PUBLIC DRAFT

CITY OF MENLO PARK

2025 URBAN WATER MANAGEMENT PLAN

MENLO PARK MUNICIPAL WATER

MAY 2026

PREPARED BY:

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2025 URBAN WATER MANAGEMENT PLAN

Menlo Park Municipal Water

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ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACS	American Community Survey
AF	Acre-feet
AFY	Acre-Feet per Year
AMI	Advanced Metering Infrastructure
AWSP	Alternative Water Supply Program
AWWA	American Water Works Association
BAWSCA	Bay Area Water Supply and Conservation Agency
Bay-Delta Plan Amendment	Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
BG	Billion Gallons
CAP	Climate Action Plan
CASGEM	California Statewide Groundwater Elevation Monitoring
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
CIP	Capital Improvement Plan
CMIP5	Coupled Model Intercomparison Project
CWC	California Water Code
DDW	Division of Drinking Water
DMM	Demand Management Measure
DSOD	Division of Safety of Dams
DSS	Decision Support System
DWR	California Department of Water Resources
FERC	Federal Energy Regulatory Commission
GPCD	Gallons per capita per day
gpm	Gallons per Minute
GPSCD	Gallons per Service Connection per Day
GRP	Groundwater Reliability Partnership
GWMP	groundwater management plan

HET	High Efficiency Toilet
HHLSM	Hetch Hetchy and Local Simulation Model
HHWP	Hetch Hetchy Water and Power
HOA	Homeowners Association
HRL	Healthy Rivers and Landscapes Program
HTWTP	Harry Tracy Water Treatment Plant
IRR	Irrigation
ISG	Individual Supply Guarantee
kWh	Kilowatt-hour
kWh/MG	Kilowatt-hours per Million Gallons
kWh/vol	Kilowatt-hours per Volume
LHMP	Local Hazard Mitigation Plan
LODES	Local Employment Dynamics Origin-Destination Employment Statistics
MCCWL	Making Conservation a California Way of Life
MCLs	Maximum Contaminant Levels
MF	Multi-family Residential
MG	Million gallons
MGD	Million Gallons per Day
MPMW	Menlo Park Municipal Water
PAPMWC	Palo Alto Park Mutual Water Company
PWS	Public Water System
RGSR	Regional Groundwater Storage and Recovery
RWF	Recycled Water Facility
RWQCB	Regional Water Quality Control Board
RWS	Regional Water System
SB	Senate Bill
SF	Single-family Residential
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SHGCC	Sharon Heights Golf and Country Club
SVCW	Silicon Valley Clean Water
SVWTP	Sunol Valley Water Treatment Plant

SWRCB	California State Water Resources Control Board
USEPA	United States Environmental Protection Agency
UV	Ultraviolet
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
WBSD	West Bay Sanitary District
WSA	Water Supply Agreement
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WWTP	Wastewater Treatment Plant

LAY DESCRIPTION

☑ ***CWC §10630.5***

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

Menlo Park Municipal Water (MPMW), which serves approximately 1,031 million gallons (MG) of water to a population of approximately 20,483, meets the definition of an urban water supplier.[1] Therefore, in accordance with California Water Code (CWC) §10621(e), MPMW is obligated to develop and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR) by July 1, 2026.

This UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands and supplies, and the resulting reliability during a set of defined water supply conditions over a minimum 20-year planning horizon. This UWMP also describes the actions MPMW is taking to promote water conservation (referred to as "demand management measures") and includes a Water Shortage Contingency Plan (WSCP) to address potential water supply shortages from drought or other impacts to supply availability. This UWMP is updated every five years in accordance with state requirements under the Urban Water Management Planning Act (UWMP Act) and amendments (Division 6 Part 2.6 of the CWC §10610 – 10656). Past UWMPs developed for MPMW are available on the DWR Water Use Efficiency Data Portal website: https://wuedata.water.ca.gov/.

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

Section 1 Plan Introduction

This section presents the background and purpose of the UWMP, describes the UWMP organization and provides an overview of the UWMP. For agencies that rely on water from the Sacramento-San Joaquin Delta (Delta), this section also discusses and demonstrates consistency with the Delta Plan by the Delta Stewardship Council. MPMW relies solely on potable water purchased from the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) and recycled water from West Bay Sanitary District (WBSD); therefore, this requirement does not apply to its water sources.

Section 2 Plan Preparation

This section discusses key structural aspects related to the preparation of this UWMP, and describes the coordination and outreach conducted as part of the preparation of the UWMP, including coordination with local agencies (i.e., the Bay Area Water Supply and Conservation Agency [BAWSCA], the BAWSCA member agencies, SFPUC, the County of San Mateo) and the public.

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

Section 3 Service Area Description

This section provides a description of MPMW's water system and service area, including information related to the climate, population, and demographics. MPMW is located in San Mateo County. The MPMW has a population of approximately 20,483 and has a mediterranean climate. The majority of the 17 inches of average annual precipitation falls between late October and April. Significant new development is envisioned in the City of Menlo Park's General Plan within MPMW's service area. MPMW distributes water purchased from the SFPUC to its three pressure zones via five SFPUC service connections (turnouts). MPMW operates one emergency supply well as well as 14 interties with adjacent water systems.

Section 4 Water Use Characterization

This section describes and quantifies MPMW's current and projected demands through the year 2050. MPMW provides drinking water (also referred to as "potable water") to customers. Water demands refer not only to the water used by customers but also include the water used as part of the system's maintenance and operation, as well as unavoidable losses inherent in the operation of a water distribution system. Recycled water supplied by WBSD is also used within portions of MPMW's service area. Total water demand within MPMW was 1,031 MG in 2025, of which 977 MG was potable demand and 54 MG was non-potable demand. Taking into account historical water use, expected population increase and other growth, climatic variability, and other assumptions, water demand within the MPMW is projected to increase to 1,160 MG by 2050, a change of 13% compared to 2025.

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

The Water Conservation Act of 2009 (SB X7-7), enacted in November 2009, required the State to achieve a 20% reduction in urban per capita water use by December 2020 and directed retail suppliers to establish an urban water-use target (2020 Target) to support this goal. Because the CWC does not set an end date for reporting progress toward the 2020 Target, this section documents MPMW's compliance with SB X7-7 as of 2020. MPMW is not a member of a "Regional Alliance" and was not part of a service area merger or consolidation after 2020.

In July 2024, the State enacted the Making Conservation a California Way of Life (MCCWL) regulation to promote long-term water conservation and drought resilience beyond SB X7-7. MCCWL established annual Urban Water Use Objectives (UWUO) for water suppliers. UWUO compliance falls under the authority of the State Water Resources Control Board (SWRCB). As such, although UWUO compliance projections are not required as part of an UWMP, they can provide valuable insight into the potential need and timing for additional conservation measures. For this reason, this section also documents MPMW's progress towards meeting the UWUOs.

Section 6 Water Supply Characterization

This section presents an analysis of MPMW's water supplies, as well as an estimate of water-related energy-consumption. The intent of this section is to present a comprehensive overview of MPMW's water supplies, estimate the volume of available supplies over a minimum 20-year planning horizon, and assess the sufficiency of MPMW's supplies to meet projected demands under "normal" hydrologic conditions.

MPMW relies on the SFPUC RWS for all of its potable water supply. MPMW's contractual allocation from SFPUC supplies (known as its Individual Supply Guarantee) is 4.456 million gallons per day (MGD), or approximately 1,630 MG. In addition to potable supplies, MPMW has been working with WBSD, the recycled water purveyor for MPMW's service area, to develop recycled water supply to serve portions of MPMW's service area. Recycled water is currently used for irrigation at the Sharon Heights Golf and

Country Club (SHGCC). Another similar recycled water project in the Bayfront area is currently in the planning phase.

Reporting calculated water system energy intensity is a requirement for the UWMPs. Energy intensity is defined as the net energy used for water treatment, pumping, conveyance, and distribution for all water entering the distribution system and does not include the energy used to treat wastewater. The energy intensity for MPMW is estimated to be 324 kilowatt hours per million gallons of water (kWh/MG).

Section 7 Water Supply Reliability Assessment

This section assesses the reliability of MPMW's water supplies, with a specific focus on potential constraints such as water supply availability, water quality, and climate change. The intent of this section is to identify any potential constraints that could affect the reliability of MPMW's supply (such as drought conditions) to support MPMW's planning efforts to ensure that its customers are well served. Water service reliability is assessed during normal, single dry-year, and multiple dry-year hydrologic conditions.

