for an urban retail water supplier, quantify to the extent records are available, past and current water use...

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

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

Optional Submittal Table 4-2 Wholesale: Total Uses for Potable and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type		**Projected Water Use** (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool.	Additional Description (as needed)	**Potable or Non-Potable** (OPTIONAL) Drop down list	**2030 (AF)**	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 opt (AF)**
Add additional rows as needed							
Sales to other agencies	Untreated Imported for Replenishment	Non-Potable	40,000	22,500	5,000	5,000	5,000
Sales to other agencies	Treated Imported	Potable	5,000	5,000	5,000	5,000	5,000
Sales to other agencies	Pure Water for Replenishment	Non-Potable	0	17,500	35,000	35,000	35,000
Sales to other agencies	Recycled Water Direct Use	Non-Potable	2,157	2,157	2,157	2,157	2,157
		Subtotal Potable	5,000	5,000	5,000	5,000	5,000
		Subtotal Non-Potable	42,157	42,157	42,157	42,157	42,157
		Total	47,157	47,157	47,157	47,157	47,157
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:							

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

LAY DESCRIPTION – CHAPTER 5

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

As a wholesale water agency, Upper Water is not required to calculate baselines, achieve SB X&-7 water use reduction targets or compliance GPCDs. Consequently, most of the requirements for this Chapter are not applicable to Upper Water.

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

- The Water Conservation Act of 2009 (or SB X7-7) required the State of California to achieve a 20 percent reduction in urban water use by the year 2020.
- As a wholesale water agency, Upper Water is not required to calculate a 2020 Water Use Target or show compliance with the 2020 Water Use Target. However, an assessment regarding Upper Water's present and proposed future measures, programs, and policies to assist Upper Water's member agencies achieve their individual 2020 Water Use Targets is provided (in Chapter 9).

5.1 REPORTING REQUIREMENTS FOR WHOLESALE SUPPLIERS

CWC 10608.12.

(l) "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.

As a wholesale water agency, Upper Water is not required to "establish and meet baseline and targets for daily per capita water use", nor is Upper Water required to submit the SB X7-7 Verification Form (Department of Water Resources' Final "Guidebook for Urban Water Suppliers"). Nevertheless, according to the DWR's UWMP guidebook, wholesale agencies, such as Upper Water, are required to "provide an assessment of their present and proposed future measures, programs, and policies that will help the retails water suppliers in their wholesale service area achieve their SB X7-7 water use reduction targets".

Upper Water participates in wholesale agency programs, which provide financial incentives for water conservation, technical support through workshops, and available staff for conservation projects. Upper Water provides financial incentives for water conservation through its many retrofit and rebate programs that replace high water-use fixtures with efficient water-use fixtures. Some of the successful measures include water conservation programs funded by Metropolitan (via pass through funding by Upper Water) and supported by Upper Water and made available to its member agencies. In addition, Upper Water has supported and/or adopted various policies to encourage demand reduction (conservation) in its service area. Regional programs are also in place that local agencies can participate in to encourage water conservation. Information regarding Upper Water's wholesale agency programs are discussed under Section 9.

Upper Water also has a robust education and outreach program intended to promote water conservation and public education on water issues. Upper Water has also assisted its member agencies with outreach and public relations. These programs and messaging

campaigns have been very successful in educating the public about the importance of water conservation. These conservation programs have changed the public's behavior and attitudes about water conservation as reflected in significantly reduced water use within Upper Water's service area.

5.2 REPORTING REQUIREMENTS FOR RETAIL SUPPLIERS

As a wholesale agency, Upper Water is not required by DWR to complete Section 5.2 and subsections.

5.3 SUBMITTAL TABLES

As a wholesale agency, Upper Water is not required by DWR to complete Table 5-1.

6.0 NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

LAY DESCRIPTION – CHAPTER 6

NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

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

- Upper Water's water supply sources include: untreated and treated imported surface water purchased from Metropolitan and recycled water. Upper Water's member agencies rely on groundwater from the Main Basin.
- Upper Water's main source of water supply is imported water from Metropolitan.
- A tabulation of Upper Water's historical water supplies is provided in Section 6.1.
- A discussion regarding Upper Water's imported water supplies from Metropolitan is provided.
- A discussion regarding groundwater supplies from the Main Basin is provided. Information regarding basin location, adjudication, management, water levels, water quality, water rights, and historical production is provided.
- Upper Water's proposed future projects to maximize its water supply resources are discussed.
- Upper Water's "energy intensity" is discussed. Upper Water does not have its own imported water distribution system and relies on Metropolitan's distribution system for delivery of treated and untreated imported water to Upper Water's member agencies. Consequently, Upper Water has no additional or direct energy use.

In this Chapter, Upper Water will identify and describe each of its sources of water supply. In addition, the following will be described:

- Characterization and management of each water supply source;
- 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 Upper Water 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 Upper Water'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 FY 2049-50.

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.

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(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).

Upper Water's water supply sources include treated imported water (from Metropolitan), untreated imported water (from Metropolitan), and recycled water (from the Sanitation Districts of Los Angeles County). Upper Water's member agencies also rely on groundwater to meet their demands. The reliability of future supplies of imported water historically has been impacted by the sources of supply available to Metropolitan. The reliability of these water supplies is discussed further in Section 7.1.2. A tabulation of Upper Water's historical water supplies is provided below.

Fiscal Year	Treated Imported Water (AF)	Untreated Imported Water (AF)	**Recycled Water** (AF)	Total Imported Water Supplies (AF)
2010-11	3,429	35,641	1,918	40,988
2011-12	3,975	10,493	2,487	16,955
2012-13	3,529	18,713	3,680	25,922
2013-14	3,490	26,549	3,933	33,972
2014-15	9,069	32,023	3,279	44,371
2015-16	2,495	21,453	3,219	27,167
2016-17	3,197	22,241	2,951	28,389
2017-18	4,204	33,746	2,999	40,949
2018-19	5,420	36,523	2,592	44,535
2019-20	6,026	40,455	2,543	49,024
2020-21	5,146	51,934	2,913	59,993
2021-22	9,435	32,675	2,549	44,659
2022-23	3,734	47,960	2,019	53,713
2023-24	2,783	58,880	1,870	63,533
2024-25	3,374	34,004	1,432	38,810

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:

- Upper Water's existing and planned sources of water supply are identified;
- Each source of supply is quantified in five-year increments through FY 2049-50;
- 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.

Upper Water historically has relied on untreated and treated imported surface water purchased from Metropolitan and recycled water to meet its demands. The following descriptions summarize Upper Water's sources of supply (detailed descriptions are provided in Section 6.2).

6.1.1.1 PURCHASED TREATED IMPORTED WATER

Upper Water relies upon Metropolitan for its current and future treated imported water supplies. Metropolitan supplies treated imported water to Upper Water, which in turn supplies that imported water to its member agencies. Treated imported water is delivered by Upper Water to its member agencies for direct use from Upper Water service connections on the Metropolitan distribution system. Section 6.2.1 provides a detailed discussion of the existing and planned supply of the untreated imported water, including a description of the management and reliability of those untreated imported water supplies. Table 6-8 summarizes the actual untreated imported water supply for FY 2024-25. In addition, Table 6-9 summarizes the projected water supply, in five-year increments, through FY 2049-50 under varying water supply conditions.

6.1.1.2 PURCHASED UNTREATED IMPORTED WATER

Untreated imported water is delivered to the Main Basin to satisfy its Replacement Water obligations required under the Main Basin Judgment (see Section 6.2.2). Section 6.2.1 provides a detailed discussion of the existing and planned supply of the untreated imported water, including a description of the management and reliability of those untreated imported water supplies. Table 6-8 summarizes the actual untreated imported water supply for FY 2024-25. In addition, Table 6-9 summarizes the projected water

supply, in five-year increments, through FY 2049-50 under varying water supply conditions.

6.1.1.3 RECYCLED WATER

Upper Water works with local water agencies to use recycled water for direct use, which is obtained from the Sanitation Districts of Los Angeles County (LACSD). Direct use of recycled water reduces groundwater production, and consequently, the need for an equivalent amount of imported water in many cases. Section 6.2.5 provides a detailed discussion of the recycled water supply. Table 6-5 summarizes the actual recycled water supply for FY 2024-25. In addition, Table 6-9 summarizes the projected water supply, in five-year increments, through FY 2049-50 under varying water supply conditions.

6.1.2 SPECIAL CONSIDERATIONS

Upper Water 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 4.4 of this Plan provides a discussion regarding climate change effects on Upper Water's various sources of supply.

6.1.2.2 REGULATORY CONDITIONS AND PROJECT DEVELOPMENT

Upper Water 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. In addition, Section 6.2.5 discusses 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 Upper Water.

6.1.2.4 WHOLESALE AND RETAIL SUPPLIERS COORDINATION

Upper Water is a wholesale supplier and has provided its 2025 Plan to all its member agencies who are retail suppliers as discussed in Section 2.4.1 (a list of member agencies is also discussed in Section 2.4.1). Upper Water's 2025 Plan includes the quantification and characterization of normal year, single dry year, five consecutive dry years, and five-year interval projections.

6.2 WATER SUPPLY CHARACTERIZATION

The sections below provided detailed descriptions of Upper Water's supply sources, in addition to groundwater which is a significant supply source for Upper Water's member agencies.

6.2.1 PURCHASED OR IMPORTED WATER

Metropolitan discusses the current available sources of water supply in Section 2.3 of its 2025 UWMP, which is incorporated by reference. Metropolitan's Appendix 2 provides tables from its draft 2025 UWMP summarizing the historical sources of water supply available to Metropolitan, its supply capability and projected demands for an average

year, single dry year, and five consecutive year drought period years, and its projections for Upper Water. As shown in Metropolitan's Appendix 11, Metropolitan has sufficient water supplies to meet all of its member agencies projected supplemental demand for the next twenty years, even during five consecutive year drought periods. Metropolitan's greatest water demands, which occur during a five consecutive year drought period, are anticipated to be approximately 1,503,000 AFY, in 2030, to 1,581,000 AFY, in 2050.

Upper Water's current and projected volumes of purchased water are provided in Tables 6-8 and 6-9 (see Section 6.9). Upper Water's imported water supply sources, supplied by Metropolitan, are discussed below. The reliability of these imported water supplies is discussed further in Section 7.1.2.

6.2.1.1 COLORADO RIVER

Metropolitan owns and operates the Colorado River Aqueduct which conveys water from Lake Havasu on the Colorado River to water transmission pipelines and to Lake Skinner and Lake Matthews for storage. Metropolitan's Colorado River water right historically included a fourth and fifth priority under the 1931 Seven Party Agreement relating to California's share in the Colorado River water supply. Metropolitan is currently allotted an amount of 550,000 acre-feet under the fourth priority right and an amount of 662,000 AFY under the fifth priority right but may receive additional supplies depending on water supply conditions for any given year. Metropolitan can receive water under the fifth priority right when the United States Secretary of the Interior determines that there is a surplus of water or if Arizona or Nevada does not use all of their allocated water. Metropolitan is allowed to store water in Lake Mead, which allows stored supplies to be used as additional water supply to ensure that Metropolitan can deliver up to the Colorado River Aqueduct's capacity of 1,250,000 acre-feet annually.

6.2.1.2 STATE WATER PROJECT

Metropolitan contracts with the State of California, through the State Water Project, for the delivery of northern California water through the California Aqueduct. The State Water Project is a statewide water conveyance system that captures, stores and conveys water to 29 water agencies. The State Water Project's original total contractual commitment called for a capacity of 4.2 million acre-feet per year. Metropolitan has a maximum annual entitlement of 2,011,500 acre-feet. In order for the SWP to increases deliveries to the maximum amount of contractual commitments to water, the SWP must expand its water conveyance facilities to divert greater flows from north of the San Francisco Bay -Sacramento River Delta area (Bay-Delta) area into the California Aqueduct.

6.2.1.3 WATER SUPPLY ALLOCATION PLAN (WSAP)

During calendar year 2007, critically dry conditions impacted Metropolitan's main 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, Metropolitan adopted a Water Supply Allocation Plan (WSAP) in February 2008 to allocate available water supplies to its member agencies. Metropolitan revised the WSAP in December 2014. The WSAP establishes ten different shortage levels and a corresponding Allocation to each member agency (discussed further in Chapter 8.1). Based on the shortage level established by Metropolitan, the WSAP provides a reduced Allocation to a member agency for its Municipal and Industrial (M&I) retail demand and replenishment demand. The WSAP 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 Metropolitan, less an Allocation reduction factor, is the member agency's "Water Supply Allocation". When a member agency reduces its local demand through conservation or other means, the Allocation will increase. Because the demand has been eliminated, the Allocation can be used to purchase Full Service untreated water for replenishment deliveries.

Metropolitan did not declare any WSAP Allocations for FYs 2011-12, 2012-13, 2013-14 and 2014-15. However, due to the fourth consecutive year of below average rainfall and critically dry conditions, Metropolitan declared a WSAP Allocation Level 3 for FY 2015-16, which represents a regional reduction of 15 percent. Metropolitan rescinded the WSAP for FY 2016-17 and has not reinstated the WSAP since that time.

In response to a very low SWP allocation in 2022, MWD Board of Directors adopted a resolution on April 26, 2022, that, in part, adopted the framework of an Emergency Water Conservation Program (EWCP). The Program allows affected Member Agencies to achieve compliance by meeting an agency-specific volumetric delivery of SWP water. Upper Water's total SWP volumetric limit was about 14,700 acre-feet. MWD has been working on near- and long-term projects and programs to help alleviate impacts on MWD member agencies from drought impacts on the SWP system. Since MWD had sufficient storage and supplies on the Colorado River, an allocation under WSAP was not necessary on the entire MWD service area. Upper Water is one of these SWP dependent areas because untreated imported water delivery as Supplemental Water to the Main Basin can only be SWP water (Colorado River water can be delivered but as emergency only and requires approval from the Watermaster Board). Upper Water's SWP restriction was about 14,700 acre-feet. MWD has been proactively improving water supply storage and preparing for future droughts to prevent another SWP restriction. The WSAP is discussed in Chapter 1 of Metropolitan's 2025 UWMP.

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.

Upper Water's legal boundaries are within the San Gabriel Valley, as noted in Chapter 2, and overlie the Main Basin. Upper Water has never produced groundwater from the Main Basin and currently does not have facilities to do so. However, Upper Water's member agencies produce water from the Main Basin. The following provides a description of the sources of supply available to retail groundwater producers within Upper Water and the multi-layer management structure that is in place to ensure long-term adequacy of the local water supply. The Main Basin has been adjudicated and management of the local

water resources within the Main Basin is based on its adjudication. Upper Water is one of the Responsible Agencies from which Watermaster purchases imported water to be used for groundwater replenishment. DWR Bulletin 118 does not identify the Main Basin as being in overdraft.

6.2.2.1 BASIN DESCRIPTION

The Main San Gabriel Basin is located within the San Gabriel Valley, which is located in southeastern Los Angeles County and is bounded on the north by the San Gabriel Mountains; on the west by the San Rafael and Merced Hills, on the south by the Puente Hills and the San Jose Hills, and on the east by a low divide between the San Gabriel River system and the Upper Santa Ana River system, as shown on Figure 3.

The San Gabriel River and its distributary, the Rio Hondo, drain an area of about 490 square miles upstream of Whittier Narrows. Whittier Narrows is a low gap between the Merced and Puente Hills, just northwest of the City of Whittier, through which the San Gabriel River and the Rio Hondo flow to the coastal plain of Los Angeles County. Whittier Narrows is a natural topographic divide and a subsurface restriction to the movement of groundwater between the Main Basin and the Coastal Plain. The approximately 490 square miles of drainage area upstream of Whittier Narrows consists of about 167 square miles of valley lands and about 323 square miles of mountains and foothills.

The Main Basin includes essentially the entire valley floor of the San Gabriel Valley with the exception of the Raymond Basin and Puente Basin. The boundaries of the Main Basin are the Raymond Basin on the northwest, the base of the San Gabriel Mountains on the north, the groundwater divide between San Dimas and La Verne and the lower boundary of the Puente Basin on the east, and the common boundaries between Upper Water and Central District through Whittier Narrows on the southwest. The common water supply of the Main Basin does not include the Raymond Basin, the area northerly

of Raymond Hill Fault, which was adjudicated in the Pasadena v. Alhambra case (Superior Court of the County of Los Angeles, 1944). The Puente Basin, although tributary to the Main Basin, is not included in the Main Basin administered by the Main Basin Watermaster.

The Main Basin (administered by the Main Basin Watermaster) is a large groundwater basin replenished by stream runoff from the adjacent mountains and hills, by rainfall directly on the surface of the valley floor, subsurface inflow from Raymond Basin and Puente Basin, and by return flow from water applied for overlying uses. Additionally, the Main Basin is replenished with imported water. The Main Basin serves as a natural storage reservoir, transmission system and filtering medium for wells constructed therein.

There are three municipal wholesale water districts overlying and/or partially overlying the Main Basin. The three districts are Upper Water, San Gabriel Valley Municipal Water District (SGVMWD), and Three Valleys Municipal Water District (TVMWD).

Urbanization of the San Gabriel Valley began in the early part of the twentieth century, but until the 1940s, agricultural land use occupied more area than residential and commercial land use. After World War II, agricultural areas reduced rapidly and tend to be located in the easterly portion of the Main Basin and along power transmission rights of way adjacent to the San Gabriel River. Agricultural plots are discontinuous and relatively small. There are several major industrial areas adjacent to the San Gabriel River and within other portions of the valley. The greatest area of land use in the valley is for residential and commercial purposes. DWR Bulletin 118 does not identify the Main Basin as being in overdraft.

Main Basin - Geology

The Main Basin consists of a roughly bowl-shaped depression of bedrock, filled over millions of years with alluvial deposits. This bowl-shaped depression is relatively deep;

the elevation at the base of the groundwater reservoir declines from about 800 feet above mean sea level (MSL) in the vicinity of San Dimas, at the northeast corner of the Main Basin, to about 2,200 feet below MSL in the vicinity of South El Monte (DWR, 1966, Plate II).

Most of the alluvium deposited within this depression is debris from the San Gabriel Mountains, washed and blown down from the side of the mountains over time. This process has also resulted in the materials of the Main Basin varying in size from relatively coarse gravel nearer the mountains to fine and medium-grained sand containing silt and clay as the distance from the mountains increases. The principal water-bearing formations of the Main Basin are unconsolidated and semi-consolidated sediments, which vary in size from coarse gravel to fine-grained sands. The interstices between these alluvial particles throughout the Main Basin fill with water and transmit water readily to wells. The thickness of the water-bearing materials in the Main Basin ranges from 200 to 300 feet in the northeastern portion of the Main Basin near the mountains (DPW, 1934, page 141) to nearly 4,000 feet in the South El Monte area (DWR, 1966, page 31).

The soils overlying the Main Basin average about six feet in depth. Soil depths are generally greater at the perimeter of the valley and decrease toward the center along the San Gabriel River. These soils are residual, formed in place through chemical, mechanical and plant weathering processes. The infiltration rates of these soils are greater along the natural channels and their adjacent flood plains. Lower infiltration rates are found in the perimeter areas of the valley. Since the valley is mostly urbanized, a significant portion of the area has been paved and many miles of stream channel have been lined for flood control purposes, thus decreasing infiltration of water through streambeds. Detailed basin geology is discussed in the report entitled “Planned Utilization of Ground Water Basins, San Gabriel Valley, Appendix A: Geo-hydrology” (DWR, 1966).

Main Basin - Hydrology

The total fresh water storage capacity of the Main Basin is estimated to be about 9.5 million acre-feet. Of that, about 1,100,000 acre-feet have been used historically in Main Basin operations. The change in groundwater elevation at the Baldwin Park Key Well[2] Key Well (Key Well) is representative of changes in groundwater in the Main Basin. One foot of elevation change at the Key Well is roughly the equivalent of about 8,000 acre-feet of water storage. The historical high groundwater elevation was recorded at over 329.1 feet in April 1916, at which time Main Basin storage was estimated to be about 8,700,000 acre-feet. The historical low was recorded in November 2018 at 169.4 feet, at which time Main Basin storage was estimated to be about 7,400,000 acre-feet. The Key Well hydrograph illustrates the cyclic nature of basin recharge and depletion. The hydrograph also illustrates the dramatic recharge capability of the Main Basin during wet periods.

Generally, water movement in the Main Basin is from the San Gabriel Mountains on the north to Whittier Narrows to the southwest. Groundwater movement in the northern and northeastern regions of the Main Basin is affected by faulting. For example, the Raymond Fault located in the northwesterly portion of the Main Basin separates the Raymond Basin from the Main Basin.