Based on this analysis, MPMW expects the available supplies to be sufficient to meet projected demands in normal years. However, MPMW is potentially expected to experience significant shortfalls of its SFPUC RWS supplies during single dry and multiple dry year conditions as a result of the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) implementation. At this time, numerous uncertainties remain in the implementation of the Bay-Delta Plan Amendment and the resultant allocation of the available supply to MPMW and the other SFPUC Wholesale Customers.

Further, potential water quality issues are not expected to affect the quality of water served to MPMW's customers, as water quality is routinely monitored and MPMW is able to make all appropriate adjustments to its treatment and distribution system to ensure only high quality drinking water is served.

Section 8 Water Shortage Contingency Planning

This section describes the WSCP for the MPMW, which serves as a standalone document (see **Appendix E**) to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios (e.g., implementing customer water budgets, or restricting landscape irrigation to specific days and/or times). Consistent with DWR requirements, the WSCP includes six levels to address shortage conditions ranging from up to 10% to greater than 50% shortage.

Section 9 Demand Management Measures

This section includes descriptions of past and planned conservation programs that MPMW operates within each demand management measure (DMM) category outlined in the UWMP Act, specifically: (1) water waste prevention ordinances, (2) metering, (3) conservation pricing, (4) public education and outreach, (5) distribution system water loss management, (6) water conservation program coordination and staffing support, and (7) "other" DMMs. Additionally, MPMW participates in regional water conservation programs offered by BAWSCA.

Section 10 Plan Adoption, Submittal, and Implementation

This section provides information on a public hearing, the adoption process for the UWMP and WSCP, the adopted UWMP and WSCP submittal process, UWMP implementation, and the process for amending the adopted UWMP and WSCP. Prior to adopting the UWMP, MPMW held a formal public hearing to present information on its UWMP and WSCP on June 23, 2026 at 6 P.M. This UWMP and corresponding WSCP were submitted to DWR within 30 days of adoption and by the July 1, 2026, deadline.

1 PLAN INTRODUCTION

This section discusses the importance and uses of this Urban Water Management Plan (UWMP), the relationship of this UWMP to the California Water Code (CWC), the relationship of this UWMP to other local and regional planning efforts, and how this UWMP is organized and developed in general accordance with the California Department of Water Resources' (DWR) 2025 UWMP Guidebook.[2]

1.1 Background and Purpose

Menlo Park Municipal Water (MPMW) serves water to approximately half of the City of Menlo Park (City), which is located along San Francisco Bay in San Mateo County. MPMW delivers water to residential, commercial, industrial, and governmental customers and purchases all of its potable water supplies from the San Francisco Public Utilities Commission (SFPUC). As of December 2025, MPMW serves 4,229 connections within its service area.

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

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

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

1.2 Urban Water Management Planning and CWC

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

The UWMP Act was enacted in 1983. Over the years it has been amended in response to water resource challenges and planning imperatives confronting California. A significant amendment was made in 2009 following the Governor's call for a statewide 20% reduction in urban water use by 2020, referred to as the

[2] The 2025 UWMP Guidebook is available at: https://wuedata.water.ca.gov/public/public_resources/4825681388/2025_Draft_UWMP_Guidebook_Release.zip

Water Conservation Act of 2009, or "Senate Bill (SB) X7-7." This amendment required urban retail water suppliers to establish water use targets for 2015 and 2020 that would result in statewide water savings of 20% by 2020. Beginning in 2016, urban retail water suppliers were required to comply with the water conservation requirements in SB X7-7 to be eligible for state water grants or loans. **Section 5** of this UWMP contains the data and calculations used to determine compliance with these requirements.

In 2016, Governor Brown signed Executive Order B-37-16 Making Conservation a California Way of Life (MCCWL). Subsequently, the Legislature passed SB 606 and Assembly Bill (AB) 1668, which added new drought planning requirements, including:

1) Additional Water Shortage Contingency Plan (WSCP) requirements (CWC §10640),
2) Drought risk assessments to assess water supply reliability in UWMPs for a drought period lasting five consecutive water years (CWC §10635(b)), and
3) Annual water supply and demand assessments to determine water supply reliability for the current year and one subsequent dry year (CWC §10632(a)).

These elements are included in **Section 7** and **Section 8** of this UWMP. Additionally, SB 606/AB 1668 set new requirements for urban water suppliers to further increase water use efficiency beyond SB X7-7. Beginning in 2024, agencies were required to report an annual Urban Water Use Objective (UWUO). Although UWUO compliance projections are not required as part of an UWMP, they can provide valuable insight into the potential need and timing for additional conservation measures. For this reason, **Section 5.2** of this UWMP documents MPMW's progress towards meeting the UWUOs.

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

1.3 Plan Organization

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

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

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

reliability, potential issues, and strategies for managing reliability risks, is provided at the beginning of this UWMP.

1.4 UWMP Relationship with Other Efforts

This UWMP provides Information specific to water management and planning within MPMW's service area. However, water management does not happen in isolation; there are other planning processes that integrate with the UWMP to accomplish urban planning. Some of these relevant planning documents include relevant city and county General Plans, Housing Elements, Specific Plans, Water Master Plans, Recycled Water Master Plans, integrated resource plans, Integrated Regional Water Management Plans, and others.

This UWMP is informed by and helps to inform these other planning efforts. In particular, this UWMP was prepared in close coordination with the City of Menlo Park's Community Development Department and the Public Works Department. As such, MPMW's 2025 UWMP has been developed to be consistent with the City's 2016 General Plan, and the City's 2023-2031 Housing Element (City of Menlo Park, 2024). This UWMP was also informed by the Association of Bay Area Governments (ABAG) Plan Bay Area 2050 and the Bay Area Water Supply and Conservation Agency (BAWSCA)+ Long-Term Reliable Water Supply Strategy 2050 (Strategy 2050).

Primary coordination was achieved through MPMW staff's participation in one workshop (held on April 23, 2026). At this workshop, key information regarding the 2025 UWMP content was presented and MPMW representatives were provided the opportunity to review, comment, and present additional information.

1.5 Special Considerations

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

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

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

The SFPUC, MPMW's wholesale water supplier, has made a legal determination that this requirement does not apply to their water sources.[3]

1.5.2 Permitting for Ocean Desalination Projects

California's *Water Supply Strategy: Adapting to a Hotter, Drier Future* updates state priorities to address water supply shortages due to long-term drought and the accelerating impacts of climate change, including identifying opportunities to access new water sources such as ocean desalination. To streamline

[3] Email from BAWSCA, dated February 9, 2021.[4] The Lume (formerly Menlo Park Uptown) and Vasara (formerly Menlo Portal) multi-family residential developments were constructed and completed between 2021-2025, totaling 776 residential units.

permitting for ocean desalination projects, the *Seawater Desalination Siting and Streamlining Report to Expedite Permitting* recommends that UWMPs clearly demonstrate the need for future or proposed ocean desalination projects.

As discussed in **Section 6**, MPMW does not anticipate the need for an ocean desalination project. Therefore, MPMW will not pursue ocean desalination to augment its supply portfolio.

2 PLAN PREPARATION

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

2.1 Basis for Preparing the UWMP

☑ ***CWC §10617***

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

☑ ***CWC §10620***

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

☑ ***CWC §10621***

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

☑ ***California Health and Safety Code §116275***

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

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

MPMW operates the Public Water System (PWS) listed in **Table 2-1**. PWSs are the systems that provide drinking water for human consumption and are regulated by the SWRCB Division of Drinking Water. The SWRCB requires that water agencies report water use and other relevant PWS information via the electronic Annual Reports to the Drinking Water Program (eARDWP). These data are used by the state to determine, among other things, whether an urban retail water supplier has reached the threshold for submitting a UWMP. In 2025, MPMW provided water to 4,229 accounts and served 1,031 million gallons (MG) of water (**Table 2-1**). MPMW is therefore subject to the requirements of the UWMP Act.

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

Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (MG)
CA4110017	City of Menlo Park	4,229	1,031
	Total	**4,229**	**1,031**

NOTES:

(a) The number of municipal connections and volume of water supplied includes both active potable and non-potable connections and supply, respectively.

(b) The number of connections herein differs from the value provided in **Table 4-4**, which presents the number of potable connections in calendar year 2024 submitted to DWR's annual water loss audit report.

2.2 Individual or Regional Plan

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

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

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

2.3 Fiscal or Calendar Year and Units of Measure

☑ ***CWC §10608.20***

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

Per CWC §10617, MPMW is an urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) of water annually as identified in **Table 2-3**. MPMW is not a wholesale water supplier.

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

Per the 2025 UWMP Guidebook, the UWMP preparer is requested to complete a checklist of specific UWMP requirements to assist the DWR review of the submitted UWMP. The completed checklist is included in **Appendix A**.

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

Type of Supplier	
☐	Supplier is a wholesale supplier.
☒	Supplier is a retail supplier.
Fiscal or Calendar Year	
☒	UWMP tables are in calendar years.
☐	UWMP tables are in fiscal years (fiscal year begins: mm/dd).
Units of measure used in UWMP	
Unit	MG

2.4 Standard Submittal Tables and Alignment with UWMP Act Requirements

The UWMP has been prepared in general accordance with the format suggested in DWR's 2025 UWMP Guidebook. Text from the UWMP Act has been included in text boxes at the beginning of relevant sections of this UWMP. The information presented in the respective UWMP sections, and the associated text, figures, and charts are collectively intended to fulfill the requirements of that subsection of the UWMP Act. Sources for the information contained herein are provided in the references section of the document.

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

2.5 Coordination and Outreach

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

2.5.1 Role of BAWSCA and the UWMP Common Language

Among its other functions, the Bay Area Water Supply and Conservation Agency (BAWSCA) represents MPMW and the 25 other water districts, cities, and utilities, collectively referred to as the "Wholesale Customers", in negotiations and other coordination efforts with the SFPUC. Together with SFPUC, BAWSCA developed common language for inclusion in each Wholesale Customers' 2025 UWMP regarding the following common issues:

- Description of BAWSCA;
- Regional Water Demand and Conservation Projections;
- Long Term Reliable Water Supply Strategy;
- Tier One Drought Allocations;
- Tier Two Drought Allocations;
- SFPUC Regional Water System;
- Individual Supply Guarantees (ISGs);
- 2028 SFPUC Decisions (formerly 2018 SFPUC Decisions);
- Reliability of the Regional Water System;
- Climate Change;
- SFPUC's Efforts to Develop Alternative Water Supplies;
- Rate Impacts of Water Shortages; and
- BAWSCA Conservation Programs.

For clarification purposes, and as shown below, the common language provided by BAWSCA and SFPUC is shown in grey font and has been indented for emphasis; it is otherwise presented unchanged from the original text. As a result, there may be some redundancy in the information presented and the number of

times that certain terms are abbreviated or defined. A description of BAWSCA's role generally and related to the 2025 UWMP development process is provided below.

> BAWSCA provides regional water reliability planning and conservation programming for the benefit of its 26 member agencies (collectively the "Wholesale Customers" or "BAWSCA Member Agencies") that purchase wholesale water supplies from the San Francisco Public Utilities Commission (SFPUC). Collectively, the Wholesale Customers deliver water to over 1.8 million residents and nearly 40,000 commercial, industrial and institutional accounts in Alameda, San Mateo and Santa Clara Counties.
>
> BAWSCA also represents the collective interests of the Wholesale Customers on all significant technical, financial, and policy matters related to the operation and improvement of the SFPUC's Regional Water System (RWS).
>
> BAWSCA's role in the development of the 2025 Urban Water Management Plan (UWMP) updates is to work with its Member Agencies and the SFPUC to seek consistency among UWMP documents.

2.5.2 Wholesale and Retail Coordination

☑ ***CWC §10631***

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

(f) An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

The SFPUC is a wholesale water supplier to all of the BAWSCA member agencies and is the only wholesale water supplier to MPMW. As part of the coordination efforts for the 2025 UWMP, and in compliance with CWC §10631(h), BAWSCA prepared water demand projections through 2050 on behalf of MPMW and transmitted MPMW's water demand projections to the SFPUC.

Additionally, as described in more detail in **Section 7**, MPMW has relied upon the water supply reliability projections provided by the SFPUC for the purposes of analyzing the reliability of its SFPUC supplies during normal and dry years through 2050 (see **Table 2-4**).

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

Wholesale Water Supplier Name
San Francisco Public Utilities Commission

2.5.3 Coordination with Other Agencies and the Community

☑ ***CWC §10620***

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

☑ ***CWC §10642***

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. 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. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. 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.

MPMW coordinated with other regional agencies during preparation of this UWMP to ensure that data and issues are presented accurately. Between January 8, 2026 and April 2, 2026, MPMW staff representatives attended a series of meetings on supply reliability hosted by BAWSCA. During the meetings, BAWSCA and the member agencies reviewed the water supply reliability projections provided by the SFPUC, as well as the updated dry year supply allocations described in **Section 7**. Representatives for the MPMW also attend monthly water management meetings with BAWSCA and its member agencies that, among other topics, include discussion of items pertinent to the preparation of the 2025 UWMPs. MPMW also held a public hearing on June 23, 2026, to present the information within the UWMP update and provide an opportunity to receive comments from the community on the Plan update.

MPMW has also been supporting West Bay Sanitary District (WBSD), the wastewater agency serving MPMW's service area, to provide recycled water for the MPMW service area. The ongoing recycled water projects led by WBSD in coordination with MPMW are discussed in **Section 6.5**.

MPMW's UWMP has also been prepared in close coordination with other relevant divisions within the City's Public Works and the Community Development department, and has been integrated with the City's planning efforts. As part of this coordination, City staff reviewed the UWMP's consistency with relevant City planning documents, development activity that has occurred since preparation of the 2020 UWMP, and currently planned and approved developments. Accordingly, MPMW's UWMP and the demand projections included herein is consistent with the City's current planning assumptions, including the 2016 General Plan, 2023-2031 Housing Element, as well as the timing of individual planned and approved projects.

2.5.4 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.

MPMW provided a 60 Day Notice to the entities and the communities it serves more than 60 days prior to the public hearing it held on June 23, 2026, informing them that the UWMP was going to be reviewed and updated. As a courtesy, MPMW also provided a 60 Day Notice to other local and regional water retailers and public agencies (such as SFPUC, BAWSCA, and the BAWSCA member agencies) due to geographical proximity and to ensure regional alignment in water management. The 60 Day Notice recipients are listed in **Section 10 (Table 10-1**)**,** and copies of correspondence with the agencies are provided in **Appendix B**.

MPMW also sought public participation and notified the public of its intent to adopt its UWMP through a public hearing and notices to members of the community. Additional information on public participation, including information on notifications, is provided in **Section 10** and in **Appendix C**.

3 SERVICE AREA DESCRIPTION

This section describes MPMW's water system and service area, including climate, population, demographics, and land uses to help in understanding various elements of water supply and demand.

3.1 General Description

☑ ***CWC § 10631 (a)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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.

MPMW serves approximately half of the City of Menlo Park, which is located along San Francisco Bay in San Mateo County, between the cities of Redwood City, Palo Alto, and East Palo Alto. Other purveyors within City limits include the California Water Service Company (Cal Water), which serves the Bear Gulch District; the O'Connor Tract Co-operative Water Company, which serves a small area of the City using groundwater production wells; and the Palo Alto Park Mutual Water Company (PAPMWC), which serves fewer than ten homes using groundwater production wells within the eastern portion of the City. **Figure 3-1** shows the location of MPMW's service area.

MPMW is a member of BAWSCA and purchases all its potable water from SFPUC. MPMW is governed by the City Council and run by the City's Public Works Department. Water distribution, water conservation and maintenance of water quality are MPMW's main water resource functions, as water purchased from the SFPUC does not require further treatment.