The Main Basin is an unconfined aquifer. Although clay deposits appear mixed with the soils in several locations in the Main Basin and there are various clay lenses throughout the Main Basin, they do not coalesce to form a single impermeable barrier for the movement of subsurface water. The Main Basin therefore operates as a single, unconfined aquifer. As previously mentioned, a thorough discussion of basin hydrogeology is contained in the report “Planned Utilization of Ground Water Basins, San Gabriel Valley, Appendix A: Geo-hydrology” (DWR, 1966).

[2] The Baldwin Key Well is a water-level monitoring well located in the City of Baldwin Park used to determine when imported water may or may not be spread in the Basin.

Within the Main Basin there are a number of identified sub-basins. These include the Upper San Gabriel Canyon Basin, Lower San Gabriel Canyon Basin, Glendora Basin, Foothill Basin, Way Hill Basin and San Dimas Basin. In addition, the Puente Basin is tributary to the Main Basin from the southeast, between the San Jose and Puente Hills, but is not included in the Main Basin adjudication.

Groundwater Replenishment

The major sources of recharge to the Main Basin are direct penetration of rainfall on the valley floor, percolation of runoff from the mountains, percolation of imported water and return flow from applied water. Rainfall occurs predominantly in the winter months and is more intense at higher elevations and closer to the San Gabriel Mountains.

The magnitude of annual recharge from direct penetration of local rainfall and return flow from applied water is not easily quantifiable. Percolation of runoff from the mountains and valley floor along with percolation of imported water has only been estimated. The DPW maintains records on the amount of local and imported water conserved in water spreading facilities and stream channels.

The San Gabriel River bisects the Main Basin. The San Gabriel River originates at the confluence of its west and east forks in the San Gabriel Mountains. It flows through the San Gabriel Canyon and enters the Main Basin at the mouth of the canyon north of the City of Azusa. The San Gabriel River flows southwesterly across the valley to Whittier Narrows, a distance of about 15 miles. It exits San Gabriel Valley at Whittier Narrows, and transverses the Coastal Plain in a southerly direction to reach the Pacific Ocean at Alamitos Bay near the City of Long Beach.

The San Gabriel River is joined and fed by tributary creeks and washes. In the Main Basin these include: Big Dalton Wash, which originates in the San Gabriel Mountains; Walnut Creek, which originates at the northeast end of the San Jose Hills; and San Jose Creek, which originates in the San Gabriel Mountains, but which travels around the southerly side of the San Jose Hills through the Puente Narrows before joining the San Gabriel River just above Whittier Narrows.

The channel of the San Gabriel River bifurcates in the upper middle portion of the Main Basin, forming a channel to the west of and parallel to the San Gabriel River, known as the Rio Hondo. Tributaries draining the westerly portion of the Main Basin, including Sawpit Wash, Santa Anita Wash, Eaton Canyon Wash, Rubio Wash and Alhambra Wash, all of which originate in the San Gabriel Mountains or the foothills, feed the Rio Hondo. The Santa Anita Wash, Eaton Canyon Wash, Rubio Wash and Alhambra Wash all cross the Raymond Basin area before entering the Main Basin. The channel of the Rio Hondo passes through Whittier Narrows westerly of the San Gabriel River and then flows southwesterly to join the Los Angeles River on the Coastal Plain.

To protect residents of the San Gabriel Valley from flooding that can result during periods of intensive rainfall, the Los Angeles County Department of Public Works (DPW) and the U.S. Army Corps of Engineers (Corps of Engineers) have constructed an extensive system of dams, debris basins, reservoirs and flood control channels. The dams and reservoirs also operate as water conservation facilities. The dams and reservoirs that control the flow of the San Gabriel River and the Rio Hondo include: Cogswell Reservoir on the west fork of the San Gabriel River, San Gabriel Reservoir at the confluence of the west and east forks of the San Gabriel River, Morris Reservoir near the mouth of the San Gabriel Canyon, Santa Fe Reservoir in the northerly portion of the Main Basin and Whittier Narrows Reservoir at the southwestern end of the San Gabriel Valley.

Many of the stream channels tributary to the San Gabriel River have been improved with concrete banks (walls) and concrete-lined bottoms. These stream channel improvements

have significantly reduced the area of previous stream channels and reduced Main Basin recharge. A number of off-stream groundwater replenishment facilities have been established along these stream channels to offset such reductions in recharge. Some of these facilities are accessible to imported water supplies, while some facilities receive only local runoff.

The paths of the surface streams are mirrored in the soils and in the direction of groundwater movement in the Main Basin. The tributary creeks and washes, carrying smaller amounts of water, generally flow toward the center of the San Gabriel Valley, while the direction of flow of the major streams, the San Gabriel River and the Rio Hondo, is from the mountains in the north to Whittier Narrows in the southwest. In similar fashion, the primary direction of groundwater movement in the Main Basin is from the north to the southwest, with contributing movement generally from the east and west toward the center of the Main Basin. The greatest infiltration and transmissivity rates of soils in the Main Basin are from north to south, with the maximum rates found in the center of the valley along the stream channels. Generally, the Main Basin directs groundwater to the southwest through Whittier Narrows.

The Main San Gabriel Basin has a freshwater storage capacity of about 8.7 million acre-feet when the Key Well groundwater elevation is at 329.1 feet, of which about 125 feet of elevation change, or about 1,000,000 acre-feet, has been used for historical Basin operations. Local runoff is stored in a series of reservoirs operated by DPW and diverted into spreading grounds to replenish the groundwater supply. Groundwater recharge occurs every year and is exhibited as increasing water levels. High rainfall years can be identified as increases in the groundwater level of 30 feet or more in one year.

In addition to groundwater replenishment with local storm runoff, the Watermaster maintains records of each producer's water rights and annual production. Although there is no limit on the quantity of water that may be produced, production in excess of a water right is subject to a Replacement Water assessment. Watermaster uses funds collected

from producers' overproduction to purchase imported water from municipal water districts. Upper Water and TVMWD obtain their water from Metropolitan. San Gabriel District has its own contract for SWP water. Watermaster coordinates purchase and delivery of imported water to replenish the ground water basin, thus offsetting the producers' overproduction and making the Basin whole.

6.2.2.2 BASIN MANAGEMENT INFORMATION

The Main Basin has been adjudicated and management of the local water resources within the Main Basin is based on that adjudication. Management of the water resources in the Main Basin is based upon Watermaster services under two Court Judgments: San Gabriel River Watermaster (River Watermaster)[3] and (Main Basin Watermaster)[4].

The following sections provide a description of the following management measures and plans:

- Main Basin – Long Beach Judgment
- Main Basin – Main Basin Judgment
- Five-Year Water Quality and Supply Plan
- Water Quality Authority 406 Plan
- Salt and Nutrient Management Plan
- In-Lieu Program
- Supplemental Water Reliability Storage Program
- Supplemental Water Stormwater Augmentation Program

[3] Board of Water Commissioners of the City of Long Beach, et al., v. San Gabriel Valley Water Company, et al., Los Angeles County Case No. 722647, Judgment entered September 24, 1965.
[4] Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., Los Angeles County Case No. 924128, Judgment entered January 4, 1973.

- Metropolitan Letter Agreement
- Three year Purchased Water Plan
- Sustainable Groundwater Management Act

Main Basin – Long Beach Judgment

On May 12, 1959, the Board of Water Commissioners of the City of Long Beach, the Central Basin Municipal Water District (Central District), and the City of Compton, as plaintiffs, filed an action against San Gabriel and 24 other producers of groundwater from the San Gabriel Valley as defendants. This action sought a determination of the rights of the defendants in and to the waters of the San Gabriel River system and to restrain the defendants from an alleged interference with the rights of plaintiffs and persons represented by the Central District in such waters. After six years of study and negotiation a Stipulation for Judgment was filed on February 10, 1965, and the Judgment (Long Beach Judgment) was entered on September 24, 1965. Under the terms of the Long Beach Judgment, the water supply of the San Gabriel River system was divided at Whittier Narrows between San Gabriel Valley upstream and the coastal plain of Los Angeles County downstream. A copy of the Long Beach Judgment can be found in Appendix F. During water year 2018-19, the Water Replenishment District of Southern California (WRD) intervened in the Long Beach Judgment for the purpose of assuming all of the requirements of the Plaintiffs and the City of Long Beach, Central District, and the City of Compton were dismissed from their collective responsibilities by the Court.

Under the terms of the Long Beach Judgment, the area downstream from Whittier Narrows (Lower Area), the plaintiffs and those they represent, are to receive a quantity of usable water annually from the San Gabriel River system comprised of usable surface flow, subsurface flow at Whittier Narrows and water exported to the Lower Area. This annual entitlement is guaranteed by the area upstream of Whittier Narrows (Upper Area), the defendants, and provision is made for the supply of Make-up Water by the Upper Area for years in which the guaranteed entitlement is not received by the Lower Area.

Make-up Water is imported water purchased by the Main Basin Watermaster and delivered to agencies in Central District to satisfy obligations under the Long Beach Judgment. The entitlement of the Lower Area varies annually, dependent upon the 10-year average annual rainfall in the San Gabriel Valley for the 10 years ending with the year for which entitlement is calculated.

The detailed operations described in the Long Beach Judgment are complex and require continuous compilation of data so that annual determinations can be made to assure compliance with the Long Beach Judgment. In order to do this, a three-member Watermaster was appointed by the Court, one representing the Upper Area parties nominated by and through Upper Water, one representing the Lower Area parties nominated by and through WRD, and one jointly nominated by Upper Water and WRD. This three-member board is known as the San Gabriel River Watermaster (River Watermaster).

The River Watermaster meets periodically during the year to adopt a budget, to review activities affecting water supply in the San Gabriel River system area, to compile and review data, to make determinations of usable water received by the Lower Area, and to prepare its annual report to the Court. The River Watermaster has rendered annual reports for the water years 1963-64 through 2024-25 and operations of the river system under that Court Judgment and through the administration by the River Watermaster have been satisfactory since its inception.

One major result of the Long Beach Judgment was to leave the Main Basin free to manage its water resources so long as it meets its downstream obligation to the Lower Area under the terms of the Long Beach Judgment. Upper Water intervened in the Long Beach case as a defendant to enforce the provisions of a Reimbursement Contract, which was incorporated into the Long Beach Judgment to assure that any Make-up Water obligations under the terms of the Long Beach Judgment would be satisfied.

Main Basin – Main Basin Judgment

The Upper Area then turned to the task of developing a water resources management plan to optimize the conservation of the natural water supplies of the area. Studies were made of various methods of management of the Main Basin as an adjudicated area and a report thereon was prepared for the Upper San Gabriel Valley Water Association, an association of water producers in the Main Basin. After due consideration by the Association, Upper Water was requested to file as plaintiff, and did file an action on January 2, 1968, seeking an adjudication of the water rights of the Main Basin and its Relevant Watershed. After several years of study (including verification of annual water production) and negotiations, a stipulation for entry of Judgment was approved by a majority of the parties, by both the number of parties and the quantity of rights to be adjudicated. Trial was held in late 1972 and the Judgment (Main Basin Judgment) was entered on January 4, 1973. The Main Basin Judgment was most recently amended on June 21, 2012. A copy of the Main Basin Judgment can be found in Appendix G.

Under the terms of the Main Basin Judgment, all rights to the diversion of surface water and production of groundwater within the Main Basin and its Relevant Watershed were adjudicated. The Main Basin Judgment provides for the administration of the provisions of the Main Basin Judgment by a nine-member Main Basin Watermaster. Six of those members are nominated by water producers (producer members) and three members (public members) are nominated by the Upper Water and the San Gabriel District, which overlie most of the Basin. The nine-member board employs a staff, an attorney and a consulting engineer. The Main Basin Watermaster holds public meetings on a regular monthly basis throughout the year.

The Main Basin Judgment does not restrict the quantity of water, which parties may extract from the Main Basin. Rather, it provides a means for replacing all annual extractions in excess of a Party's annual right to extract water with Supplemental Water.

The Main Basin Watermaster annually establishes an Operating Safe Yield for the Main Basin which is then used to allocate to each Party its portion of the Operating Safe Yield which can be produced free of a Replacement Water Assessment. If a producer extracts water in excess of its right under the annual Operating Safe Yield, it must pay an assessment for Replacement Water, which is sufficient to purchase one acre-foot of Supplemental Water to be spread in the Main Basin for each acre-foot of excess production. All water production is metered and is reported quarterly to the Main Basin Watermaster.

In addition to Replacement Water Assessments, the Main Basin Watermaster levies an Administration Assessment to fund the administration of the Main Basin management program under the Court Judgment and a Makeup Obligation Assessment in order to fulfill the requirements for any makeup Obligation under the Long Beach Judgment and to supply fifty percent of the administration costs of the River Watermaster service. The Main Basin Watermaster levies an In-lieu Assessment and may levy special Administration Assessments.

Water rights under the Main Basin Judgment are transferable by lease or purchase so long as such transfers meet the requirements of the Judgment. There is also provision for Cyclic Storage Agreements by which Parties and non-parties may store imported supplemental water in the Main Basin under such agreements with the Main Basin Watermaster pursuant to uniform rules and conditions and Court approval.

The Main Basin Judgment provides that the Main Basin Watermaster will, insofar as practicable, spread imported water in the Main Basin to maintain the groundwater elevation at the Key Well above 200 feet. Under the terms of the Long Beach Judgment, any excess surface flows that pass through the Main Basin at Whittier Narrows to the Lower Area (which is then conserved in the Lower Area through percolation to groundwater storage) is credited to the Upper Area as Usable Surface Flow.

Five-Year Water Quality and Supply Plan

The Main Basin Watermaster was created in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. Main Basin Watermaster's mission was to generally manage the water supply of the Main Basin. During the late 1970s and early 1980s, significant groundwater contamination was discovered in the Main Basin. The contamination was caused in part by past practices of local industries that had carelessly disposed of industrial solvents referred to as Volatile Organic Compounds (VOCs) as well as by agricultural operations that infiltrated nitrates into the groundwater. Cleanup efforts were undertaken at the local, state, and federal level.

Local water agencies adopted a joint resolution in 1989 regarding water quality issues that stated Main Basin Watermaster should coordinate local activities aimed at preserving and restoring the quality of groundwater in the Main Basin. The joint resolution also called for a cleanup plan. In 1991, the Court granted Main Basin Watermaster the authority to control pumping for water quality purposes. Accordingly, Main Basin Watermaster added Section 28 to its Rules and Regulations regarding water quality management. The new responsibilities included development of a Five-Year Water Quality and Supply Plan[5], updating it annually, submitting it to the California Regional Water Quality Control Board, Los Angeles Region, and making it available for public review by November 1 of each year.

Main Basin Watermaster prepares and annually updates the Five-Year Water Quality and Supply Plan in accordance with the requirements of the Section 28 Rules and Regulations. The objective is to coordinate groundwater-related activities so that both water supply and water quality in the Main Basin are protected and improved. Many important issues are detailed in the Five-Year Plan, including how Main Basin Watermaster plans to:

[5] https://www.watermaster.org/reports

1. Monitor groundwater supply and quality;
2. Develop projections of future groundwater supply and quality;
3. Ensure adequate supplemental water is available for groundwater replenishment;
4. Review and cooperate on cleanup projects, and provide technical assistance to other agencies;
5. Assure that pumping does not lead to further degradation of water quality in the Basin;
6. Address Perchlorate, N-nitrosodimethylamine (NDMA), and other emerging contaminants in the Basin;
7. Develop a cleanup and water supply program consistent with the U.S. Environmental Protection Agency (USEPA) plans for its San Gabriel Basin Superfund sites; and
8. Coordinate and manage the design, permitting, construction, and performance evaluation of the Baldwin Park Operable Unit (BPOU) cleanup and water supply plan.

The Main Basin Watermaster, in coordination with Upper Water, has worked with state and federal regulators, along with local water companies to clean up water supplies. Section 28 of the Main Basin Watermaster's Rules and Regulations require all producers to submit an application to 1) construct a new well, 2) modify an existing well, 3) destroy a well, or 4) construct a treatment facility. The Main Basin Watermaster prepares a report on the implications of the proposed activity. Upper Water reviews a copy of these reports and is provided the opportunity to submit comments on the proposed activity before the Main Basin Watermaster Board takes final action.

Water Quality Authority 406 Plan

The WQA was established by the State Legislature on February 11, 1993 to develop, finance and implement groundwater treatment programs in the Main Basin. Section 406 of the WQA Act requires the WQA "to develop and adopt a basinwide groundwater quality management and remediation plan" that is required to be consistent with the EPA's National Contingency Plan ("NCP") and Records of Decision ("ROD") and all requirement of the Los Angeles Regional Water Quality Control Board ("LARWQCB"). According to the WQA Act, the Section 406 Plan, which is incorporated in this Plan by reference, must include:

1) Characterization of Basin contamination;
2) A comprehensive cleanup plan;
3) Strategies for financing the design, construction, operation and maintenance of groundwater cleanup facilities;
4) Provision for a public information program; and
5) Coordination of activities with federal, state, and local entities.

WQA reviews and adopts the Section 406 Plan on an annual basis and as necessary, makes revisions according to changing regulatory, political and/or funding environments. In support of the Section 406 Plan, WQA also adopts an annual FY budget (July 1 through June 30) which includes all projects (actual or planned) WQA is facilitating through its participation during that time period. The budget identifies the various funding sources, and combinations thereof, to ensure full funding for each project (capital and/or O&M) can be achieved.

Salt and Nutrient Management Plan

On February 9, 2009, the State Water Board adopted Resolution 2009-0011 that created the "Recycled Water Policy". The Recycled Water Policy recognized that "…collapse of the Bay Delta ecosystem, climate change, and continuing population growth have combined with a severe drought on the Colorado River, and failing levees in the Delta, to

create a new reality that challenges California's ability to provide the clean water need for a healthy environment, a healthy population and a healthy economy, both now and in the future." The Recycled Water Policy encourages appropriate water recycling, water conservation and use of stormwater to increase water supplies within California.

The primary goal of the San Gabriel Valley Salt and Nutrient Management Plan (SNMP) is to assist the Main Basin Watermaster and participating/potential stakeholders to comply with the Recycled Water Policy regarding the use of the recycled water from municipal wastewater treatment facilities as a safe source of water supply, while maintaining the water quality objectives for salt and nutrients in the Basin Plan established by the LARWQCB. The primary objective of the SNMP is to comply with the specific requirements described in the Recycled Water Policy. They include:

1) Characterization of the Main Basin,
2) Identification of sources of salt, nutrients, and constituents of emerging concern (CECs) (when deemed necessary by the Recycled Water Policy) and their fate and transport,
3) Estimation of salt, nutrients, and CECs (if necessary) loadings and assimilative capacities,
4) Identification of water recycling and stormwater recharge/use goals and objectives,
5) Verification of compliance with Resolution No. 68-16 through antidegradation analyses, and
6) Development of a monitoring plan to verify compliance with the Basin water quality objectives.

The SNMP reviewed the geology, hydrology and hydrogeology of the San Gabriel Basin, along with the institutional and management structure for the San Gabriel Basin. TDS, Nitrate, Sulfate, and Chloride were identified as the primary constituents of concern. Sources of loading (precipitation, subsurface inflow, infiltration of applied water, storm runoff and untreated imported water replenishment) and unloading (groundwater

pumping and subsurface outflow) were included in a spreadsheet computer model, along with average water quality data for TDS, Nitrate, Sulfate, and Chloride, on an annual basis.

The SNMP proposed to use the Main Basin Watermaster's existing Title 22 water quality monitoring program for groundwater and San Gabriel River water, with increased frequencies of monitoring for Total Dissolved Solids and nitrate, to satisfy the monitoring plan requirement of the SNMP. The following are recommendations for on-going salt and nutrient management in the San Gabriel Basin:

- Regularly update the SNMP spreadsheet data so that impacts of potential future projects on salt and nutrient loading may be evaluated.
- Continue to collect water quality data throughout the San Gabriel Basin.
- Continue to meet with stakeholders on a regular basis to coordinate San Gabriel Basin management activities with an emphasis on stormwater runoff replenishment and continued use of SWP water for groundwater replenishment

In-Lieu Program

During calendar year 2014, the ability to deliver Supplemental Water (State Water Project (SWP) water and Colorado River water) to replenish the Basin was severely limited. Consequently, during FY 2014-15, Watermaster developed and implemented a program to have Producers purchase additional treated imported water for direct delivery in-lieu of pumping groundwater (In-Lieu Program), in an effort to reduce the amount of groundwater pumped from the Basin. The Watermaster uses the In-Lieu Assessment on all production to fund the additional direct cost incurred by a producer participating in the In-Lieu Program. Watermaster implemented this program during FY 2014-15 and 2015-16.

Supplemental Water Reliability Storage Program (RDA)

The 2012 Main Basin Judgment Amendments provided the Main Basin Watermaster with increased management flexibility and adaptability; and provided more discretion in making Basin management decisions. A key component of the Judgment Amendments was the new Water Resource Development Assessment (RDA) to be levied on all production. The Supplemental Water Reliability Storage Program (RDA) provides a process for the Main Basin Watermaster to generate funds to purchase and store Supplemental Water in the Basin to be used (applied) when there are limitations on the availability of Supplemental Water from the Responsible Agencies. As a result of the severe long-term drought conditions resulting in significant reductions on the quantity of local water replenishment to the Basin, the Main Basin Watermaster expanded RDA into the Supplemental Water Stormwater Augmentation Program described below.

Supplemental Water Stormwater Augmentation Program

The Water Resource Development Assessment for Stormwater Augmentation Program was developed by the Main Basin Watermaster to help manage Basin water supplies under the perceived "worst case" hydrologic conditions, which was assumed to be two additional consecutive 5-year droughts, using the same hydrologic conditions as the recent FY 2011-12 through 2015-16 severe drought. Based upon ten (10) additional consecutive years of drought, the new Program is intended to purchase imported replenishment water (when available), for stormwater augmentation, to maintain the Baldwin Park Key Well (Key Well) elevation above 180 feet by the end of the tenth year. This Key Well elevation essentially ensures continued Basin water supply to the Basin Producers under a worst case, 15-year sustained drought. The RDA II Program has an assessment of $175 per AF on all FY 2024-25 production and is planned to be $175 per AF on all FY 2025-26 production, with a potential to increase in the next three to five years. The Main Basin Watermaster will use the funds to purchase untreated imported water to replenish the Main Basin for the "general benefit" of all Producers within the Main Basin. Unlike the original RDA (Supplemental Water Replenishment Storage Program), which is a Watermaster pre-purchase of Replacement Water, the untreated imported

water will supplement local stormwater replenishment, enhance overall Basin conditions, and have "no right of recovery" using a water right, by any Main Basin producer.

Metropolitan Letter Agreement

Since 2017, Watermaster, Upper Water, the Three Valleys District, and Metropolitan entered into a series of letter agreements to pre-deliver untreated imported water in support of Basin management programs (Letter Agreement). Through these agreements, Metropolitan has delivered a cumulative total of 405,517.5 acre-feet of imported water. While deliveries have varied depending on hydrological conditions and local stormwater capture, these agreements have provided a critical means of supplementing the Basin's supplies over time.

During fiscal year 2023–24, Watermaster and Upper Water entered into a fourth agreement with to pre-deliver an additional 87,000 acre-feet of untreated imported water during calendar year 2024. In addition, Watermaster and Three Valleys District entered into a separate agreement with Metropolitan to pre-deliver about 35,000 acre-feet during calendar year 2024. During fiscal year 2024–25, Watermaster and Upper Water entered into a fifth agreement with Metropolitan to pre-deliver an additional 86,000 acre-feet of untreated imported water during calendar year 2025.

Three Year Purchased Water Plan

On June 21, 2012, the Superior Court of the State of California for the County of Los Angeles (Court) approved certain proposed Judgment amendments. Some of these Judgment amendments help Watermaster address Supplemental Water supply concerns. One of the amendments, Exhibit H(3)(d), requires that "…on or before November 1 of each year, Watermaster shall prepare and distribute to the Responsible Agencies a three-year projection of its Supplemental Water purchases from each agency.

Watermaster shall, to the extent feasible, coordinate the tentative schedule for delivery and payment of those purchases with each agency."

Judgment Amendment, Section 45(b)(7), allows Watermaster to "…levy an Assessment on all Pumping, as determined through Rules and Regulations … to support the purchase, financing, and/or development of new or additional Supplemental Water sources, in cooperation with one or more Responsible Agencies as appropriate." Section 45(b)(7) established the "Water Resource Development Assessment" for the purchase or development of additional Supplemental Water supplies. Based on these Judgment amendments, Main Basin Watermaster also amended its Rules and Regulations to include a policy/criteria to develop the "Three-Year Purchased Water Plan" (Three-Year Plan). Under Section 26(d)(5) of the Rules and Regulations, the first priority for spreading of Supplemental Water is "…Supplemental Water ordered by Watermaster from Responsible Agencies for direct delivery to the Basin as Replacement Water…". Recognizing many Producers currently pre-purchase Supplemental Water for delivery into their Cyclic Storage accounts, those pre-purchases are considered to have the same priority as Replacement Water.

Exhibit M of Watermaster's amended Rules and Regulations[6] provides the policy/criteria for the "Three-year Purchased Water Plan," and requires Main Basin Watermaster to estimate Supplemental Water purchases from the Responsible Agencies for each of the three subsequent years. The policy/criteria indicate estimated Supplemental Water purchases may be based on the following:

1) *The first year shall be, at a minimum, the total Replacement Water requirement for the three Responsible Agencies (Upper Water, San Gabriel District, and Three Valleys.*
2) *The second and third years may be estimated as follows:*

[6] https://www.watermaster.org/about-us (Rules and Regulations)

a) *Operating Safe Yield (OSY) established by Watermaster for the current fiscal year and next succeeding years;*
b) *Alternative projections of the OSY;*
c) *Evaluation of potential wet, average, and dry hydrologic conditions;*
d) *Future groundwater production provided by or estimated for each producer; and*
e) *Depending on Basin conditions, Watermaster may consider additional factors as necessary.*

As a result of the negotiated pre-delivery of significant Metropolitan imported replenishment water by Watermaster and subsequently transferred by Metropolitan to Upper Water and Three Valleys District, the above policy/criteria has been superseded by this delivery of imported water to supplement local rainfall and runoff replenishment.

Sustainable Groundwater Management Act

The Main San Gabriel Basin (Main Basin) is a sub-basin of the San Gabriel Valley Basin pursuant to DWR Bulletin 118, Basin Number 4-013. Pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), the Main Basin was named as an adjudicated groundwater basin and is exempt from the requirements of developing a Groundwater Sustainability Plan (GSP) and subsequently was designated as a very-low-priority basin in DWR's 2019 SGMA Basin Prioritization report. In compliance with SGMA, the Main Basin Watermaster submits its Annual Report to DWR.

Upper Water Policy No. 9-00-8

Upper Water adopted Policy No. 9-00-8 which established criteria and conditions under which the Upper Water Board of Directors will consider providing funding, exclusively or in cooperation with WQA, Watermaster and other interested parties, for the construction of water treatment facilities and/or groundwater remediation projects in the Main Basin. This policy also establishes the general manner and methodology by which such funding

can be distributed by Upper Water for approved projects and programs. A copy of this policy is in Appendix H.

Within its statutory authority, budgetary limitations and policy objectives, Upper District will provide financial assistance for the procurement and/or construction of water treatment facilities at sites in the San Gabriel Valley. The principle objectives are:

1. Optimize utilization of local water resources.
2. Reduce or eliminate local reliance on treated, non-interruptible imported water supplies.
3. Maximize local water supply reliability
4. Provide for wholesale water supply price efficiency.
5. Protect public health and safety.

Projects to be considered for approval by the Board must meet the guidelines of this program and satisfy certain criteria to qualify for funding under this program. That criterion is listed as follows:

1. The project must be located within the boundaries of Upper Water.
2. The project must be considered in a manner so as to reactivate, or maintain operation of, an existing local water source that otherwise could not continue operation because of excessive contamination.
3. The project must be designed such that its operation presents a significant water supply benefit to the public served.
4. The project must be designed such that its operation provides a significant groundwater remediation benefit if applicable.
5. The project must employ proven or CDHS certified treatment technology to allow for a high probability of success.
6. The project must be structured such that either Upper Water has a reasonable probability of substantial cost recovery from parties responsible for groundwater contamination, or it addresses an urgent and immediate public

health and safety crisis that cannot be resolved in a more efficient and effective manner.

7. The project must be reviewed by Upper Water's Engineer.

Funding can be provided in several forms depending upon the circumstances surrounding the project. When structuring the distribution of funds, factors such as the likelihood of cost recovery, the future availability of other sources of funding and the preliminary goals of the project will be considered. To maximize the potential for cost recovery and securing funding from other sources, Upper Water project funds will be distributed through the WQA's project accounts where possible.

6.2.2.3 OTHER CONSIDERATIONS

Through the Long Beach Judgment and the Main Basin Judgment, operations of the Main Basin are optimized to conserve local water to meet the needs of the parties of the Main Basin Judgment.

Typically, water producers within Upper Water rely upon groundwater from Main Basin for their water supply. The City of Alhambra has agreed to receive treated, imported water as part of the Cooperative Water Exchange Agreement (CWEA) to reduce the groundwater extractions from the western portion of the Main Basin and the associated drawdown concerns.

Imported water for groundwater replenishment is delivered through the flood control channels and diverted and spread at spreading grounds through Main Basin Watermaster's agreement with DPW. Groundwater replenishment utilizes imported water and is considered Replacement Water under the terms of the Main Basin Judgment. In addition, it can be stored in the Main Basin through Cyclic Storage agreements,

authorized by terms of the Main Basin Judgment, but such stored water may be used only to supply Supplemental Water to the Main Basin Watermaster.

The Main Basin Watermaster has entered into a Cyclic Storage Agreement with each of the three municipal water districts. One is with Metropolitan and Upper Water, which permits Metropolitan to deliver and store imported water in the Main Basin in an amount not to exceed 200,000 acre-feet for future Replacement Water use. The second Cyclic Storage Agreement is with Three Valleys District and permits Three Valleys District to deliver and store up to 50,000 acre-feet for future Replacement Water use. The third is with San Gabriel District and permits San Gabriel District to deliver and store up to 50,000 acre-feet for future Replacement Water use.

Imported Make-up Water has been delivered to lined stream channels and conveyed to the Lower Area. Make-up Water is required to be delivered to the Lower Area by the Upper Area when the Lower Area entitlement under the Long Beach Judgment exceeds the usable water received by the Lower Area. Imported water is used to fulfill the Make-up Water Obligation when the amount of Make-up Water cannot be fulfilled by reimbursing the Lower Area interests for their purchase of recycled water. The amount of recycled water for which reimbursement may be made as a delivery of Make-up Water is limited by the terms of the Long Beach Judgment to the annual deficiency in Lower Area Entitlement water or to 14,735 acre-feet, whichever is the lesser quantity.

6.2.2.4 PAST FIVE YEARS GROUNDWATER PUMPING

As discussed in Section 6.2, Upper Water has never produced groundwater from the Main Basin and currently does not have facilities to do so (see Table 6-1). However, Upper Water's member agencies produce water from the Main Basin.

As discussed above, the Main Basin is managed by the Main Basin Watermaster. The most recent amendments to the Main Basin Judgment were made in June 2012. Historical fluctuation of the Key Well elevation illustrates that since the Main Basin was adjudicated in 1973, it generally operated between an elevation 250 feet and 200 feet above MSL. Furthermore, at an elevation of 169 feet above MSL at the Key Well, which represents the historical low, the Main Basin has about 7,400,000 acre-feet of remaining storage. However, this storage is not accessible due to the impacts of lower groundwater levels. During the period of management under the Judgment, significant drought events occurred from 1969 to 1977, 1983 to 1991, 1998 to 2004, 2006 to 2009, 2011 to 2015, and 2019-20 to 2021-22. In each drought cycle the Main Basin has been managed to maintain water levels.

6.2.3 SURFACE WATER

Upper Water does not use surface water supplies to meet its water demands. However, surface water is captured and conserved by the Los Angeles County Department of Public Works for groundwater replenishment within Upper Water's service area.

6.2.4 STORMWATER

Upper Water does not use stormwater to meet its water demands. However, stormwater is captured and conserved by the Los Angeles County Department of Public Works for groundwater replenishment within Upper Water's service area.

6.2.5 WASTEWATER AND RECYCLED WATER

CWC 10633.

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

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

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

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

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

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

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

Upper Water currently delivers recycled water to its member agencies for direct (irrigation) use only. Upper Water continuously pursues opportunities to expand recycled water use in its service area to reduce reliance on imported water supplies.

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…

Reclamation of wastewater in the Main Basin has been extensively reviewed in both local and regional studies. In 1976 Upper Water and San Gabriel District completed a study entitled "Potential Use of Reclaimed Water for Groundwater Replenishment in the Basin." This study was updated at the request of the Watermaster in 1980 and again in March 1987. In 1979, a cooperative study was completed by Metropolitan and others entitled "Orange and Los Angeles Counties Water Reuse Study." During calendar year 1994, Upper Water participated in a study to identify potential direct non-potable users of recycled water. In October 1994, a draft report of the study entitled, "Direct Reuse Study" was released, which identified the potential for recycled water use within the Main San Gabriel Basin. The Direct Reuse Study identified over 600 potential recycled water users within the San Gabriel Valley consisting of schools, parks, golf courses, nurseries, sand and gravel companies and cemeteries.

These potential direct users of recycled water would be serviced by their retail water agencies. These studies concluded that water reuse in the Basin could be feasible; however, the cost of utilizing recycled water varies widely with the quantity to be used and the distance required to transport the water from the treatment plant to the point of use.

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.

There are two water reclamation plants located within Upper Water's service area; the Whittier Narrows Water Reclamation Plan (WNWRP) and the San Jose Creek Water Reclamation Plant (SJCWRP). LACSD operates both of these facilities. The location of these reclamation plants is shown in Figure 4. The method of disposal when treated recycled water is not used (non-recycled) is discharge to the San Gabriel River/Rio Hondo and eventually flows to the ocean, as shown in Table 6-3.

The WNWRP began operations in 1962 and has a treatment capacity of about 15 million MGD. The WNWRP provides coagulated, filtered and disinfected tertiary effluent. All wastewater treated at the WNWRP meets recycled water standards. The WNWRP serves a population of approximately 150,000 people. During FY 2024-25, the total recycled water production from this plant was about 8,618 acre-feet.

The SJCWRP began operations in 1973 and currently has a treatment capacity of about 100 MGD. The SJCWRP provides coagulated, filtered and disinfected tertiary effluent. The SJCWRP has room for an expansion of an additional 25 MGD, although there is no schedule for such an expansion. The SJCWRP plant serves a population of approximately 1 million people, largely a residential population. During FY 2024-25, the total recycled water production from this plant was about 57,456 acre-feet.

Upper Water does not provide supplemental treatment to recycled water produced from the WNWRP or the SJCWRP before delivery for direct use.

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.

Upper Water's direct non-potable use recycled water program is part of Upper Water's effort to reduce reliance on imported water supplies, providing an economic benefit as well as enhance local water supply reliability. Upper Water's existing recycled water program includes pipelines and a recycled water reservoir to provide tertiary treated recycled water to customers in Upper Water's service area. Upper Water's existing recycled water program is divided into the following systems: Phase I, Phase IIA, Phase IIB, and the La Puente Valley County Water District Project. The locations of Upper Water's recycled water users are provided in Figure 5. Upper Water's La Puente Valley County Water District Project began delivering recycled water in 2023.

In addition to the recycled water supplied by Upper Water through its direct use recycled water system, other purveyors within Upper Water's service area supply recycled water for irrigation use as well.

Phase I

Upper Water's Phase I recycled water system provides service to various landscape irrigation customers in the City of Whittier. Recycled water from the SJCWRP is currently supplied to San Gabriel Valley Water Company (SGVWC) at a discounted recycled water rate. During FY 2024-25, the Phase I system delivered approximately 30 acre-feet of recycled water from the SJCWRP to Mills Elementary School, Rio Hondo College, and Gateway Pointe Industrial Park.

Phase IIA – Whittier Narrows Project, Rosemead Extension and South El Monte Extension

Upper Water's Phase IIA recycled water system is divided into the Whittier Narrows Project, Rosemead Extension, and the South El Monte Recycled Water Expansion Project. Recycled Water from the WNWRP is currently supplied to SGVWC and Golden State Water Company to serve recycled water to various customers for landscape

irrigation. During FY 2024-25, the Phase IIA recycled water system delivered approximately 1,142 acre-feet of recycled water from the WNWRP to parks, schools, medians, and commercial complexes.

Phase IIB – Industry

Upper Water's Phase IIB - Industry recycled water system provides service to customers in the City of West Covina. Recycled Water from the SJCWRP is currently supplied to Suburban Water System and Valencia Heights Water Company to serve recycled water to various customers for landscape irrigation. During FY 2024-25, the Phase IIB-Industry system delivered approximately 433 acre-feet of recycled water from the SJCWRP to parks, schools, and medians.

La Puente Valley County Water District

Upper Water's La Puente Valley County Water District project provides recycled water service for landscape irrigation in the City of Industry. During FY 2024-25, the La Puente Valley County Water District system delivered approximately 6 acre-feet of recycled water from the SJCWRP to commercial areas and medians.

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.

Recycled water users within Upper Water's service area include several schools, parks, and commercial areas. Recycled water is produced by LACSD's SJCWRP and WNWRP treatment plants. Use of recycled water allows Upper Water's member agencies to reduce the amount of imported water purchases required and groundwater production required from the Main San Gabriel. The amount of recycled water supplied by Upper Water in FY 2024-25, along with projected recycled water demands through FY 2049-50, are provided in Table 6-4.

Current Recycled Water Use

As discussed in Section 6.5.3, Upper Water's existing recycled water program is divided into the following systems: Phase I, Phase IIA – Whittier Narrows Project, Rosemead Extension and South El Monte Recycled Water Expansion Project, Phase IIB – Industry Project, and the La Puente Valley County Water District Project. Current Recycled Water Use is shown in Table 6-4.

In the Phase I system, SGVWC serves the recycled water to various customers for landscape irrigation. During FY 2024-25, the Phase I system delivered approximately 30 acre-feet of recycled water from the SJCWRP to Mills Elementary School, Rio Hondo College, and Gateway Pointe Industrial Park.

Upper Water's Phase IIA recycled water system supplies recycled water from the WNWRP to SGVWC and Golden State Water Company to serve recycled water to various customers for landscape irrigation. During FY 2024-25, the Phase recycled water system delivered approximately 1,142 acre-feet of recycled water from the WNWRP to parks, schools, medians, and commercial complexes.

Upper Water's Phase IIB - Industry recycled water system supplies recycled water to Suburban Water System and Valencia Heights Water Company to serve recycled water to various customers for landscape irrigation. During FY 2024-25, the Phase IIB-Industry system delivered approximately 433 acre-feet of recycled water from the SJCWRP to parks, schools, and medians.

Upper Water's more recent La Puente Valley County Water District Project began operation in 2023 and serves recycled water to customers in the Cities of Industry and La Puente, as shown in Table 6-4. La Puente Valley County Water District is a project partner and system operator of the project. During FY 2024-25, the La Puente Valley County Water District Project delivered approximately 6 acre-feet of recycled water from the SJCWRP.

6.2.5.4.1 Potential and Projected Recycled Water Use

Metropolitan is currently developing the Pure Water Southern California project, formerly known as Regional Recycled Water Program, to provide up to 150 MGD (approximately 155,000 AFY, as shown in Table 6-4) of advanced treated wastewater from LACSD's A.K. Warren Water Resource Facility (formerly known as the Joint Water Pollution Control Plant) in Carson, California (Warren Facility Plant). The Pure Water Southern California project would deliver purified water from the Warren Facility Plant through up to 60 miles of transmission pipelines to groundwater basins within Metropolitan's service area beginning in 2035, as shown in Tables 6-4 and 6-7. Implementation of Pure Water would provide regional benefits to all Metropolitan member agencies by: (1) reducing reliance on imported water; (2) diversifying locally available supplies; (3) improving resilience to climate change and other stressors; and (4) enhancing operational reliability and flexibility. In addition, these deliveries would help restore water levels regionally in the San Gabriel Valley and reduce the need for imported water supplies.

6.2.5.4.2 2020 Recycled Water Use Projection Compared to 2025 Actual

The total projected FY 2024-25 recycled water demand in Upper Water's service area was estimated in Upper Water's 2020 Plan to be approximately 2,085 AFY. The projection was based on planning documents prepared by Upper Water. The actual recycled water demand during 2024-25 was approximately 1,611 AF. A comparison of the actual and projected recycled water use for FY 2024-25 is shown in Table 6-5.

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.