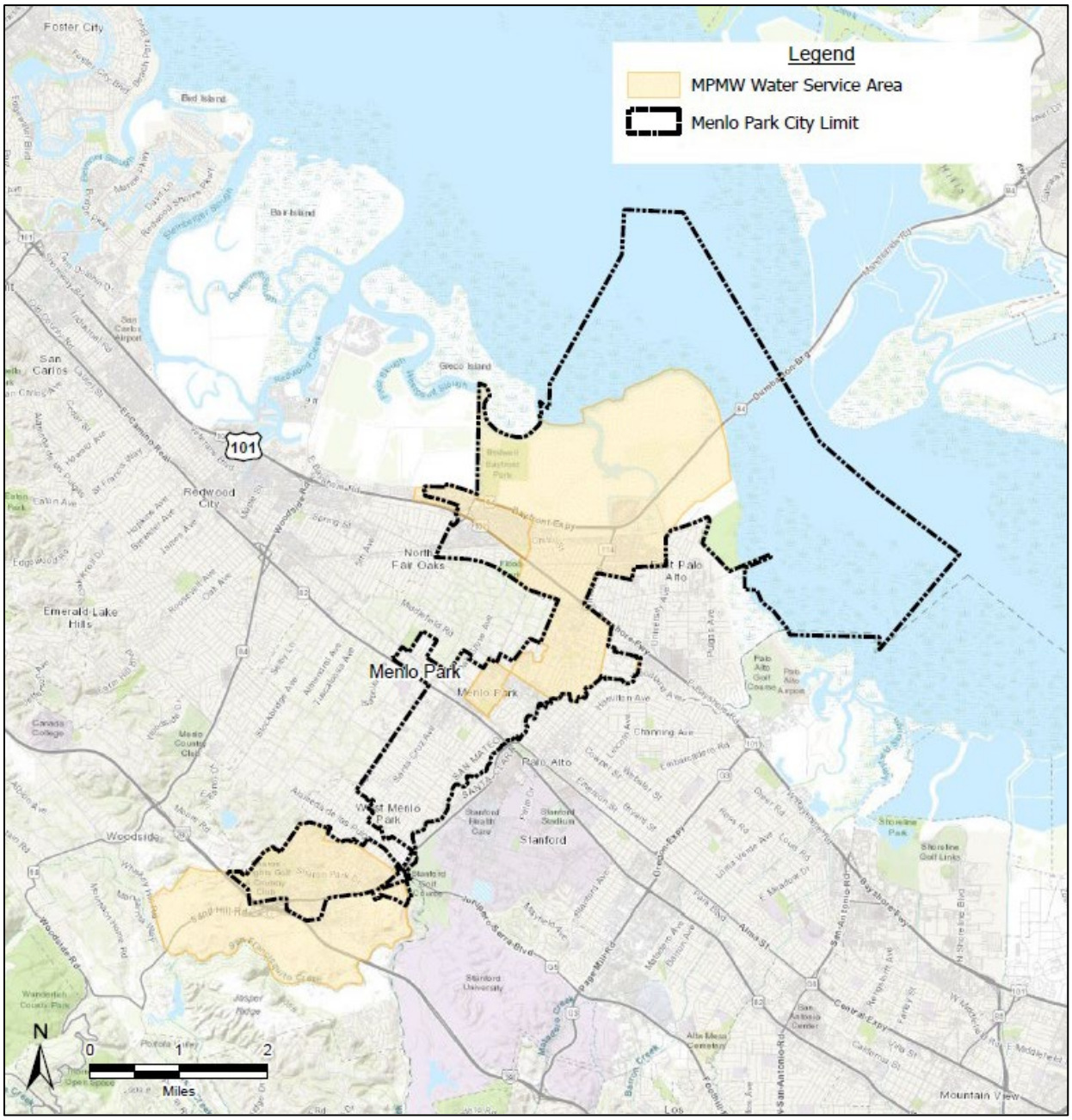

Figure 3-1 MPMW Location and Service Boundaries

3.2 Service Area Climate

☑ ***CWC §10631***

(a) Describe the service area of the supplier, … "climate…"

☑ ***CWC §10635***

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

MPMW's service area is located within a region characterized by a Mediterranean climate with cool, wet winters and warm, dry summers. As shown in **Table 3-1** and **Figure 3-2**, rainfall in the area averages 17 inches per year and is generally confined to the wet season from late October to early May. The average reference evapotranspiration (ETo) for the region is 45 inches per year. The ETo is a standard measurement related to the water demand by plants in a specific region. Because the average annual ETo is approximately 28 inches more than the average annual precipitation, and because 92% of the annual precipitation occurs between the months of November and April, growing turf or other plantings in this region requires a significant amount of irrigation during the dry season. This irrigation demand contributes to the overall and observed seasonal variation in water demand throughout the MPMW's service area.

Table 3-1 Climate Characteristics

Month	Average Temperature (a)		Standard Average ETo (inches) (b)	Average Rainfall (Inches) (a)
	Min (°F)	Max (°F)		
January	42	59	1.4	3.3
February	44	61	2.0	3.5
March	46	65	3.3	2.4
April	48	68	4.5	1.2
May	51	71	5.5	0.4
June	54	76	6.1	0.1
July	57	78	6.3	0.0
August	57	78	5.6	0.0
September	56	78	4.4	0.1
October	52	74	3.1	0.7
November	46	65	1.7	1.6
December	42	59	1.3	3.3
Annual	**50**	**69**	**45**	**17**

NOTES:
(a) Average temperature and rainfall data were obtained from the PRISM datasets from 1991 to 2020 (PRISM Group, 2026).
(b) Reference evapotranspiration data for Union City station #171 are from the Department of Water Resources, California Irrigation Management Information System.

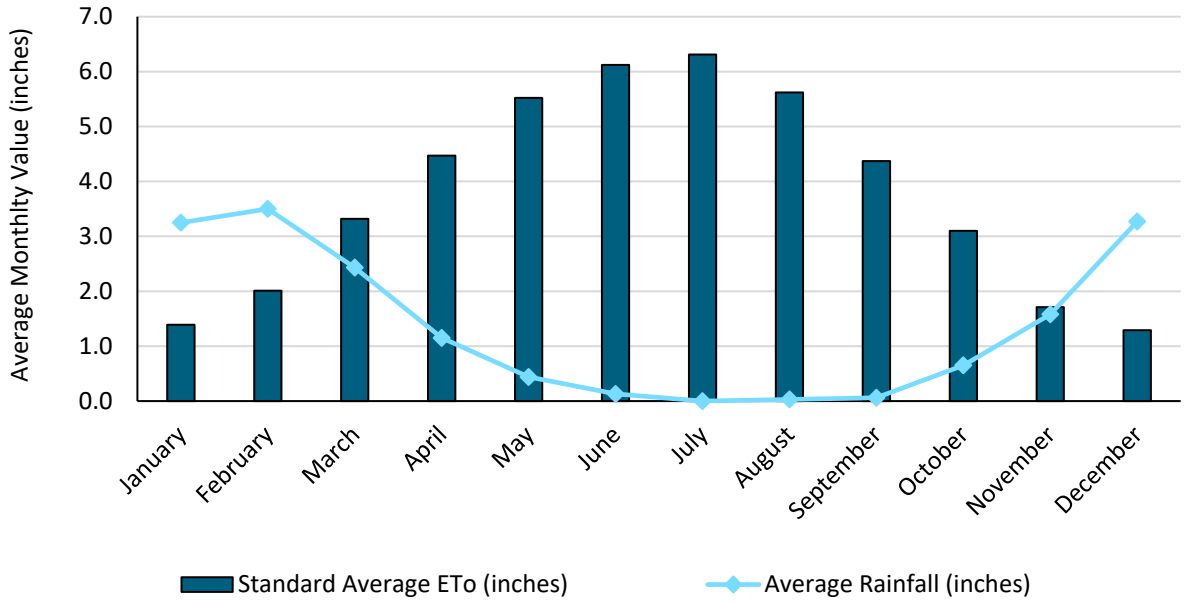

Figure 3-2 Average Monthly Climatic Conditions

According to the Cal-Adapt tool, future projections for MPMW's service area using Localized Constructed Analogs (LOCA) downscaled Coupled Model Intercomparison Project (CMIP5) model indicate an average increase in temperature of 3.2°F for medium emissions (RCP 4.5) models and 4.0°F for high emissions (RCP 8.5) models by 2064 **(Figure 3-3)**.