Upper Water's current recycled water rates vary depending upon Upper Water's actual cost of delivery to the end user. The recycled water rates are established through long-term contracts with the participating retail agency. However, the rates are set to create an economic incentive to maximize the use of recycled water for irrigation applications, while reducing demand on potable supplies, for irrigation applications.

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.

As previously discussed, Upper Water's member agencies produce groundwater from the Main Basin. Groundwater produced from the Main Basin has acceptable Total Dissolved Solids (TDS) concentrations (less than secondary Maximum Contaminant Level (MCL) of 1,000 milligrams per liter (or mg/l) and does not require desalination. The annual average TDS value is for San Gabriel's Main Basin Wells is approximately 338 mg/L, according to the Main Basin Salt and Nutrient Management Plan, which is below its secondary MCL. The State Water Resources Control Board Division of Drinking Water (DDW)[7] recommended level is 500 mg/l and water can be provided for long-term domestic use with TDS concentrations of up to 1,000 mg/l. Due to the high quality (low TDS concentration) of the groundwater, Upper Water and its member agencies have not been required to investigate the use of desalination to develop or reestablish a new long-term supply for the Main Basin. However, 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.

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.

Upper Water's current exchanges and transfers are discussed in the sections below.

[7] The Division of Drinking Water was formerly under the California Department of Public Health Drinking Water Program.

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."

Upper Water participates in a long-term Cooperative Water Exchange Agreement (CWEA) with the City of Alhambra, Metropolitan, San Gabriel District and the Watermaster. Upper Water is the representative member agency for Metropolitan in that exchange. The CWEA was negotiated to solve a local problem near the City of Alhambra, referred to as the Alhambra Pumping Hole. The Alhambra Pumping Hole is located in an area of the Main Basin that receives little replenishment due to its location and hydrogeologic characteristics. Seven producers extract water from the Alhambra Pumping Hole, and this resulted in declining water level elevations. Six of the producers are member agencies of Upper Water. The seventh producer, the City of Alhambra, is a member agency of San Gabriel District. This exchange is cooperatively financed by the City of Alhambra, San Gabriel District and Upper Water. It was agreed the City of Alhambra would receive direct delivery of water from Metropolitan and in exchange would reduce its extractions from the Alhambra Pumping Hole by an equivalent quantity. Currently, the Watermaster levies an In-lieu Assessment to provide reimbursement to the City of Alhambra for increased incremental costs. The City of Alhambra receives about 3,000 acre-feet per year of direct deliveries from Metropolitan.

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."

Upper Water, through Metropolitan, is active in the long-term cyclic storage of water in the Main Basin. Metropolitan is able to deliver water for groundwater replenishment purposes in advance of Upper Water's specific requirement for such water. Water delivered to the Main Basin in advance of its requirement is credited to the Cyclic Storage Account and the credited deliveries are accrued from year to year. When the Watermaster requires Replacement Water from Upper Water, a transfer can then be made from the Cyclic Storage Account to Watermaster in-lieu of actual delivery of imported water for that purpose, at the discretion of Metropolitan. Because water is often in Cyclic Storage for many years before being required as Replacement Water, the Cyclic Storage program, although technically a conjunctive use operation, may be considered an exchange or transfer program in that it takes advantage of surplus water, when available, and stores it in the Main Basin for future use.

6.2.7.3 EMERGENCY INTERTIES

Upper Water does not own any treated or untreated imported water distribution systems. All water facilities for treated imported water belong to Metropolitan and Upper Water's member agencies. Appropriately, Metropolitan and the member agencies have developed actions to be taken during an emergency interruption and are discussed in Metropolitan's 2025 UWMP and in the member agencies' 2025 UWMPs.

The agencies that now rely on recycled water for irrigation historically produced groundwater. Therefore, in the event of an emergency that interrupts recycled water deliveries, those agencies can produce the needed water from the Main Basin for irrigation purposes until the recycled water facility has been repaired. Chapter 6.2.2

discusses the management and reliability of the Main Basin, which Upper Water's member agencies can rely on for their primary water supply in case of a supply interruption.

6.2.8 SUPPLY FROM STORAGE

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

6.2.9 OTHER

Upper Water 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.

Upper Water receives imported supplemental water from Metropolitan and supplies such water to its member agencies. Upper Water's member agencies also have rights to water supplies of the Main Basin. The management structure of the Main Basin ensures a reliable future water supply. Section 6.2 provides an extensive description of the Main Basin and provides information on its management. The management structure of the Basin provides a reliability of supply in average, single-dry and five consecutive year drought water years. Although Upper Water overlies a well-managed groundwater basin, it participates in a variety of programs intended to enhance regional water supply.

In 2012, Upper Water, in collaboration with stakeholders, prepared an Integrated Resources Plan (IRP) to address projected water supply and demand issues. As a result of changes to projected population, water supply and hydrology (drought) conditions, the IRP was updated in 2016. Since the 2016 IRP Update, there have been substantive changes regarding planning for water supplies including efforts regarding the Delta Conveyance Project, further development of the Pure Water project, and updating a Basin management planning tool (RDA). Consequently, Upper Water is currently preparing a 2026 IRP Update to address both demand-side and supply-side options, address multiple goals, and incorporate risk and uncertainty. The IRP evaluates projects and alternatives to determine the most beneficial strategy for reducing demands and imported water through an adaptive management approach. Alternatives and projects are evaluated based on the following performance criteria: cost, yield, reliability, drought resiliency, and water quality.

Upper Water's direct use recycled water program has been developed as part of Upper Water's continuing effort to augment Metropolitan's imported water supply. As discussed in Section 6.2.5, Upper Water's direct use recycled water program was recently expanded to include the La Puente Valley County Water District Project. This project will reduce local demands on groundwater produced from the Main Basin.

Upper Water, through Metropolitan, is also pursuing a groundwater replenishment project utilizing advanced treated recycled water. These recycled water supplies used for groundwater replenishment will augment imported water supplies currently used for groundwater replenishment in the Main Basin.

The above mentioned projects are shown on Tables 6-4 and 6-7. The current direct use recycled water project and the RRWP are aligned with the strategies proposed in the IRP and ultimately reduce the reliance of both imported water and local groundwater. In the future, Upper Water may develop additional projects and programs aligned with the overall adaptive management strategy proposed in the IRP. These projects and programs may include the following:

- Expand and develop recycled water projects
- Enhance existing stormwater capture facilities
- Construct new stormwater capture facilities
- Encourage and develop decentralized stormwater capture programs (cisterns, bioretention areas, etc.)
- Develop storage and transfer agreements with other agencies

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. Upper Water does not have its own imported water distribution system and relies on Metropolitan's distribution system for delivery of treated and untreated imported water to Upper Water's member agencies. Consequently, Upper Water has no additional or direct energy use. Metropolitan's energy use for importing, treating, and distributing water supplies to member agencies, such as Upper Water, are discussed in its UWMP in Section 3.8 and Appendix 9, and incorporated here by reference.

6.4 SUBMITTAL TABLES

The applicable standardized Submittal Table referenced within Chapter 6 is provided below.

6.4.1 TABLE 6-1: GROUNDWATER VOLUME PUMPED

Table 6-1 Groundwater Volume Pumped

Submittal Table 6-1 Wholesale: Groundwater Volume Pumped							
☑	Check the box if the Supplier does not pump groundwater.						
☐	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							
		Total	0	0	0	0	0
DWR NOTES:							
NOTES:							

10631(4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following (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.

6.4.2 TABLE 6-3: WASTEWATER TREATMENT AND OUTCOMES WITHIN UWMP SERVICE AREA

Table 6-2 Wastewater Treatment and Outcomes Within UWMP Service Area

Submittal Table 6-3 Wholesale: Wastewater Treatment and Discharge Within Service Area Water Code Section 10633(b)														
☐	Check the box if the Wholesale Supplier neither distributes nor provides supplemental treatment to recycled water. Proceed to the next table.													
Wastewater Treatment Plant Name and Place ID Number **Drop down list**	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) **Drop down list**	2025 Volume of Wastewater Received from UWMP Service Area (AF)	Total 2025 Volume of Water Treated (AF)	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		**Water Recycled Outside of UWMP Service Area** (enter data as applicable)		**Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable)		**Required Discharge for Instream Flow** (enter data as applicable)		**Delivered to Another Entity for Additional Treatment** (enter data as applicable)		
				Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Name of other entity
Add additional rows as needed.														
San Jose Creek Water	Yes	57456	57456	Tertiary	5,400	Tertiary	52,056	Tertiary	0					
Whittier Narrows Water	Yes	8618	8618	Tertiary	1,490	Tertiary	7,126	Tertiary	2					
Total		66074	66074		6,890		59,182		2		0		0	
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. **IPR:** Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down. **Additional Guidance:** See Appendix M, Section M.21 for detailed guidance on this table.														
NOTES:														

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. ...and shall include all of the following:
(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.

6.4.3 TABLE 6-4: RECYCLED WATER DIRECT BENEFICIAL USES WITHIN SERVICE AREA

Table 6-3 Recycled Water Direct Beneficial Uses Within Service Area

Submittal Table 6-4 Wholesale: Current and Projected Recycled Water Uses
Water Code Section 10633(c),(d),(e)

☐ Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.

Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :	
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :	
Volume of Supplemental Water Added in 2025 (OPTIONAL) :	
Source of 2025 Supplemental Water (OPTIONAL) :	

Name of Receiving Supplier or Direct Use by Wholesale Supplier	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use	
									Volume (AF)	Narrative page number (OPTIONAL)
Add additional rows as needed										
La Puente Valley County Water District	Non-Potable	Tertiary	8	15	15	15	15	15		
San Gabriel Valley Water Company (South El Monte Expansion)	Non-Potable	Tertiary	60	71	71	71	71	71		
San Gabriel Valley Water Company (Phase 1)	Non-Potable	Tertiary	34	31	31	31	31	31		
San Gabriel Valley Water Company (Phase IIA)	Non-Potable	Tertiary	1507	1368	1368	1368	1368	1368		
Golden State Water Company (Phase IIA)	Non-Potable	Tertiary	2	2	2	2	2	2		
Suburban Water System (City of Industry Regional Recycled Water System, Phase IIB)	Non-Potable	Tertiary	514	650	650	650	650	650		
Valencia Heights Water Company (City of Industry Regional Recycled Water System, Phase IIB)	Non-Potable	Tertiary	23	20	20	20	20	20		
Pure Water Southern California	Non-Potable	Advanced	0	0	17500	35000	35000	35000		
		Subtotal Potable	0	0	0	0	0	0	0	
		Subtotal Non-Potable	2,148	2,157	19,657	37,157	37,157	37,157	0	
		Total	2148	2157	19657	37157	37157	37157	0	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.
Potential recycled water use: a description of the feasibility of these uses must be included in the narrative.
Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.

NOTES:

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... and shall include...
(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use
d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

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

Table 6-4 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual

Submittal Table 6-5 Wholesale: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
☐	Check the box if recycled water was not used or distributed by the supplier in 2025, nor projected for use or distribution in 2020. Proceed to the next table.	
Name of Receiving Supplier or Direct Use by Wholesale Supplier	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Add additional rows as needed		
Direct Use Recycled Water Program	2,085	1,611
Total	2,085	1,611
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:		

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the serv`ice 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: (e) ...a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision

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

Table 6-5 Methods to Encourage Future Recycled Water Use

Submittal Table 6-7 Wholesale: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)							
☐	Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.						
☐	Check the box if some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.						
6-48 to 6-50	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							
Pure Water Southern California	Yes	Metropolitan Water District of Southern California; Three Valleys MWD, San Gabriel District MWD			2035	All Year Types	35,000
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:							

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.

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

Table 6-6 Expected Future Water Supply Projects or Programs

Submittal Table 6-7 Wholesale: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)							
☐	Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.						
☐	Check the box if some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.						
6-48 to 6-50	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							
Pure Water Southern California	Yes	Metropolitan Water District of Southern California; Three Valleys MWD, San Gabriel District MWD			2035	All Year Types	35,000
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:							

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.

6.4.7 TABLE 6-8: WATER SUPPLIES—ACTUAL

Table 6-7 Water Supplies—Actual

Submittal Table 6-8 Wholesale: Water Supplies — Actual Water Code Section 10631(b)				
Water Supply		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	Additional Description (as needed)	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed				
Purchased or Imported Water	Upper District receives treated imported surface water from Metropolitan.	Potable	3,374	
Purchased or Imported Water	Upper District receives untreated imported surface water from Metropolitan for groundwater replenishment.	Non-Potable	29,466	
Recycled Water	Direct Use	Non-Potable	2,148	
		Subtotal Potable	3,374	0
		Subtotal Non-Potable	31,614	0
		Total	34,988	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:				

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following... (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

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

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

6.4.9 TABLE 6-9: WATER SUPPLIES—PROJECTED

Table 6-8 Water Supplies—Projected

Submittal Table 6-9 Wholesale: Water Supplies — Projected Water Code Section 10631 (b)							
Water Supply			Projected Water Supply (Report to the Extent Practicable)				
			2030	2035	2040	2045	2050 (opt)
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	Additional Detail on Water Supply	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)
Add additional rows as needed							
Purchased or Imported Water	Treated Imported Water from Metropolitan	Potable	26,739	27,639	27,732	27,556	27,240
Purchased or Imported Water	Untreated Imported Water (Raw Water) from Metropolitan for Groundwater Replenishment	Non-Potable	40,000	22,500	5,000	5,000	5,000
Recycled Water	Pure Water from Metropolitan for Groundwater Replenishment	Non-Potable	0	17,500	35,000	35,000	35,000
Recycled Water	Direct Use	Non-Potable	2,157	2,157	2,157	2,157	2,157
		Subtotal Potable	26,739	27,639	27,732	27,556	27,240
		Subtotal Non-Potable	42,157	42,157	42,157	42,157	42,157
		Total	68,896	69,796	69,889	69,713	69,397
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 a Submittal Table 2-3.							
NOTES:							

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following... (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...

7.0 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 Upper Water's 2025 Plan discusses and provides the following:

- FY 2019-20 represents an "average" or "normal" water year for Upper Water in which the total amount of rainfall was similar to the historical average rainfall.
- A "single dry" year for Upper Water was represented in FY 2017-18, in which the total amount of rainfall was below the historical average rainfall.
- A "five consecutive year drought" period for Upper Water is represented from FY 2011-12 to FY 2015-16, where the total amount of rainfall during each of these years was less than the historical average rainfall.
- Upper Water's current and projected water supplies available during normal years in five-year increments over the next 25 years are provided (through FY 2049-50) as shown on Table 7-2.
- Upper Water's current and projected water supplies available during single dry years in five-year increments over the next 25 years are provided (through FY 2049-50) as shown on Table 7-3.
- Upper Water'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 FY 2049-50) as shown on Table 7-4.
- The reliability of Upper Water'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 Upper Water'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 Upper Water's water supply reliability over a five consecutive year drought period. Upper Water's DRA assumes a five consecutive year drought from FY 2025-26 through FY 2029-30 and includes a review of water supplies, water uses, and water supply reliability for each water supply source during this period. Upper Water's water system has experienced a prior five consecutive year drought with no limitation to its collective water supplies. Consequently, Upper Water 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 Upper Water's UWMP describes Upper Water's ability to meet wholesale customer water demands by analyzing a variety of factors which affect Upper Water's water supply. Upper Water's member agencies have historically used groundwater to meet non-potable irrigation demands. Therefore, those agencies can produce the needed water from the Main Basin for irrigation purposes if recycled water supplies are impaired.

This section assesses Upper Water'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 DRA which provides a mechanism for Upper Water 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

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 water supply to Upper Water's member agencies meets all state and federal water quality standards. The potable water supply within Upper Water's service area comes from two main sources: the Main Basin and Metropolitan.

7.1.1.1 Groundwater

Water produced within the Main Basin historically had been impacted by man-made contaminants in certain areas and at varying depths. The Watermaster, in coordination with Upper Water, has worked with state and federal regulators, along with local water

companies to clean up water supplies. Multiple treatment facility sites have been constructed and operated to remove contaminants from the groundwater. Wells which pump potable water from the Main Basin meet the State Water Resources Control Board – Division of Drinking Water's (DDW's) drinking water standards. These groundwater supplies are considered reliable both from a water quality and quantity standpoint.

As discussed in detail in Section 6.2.2, the Watermaster prepares and annually updates the Five-Year Water Quality and Supply Plan in accordance with the requirements of Section 28 of its Rules and Regulations. The objective of the Five-Year Water Quality and Supply Plan is to coordinate groundwater-related activities so that both water supply and water quality in the Main Basin are protected and improved. Many important issues are detailed in the Five-Year Plan, including how Watermaster plans to:

1. Monitor groundwater supply and quality;
2. Develop projections of future groundwater supply and quality;
3. Review and cooperate on cleanup projects, and provide technical assistance to other agencies;
4. Assure that pumping does not lead to further degradation of water quality in the Basin;
5. Address Perchlorate, NDMA, and other emerging contaminants in the Basin;
6. Develop a cleanup and water supply program consistent with the USEPA plans for its San Gabriel Basin Superfund sites; and
7. Coordinate and manage the design, permitting, construction, and performance evaluation of the BPOU cleanup and water supply plan.

Current and projected water quality of the Main Basin is discussed in the Main Basin's Five-Year Water Quality and Supply Plan, which is attached in Appendix I.

7.1.1.2 Imported Water

Water from Metropolitan is delivered by Upper Water to its member agencies within its service area for direct use and groundwater replenishment. Metropolitan's water quality meets all state and federal water quality standards. Water quality plays a vital role in Metropolitan's availability of a useful water supply. Water quality affects the reliability of groundwater storage, recycled water and impacts the Bay-Delta. To the extent possible, Metropolitan responds to water quality concerns by concentrating on protecting the quality of the source water and developing water management programs that maintain and enhance water quality. Metropolitan's efforts and water quality data are explained in Section 4 of its 2025 UWMP, which is incorporated by reference. As discussed in Metropolitan's 2025 UWMP, Metropolitan anticipates no significant reductions in water supply availability from these sources due to water quality concerns and has not identified any water quality risks that cannot be mitigated. Metropolitan discusses the reliability of its existing and planned sources of water supply in Section 2 of its 2025 UWMP, which is incorporated by reference.

Colorado River

Through farm and irrigation conservation programs, improved reservoir system operations, land management programs, and water transfer and exchanges, Metropolitan has increased the reliable supply from the Colorado River Aqueduct.

Quagga mussels in the lower Colorado River threaten Metropolitan's Colorado River Aqueduct system and have the potential to grow exponentially unless the Colorado River water is isolated and allowed to dry out. In 2007, Metropolitan developed its Quagga Mussel Control Program to monitor and control the quagga mussel population. Although Colorado River water may be delivered as Supplemental Water to the Main Basin, there are issues which must be addressed prior to delivery. The conditions which would allow an area to dry out to eliminate the quagga population do not exist on the San Gabriel

River when delivering water through USG-3; however, Watermaster is coordinating with Upper Water, Metropolitan and the Los Angeles County Department of Public Works to develop a solution to mitigate the Quagga mussel issue in order to deliver Colorado River water through USG-3 and CEN B-48. A second concern is the high TDS concentration in Colorado River water, which would need to be addressed through Watermaster's "Criteria for Delivery of Supplemental Water". More details on Colorado River and constraints can be found in Chapter 3 of MWD's 2025 UWMP.

State Water Project

In order for the State Water Project to deliver all of the water contracted in the future, additional water supplies must be developed. Water diverted at the Sacramento-San Joaquin Delta by the SWP must be water that is surplus to the needs of the areas of origin. As local use of water in northern California increases, the supply to the SWP may be reduced. The Bay-Delta is a part of the SWP water delivery system. The reliability of the Bay-Delta to deliver water may be impacted by potential risks associated with endangered species, earthquakes, levee failure, and climate change. In order to mitigate these potential risks, State and federal resources and environmental protection agencies and a broad range of stakeholders are involved in a multiyear planning process referred to as the CALFED process to develop programs to greatly improve the capacity and reliability of the SWP and the environmental conditions of the Bay-Delta.

Golden mussels were discovered in the Sacramento-San Joaquin Delta in October 2024 and rapidly spread through the SWP. These invaders are similar to quagga and zebra mussels in that they can rapidly spread and alter ecosystems. Although the introduction of these species into drinking water supplies does not typically result in violation of drinking water standards, invasive mussel infestations can adversely impact aquatic environments and infrastructure. On September 3, 2025, DWR confirmed the presence of a golden mussel veliger in a sample from Silverwood Lake. This finding, verified through DNA sequencing, represents the southernmost detection of golden mussels in

the SWP to date. On September 24, 2025, the Los Angeles County Department of Public Works (DPW) ceased all Supplemental Water deliveries to the DPW owned spreading grounds in the Main San Gabriel Basin due to the detection of Golden Mussels in the State Water Project water at Silverwood Lake. Watermaster, Upper Water, Three Valleys District, San Gabriel District and Metropolitan are working cooperatively with DPW in developing a Golden Mussel Prevention, Control and Mitigation Plan (Golden Mussel Plan) for continued deliveries of untreated imported water to replenish the Basin. More details on SWP and constraints can be found in Chapter 3 of Metropolitan's 2025 UWMP.

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 Upper Water's supplies is based on the historical precipitation data in the vicinity of Upper Water's service area. Furthermore, Section 4.2.5 of this Plan notes that potential future climate change impacts may result in an increase in the average annual precipitation within Upper Water'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 Upper Water's service area is about 17.1 inches. Rainfall at the Puddingstone Dam Station 96C also is presentative of rainfall in the San Gabriel Valley. FY 2019-20 represents an average or normal water year for Upper Water in which the total amount of rainfall at the Puddingstone Dam Station was about

16.5 inches. A single dry year for Upper Water was represented in FY 2017-18 in which the total amount of rainfall at the Puddingstone Dam Station was about 7.0 inches. A five consecutive year drought period for Upper Water is represented from FY 2011-12 to FY 2015-16, where the total amount of rainfall at the Puddingstone Dam Station was about 11.6 inches, 7.8 inches, 4.8 inches, 7.9 inches, and 12.1 inches, respectively. Table 7-1 summarizes these "base years" for average, single dry, and five consecutive year drought and provides the total amount of imported water supplies available to Upper Water during those base years. The following discussion assesses the water service reliability of Upper Water's water supply sources.

Tables 7-2, 7-3, and 7-4 show that during these base years (for average year, single dry year and five consecutive year drought), supplies remained stable. A single dry year or a five consecutive-year drought period will not compromise Upper Water's ability to provide a reliable supply of water to its customers.

Water Service Reliability - Imported Water

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

In 2007, critically dry conditions impacted Metropolitan'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, Metropolitan adopted a WSAP in February 2008 to allocate available water supplies to its member agencies. Metropolitan 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 Metropolitan, the WSAP provides a separate reduced Allocation to a member agency for its 1) 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 Metropolitan, less an Allocation reduction factor, is the member agency's "Water Supply Allocation" of imported water from Metropolitan. When a member agency reduces its local demand through conservation or other means, the Allocation of imported water will increase. Depending on Metropolitan's available supply, Metropolitan can establish a specific WSAP shortage level. The shortage level causes a regional reduction and calculates an allocation for each of its member agencies. Additional information about Metropolitan's WSAP is provided in Metropolitan's Regional 2025 UWMP which is incorporated by reference. The following is a summary of Metropolitan'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, Metropolitan declared a WSAP Allocation Level 3 for FY 2015-16, which represented a regional reduction of 15 percent. In FY 2015-16 allocation was 27,913 acre-feet. Metropolitan rescinded the WSAP for FY 2016-17 and has not reinstated the WSAP since that time.

Water Service Reliability - Groundwater

Upper Water's member agencies produce water from the Main Basin. The amount of basin replenishment affects the elevation of the Key Well, which represents changes in the groundwater basin. As shown in Figure 6, the Main Basin historically goes through phases of drafting, which are followed by filling. As noted in Section 6.2, the Main Basin is a well-managed groundwater basin and can ensure long-term reliability of water supply. Additional information on the reliability of the groundwater basin and the elevation of the Key Well is discussed in Section 6.2.

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). Through imported water from Metropolitan, Upper Water has sufficient supplies to meet its demands during a single dry year and a five-year consecutive drought (See Tables 7-2, 7-3, and 7-4).

7.2.1 WSRA YEAR-TYPE CHARACTERIZATION

Table 7-1 summarizes “base years” for average, single dry, and five consecutive year drought years and provides the total amount of imported water supplies available to Upper Water during those base years. These year types are discussed below.

7.2.1.1 Types of Years

Upper Water’s base years for average, single dry, and five consecutive year drought years are provided in Section 7.2 and are summarized in Table 7-1. Upper Water relies on Metropolitan for its supplies of untreated and treated imported water and on LACSD for recycled water; consequently, a single dry year or a five consecutive year drought period will not compromise Upper Water’s ability to provide a reliable supply of water to its customers. As indicated in Chapter 6, Upper Water’s water supplies were sufficient in meeting Upper Water’s historical water demands during normal, single, and five consecutive year drought years. A normal or average year was based on a year during the past 15 years with a total precipitation similar to the historical average precipitation in the vicinity of Upper Water’s service area. A single dry year was based on a year during the past 15 years in which the total amount of rainfall was less than the historical average rainfall. A five consecutive year drought period for Upper Water is represented from FY 2011-12 to FY 2015-16, where the total amount of rainfall during each of these years was less than the historical average rainfall.

Upper Water primarily obtains its water supply from surface water from Metropolitan. In addition, Upper Water obtains recycled water from LACSD. Both types of water supply are included in Tables 7-2, 7-3 and 7-4. As discussed in Section 7.3 and shown in Table 7-2, Table 7-3, and Table 7-4, a single dry year or a five consecutive year drought period will not compromise Upper Water’s ability to provide a reliable supply of water to its member agencies.

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 Upper Water'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.

As previously discussed in Chapter 6, Upper Water's member agencies rely on water supply from: 1) Metropolitan imported water supply; 2) Main Basin groundwater; and 3) recycled water from LACSD. Upper Water provides treated imported water for drinking water and provides untreated imported water for groundwater replenishment. As previously discussed in Section 7.2.1, a single dry year or a five consecutive year drought period will not compromise Upper Water's ability to provide a reliable supply of water to its member agencies.

Imported Water

It is assumed the WSAP is implemented when Metropolitan has restricted water supply during a single dry year and a five consecutive year drought. Tables 7-3 and 7-4 compare

Upper Water's demand and supply on imported water from Metropolitan during single dry and five consecutive year drought periods. As shown in Tables 7-3 and 7-4, Upper Water will be able to provide both treated imported water for direct deliveries and untreated imported water for Replacement Water within its WSAP allocation for the next 20 years during single dry and five consecutive year drought periods.

In addition, Metropolitan's 2025 UWMP has concluded that the region can provide reliable water supplies under both the single driest year and the five consecutive year drought hydrologies for the next 25 years (see Appendix J). The 2025 UWMP prepared by Metropolitan, which is incorporated by reference, should be referred to for more details on the reliability of Metropolitan's imported water supplies.

Groundwater

Upper Water's member agencies produce water from the Main Basin. The amount of basin replenishment affects the elevation of the Key Well, which represents changes in the groundwater basin. As shown in Figure 6, the Main Basin historically goes through phases of drafting, which are followed by filling. As noted in Section 6.2, the Main Basin is a well-managed groundwater basin and can ensure long-term reliability of water supply. Additional information on the reliability of the groundwater basin and the elevation of the Key Well is discussed in Section 6.2.2.

7.2.2.1 Water Service Reliability – Normal Year

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

Recycled Water

As previously discussed, Upper Water's direct non-potable use recycled water program is part of Upper Water's effort to reduce reliance on imported water supplies, providing an economic benefit as well as enhance local water supply reliability. Upper Water's existing recycled water program includes pipelines and a recycled water reservoir to provide tertiary treated recycled water to customers in Upper Water's service area. Additional information on the reliability of the recycled water program is discussed in Section 6.2.5.

7.2.2.2 Water Service Reliability – Single Dry Year

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

7.2.2.3 Water Service Reliability – Five Consecutive Dry Years

Table 7-4 summarizes Upper Water'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 that Upper Water 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.

This Plan describes the management tools and options used to maximize local resources and minimize the need to import water. In particular, Section 6.2 discusses the management of the groundwater basin, Chapter 9 discusses the Demand Management Measures (DMMs) implemented by Upper Water, Section 6.8 describes future water supply projects within Upper Water's service area, and Section 6.5 discusses recycled water use and the potential plans to serve additional member agencies within Upper Water's service area. As a wholesale water agency, Upper Water delivers imported treated water to its member agencies for direct use and untreated imported water from groundwater replenishment and is committed to assisting its member agencies to maximize their local resources. As discussed in Chapter 9, Upper Water participates in wholesale agency programs, which provide financial incentives for water conservation, technical support through workshops, and available staff for conservation projects. As discussed in Section 6.5, Upper Water's direct non-potable use recycled water program is part of Upper Water's effort to reduce reliance on imported water supplies, providing an economic benefit as well as enhancing local water supply reliability.

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.

Upper Water's water supply sources include treated imported water, untreated imported water, and recycled water. The following discussion provides a DRA which assesses Upper Water's water supply reliability over a five consecutive year drought period. Upper Water's DRA incorporates a five-year consecutive drought from FY 2025-26 through FY 2029-30 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

Upper Water's DRA was prepared using historical production data from Upper Water's water supply sources. The following assumptions were considered during the preparation of Upper Water'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 FY 2025-26 through FY 2029-30.
- 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 FY 2011-12 and FY 2015-16 (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 FY 2019-20 (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 FY 2011-12 and FY 2015-16).
- 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 Upper Water's DRA for 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 reduce 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 increased 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 increased 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 on 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

Upper Water's DRA incorporates a five consecutive year drought based on five consecutive dry years commencing in FY 2025-26. The quantity of water supplies available for each year during this five consecutive year drought period included in Upper Water's DRA is assumed to be the same as the quantity of water supplies produced by Upper Water (i.e. demands) during the most recent and historical five consecutive year drought which occurred from FY 2011-12 and FY 2015-16. 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.

Upper Water obtains imported water from the Metropolitan Water District of Southern California. Section 6.2.1 describes the planning conducted by the Metropolitan Water District of Southern California regarding imported water supplies available to Upper Water. The reliability of Metropolitan's supplies is also discussed in its 2025 Regional UWMP and is incorporated by reference. Upper Water purchases imported water which is delivered directly within its distribution system. Upper Water's purchases of imported water over the past ten years have been tabulated in Section 6.1.

As discussed in Section 6.2.7.2, Upper Water and Metropolitan actively store water in the Man Basin through a long-term cyclic storage agreement. Metropolitan is able to deliver water for groundwater replenishment purposes in advance of Upper Water's specific requirement for such water, as supplies allow. These operations provide additional reliability to groundwater supplies in the Main Basin for Upper Water's member agencies.

The imported water purchases by Upper Water during the most recent and historical five consecutive year drought period have been tabulated in Section 6.1. Because Upper Water'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 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 imported water which may be available in a future five consecutive year drought absent Metropolitan's programs which it has since implemented.

Summary

Upper Water's water system has previously experienced a five consecutive year drought with no limitation to its collective water supplies. Upper Water has the ability to enact varying water shortage levels (see Chapter 8), through allocations from Metropolitan, and 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 imported water supply Upper Water will rely on during a five consecutive year drought. The annual quantities are summed and are also provided on Table 7-5. When necessary, Upper Water can implement

various water shortage levels of its Water Shortage Contingency Plan (as discussed in Chapter 8) in order to reduce its water demands. The total water supplies available to Upper Water shown in Table 7-5 are based on the quantity of supplies produced by Upper Water (i.e. demands) during the most recent historical five consecutive year drought period (from FY 2011-12 through FY 2015-16). As shown in Table 7-5, assuming no additional water supply benefits will be available from groundwater supplies, Upper Water will need to 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. Additionally, Upper Water's member agencies will need to reduce their retail demands.

During the last five consecutive year drought period, Metropolitan instated its WSAP with Upper Water receiving a WSAP allocation of approximately 27,900 acre-feet. These potential supplies during a five consecutive year drought period are compared with the DRA estimated supplies and demands (Table 7-5) in the tabulation below.

7.4 SUBMITTAL TABLES

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

Table 7-1 Basis of Water-Year Data (WSRA)

OPTIONAL Submittal Table 7-1 Wholesale: Basis of Water Year Data (Reliability Assessment)			
Year Type	**Base Year** If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	**Available Supplies if Year Type Repeats**	
		☐ Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** [insert location from UWMP]	
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	**% of Average Supply**
Average Year	2020	36739	100%
Single-Dry Year	2018	25666	68%
Consecutive Dry Years 1st Year	2012	27888	73%
Consecutive Dry Years 2nd Year	2013	19243	45%
Consecutive Dry Years 3rd Year	2014	43712	115%
Consecutive Dry Years 4th Year	2015	54033	151%
Consecutive Dry Years 5th Year	2016	29032	77%
DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 W 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 W, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 W 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 unit of measure selected in Submittal Table 2-3.			
NOTES:			

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

Table 7-2 Normal-Year Supply and Use Comparison

Submittal Table 7-2 Wholesale: 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 W)	68,896	69,796	69,889	69,713	69,397
Use totals (see OPTIONAL Submittal Table 4-2 W)	47,157	47,157	47,157	47,157	47,157
Surplus/(shortfall)	21,739	22,639	22,732	22,556	22,240
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 SUBMITTAL TABLE 7-3: SINGLE-DRY-YEAR SUPPLY AND USE COMPARISON

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

Submittal Table 7-3 Wholesale: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (AF)	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 (AF)**
Supply totals	72,748	73,645	73,737	73,561	73,248
Use totals	68,686	69,583	69,675	69,499	69,186
Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
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:					

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

Table 7-4 Multiple Dry Years Supply and Use Comparison

Submittal Table 7-4 Wholesale: 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	58,038	73,969	74,391	74,322	74,060
	Use totals	53,976	69,907	70,329	70,260	69,998
	Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals	58,038	73,969	74,391	74,322	74,060
	Use totals	53,976	69,907	70,329	70,260	69,998
	Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals	58,038	73,969	74,391	74,322	74,060
	Use totals	53,976	69,907	70,329	70,260	69,998
	Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals	58,038	73,969	74,391	74,322	74,060
	Use totals	53,976	69,907	70,329	70,260	69,998
	Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals	58,038	73,969	74,391	74,322	74,060
	Use totals	53,976	69,907	70,329	70,260	69,998
	Surplus/(shortfall)	4,062	4,062	4,062	4,062	4,062
	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:						

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

Table 7-5 Five-Year Drought Risk Assessment

Submittal Table 7-5 Wholesale: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	**Total**
Total Water Use (AF)	27,888
Total Supplies (AF)	27,888
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2027	**Total**
Total Water Use (AF)	19,243
Total Supplies (AF)	19,243
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2028	**Total**
Total Water Use (AF)	43,712
Total Supplies (AF)	43,712
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2029	**Total**
Total Water Use (AF)	54,033
Total Supplies (AF)	54,033
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2030	**Total**
Total Water Use (AF)	29,032
Total Supplies (AF)	29,032
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	

8.0 WATER SHORTAGE CONTINGENCY PLAN

LAY DESCRIPTION – CHAPTER 8

WATER SHORTAGE CONTINGENCY PLAN

Chapter 8 discusses the Water Shortage Contingency Plan (WSCP) for Upper Water. Due to Upper Water being a wholesale water agency and relying on Metropolitan for all of its imported water supplies, Upper Water's WSCP incorporates Metropolitan's Water Surplus and Drought Management (WSDM) Plan and WSAP in its WSCP.

A water shortage means that the water supply available is insufficient to meet the normally expected customer water use at a given point in time. The WSCP anticipates a water supply shortage and provides guidance for managing and mitigating a potential water shortage. The WSCP can be amended as needed without amending Upper Water's 2025 Urban Water Management Plan in its entirety.

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

- Upper Water's Water Shortage Contingency Plan presents how Upper Water intends to act, or respond, in the case of an actual water shortage contingency.
- Preparation of Upper Water's "Annual Water Supply and Demand Assessment" (or Annual Assessment) is discussed. The Annual Assessment includes a review of Upper Water's "unconstrained" water demands for the current year and for a potential upcoming single dry year. Unconstrained water demands represent Upper Water's water demands prior to any "response actions" Upper Water may invoke pursuant to Upper Water's Water Shortage Contingency Plan.

- Metropolitan manages water supplies to minimize the adverse impacts of water shortages. Metropolitan's plan for water usage during periods of shortage has been correlated 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.
- Metropolitan and Upper Water's response actions to reduce demand on water supplies and to reduce any shortage gaps in water supplies are summarized.
- Upper Water's Emergency Response Plan is summarized.
- The local and regional seismic risk assessments are discussed. The locations of earthquake faults in the vicinity of Upper Water's water service area are provided.
- The effectiveness of the shortage response actions is presented. Upper Water has been able to provide sufficient water supplies to its member agencies, including during long-term droughts and years with historically high-water demands.
- The communication protocols implemented by Upper Water during a water supply shortage are presented.
- The legal authorities associated with Upper Water's WSCP are presented.
- The financial consequences associated with Upper Water's standard water shortage levels are presented.
- Upper Water 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 Upper Water to adopt and amend its Water Shortage Contingency Plan are presented.

The following Water Shortage Contingency Plan includes references to Chapters and Sections from Upper Water'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.

Upper Water's sources of supply were discussed in Section 6.2 of the 2025 UWMP and consist of imported water purchased from Metropolitan. Upper Water's member agencies also rely on managed groundwater supplies from the Main Basin. The reliability of the various sources of supply is discussed in Chapter 7 of the 2025 UWMP. Imported water supplies (both treated and untreated) may be impacted in the event Metropolitan implements its WSAP due to a water supply shortage. A seismic risk assessment and mitigation plan is discussed in Section 8.4.6. Finally, recycled water is locally generated and generally is not impacted by drought conditions.

8.2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

CWC 10632.

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 June 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 June 1 of each year, whichever is later.

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

and communication actions consistent with Upper Water's Water Shortage Contingency Plan.

For each Annual Assessment, Upper Water prepares a preliminary assessment which evaluates the adequacy of its water supplies for the current and upcoming years by April of each year. The preliminary assessment includes a review of water supplies for at least a single dry year.

The components of an Annual Assessment consist of the following:

- A written decision-making process
- Key data inputs and assessment methodology

8.2.1 DECISION-MAKING PROCESS

Upper Water purchases treated and untreated imported water as its primary source of water supply. Consequently, during the third quarter of each FY Upper Water will review its water demands from the initial six months along with the current groundwater basin conditions, local hydrology and imported water supply outlook. This information will be used to help develop the Annual Assessment. A draft of the Annual Assessment will be circulated internally within Upper Water for peer review and comment. Based on comments received, a redraft will be prepared and provided to the General Manager for final review. If necessary, a final draft of the Annual Assessment will be provided to Upper Water's Board of Directors for review and included in the agenda as part of a Board 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 Upper Water 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 Upper Water.

8.2.2 DATA AND METHODOLOGIES

The key data inputs and methodologies which will be evaluated by Upper Water during the preparation of the preliminary assessment will include the following:

1) Evaluation Criteria: The locally applicable evaluation criteria used to prepare the Annual Assessment will be identified. The criteria include the key data inputs and methodologies described below.

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 prior to any special shortage actions, 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 Monitoring Reports, existing water shortage levels (see Section 8.3), and existing water conservation ordinances (see Section 9.2.1).

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. 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 4.2.4) 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 6.2.8), will be considered.

6) Other Factors: Additional local considerations, if any, which can affect the availability of water supplies will be described.

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.

Upper Water is a member agency of Metropolitan and as such relies on Metropolitan for all its imported water supplies. According to Metropolitan's 2025 UWMP, Metropolitan's

supply is considered to be in surplus as long as net annual deliveries are made to the water storage programs. Metropolitan's supply is considered to be in a shortage condition when Metropolitan must withdraw water from storage to meet demands. Metropolitan has developed a Water Surplus and Drought Management (WSDM) Plan which is discussed further in the following section and is included in Section 2.5 of Metropolitan's 2025 UWMP, which is incorporated by reference.

The WSDM Plan was adopted in April 1999 as a management tool for planning during wet and dry years. Upper Water participated in Metropolitan's WSDM Plan by jointly participating in the development of the plan through various workshops held by Metropolitan. The WSDM Plan addresses regional water management strategies. The WSDM Plan has specific management actions for six specific water shortage stages and four surplus situations. Shortages can be classified as "shortage", "severe shortage", or "extreme shortage".

Metropolitan has established a Treated water rate of $1,498 per AF and an Untreated water rate of $1,015 for CY 2025. During a Shortage Stage 6 of the WSDM Plan, Metropolitan will implement the WSAP, discussed in Section 6.1. Depending on Metropolitan's available supply, Metropolitan can establish a specific WSAP shortage level. The shortage level causes a regional reduction and calculates an allocation for each of its member agency. At such times Metropolitan instates its WSAP as the result insufficient water supplies, Upper Water's imported water supplies will be significantly impacted for the period of time the WSAP is in place. The available supplies during a WSAP will vary based on the level of the allocation but was about 27,900 acre-feet during fiscal year 2015-16 (Level 3). Additional information about Metropolitan's WSAP is provided in Metropolitan's 2025 UWMP.