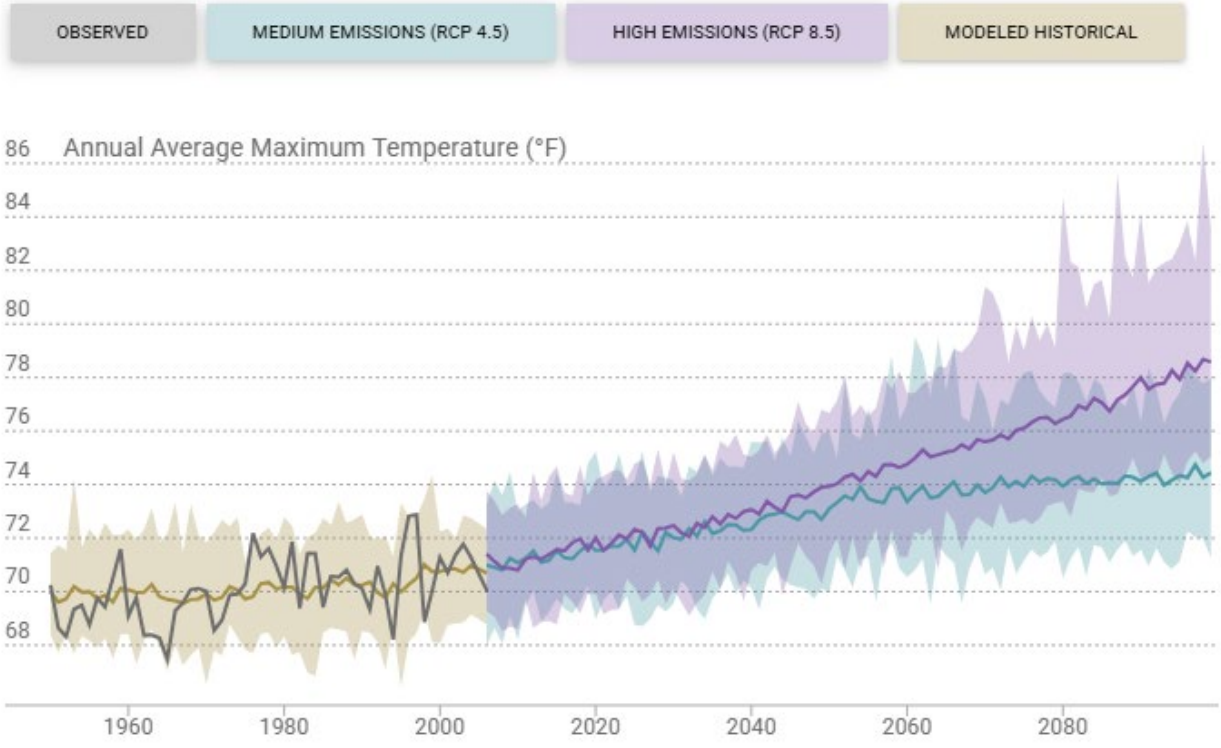

Figure 3-3 Observed and Forecasted Temperature for MPMW's Service Area

Section 4.5.5 discusses potential climate change impacts on water demands, and **Section 6.10.1** discusses potential climate change impacts on supplies. Pursuant to the CWC requirements and the 2025 UWMP Guidebook, this UWMP incorporates climate change considerations into the following relevant sections:

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

In addition, this UWMP incorporates the following documents by reference that include information on climate change hazards and mitigation actions within the MPMW service area:

- Sea Level Rise Vulnerability Assessment, 2018: The first step of the Sea Change San Mateo County initiative, this assessment provides an overview of the risk within the County from current and future flooding. The assessment identified many built and natural assets in the City that are vulnerable, including levees, other built shoreline infrastructure, storm drains, outfalls, and stormwater pumps (County of San Mateo, 2018).
- Formation of the Flood and Sea Level Rise Resiliency District (One Shoreline), 2019: As a result of the Sea Change San Mateo County initiative, the cities and County of San Mateo formed One Shoreline to address sea level rise, flooding, coastal erosion, and large-scale storm water infrastructure improvements through integrated regional planning, investment, and project implementation.
- County of San Mateo Local Hazard Mitigation Plan (LHMP), 2021: The City of Menlo Park is a participating jurisdiction in the Countywide LHMP, which identifies risks from flooding, sea level rise, earthquakes, and other natural hazards. The City of Menlo Park aligns local policies, capital improvement projects, and emergency preparedness efforts with the LHMP to reduce hazard impacts, including flood risk reduction, stormwater infrastructure improvements, and Bayfront and bayside resilience planning (San Mateo County, 2021). The City is also participating in the 2026 update to the LHMP.
- City of Menlo Park's 2030 Climate Action Plan (CAP), 2024: The CAP discusses actions to be taken by the City of Menlo Park to increase resiliency in the event of climate change impacts such as sea level rise, wildfire, extreme heat, and droughts (City of Menlo Park, 2024b).
- SAFER Bay Project: The SAFER Bay Project is a multi-jurisdictional effort to reduce coastal flood risk and improve shoreline resilience in Menlo Park and East Palo Alto. In Menlo Park, the project proposes levees, floodwalls, flood gates, habitat enhancements, and marsh restoration along the Bay shoreline to help protect the Bayfront and Belle Haven neighborhoods from sea level rise and tidal flooding (City of Menlo Park, 2026).

3.3 Service Area Population and Demographics

☑ ***CWC §10631***

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

MPMW's water distribution system provides water retail service to approximately half of the City's population through approximately 4,229 connections. The current and projected population and employment data from 2025 through 2050 within the MPMW service area are shown in the following sections.

3.3.1 Population

MPMW's current and projected service area population are shown in **Table 3-2** and **Figure 3-4** in five-year increments through 2050. Current population is estimated using 2020 Census estimates as the benchmark and adjusted for growth since 2020. Population for subsequent years since 2020 were adjusted to include population growth associated with completed multi-family developments[4] and growth associated with the City's 2023-2031 Housing Element projections (City of Menlo Park, 2024a).

MPMW's projected population is developed using the BAWSCA 2025 Regional Water Demand and Conservation Projections Study (2025 Demand Study) as the starting point with refinements to better reflect local planning assumptions and known development activity. The 2025 Demand Study projected population using Plan Bay Area 2050 Traffic Analysis Zone data, aggregated to MPMW's service area (ABAG, 2021). Plan Bay Area 2050 is a long-range regional plan for the San Francisco Bay Area, focusing on housing, transportation, the economy, and the environment. Additional detail on the 2025 Demand Study's demographic assumptions is provided in Section 5.3 of the Demand Study Report. The Demand Study applied projected population growth rates to the most recent historical estimate of service area population to ensure continuity between historical and projected conditions.

The resulting projections were further refined by the City's Community Development department to include population growth associated with known multi-family residential developments[4] and growth consistent with the City's 2023-2031 Housing Element projections (City of Menlo Park, 2024a). These refinements, discussed in more detail below, were intended to more closely align with local planning assumptions, recent and anticipated development activity, and the City's 2016 General Plan for areas within MPMW's boundary (City of Menlo Park, 2016).

Projected population growth through 2050 is expected occur primarily within the multi-family residential sector, while growth in the single-family residential sector is expected to remain limited. Single-family residential projections are based on the Plan Bay Area 2050 growth rate from the BAWSCA Demand Study, which forecasts approximately a 2% increase in the single-family residential population through 2050. Consistent with ConnectMenlo and based on ABAG data, projected multi-family residential population was calculated using an average household size of 2.57 persons per dwelling unit multiplied by the total

[4] The Lume (formerly Menlo Park Uptown) and Vasara (formerly Menlo Portal) multi-family residential developments were constructed and completed between 2021-2025, totaling 776 residential units.

number of projected housing units. A total of 2,927 new multi-family housing units is projected to be added by 2040, consisting of the following:

1. 1,790 units identified in the City's adopted 2023-2031 Housing Element;
2. 737 units associated with ConnectMenlo;[5] and
3. 400 additional units associated with the SRI Parkline development, which were added after adoption of the City's 2023-2031 Housing Element.

The adopted 2023-2031 Housing Element includes projected development through 2040. For the period from 2041 through 2050, the same multi-family residential growth rate was assumed, resulting in an additional projected 1,950 multi-family housing units or 5,011 persons.

MPMW's service area population is estimated to be 20,483 in 2025. By 2050, the total population within the MPMW's service area is expected to be 33,276, which represents a 2.0% annual growth rate compared to the 2025 population.