In response to a very low SWP allocation in 2022, MWD Board of Directors adopted a resolution on April 26, 2022, that, in part, adopted the framework of an Emergency Water Conservation Program (EWCP). The Program allows affected Member Agencies to

achieve compliance by meeting an agency-specific volumetric delivery of SWP water. Upper Water's total SWP volumetric limit was about 14,700 acre-feet. MWD has been working on near- and long-term projects and programs to help alleviate impacts on MWD member agencies from drought impacts on the SWP system. Since MWD had sufficient storage and supplies on the Colorado River, an allocation under WSAP was not necessary on the entire MWD service area.

The following is a summary of Metropolitan'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 accordance with the CWC in which urban water suppliers are required to define six standard water shortage levels, Upper Water has developed the crosswalk illustrated below (also included in Upper Water's 2020 Plan) that translates Upper Water's previously established shortage levels to the mandated standard shortage levels. These shortage level stages are shown in Table 8-1.

Shortage Level	Water Shortage Condition
Level 1	5%
Level 2	10%
Level 3	15%
Level 4	20%
Level 5	25%
Level 6	30%
Level 7	35%
Level 8	40%
Level 9	45%
Level 10	50%

Shortage Level	Percent Shortage Range
1	Up to 10%
2	Up to 20%
3	Up to 30%
4	Up to 40%
5	Up 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.

During a water shortage, Metropolitan may be required to implement shortage response actions that will be customized to meet the circumstances of the particular shortage which will include supply augmentation, demand response measures, and operational measures.

8.4.1 SUPPLY AUGMENTATION

Upper Water is a member agency of Metropolitan and as such relies on Metropolitan for all its imported water supplies. Metropolitan's first response to a gap between supplies and demands is to optimize its supply options from the SWP and Colorado River including its flexible supply programs and storage reserves. Metropolitan pursues water transfer and exchange programs to mitigate supply deficiencies. See Metropolitan's WSCP for more information.

In addition, Upper Water's member agencies can focus on demand reduction measures in the event existing sources of supply are not sufficient to meet customer demands. As noted in Section 8.2, Upper Water 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.

8.4.2 DEMAND REDUCTION

As discussed previously, water supply shortages may require Metropolitan to enact the WSAP to implement regional reductions to its member agencies' allocations of imported water. By limiting Upper Water's available supplies, Upper Water's member agencies would be required to reduce their retail demands on treated imported water or obtain additional supplies from other sources. As discussed in Section 9, Upper Water encourages efficient use of water and implements demand management measures, regardless of the status of available supplies from Metropolitan. During a water shortage, Upper Water will continue its outreach efforts to encourage water conservation and will continue to implement its demand management actions such as offering its rebate programs and landscape surveys to reduce demands. See Metropolitan's WSCP for more information.

The following table provides a summary of shortage response actions that may be implemented by Metropolitan and passed through to Upper Water as a member agency.

Table A.4-5
Shortage Stages and Response Actions

Shortage Stage	Shortage Percentage	Shortage Response	
1	Up to 10%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation
2	10% to 20%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation
3	20% to 30%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation
4	30% to 40%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation
5	40% to 50%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation
6	More than 50%	Take from Storage Execute Flexible Supplies Implement Voluntary Demand Reduction Implement Supply Allocations Take from Emergency Storage, if needed	• 0 to 100% met by Storage • 0 to 100% met by Flexible Supplies • 0 to 20% of total retail water use met by implementing Communication Plan • 0 to 50% of total base demand met by supply allocation • Take from emergency storage during a catastrophic event

Source: The Metropolitan Water District of Southern California 2025 Urban Water Management Plan and Water Shortage Contingency Plan.

Table 8-3 describes each demand reduction action and its effect on reducing the shortage gap.

8.4.3 OPERATIONAL CHANGES

As discussed in Section 3.1, Upper Water does not own any water distribution facilities. Accordingly, any operational changes required during a water shortage would be enacted by Metropolitan. Examples of possible operational changes include suspension of maintenance cycles, deferment of planned system outages, and adjustment to the flow

and routing through Metropolitan's system. See Metropolitan's WSCP for more information.

8.4.4 ADDITIONAL MANDATORY RESTRICTIONS

As a wholesale agency, Upper Water is not required by DWR to complete Section 8.4.4.

8.4.5 EMERGENCY RESPONSE PLAN

Upper Water is prepared to assist its member agencies and emergency response efforts in the event of an emergency within its service area. Upper Water updated its Emergency Response Action Plan (ERAP) in November 2025 documenting roles and responsibilities and procedures during an emergency. The ERAP is incorporated by reference.

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.

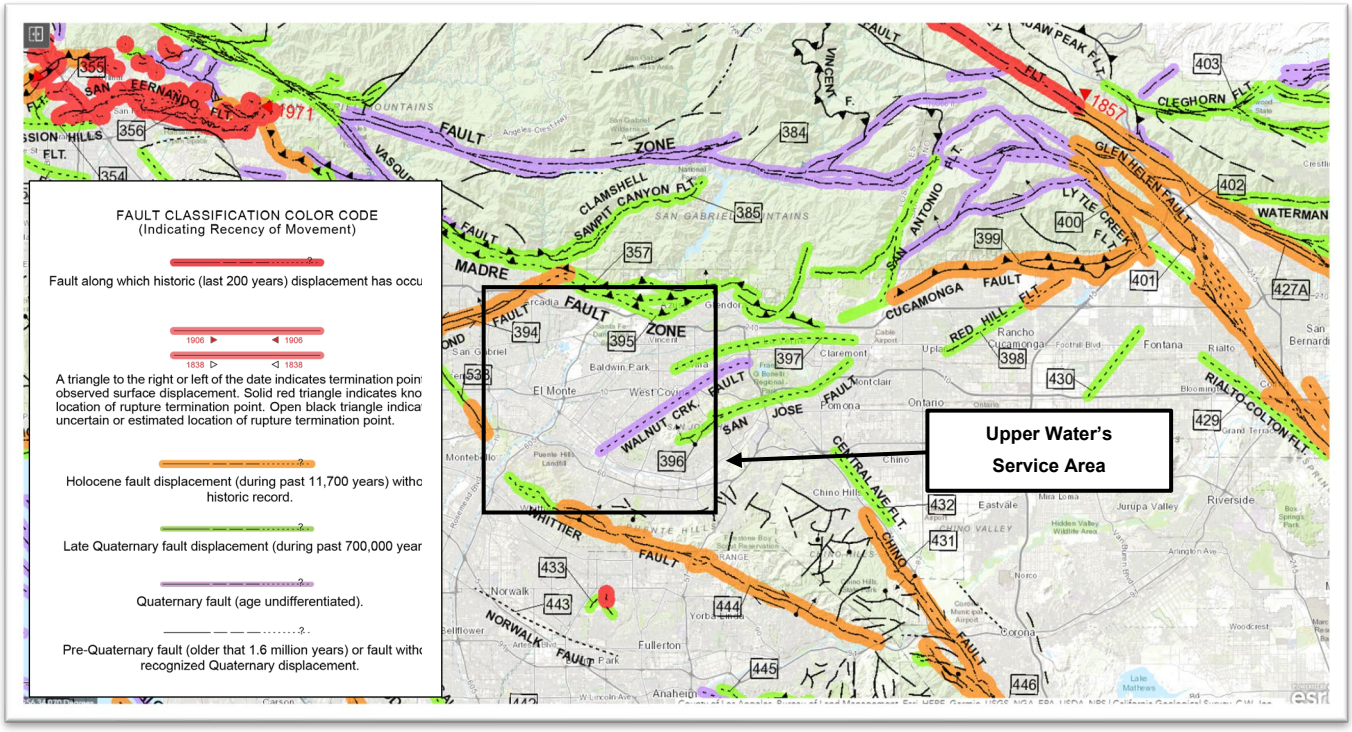
As discussed in Section 8.4.5, Upper Water is prepared to assist its member agencies in the event of an emergency, such as a seismic event. Metropolitan has prepared a seismic

risk assessment and mitigation plan as part of its resilience strategy which is included in Appendix 9 of Metropolitan's UWMP.

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 K. Additional information regarding the County of Los Angeles Emergency Management plans and procedures can be found at the following link: https://ceo.lacounty.gov/emergencydisaster-plans-and-annexes/

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 Upper Water'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 Upper Water's water service area include the San Andreas fault, the Walnut Creek fault, the San Jose fault, the Red Hill fault, the Raymond fault, the Cucamonga fault, and the Sierra Madre fault.

Location of Earthquake Faults



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

The California Geological Survey provides earthquake hazard maps[8] based on the Modified Mercalli Intensity (MMI) scale, which measures earthquake shaking intensity and its impacts on people, objects, and buildings. The area within Upper Water's service area has an MMI of approximately 9.3 to 9.6 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, Upper Water has prepared an Emergency Response Action Plan which provides the management, procedures, and designated actions Upper Water and its employees will implement during emergency

[8] https://conservation.ca.gov/cgs/sh/earthquake-shaking-potential

situations resulting from natural disasters, including during earthquakes, to ensure that customers receive a reliable and adequate supply of potable water.

8.4.7 SHORTAGE RESPONSE ACTION EFFECTIVENESS

The effectiveness of the shortage response actions is evident in Upper Water's historical ability to meet its customer's water demands in response to a water supply shortage. In addition, Upper Water supports local agencies in efforts to enforce regulations and prohibitions on water use. The effectiveness of Upper Water'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 Upper Water's historical annual water demands from its member agencies for each water supply source. During the past 15 years, Upper Water experienced a five consecutive year drought within the area receiving its water supplies from FY 2011-12 to FY 2015-16. Throughout this extended dry year period, Upper Water's imported water deliveries ranged from approximately 15,563 AF to 56,582 AF. Upper Water has been able to provide sufficient water supplies to its member agencies, including during long-term droughts and years with historically high water demands.

Based on Upper Water's ability in meeting water demands during past water supply shortages, it is anticipated that Upper Water will be able to continue providing sufficient water supplies to its customers during any of its standard water shortage levels.

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.

Upper Water is required to submit an Annual Assessment in accordance with DWR's guidance and requirements. The Annual Assessment will provide information on Upper Water's anticipated shortage, triggered response actions, compliance and enforcement actions, and communication actions, as discussed in Section 8.2. Upper Water may use the Annual Assessment as a method of declaring the appropriate water shortage level. Information pertaining to a water shortage and any Metropolitan water supply allocation will be provided to the public, member agencies, interested parties, and local agencies.

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.

As a wholesale agency, Upper Water is not required by DWR to complete Section 8.6.

8.7 LEGAL AUTHORITIES

CWC 10632.

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

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

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

CWC 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.

Public entities that supply water, such as Metropolitan and Upper Water, may adopt ordinances and resolutions, including a WSCP, by a majority vote of the governing body after holding a properly noticed public hearing. California Water Code also provides the authority for pricing to encourage water conservation.

In the event that the demand of water consumers cannot be satisfied without depleting a substantial amount of water supply needed for human consumption, sanitation, and fire protection, Upper Water shall declare a water shortage emergency, by way of a resolution adopted by Upper Water's board, and in accordance with CWC Chapter 3 (commencing with Section 350) of Division 1. Upper Water shall also coordinate with any city or county within its service area for possible declaration of a local emergency.

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.

Upper Water generates revenue from several sources including property taxes, a ready-to-serve charge, interest on accumulated funds, and surcharges on water sales. In the event of a water shortage, imported water sales may be reduced, which may impact: 1) revenue generated from surcharges on water sales; and 2) accumulated funds.

In 1995, Upper Water passed Resolution 4-95-333, which was amended in 2009 by Resolution 2-09-465, to levy a surcharge on all water sales (see Appendix L). Through these Resolutions, Upper Water initiated a program to levy a surcharge on all water sales to generate additional revenue. This program has continued and is still maintained today.

Revenue from water sales for Upper Water is based on the surcharge for 1) treated direct use and 2) untreated water for groundwater replenishment. The calendar year 2025 rate for full-service, treated water is $1,498, of which about $103 is a surcharge. The calendar year 2025 rate for full-service, untreated water is $1,015, of which $103 is a surcharge.

In the event of a shortage of water supply, direct deliveries of treated water could be reduced by 50 percent. The ten-year average of Upper Water's treated direct use sales

were about 5,000 acre-feet. If direct deliveries were reduced by 50 percent, Upper Water's treated direct use requirement would decrease to about 2,500 acre-feet and it would result in a revenue reduction. Based on the current surcharge rate of $103 per acre-foot for direct deliveries, there would be a loss of revenue of about $257,500.

Upper Water would experience a loss of revenue if there was a shortage of water supply; however, Upper Water's projected demand for direct deliveries for the next 25 years shows a stable trend. Future demands on Metropolitan for direct deliveries are assumed to be minimal. Upper Water will rely more on untreated imported water for groundwater replenishment and will decrease its demands for treated imported water, as shown in Table 6-9.

In the event of a shortage of water supply, Replenishment water sales could be reduced by up to 50 percent. If sales of untreated imported water for groundwater replenishment were reduced by 50 percent, it would result in a revenue reduction. However, the full-service, untreated water sales for the groundwater replenishment program continuously have periods of filling and drafting and the revenue from this program will eventually be received.

Upper Water has reserve funds set aside in case of a decrease in water sales. In the event of a significant decrease in water sales, it may be necessary for Upper Water to utilize these reserve funds to cover fixed operating expenses until normal operating revenues could be reestablished. During a significant decrease in water sales, during which Upper Water could not cover fixed operating expenses with reserve funds, it could be necessary for Upper Water to postpone or otherwise impact established water supply project schedules.

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.

As a wholesale agency, Upper Water is not required by DWR to complete Section 8.9. Upper Water will coordinate with its member agencies to assist with communication and outreach efforts needed during water shortages. In addition, Upper Water will coordinate with Metropolitan on regional efforts to maximize water use efficiency and mitigate supply limitations.

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.

Metropolitan's WSCP will periodically be re-evaluated and refined as necessary. As a member agency, Upper Water will coordinate with Metropolitan regarding any changes to the WSDM Plan and WSAP. During a water supply shortage, Upper Water will review the implementation results for any current or potential shortage gaps between water supplies and demands. Upper Water 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).

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

This Water Shortage Contingency Plan is adopted as part of Upper Water's 2025 Urban Water Management Plan adoption process discussed in Section 10.3. It is anticipated Upper Water will review, revise, and adopt an updated WSCP as part of preparing its 2030 Urban Water Management Plan as necessary. Any updates to Upper Water's WSCP will include a public hearing and adoption process by Upper Water's Board.

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.

As a wholesale agency, Section 8.11 is not applicable to Upper Water.

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.

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

- Upper Water will conduct a public hearing and make the Water Shortage Contingency Plan available for public inspection.
- Upper Water will provide notification of the time and place of the public hearing to any city or county in which water is provided.
- Upper Water will publish notice of public hearing in a newspaper once a week, for two successive weeks (with at least five days between publication dates).
- Upper Water's Board 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, Upper Water 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. Upper Water 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, Upper Water 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:

- Upper Water will conduct a public hearing and make the amended Water Shortage Contingency Plan available for public inspection.
- Upper Water's Board will adopt the amended Water Shortage Contingency Plan
- Upper Water 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 Upper Water'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

8.14.1 SUBMITTAL 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)			
☑	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	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%	6	More than 50%
NOTES:			

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:

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

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

8.14.2 SUBMITTAL TABLE 8-2: SUPPLY AUGMENTATION AND OTHER ACTIONS

Table 8-2 Supply Augmentation and Other Actions

Submittal Table 8-2 Wholesale: 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	Other Actions (describe)	Percentage	0	Not applicable. See Notes.
2	Other Actions (describe)	Percentage	0	Not applicable. See Notes.
3	Other Actions (describe)	Percentage	0	Not applicable. See Notes.
4	Other Actions (describe)	Percentage	0	Not applicable. See Notes.
5	Other Actions (describe)	Percentage	0	Not applicable. See Notes.
6	Other Actions (describe)	Percentage	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: Upper Water relies on Metropolitan for imported water supplies and consequently relies on Metropolitan's supply augmentation actions during a water shortage. Upper Water does not anticipate augmenting water supplies.				

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.
(C) Locally appropriate operational changes.
(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.

8.14.3 SUBMITTAL TABLE 8-3: DEMAND REDUCTION ACTIONS

Table 8-3 Demand Reduction Actions

Submittal Table 8-3 Wholesale: Demand Reduction Actions Water Code Section 10632(a)(4)(B) 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)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
Shortage Level 1	Expand Public Information Campaign	Percentage	Assumed to be effective at reducing demands by 5% to 10%	
Shortage Level 1	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 5% to 10%. Shortage gap to be reduced by retailers.	Provide Rebates on Plumbing Fixtures and Devices
Shortage Level 1	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 5% to 10%. Shortage gap to be reduced by retailers.	Provide Rebates for Landscaping Irrigation Efficiency
Shortage Level 1	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 5% to 10%. Shortage gap to be reduced by retailers.	Provide Rebates for Turf Replacement
Shortage Level 1	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 5% to 10%. Shortage gap to be reduced by retailers.	Offer Water Use Surveys
Shortage Level 2	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 10% to 20%. Shortage gap to be reduced by retailers.	All actions under Shortage Level 1
Shortage Level 3	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 20% to 30%. Shortage gap to be reduced by retailers.	All actions under Shortage Level 2
Shortage Level 4	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 30% to 40%. Shortage gap to be reduced by retailers.	All actions under Shortage Level 3
Shortage Level 5	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands by 40% to 50%. Shortage gap to be reduced by retailers.	All actions under Shortage Level 4
Shortage Level 6	Other Actions (describe)	Percentage	Assumed to be effective at reducing demands greater than 50%. Shortage gap to be reduced by retailers.	All actions under Shortage Level 5
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES:				

10632(a)(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:
(B) Locally appropriate demand reduction actions to adequately respond to shortages.
(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.

9.0 DEMAND MANAGEMENT MEASURES

LAY DESCRIPTION – CHAPTER 9

DEMAND MANAGEMENT MEASURES

Chapter 9 (Demand Management Measures) of Upper Water's 2025 Plan discusses and provides the following:

- Upper Water has implemented "Demand Management Measures" to reduce its water demands.
- Upper Water's Demand Management Measures include metering of all its water supply connections with its retail member agencies.
- Upper Water's Demand Management Measures include public education and outreach programs regarding water conservation.
- Upper Water's Demand Management Measures include staffing of its water conservation program.
- Additional Demand Management Measures including wholesale supplier assistance programs are discussed.
- A summary of the Demand Management Measures Upper Water has been implemented over the past five (5) years is provided.

Technical Assistance Guidance

Upper Water conservation staff continued providing one-on-one technical assistance regarding conservation programs to its retailers. Such assistance included informational resources, advice, program strategizing, and guidance pertaining to program development.

Upper Water also offered technical assistance through its Conservation Action Roundtable (CAR) meetings which kept retailers informed with program updates, upcoming events, conservation-related messaging and outreach campaigns, access to informational resources and tools, as well as information regarding pertinent WUE legislation and reporting requirements. CAR also empowered the retailers to share information about their own programs and discuss lessons, challenges, approaches, and solutions.

9.1 DEMAND MANAGEMENT MEASURES FOR RETAIL SUPPLIERS

As a wholesale agency, Upper Water is not required by DWR to complete Section 9.1.

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:

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

(ii) Metering.

(iv) Public education and outreach.
(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.

(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.

Regional Partnerships Supporting Water Use Efficiency

Upper Water has a proactive and extensive public outreach campaign that is deeply rooted in conservation and education efforts that promote water use efficiency.

Upper Water is an active member of both the California Water Efficiency Partnership (CalWEP) and the Alliance for Water Efficiency (AWE), having held membership in both organizations since their respective inceptions. Previously, Upper Water was an active member of the California Urban Water Conservation Council (CUWCC) which dissolved in 2016. The dissolution of the CUWCC resulted in the discontinuation of Best Management Practices (BMP) reporting. Even so, the Demand Management Measures (DMMs) mirror the BMPs and the DMMs continue to be vigorously implemented as part of Upper Water's integrated approach to actively pursuing water supply reliability.