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

Population Served	2025	2030	2035	2040	2045	2050 (Opt)
	20,483	23,019	25,555	28,130	30,703	33,276

NOTE:
(a) Projected population growth for MPMW's service area was estimated based on Plan Bay Area 2050 demographic forecasts, and growth associated with known developments and the City's 2023-2031 Housing Element (City of Menlo Park, 2024a).

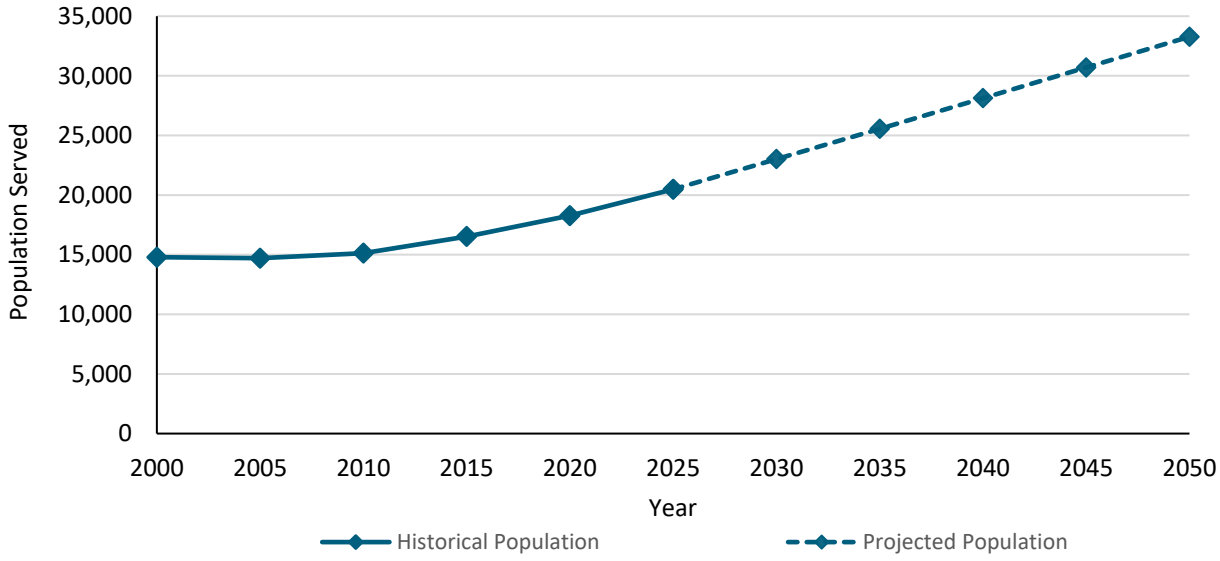

Figure 3-4 Population – Historical and Projected

3.3.2 Employment

The current and projected service area employment estimates from 2025 through 2050 were developed as part of the BAWSCA 2025 Demand Study. The existing employment is estimated in the Demand Study

[5] In May 2026, the Willow Village development project was placed on hold. Due to the uncertainty regarding the project schedule, the City's Community Development Department removed the previously projected 1,730 housing units from current projections. These units may be reevaluated in future UWMP updates if the project advances.

using the U.S. Census Bureau Local Employment Dynamics Origin-Destination Employment Statistics (LODES), and projected employment is based on the most recent historical estimate and applies growth rates derived from Plan Bay Area 2050 demographic forecasts (ABAG, 2021). Estimates reported in this UWMP were also reviewed by the City's Community Development department for consistency with the City's 2016 General Plan for areas within the MPMW's service area boundary. As shown in **Table 3-3**, by 2050, employment within MPMW's service area is anticipated to grow to 53,588 jobs, an increase of 16% relative to 2025 and an annual growth rate of 0.58%.

Table 3-3 Employment – Current and Projected

Service Area Employment	2025	2030	2035	2040	2045	2050(opt)
	46,377	48,351	50,325	51,413	52,500	53,588

NOTE:
(a) Projected employment growth for MPMW's service area was estimated based on Plan Bay Area 2050 demographic forecasts.

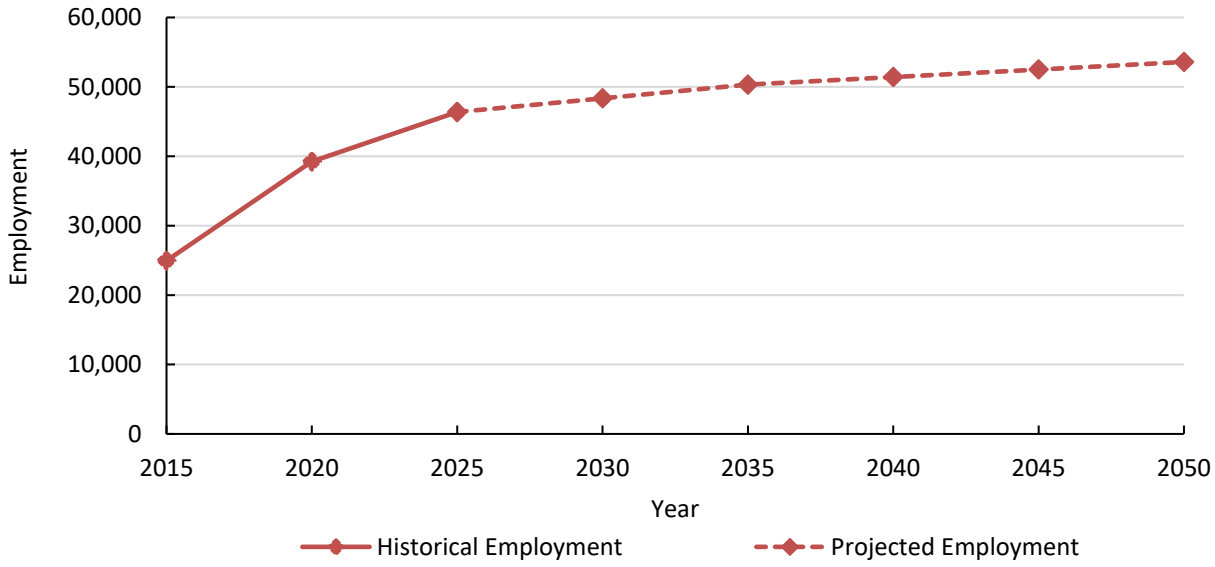

Figure 3-5 Employment – Current and Projected

3.3.3 Other Social, Economic, and Demographic Factors

Demographics for the City of Menlo Park are summarized in **Table 3-4** as they may affect water management and planning. These data are from the U.S. Census American Community Survey (ACS) 2024 5-Year Estimates (U.S. Census Bureau, 2024). The same data are also provided for the whole State of California as comparison. The City has a similar age and race structure to the State as a whole. Educational attainment and median household income in the City are much higher than for the State, and percent of population below the poverty level is comparatively lower. Approximately 19% of the homes in the City were built after 1980 (City of Menlo Park, 2024). Homes built after 1980 are more likely to have plumbing fixtures that are compliant with state and federal water and energy efficiency standards.

Table 3-4 Demographic and Housing Characteristics, 2020-2024

Demographics	Menlo Park	California
Age and Sex		
Persons under 5 years	5.9%	5.3%
Persons under 18 years	21.0%	21.3%
Persons 65 years and older	16.6%	16.5%
Female persons	50.3%	50.1%
Race and Hispanic Origin		
White alone	55.6%	69.8%
Black or African American alone	2.2%	6.4%
American Indian and Alaska Native alone	0.7%	1.8%
Asian alone	19.1%	17.0%
Native Hawaiian and Other Pacific Islander alone	0.2%	0.5%
Two or More Races	12.7%	4.4%
Hispanic or Latino	20.9%	40.8%
White alone, not Hispanic or Latino	51.6%	33.6%
Families & Living Arrangements		
Persons per household	2.68	2.84
Living in same house 1 year ago, percent of persons age 1 year+	83.1%	89.2%
Language other than English spoken at home, age 5 years+	39.7%	44.4%
Education		
High school graduate or higher, persons age 25 years+	92.5%	84.7%
Bachelor's degree or higher, persons age 25 years+	72.5%	37.1%
Income & Poverty		
Median Household Income (2024 dollars)	$210,025	$99,122
Per capita income in past 12 months (2024 dollars)	$128,814	$49,513
Persons in poverty	5.8%	11.8%

NOTES:
(a) Demographic data per the U.S. Census Bureau (U.S. Census, 2024).
(b) Data are shown for the entire City of Menlo Park and are not limited to the MPMW service area.

3.4 Land Uses within Service Area

☑ ***CWC §10631***

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

General Plans are required by State law to guide land use and development within cities (California Government Code Section 65030.1). The Land Use and Circulation Elements are the central components of the General Plan as they frame the type and scale of potential development that may occur over a 20-year time horizon and inform associated transportation and water demand issues. The City's most recent comprehensive update to the Land Use and Circulation Elements was completed through the ConnectMenlo process, which began in 2014 and culminated in adoption of the updated General Plan in 2016.

As reflected in the 2016 General Plan Land Use Element, the majority of the City's land use is residential (55%), while the remaining 45% is split among other uses, notably Bayfront Innovation Area (15%), Parks and Recreation (10%), and Commercial (7%). MPMW's service area is in the northeastern and southwestern portions of the City, covering approximately half of the City's area. Land uses within the MPMW service area generally consists of a mix of residential, commercial, and light industrial uses.

The City's General Plan identifies substantial development potential within MPMW's service area, particularly in the Bayfront Area north of Highway 101. This area is served by MPMW and represents a major source of potential future water demand growth.[6] The maximum potential net increase from the Bayfront Area development includes approximately:

- 2.3 million non-residential square feet, including offices, life-sciences buildings, and other commercial uses;
- 400 hotel rooms;
- 4,500 multi-family residential units;
- Two transit centers; and
- Up to 61 acres of landscaped open space.

Although the General Plan identifies significant long-term development potential in the Bayfront Area, actual development activity since preparation of the 2020 UWMP has occurred more gradually than previously anticipated. Some planned development has been completed or advanced, but the pace of development has been affected by broader economic and demographic trends, including the COVID-19 pandemic and slower-than-anticipated regional population and employment growth. The UWMP intends to reflect the best available information regarding likely growth within MPMW's service area, while recognizing the inherent uncertainty associated with long-term land use and development forecasts.

[6] A portion of the Bayfront Area bounded by Highway 101, Marsh Road, and the Dumbarton Rail is served by Cal Water. The land use changes associated with ConnectMenlo in this area would generally reflect the same uses and intensity that is permitted under the current regulations.

3.5 Water Distribution System

MPMW's potable water distribution system is split into three different pressure zones, which are described below.

- The Lower Zone is generally located north and east of El Camino Real and serves residential, small commercial, and light industrial land uses. The lower zone includes the Belle Haven neighborhood, commercial and light industrial in the Bayfront Area, as well as portions of the Bay Road and Willows neighborhoods. It also includes the business parks between Willow Road and University Avenue north of O'Brien Drive.
- The High Pressure Zone is located in northern Menlo Park between Highway 101 and Bayfront Expressway, north of Chilco Street, and serves multi-family residential, commercial and light industrial, and a mobile home park outside the City's northernmost boundary. The High Pressure Zone is hydraulically disconnected from the other zones.
- The Upper Zone is located in the southwest portion of Menlo Park near Interstate 280 and is geographically and hydraulically disconnected from the other pressure zones. It primarily serves the residential Sharon Heights neighborhood and business parks along Sand Hill Road.

There are 25 MPMW customers located along Euclid Avenue that receive water from the City of East Palo Alto's water distribution system that are billed by MPMW. MPMW compensates City of East Palo Alto for water used by these customers and their water use is not included as part of MPMW's demand.

Water from the SFPUC's RWS enters MPMW's distribution system through five service connections (turnouts). The High Pressure Zone and the Upper Zone each have one turnout, and the Lower Zone has three turnouts. MPMW has two water storage tanks, which have capacities of 2 MG and 3.5 MG, and act together to serve the Upper Zone. A MPMW pump station conveys water from the upper zone turnout to fill the storage tanks and to supplement demands.

MPMW has 14 emergency interties with four adjacent water suppliers. Four connections (one metered, two hydrant) are with the Cal Water's Bear Gulch system; a metered connection with the O'Connor Tract Co-operative Water Company; one connection with the City of Redwood City (hydrant); and eight interties with the City of East Palo Alto.

MPMW has one emergency groundwater well at the City's Corporation Yard located at 333 Burgess Drive.

Construction of the above-grade facilities for the Corporation Yard well was completed in late 2020, and in early 2023, MPMW received approval from the SWRCB to operate the well as standby in emergencies. MPMW is also investigating locations for a future underground reservoir for the Lower Zone and High Pressure Zone. MPMW has identified two suitable sites for the reservoir; however, a final site selection has not yet been made.

MPMW updated its Water System Master Plan in 2018. The Water System Master Plan identifies strategies for cost-effectively meeting MPMW's distribution system infrastructure needs for the next 25 years through year 2040; recommends capital expenditures for the system totaling $90.31 million; furnishes important guidance to enhance renewal and replacement strategies, operational and water quality practices; and provides a framework for diversifying MPMW's water supply. The 2018 Water System Master Plan can be viewed at menlopark.gov/water.

In 2022, the City prepared an update and supplement to the 2018 Water System Master Plan. This work included the reevaluation of storage requirements based on existing water demands and 2040 conditions using the water hydraulic model, the development of a prioritized list of pipeline replacement projects in more discrete project packages, and updated tables and figures.

4 WATER USE CHARACTERIZATION

☑ ***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.

This section describes and quantifies MPMW's historical, current, and projected water uses through 2050. For the purposes of this UWMP, the terms "water use" and "water demand" are used interchangeably.

4.1 Non-Potable Versus Potable Water Use

Potable water deliveries comply with Title 22 Drinking Water Standards. Non-potable water uses may include recycled and untreated raw water deliveries, such as tertiary treated recycled water, remediated groundwater, or untreated surface or groundwater supplies that do not meet potable drinking water standards. Uses of potable versus non-potable water are clearly distinguished in the tables included in this section of the UWMP. Water losses are further categorized consistent with American Water Works Association (AWWA) water audit methodology, including apparent losses (e.g., unauthorized consumption and metering inaccuracies) and real losses (e.g., leakage from distribution mains and service connections).

For the purposes of this UWMP, potable water demand is defined as the volume of potable water that MPMW purchases from the SFPUC RWS. Non-potable water demand is defined as the demand for recycled water provided by the WBSD to the MPMW service area, that would otherwise be served by MPMW .

4.2 Water Use Sectors

☑ ***CWC §10631***

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

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

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

(I) Agricultural.

(J) Distribution system water loss.

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

- **Single Family Residential**: Attached or detached dwelling units that are individually metered.
- **Multi-Family Residential**: Two or more dwelling units served by a common water meter. Water use is predominately for indoor water uses; irrigation water use for multiple family sites is usually separately metered and listed in the landscape sector.
- **Commercial**: Includes commercial customers. Irrigation water use at these sites is usually separately metered and listed in the landscape sector.
- **Industrial**: Includes industrial customers. Irrigation water use at these sites is usually separately metered and listed in the landscape sector.
- **Institutional/Governmental**: Includes meters serving City sites, higher-education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.
- **Other**: Includes temporary meters and miscellaneous customers not listed elsewhere.
- **Landscape**: Water meters used exclusively for outdoor uses associated with multiple family residential customers (i.e., homeowner associations [HOAs]) and other irrigation sites.
- **Fire Service**: Water meters used for fire suppression or system maintenance.

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

4.3 Past and Current Water Demand

☑ ***CWC §10631***

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

Past water uses inform an understanding of water use trends which are crucial for developing water use projections. **Figure 4-1** shows historical and current water use from 2015 through 2025, **Figure 4-2** shows MPMW's per capita potable water use during the same time period, and **Table 4-1** summarizes the data from both figures. Total water use fluctuated during this period, reflecting the effects of drought water use restrictions and subsequent demand rebounds. MPMW's per capita potable water use has notably decreased, falling from 146 gallons per person per day (GPCD) in 2015 to 131 GPCD in 2025, a drop of 11%. This decline reflects several factors, including an increase in potable water use efficiency, the addition of multi-family residential development within the service area, and the introduction of recycled water use at Sharon Heights Golf and Country Club, which offsets non-residential potable demand. Additional potable demand offset with recycled water is anticipated in the future following completion of WBSD's Bayfront Recycled Water Project (see **Sections 4.5.2** and **6.5**).