Upper Water has actively encouraged its retailers to become members of CalWEP and subsequently AWE since CalWEP is the regional chapter of AWE. Throughout the UWMP reporting period Upper Water staff actively informed its retailers about CalWEP and AWE, noting the benefits of membership and encouraging retailers to join both organizations. Emails were sent to the retailers via the Conservation Action Roundtable (CAR) email list encouraging membership and providing information about dues cost-sharing offered by MWD. Upper Water invited CalWEP staff to conduct presentations about the organization a few times during the reporting years. Upper Water also continued to inform retailers about various studies, programs, and workshops offered by CalWEP.

Upper Water remains avidly committed to developing, implementing, managing, and evaluating comprehensive water use efficiency efforts as a good-faith-effort to implementing all cost-effective DMMs. Upper Water also continues to encourage its retail agencies to actively implement all cost-effective DMMs established for retail agencies.

9.2.1 REQUIRED DEMAND MANAGEMENT MEASURES

9.2.1.1 METERING

Upper Water, in coordination with Metropolitan, meters all water sales for direct use, groundwater replenishment, make-up water, and separately for recycled water.

9.2.1.2 PUBLIC EDUCATION AND OUTREACH

Water use efficiency is promoted through a wide spectrum of public education and outreach programs. Upper Water offers conservation brochures and posters, activity booklets, public outreach displays, oral presentations, videos, and workshops to inform the public of conservation efforts. Upper Water also raises awareness about water conservation through its annual WaterFest event, information booths, website, e-newsletter, press releases, news ads, paid advertising, and social media platforms.

In an effort to raise awareness among youth and their families, regarding water conservation and related issues, Upper Water offers student education programs available to all schools within its service area. Upper Water's school education programs, materials, and presentations meet state education framework requirements.

Upper Water also participates in additional educational youth programs offered through Metropolitan which also meet state education framework requirements and are made available to the schools within Upper Water's boundaries. Discussion of Metropolitan's school education programs and public outreach efforts are included in Metropolitan's 2025 UWMP, which is incorporated by reference.

Additional information regarding Upper Water's public education and outreach efforts for the UWMP reporting period is provided below. Information can also be found on Upper Water's website (http://upperwater.org).

Public Education and Outreach

Every individual plays a role in protecting and preserving our natural resources, including water. It is important for people of all ages to build awareness about environmental issues that may impact their water supplies. In pursuit of raised awareness, Upper Water continues to create and expand its public outreach and youth education efforts with an emphasis on making water conservation a way of life. Upper Water's public education and outreach efforts during the reporting period are discussed further on the following pages.

Residential Plant Voucher Program

The Residential Plant Voucher Program was an innovative small-scale pilot program that offered qualifying residents a voucher redeemable for up to $250 worth of approved water efficient, climate-appropriate plants to help transform their yards into beautiful water efficient landscapes. The program website offered information about qualifying plants and helpful information for converting a yard into a water efficient landscape.

Program Metrics:

From FY 20/21 through FY 24/25 (data through June 2025), 710 vouchers have been redeemed by residents. Additional redemptions are anticipated through the end of FY 2025/26.

Watershed Restoration Program

Started in 1992, the Watershed Restoration Program is a cooperative partnership between the Upper Water and the U.S. Forest Service that incorporates volunteers into efforts to protect and maintain the local watershed. Program activities typically include

collection of native seeds, planting of saplings and trash removal. Volunteers are taught about watersheds and water conservation: making the connection between the local mountains and their own drinking water.

Program events were paused during Fiscal Years 2020/21 and 2021/22 due to the COVID-19 pandemic.

Program Metrics:

Watershed Restoration Program Events					
FY	**# of Events**	**Volunteer Participants**	**Volunteer Hours**	**Saplings Planted**	**Trash Collected (lbs.)**
FY 2022-23	**2**	**25**	**100**	**692**	**290**
FY 2023-24	**4**	**109**	**436**	**2690**	**160**
FY 2024-25	**4**	**19**	**76**	**108**	**10**
Totals	**10**	**153**	**4,192**	**612**	**460**

Sustainable Watershed Education Program

Upper Water partners with the Discovery Science Foundation to provide K-7th grade student curriculum that focuses on water use efficiency, watershed issues, and groundwater awareness. Offered free to participating schools, the program includes interactive assemblies for K-7th graders and in-class hands-on workshops. The program is offered to all schools within Upper Water's service area.

Program Metrics:

	Assembly and Workshop Student Participants						Fieldtrips	
FY	**K-3rd Graders**	**4th Graders**	**5th Graders**	**6th Graders**	**7th Graders**	**Total**	**Trips**	**# of K-7th - Grade Students**
FY 2020-21		995	1,430	1,026	347	3,798	1	60
FY 2021-22		737	658	729	391	1,915	0	0
FY 2022-23		272	234	608	282	1,396	0	0
FY 2023-24		352	1,631	608	693	3,284	N/A	4,894
FY 2024-25	634	415	505	756	146	2,456	16	1,183
Totals	**634**	**2,771**	**4,458**	**3,727**	**1,859**	**12,849**	**17**	**6,137**

During Fiscal Years 2020–2021 through 2022–2023, school field trips were paused due to the COVID-19 pandemic. During this time, alternative education methods, such as online seminars, were offered.

Teacher/Parent Toolkit and Youth Activities

Upper Water created an online teacher/parent toolkit which offers a wealth of water education resources and tools to help teach youth about the importance of using water more efficiently both indoors and outdoors. Videos, lessons, activities, and weblinks offer information that teach about the water cycle, water sources, and water distribution systems which help students develop their own understanding of why water is a critical resource and the importance of conservation. The toolkit can be viewed online at https://upperwater.org/teacher-parent-tool-kit/

Water Efficient Landscape Classes

A number of water efficient workshops were offered free to the public covering topics such as water efficient landscaping, turf removal, home greywater systems, and leak detection. Upper Water also partnered with the Metropolitan Water District of Southern California, which sponsored free workshops for local communities and supported the offering of

additional workshops, both online and in person, for residents. During Fiscal Year 2020-21, workshops were conducted online due to the COVID-19 pandemic.

Program Metrics:

Workshop Participation		
FY	**# of Workshops**	**# Attendees**
FY 2020-21	2	337
FY 2021-22	10	346
FY 2022-23	14	328
FY 2023-24	12	247
FY 2024-25	7	310
Totals	**45**	**1,568**

Water Engineering 4 Good (WE4G)

Since the discontinuation of Solar Cup, sponsored by Metropolitan, the program has transitioned to Water Engineering 4 Good (WE4G). WE4G is an online STEAM competition for middle and high school students in which teams collaborate with water industry professionals to develop engineering-based solutions addressing drought and water conservation challenges. Students design and build both physical models using recycled materials and digital CAD models and present their final solutions to a panel of water industry experts. Participation has been gradual in the initial years, with a few teams joining in recent fiscal years.

Program Metrics:

WE4G Participants	
FY	**# Teams**
FY 2024-25	2
Totals	**2**

Water Awareness Art Contest

Upper Water's student art contest, originally titled "Water is Life," encourages youth to reflect on the importance of water and express its value through artwork. Beginning in Fiscal Year 2024–2025, the contest transitioned to the theme "Being Water Wise Is…". The program includes four grade categories: K–2, 3–5, 6–8, and 9–12.Program Metrics:

Art Contest Participation		
FY	**# of Student Entries**	**# of Schools**
FY 2020-21*	0	0
FY 2021-22	178	18
FY 2022-23	197	27
FY 2023-24	101	19
FY 2024-25	105	18
Totals	581	82

*Contest cancelled due to Covid-19

Water Education Grant Program

The Water Education Grant Program offers grants of up to $1,000 for classroom or school projects, grades K-12, that further a better understanding of water as a vital resource and the important role it plays in Southern California.

Program Metrics:

Water Education Grants			
FY	**Total Grants Awarded**	**# Participating Students**	**Grant Funding Awarded**
FY 2020-21	22	2,576	$16,658
FY 2021-22	28	2,641	$22,672
FY 2022-23	25	2,564	$24,660
FY 2023-24	23	2,083	$19,648
FY 2024-25	23	1,700	$18,786
Totals	**121**	**11,564**	**$102,424**

Waterfest

WaterFest is a free educational event for residents, families, and children, featuring interactive educational booths, environmental displays, informative presentations, free water-saving materials, raffles, and more. Upper Water partners with the Los Angeles County Department of Parks and Recreation And invites local retailers and non-profits to participate with informational booths. Beginning in 2024, the event was moved from fall to spring to align with Water Awareness Month. WaterFest was paused in 2020 and 2021 due to the COVID-19 pandemic.

Program Metrics:

WaterFest Attendees	
FY	**# Attendees**
FY 2021-22	1,500
FY 2022-23	1,500
FY 2023-24	1,500
FY 2024-25	1,000
Totals	**5,500**

Water Conservation Booths

In promoting water conservation, Upper Water launched an aggressive grassroots outreach campaign to educate the residents of the San Gabriel Valley. Informational booths on water conservation were hosted by Upper Water at city-sponsored events such as summer concerts, community gatherings, and environmental fairs.

Program Metrics:

Conservation Information Booths	
FY	**# Booths**
FY 2020-21*	0
FY 2021-22	32
FY 2022-23	56
FY 2023-24	54
FY 2024-25	42
Totals	**184**

**Canceled due to COVID-19 pandemic*

Community Town Hall Events

In an effort to better educate San Gabriel Valley residents, Upper Water hosted a "Firescaping the Foothills" town hall focused on wildfire preparedness and prevention. Topics included local water supply conditions, defensible space, emergency access, and landscaping approaches to help protect homes from wildfires, along with resources available to residents living in foothill communities.

Program Metrics:

- FY 2020-21: 162 attendees.

NewSplash Newsletter

During FY 2019-20 Upper Water unveiled a new monthly e-newsletter called "NewSplash" to engage and inform residents and key stakeholders. The program is emailed out to almost 11,000 recipients. Content includes information about conservation, water efficient programs, available rebates, water resources, water quality, WaterSense information, and kid's activities.

Conserve-a-palooza

Conserve-a-palooza is a virtual outreach program that uses social media to engage and educate residents on water conservation. For FY 2023/24, Upper Water held Conserve-

a-palooza in the fall over a six-week period. Residents within Upper Water's service area had the opportunity to participate by answering weekly conservation trivia. Randomly selected participants received water-use efficiency devices as giveaways ranging from high-efficiency toilets to native plant vouchers.
To view the videos, visit https://www.youtube.com/@upperwater

Upper Water's Rebranding

During FY 2024-25, Upper Water completed a brand refresh to better reflect our mission, engage the community, and provide clear, accessible information. The updated website features a streamlined design that meets all accessibility and public access guidelines for special districts. The site continues to provide valuable educational resources and water conservation materials for residents, teachers, and parents. Through this rebranding, Upper Water emphasizes its commitment to water resilience, sustainable practices, and community engagement, reinforcing our role as trusted stewards of safe, reliable water for the communities we serve. Visit upperwater.org for the new website.

Upper Water's Media Outreach

Throughout the reporting period Upper Water utilized a variety of media sources for education and outreach efforts. Print media included ads in publications such as San Gabriel Valley Tribune, Chinese World Journal, La Opinion, Beacon Media, Building Trades News, and Civic Publications. Online outreach ad sources included San Gabriel Valley Tribune online, La Opinion online, and Facebook and Instagram. Theater movie screen ads were also utilized.

Program Metrics:

Media Outreach		
FY	**Print Ads**	**Facebook Ads**
FY 2020-21	12	1
FY 2021-22	21	6
FY 2022-23	18	6
FY 2023-24	15	6
FY 2024-25	8	0
Totals	**74**	**19**

WaterSense Collaboration

As an active WaterSense partner, Upper Water strives to promote the WaterSense label and to further the water use efficiency outreach conducted through WaterSense. During the UWMP reporting period Upper Water took a proactive approach to support and expand the WaterSense outreach campaigns by offering to fund the translation of several WaterSense campaign materials into Chinese. Translated materials included 5 different "When in Drought" collaterals, 4 "Outdoor Watering" collaterals, as well as "It's Time to Start a Sprinkler Spruce-Up", "Is Your Watering Under Control", "Fix a Leak" Tip Sheet, "Your Better Bathroom" and "Detect and Chase Down Leaks" Checklist. These translated materials were fully funded by Upper Water and provided to WaterSense to make available to all WaterSense partners through the WaterSense partner website.

Upper Water Social Media

Public outreach regarding conservation and sustainability were also conducted by engaging the public through social media platforms that include:

- Facebook - https://www.facebook.com/upperdistrict/
- Instagram - https://www.instagram.com/upper_water/
- YouTube - https://www.youtube.com/@upperwater

Upper Water's "Water 101" Tours

Upper Water has actively engaged the region's local elected officials by offering educational programs on conservation, key water policies, and water issues that affect the San Gabriel Valley. Upper Water in partnership with the Main San Gabriel Basin Watermaster, Metropolitan, the Army Corps of Engineers, LA County Flood Control District and San Gabriel Valley Water Company have provided educational tours of the San Gabriel Valley water infrastructure. The tour also included an educational Water 101 for local city council members and municipal staff.

Program Metrics:

Tours	
FY	**# Tours**
FY 2022-23	2
FY 2023-24	2
FY 2024-25	5
Totals	**9**

Wholesale Supplier Assistance Programs – Regional Programs Implemented

SoCal Water$mart Rebate Program

Upper Water takes an active role in promoting rebates for water efficient devices offered through Metropolitan's SoCal Water$mart rebate program. These rebates are available to all qualifying residents and businesses within Upper Water's service area. Residential rebated items include: High-Efficiency Clothes Washers (HECWs), Premium High Efficiency Toilets (PHETs), Weather-Based Irrigation Controllers (WBICs), Rotating Sprinkler Nozzles, Soil Moisture Sensors, (SMS) and turf removal. CII rebated devices include HETs, High Efficiency Urinals, WBICs, SMS, conductivity controllers, turf removal, as well as some industry-specific water efficient devices. Upper Water's outreach efforts elevated public awareness of the program which resulted in increased program participation. Rebates provided for residents and businesses within Upper Water's area are shown in the following table.

Program Metrics:

FY	Residential Rebates		CII Rebates	
	Device Quantity	Applications	Device Quantity	Applications
FY 2020-21	5,359	1,054	0	0
FY 2021-22	43,792	996	141	5
FY 2022-23	298,121	3,738	18,240	14
FY 2023-24	184,298	4,299	71,477	19
FY 2024-25	84,104	3,813	14,926	15
Total	**615,674**	**13,900**	**104,784**	**53**

Member Agency Allocation Funding for Local Programs

Upper Water offers its retailers access to funding allocated through Metropolitan's Member Agency Allocation Program (MAAP) for the implementation of water use efficiency programs. Upper Water assists its retailers with advice and information regarding project proposals, program formulation, reporting templates, and assistance on an as-needed basis. Individual retailers will report on the metrics of their programs in their own respective 2020 Urban Water Management Plans. The following table provides a breakdown of MAAP funding Upper Water provided to participating retailers during the UWMP reporting period.

Program Metrics:

MAAP Funding Provided for Local Programs			
FY	**Amount Provided**	**Retailer**	**Program/ Device**
FY 2020-22	$60,000	Valley County Water District	School and Community Program
FY 2020-22	$40,000	Suburban Water Systems	Landscape Retrofit Program
FY 2020-22	$35,000	Suburban Water Systems	Residential Landscape Survey and Smart Controller Irrigation Nozzle Program
FY 2020-22	$100,000	Upper Water	Water Bottle Filling Station Program

FY 2020-22	$215,000	Upper Water	Water Smart Home Program (6 for 60)
FY 2020-22	$30,000	Valley County Water District	Weathering the Drought
FY 2020-22	$5,000	La Puente Calley County Water District	Drought Marketing Materials
FY 2020-22	$5,000	City of Monrovia	Drought Video
FY 2020-22	$120,000	Upper Water	Drought Marketing
FY 2022-24	$66,348	Upper Water	Emergency Water Conservation Program
FY 2022-24	$150,000	Upper Water	Water Smart Home Kit Program
FY 2022-24	$25,422	City of Monrovia	Monrovia Drought Marketing Campaign
FY 2022-24	$60,000	Valley County Water District	No-Des Truck
FY 2022-24	$6,125	City of Monrovia	Monrovia Enforcement Plan
FY 2022-24	$23,391	Sunny Slope Water Company	Sunny Slope Water Patrol Services
FY 2022-24	$30,000	City of Azusa	Outdoor Irrigation Survey and Direct Install Program
FY 2022-24	$103,000	Upper Water	Residential Plant Voucher Program
FY 2022-24	$50,000	Valley County Water District	Aquacademy
FY 2022-24	$16,500	Valley County Water District	CaDC Analytics Platform Software
FY 2022-24	$17,500	Valley County Water District	SwiftComply Software
FY 2022-24	$16,700	Valley County Water District	Valley County Plant Vouchers
FY 2024-25	$100,000	Upper Water	Water Smart Home Kit Program
FY 2024-25	$80,000	Upper Water	Residential Plant Voucher Program
FY 2024-25	$23,300	Valley County Water District	CII Large Commercial Meter Testing
FY 2024-25	$12,075	California American Water	Water Bottle Fill Station
TOTAL	**$1,390,361**		

Technical Assistance Guidance

Upper Water conservation staff continued providing one-on-one technical assistance regarding conservation programs to its retailers. Such assistance included informational resources, advice, program strategizing, and guidance pertaining to program development.

Upper Water also offered technical assistance through its Conservation Action Roundtable (CAR) meetings which kept retailers informed with program updates,

upcoming events, conservation-related messaging and outreach campaigns, access to informational resources and tools, as well as information regarding pertinent WUE legislation and reporting requirements. CAR also empowered the retailers to share information about their own programs and discuss lessons, challenges, approaches, and solutions.

9.2.1.3 WATER CONSERVATION PROGRAM COORDINATION AND STAFFING SUPPORT

Upper Water's water conservation and outreach program is managed by the Assistant General Manager who oversees the development of Upper Water's external relations, public outreach, and education programs. The Water Resources Analyst position, created in 2025, is as a full-time position assigned to promote and implement Upper Water's water use efficiency and education programs. The Water Resources Analyst is responsible for planning, developing, coordinating, implementing, and evaluating Upper Water's water use efficiency programs and also assists Upper Water's retailers by providing technical assistance for implementing local programs.

The Public Affairs Assistant position was created in 2025 to assist in the implementation of Upper Water's public outreach and social media campaigns. Other Upper Water staff provide support for Upper Water's conservation programs and outreach efforts. Consultants are also retained on an as-needed basis to supplement project management for specific conservation programs.

9.2.1.4 OTHER DEMAND MANAGEMENT MEASURES

There are no additional DMMs other than the ones discussed under Section 9.1.

9.2.2 WHOLESALE DEMAND MANAGEMENT MEASURES

9.2.2.1 ASSET MANAGEMENT

Upper Water does not have its own distribution system and relies on Metropolitan's distribution system for delivery of treated and untreated imported water to Upper Water's member agencies. Therefore, Upper Water is not required to fill out the Asset Management section. Information on Metropolitan's Asset Management can be found in Metropolitan's 2025 UWMP, which is incorporated by reference.

9.2.2.2 WHOLESALE SUPPLIER ASSISTANCE PROGRAMS

As a wholesaler Upper Water implements wholesale agency programs which have included financial incentives for water conservation devices, technical support and guidance, and regional implementation of programs when viable. Providing a regional approach allows all consumers in the service area an opportunity to participate in conservation programs that some local retailers might be unable to implement on their own. Such programs ensure consistent participation guidelines and consistent public messaging regarding water use efficiency.

Upper Water provides financial incentives for water conservation through various water use efficiency programs. Upper Water provides technical support by conducting workshops for various water conservation programs and provides one-on-one guidance with program strategies and processes. Upper Water also organizes and facilitates conservation roundtables that keep its retailers informed about conservation programs and outreach efforts as well as offers them an open forum to discuss their own programs and efforts.

Regional Program Implementation

When agreeable and beneficial, Upper Water develops, secures funding for, implements, and manages regional water use efficiency programs on behalf of its retail water agencies. This approach capitalizes on the economies of scale, ensures consistent programs guidelines, and maintains a consistent regional water use efficiency message to the public. During the reporting period, Upper Water implemented a variety of regional programs including, but not limited to, large landscape survey and retrofit program, plant voucher program, water bottle filling station program, watershed restoration program, as well as a number of school education programs, public workshops, and public outreach campaigns. Information regarding Upper Water's conservation programs can also be found on Upper Water's website (http://upperdistrict.org).

Efforts also include substantial promotion of water use efficiency programs offered through Metropolitan that are available to customers within Upper Water's service area. Examples of such programs include the SoCal Water$mart rebate program, Water Savings Incentive Program (WSIP) designed for improving non-residential water efficiency through upgraded equipment or services that do not qualify for standard rebates, and On-Site Retrofit Program which provides financial incentives to property owners who convert potable water irrigation or industrial water systems to recycled water use. Discussion of Metropolitan's regional water use efficiency programs are included in Metropolitan's 2025 UWMP which is incorporated by reference.

Local Program Assistance

Upper Water also aids its retailers with creating, developing, and implementing local programs. Assistance has been provided in a variety of ways, depending on the needs of each retailer, and has included: program design and strategy, targeting customer classes, assistance with funding procurement, program implementation, marketing, reporting, staff training opportunities, and provision of water use efficiency research and information.

10.0 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

LAY DESCRIPTION – CHAPTER 10

PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

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

- The steps Upper Water has performed to adopt and submit its 2025 Plan are detailed.
- The steps Upper Water has performed to adopt and submit its Water Shortage Contingency Plan are detailed.
- Upper Water coordinated the preparation of its 2025 Plan with interested parties and the cities and county within with Upper Water provides water supplies. Upper Water 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.
- Upper Water provided a notice of the public hearing to the same agencies regarding the time, date, and place of the public hearing.
- Upper Water published a newspaper notification of the public hearing, once a week for two successive weeks
- Upper Water conducted a public hearing to discuss and adopt Upper Water's 2025 Plan and its Water Shortage Contingency Plan.
- Within 30 days of adoption, Upper Water submitted the 2025 Plan and Water Shortage Contingency Plan to the California Department of Water Resources.
- Within 30 days of adoption, Upper Water submitted all data tables associated with the 2025 Plan to the California Department of Water Resources.

- Within 30 days of adoption, Upper Water submitted a copy of the 2025 Plan to the State of California Library.
- Within 30 days of adoption, Upper Water submitted a copy of the 2025 Plan (and Water Shortage Contingency Plan) to the County of Los Angeles Registrar / Recorder's office.
- Within 30 days after submittal of the 2025 Plan to the California Department of Water Resources, Upper Water made the 2025 Plan (including the Water Shortage Contingency Plan) available on Upper Water's website.
- The steps Upper Water 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 Upper Water's 2025 Plan is provided on a FY basis through June 30, 2025 (as discussed in Section 2.4.2).

10.2 NOTICE OF PLAN PREPARATION

Upper Water's public hearing notification process for its 2025 Plan and the WSCP are discussed below.

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 2.4.2., Upper Water coordinated the preparation of the Urban Water Management Plan with water management agencies, relevant public agencies and other water suppliers. These interested parties include the following:

- Amarillo Mutual Water Company
- California American Water Company (Duarte System and San Marino)
- California Domestic Water Company
- City of Arcadia
- City of Azusa Light & Water
- City of Baldwin Park
- City of Bradbury
- City of Covina
- City of Duarte
- City of El Monte
- City of Glendora
- City of Industry
- City of Irwindale
- City of La Puente
- City of Monrovia
- City of Rosemead
- City of San Gabriel
- City of South El Monte
- City of South Pasadena
- City of Temple City
- City of West Covina
- City of Whittier
- County of Los Angeles
- Covina Valley Water Company
- Del Rio Mutual Water Company
- Golden State Water Company (San Gabriel District)
- Hemlock Mutual Water Company
- La Puente Valley County Water District and Industry Public Works
- Main San Gabriel Basin Watermaster

- San Gabriel County Water District
- San Gabriel River Watermaster
- San Gabriel Valley Water Company
- Sterling Mutual Water Company
- Suburban Water Systems
- Sunny Slope Water Company
- Valley County Water District
- Valley View Mutual Water Company

Upper Water notified these agencies (including the cities and counties within which Upper Water 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.

Additionally, a notice of the public hearing was sent to the above listed interested parties. Copies of the notice of the public hearing are 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.

Upper Water 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, Upper Water published a notice of public hearing in the newspaper during the weeks of May 27, 2026 and June 3, 2026. A notice of public hearing was also on Upper Water's website. To ensure that the plan was available for review, Upper Water made a copy of the draft 2025 Plan and the draft Water Shortage Contingency Plan 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 72916066

…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 2025 Plan, Upper Water held a public hearing on June 10, 2026 which included input from the community regarding Upper Water's draft 2025 Plan and the draft WSCP.

Following the public hearing, Upper Water adopted both the draft 2025 Plan and the draft WSCP (included in Chapter 8). A copy of the minute motion adopting the 2025 Plan and the WSCP is provided in Appendix M.

10.5 PLAN SUBMITTAL

CWC 10621.

(e) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

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.

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.

Upper Water's submittal process for its 2025 Plan and the WSCP are 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 Upper Water Council and by July 1, 2026, Upper Water submitted the adopted 2025 Plan (including the WSCP) to DWR. The 2025 Plan and WSCP were submitted through DWR's "Water Use Efficiency (WUE) Data Portal" website.

DWR provided a checklist to determine if an Urban Water Management Plan has addressed the requirements of the California Water Code. Upper Water has completed

the DWR checklist by indicating where the required CWC elements can be found within Upper Water'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, Upper Water submitted all data tables associated with the 2025 Plan through DWR's "Water Use Efficiency (WUE) Data Online Submittal Tool" website.

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

Within 30 days of adoption of the 2025 Plan by Upper Water's Board, 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 is maintained in Upper Water's file. The 2025 Plan was mailed to the following address if sent by regular mail:

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

The 2025 Plan was 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 by Upper Water Council, a copy of the 2025 Plan was submitted to the County of Los Angeles Registrar / Recorders office. A copy of the letter to the County of Los Angeles is maintained in Upper Water'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, Upper Water made the 2025 Plan and WSCP available at Upper Water's office during normal business hours and on Upper Water'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.

Upper Water is not required to provide notice to the 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.

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

Upper Water's amendment process for its 2025 Plan is discussed below.

10.9.1 AMENDING A UWMP OR WSCP

If Upper Water amends the adopted 2025 Plan, the amended Plan will undergo adoption by Upper Water's governing board. Within 30 days of adoption, the amended Plan will then be submitted to DWR, the State of California Library, the State of California Library, and the County of Los Angeles Registrar / Recorders office.

10.9.2 SUBMITTING A REVISED WATER SHORTAGE CONTINGENCY PLAN

CWC 10644.

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

If Upper Water amends the adopted 2025 WSCP, the amended WSCP will undergo adoption by Upper Water's governing board. Within 30 days of adoption, the amended WSCP will then be submitted to DWR, the State of California Library, the State of California Library, and the County of Los Angeles Registrar / Recorders office.

10.10 CALIFORNIA DEPARTMENT OF WATER RESOURCES REVIEW OF SUBMITTAL 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

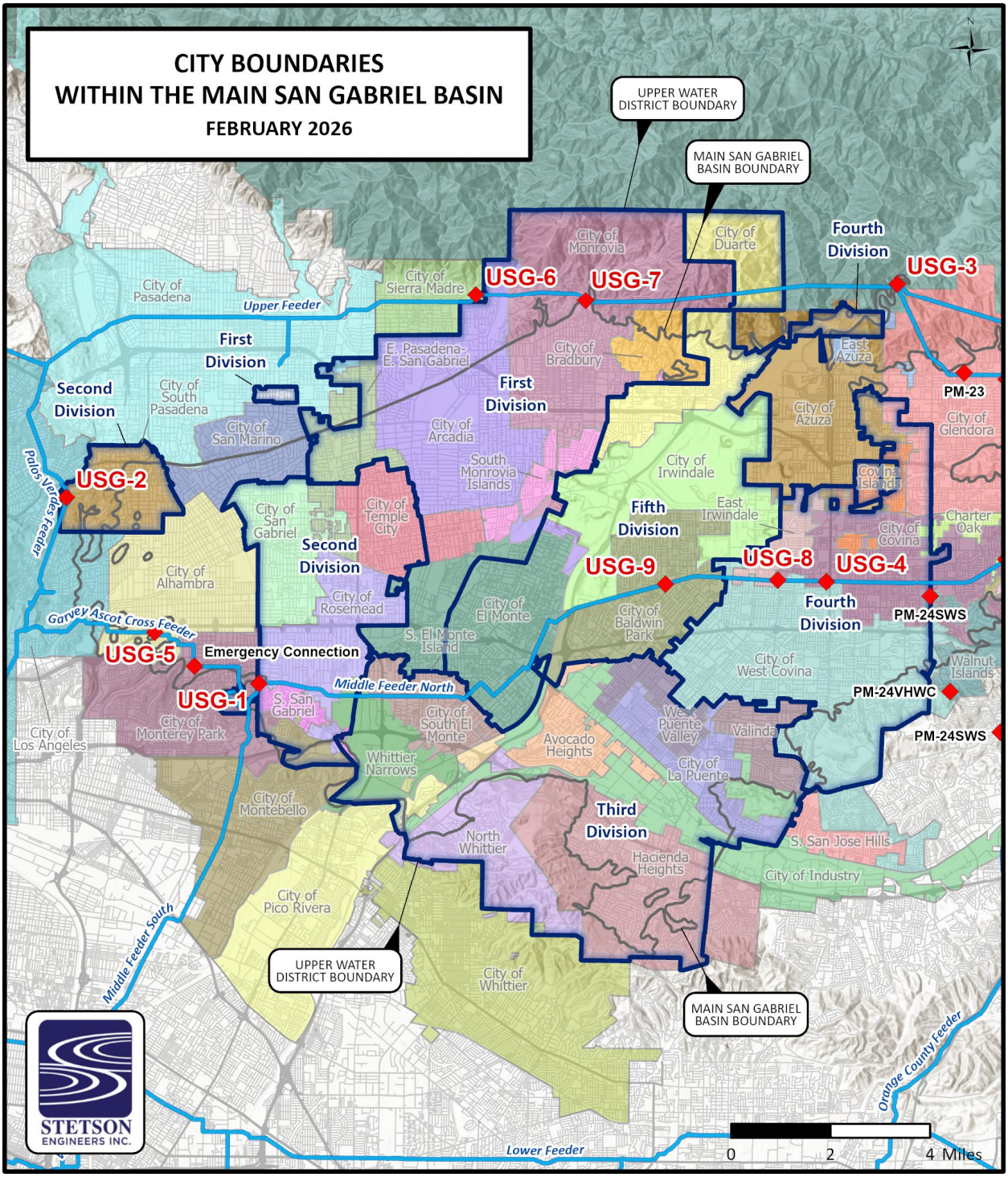
Table 10-1 Notification to Cities and Counties

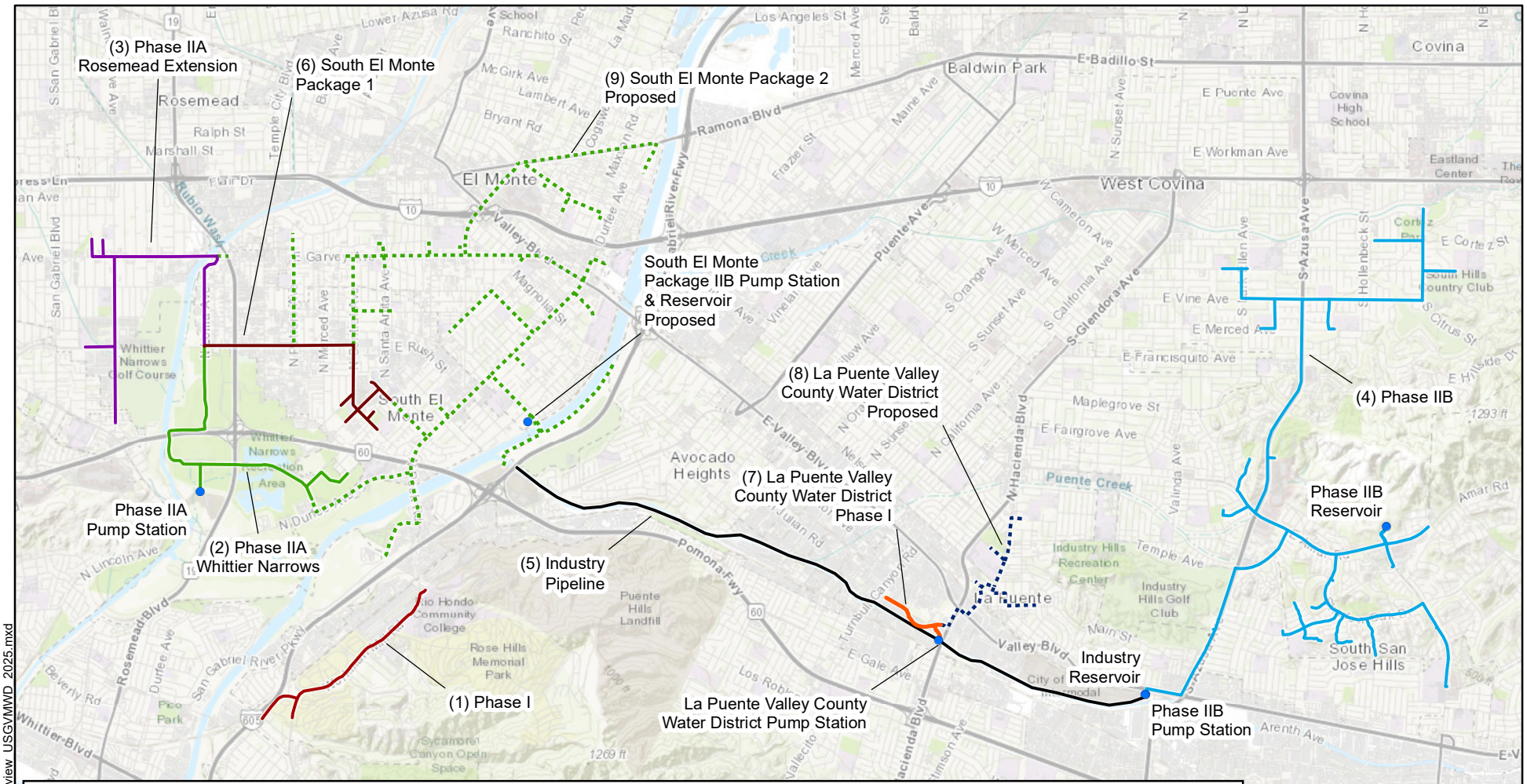
Submittal Table 10-1 Wholesale: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
☑	Check the box if the Supplier has notified more than 10 cities or counties. **Completion of the table below is not required. Provide a separate list of the cities and counties that were notified.**	
10-3, 10-4	Provide the page or location of this list in the UWMP.	
☐	Check the box if the Supplier has notified 10 or fewer cities or counties. **Complete the table below.**	
City Name	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
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		
NOTES:		

CWC 10621 (b)Notify at least 60 days prior to the public hearing any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

CWC 10642 The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.

FIGURE 1


CITY BOUNDARIES
WITHIN THE MAIN SAN GABRIEL BASIN
FEBRUARY 2026
UPPER WATER DISTRICT BOUNDARY
MAIN SAN GABRIEL BASIN BOUNDARY
USG-1
USG-2
USG-3
USG-4
USG-5
USG-6
USG-7
USG-8
USG-9
Emergency Connection
PM-23
PM-24SWS
PM-24VHWC
PM-24SWS
First Division
Second Division
Third Division
Fourth Division
Fifth Division
Upper Feeder
Middle Feeder North
Middle Feeder South
Lower Feeder
Garvey Ascot Cross Feeder
Orange County Feeder
Palos Verdes Feeder
City of Pasadena
City of Sierra Madre
City of Monrovia
City of Duarte
City of Bradbury
East Azusa
City of Azusa
City of Glendora
City of South Pasadena
City of San Marino
City of Arcadia
South Monrovia Islands
City of Irwindale
East Irwindale
Covina Island
City of Covina
Charter Oak
City of San Gabriel
City of Temple City
City of Alhambra
City of Rosemead
City of El Monte
S. El Monte Island
City of Baldwin Park
City of West Covina
Walnut Islands
S. San Gabriel
City of South El Monte
City of Monterey Park
City of Los Angeles
Whittier Narrows
Avocado Heights
West Puente Valley
Valinda
City of La Puente
City of Montebello
North Whittier
Hacienda Heights
S. San Jose Hills
City of Industry
City of Pico Rivera
City of Whittier
STETSON ENGINEERS INC.
0
2
4 Miles



Document Path: J:\Covina Work\Recycled Water Drawing\Overview_USGVMWD_2025.mxd

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

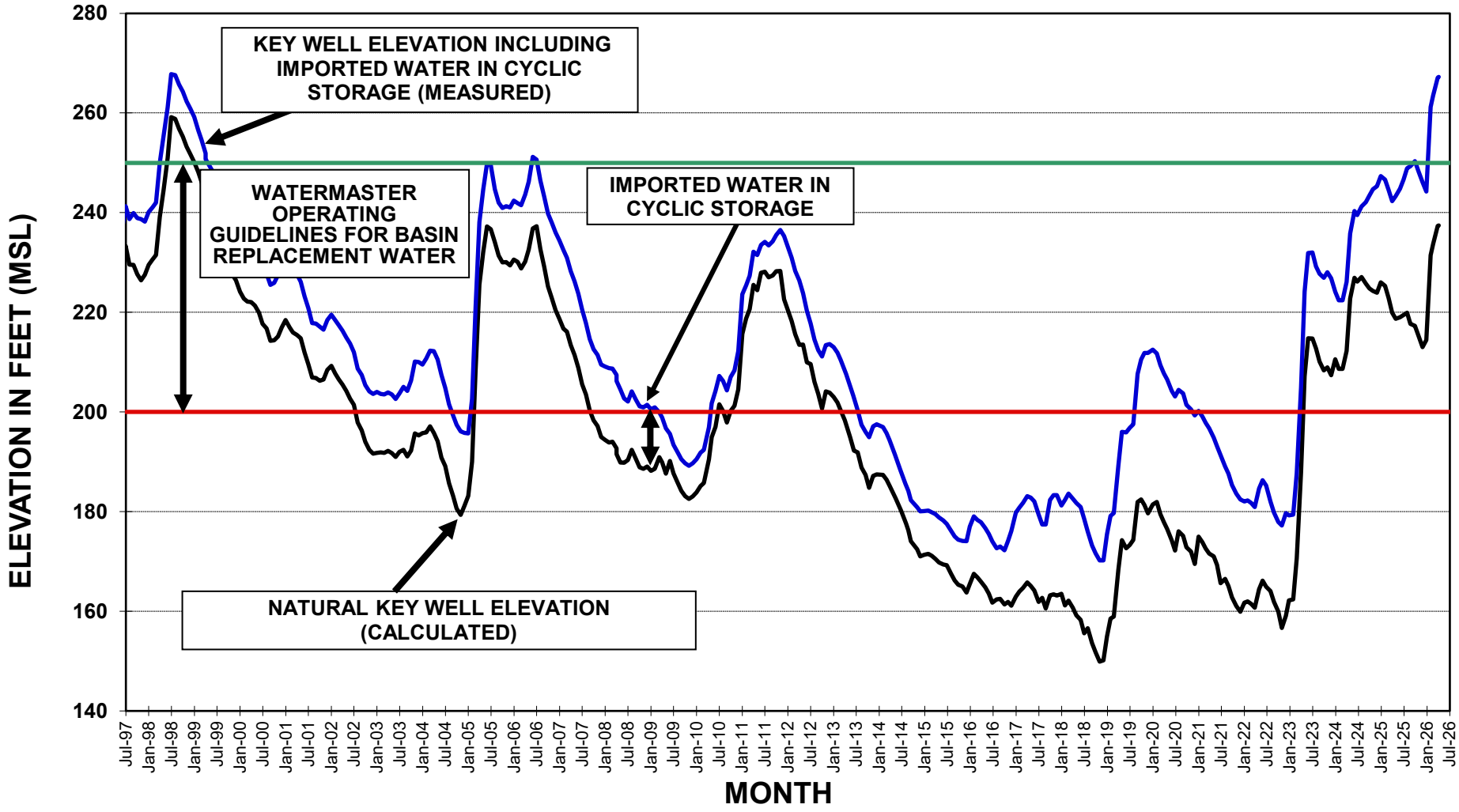
RECYCLED WATER PROGRAM

October 2025

0 0.5 1 Miles

N

FIGURE 2



STETSON ENGINEERS INC.

Covina San Rafael Mesa, Arizona

WATER RESOURCE ENGINEERS

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT

BALDWIN PARK KEY WELL GROUNDWATER ELEVATION

FIGURE 3

J:\2533\1.01.001 - Engineers Report for Board Meetings\Board Meeting Reports\Engineer's report\Revised Key Well ElevChart_UD