Recycled water accounted for 5% of water use in 2025, all of which is used at the Sharon Heights Golf and Country Club (SHGCC) for irrigation. Detailed discussion of MPMW's recycled water program is provided in **Section 6.5**.

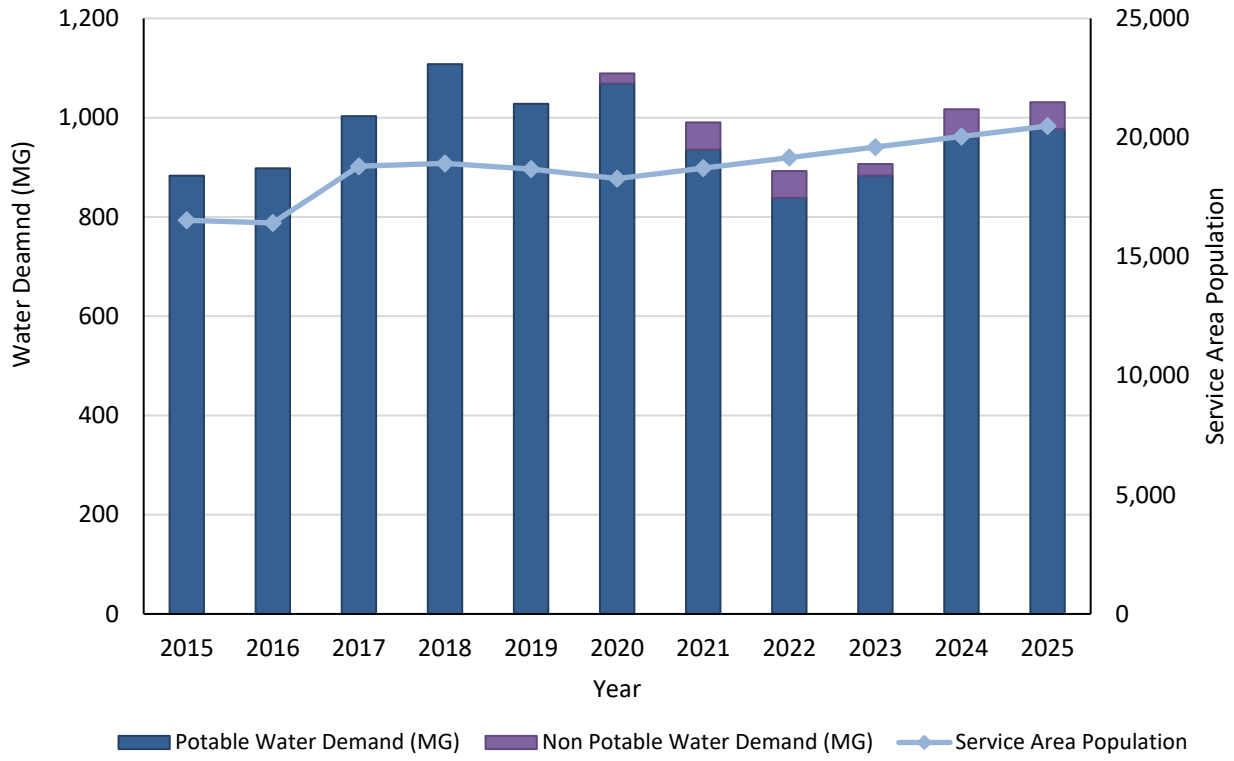

Figure 4-1 Total Uses for Potable and Non-Potable Water - 2015 – 2025 Actual

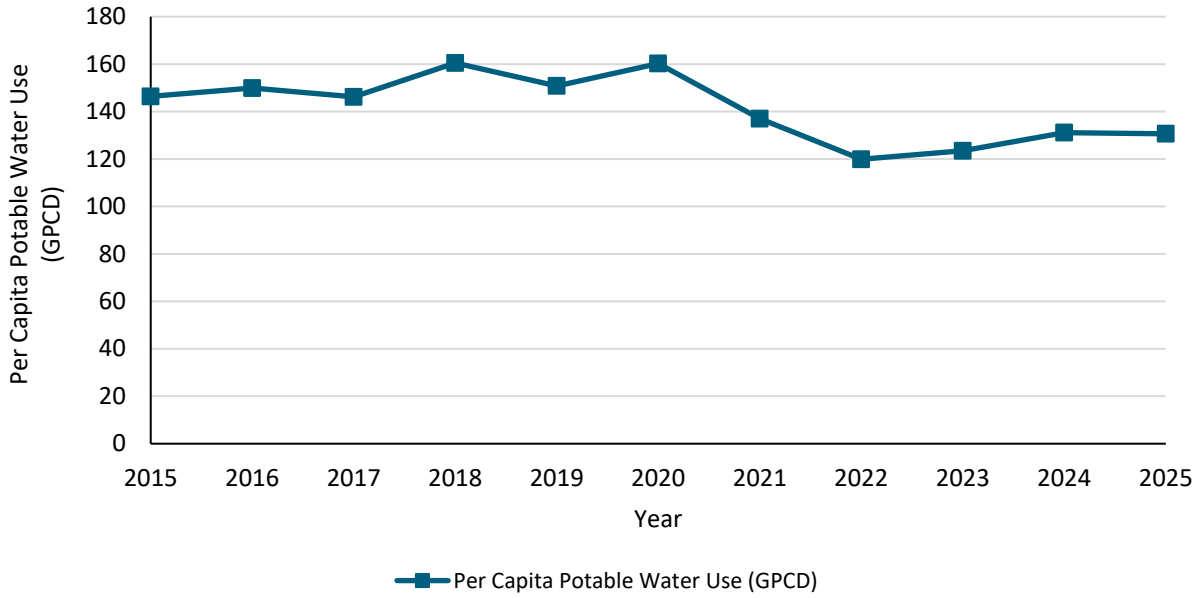

Figure 4-2 Per Capita Potable Water Use From 2015 – 2025 Actual

Table 4-1 Historical Water Demand and Per Capita Water Demand

Year	Total Water Demand (MG) (a)	Potable Water Demand (MG)	Non-Potable Water Demand (MG) (b)	Service Area Population (c)	Per-Capita Potable Water Use (GPCD) (d)
2015	883	883	0	16,525	146
2016	898	898	0	16,413	150
2017	1,003	1,003	0	18,795	146
2018	1,108	1,108	0	18,915	160
2019	1,028	1,028	0	18,676	151
2020	1,089	1,069	20	18,276	160
2021	990	936	54	18,718	137
2022	892	839	54	19,159	120
2023	907	883	23	19,601	123
2024	1,017	959	58	20,042	131
2025	1,031	977	54	20,483	131

NOTES:

(a) For planning purposes, distribution losses are considered potable water demand.

(b) Non-potable demand is recycled water use at Sharon Heights Golf and Country Club.

(c) Service area population from 2015 through 2020 from the BAWSCA Demand Study and benchmarked to decennial Census data. Population from 2021-2025 were estimated by City staff by applying DOF annual jurisdictional population growth rates to the MPMW water service area and adjusting for completed multi-family developments and Housing Element-related growth.

(d) Per capita potable water use is calculated by dividing the total annual potable water demand by the service area population and the number of days in a year.

Table 4-2 and **Figure 4-3** break down the 2025 actual water use by customer sector. The residential sector accounted for an average of approximately 38% of the total water demand in MPMW's service area in 2025. MPMW has a substantial commercial, industrial, and institutional (CII) base, which together accounted for approximately 36% of total water demand. The landscape and "other" potable use (miscellaneous customers and fire service) respectively accounted for 8% and less than 1% of the total water demand. Landscape services include irrigation water use at accounts that have a separate irrigation meter and does not represent all of the outdoor irrigation water use within MPMW. Recycled water accounted for approximately 5% of the total water demand. The recycled water demand accounts for irrigation at the Sharon Heights Golf and Country Club.

Table 4-2 2025 Actual Total Uses for Potable and Non-Potable Water (DWR Table 4-1)

Use Type	Additional Description	2025 Actual Water Use	
		Level of Treatment When Delivered	Volume (MG)
Single Family		Potable	282
Multi-Family		Potable	117
Commercial		Potable	138
Industrial		Potable	135
Institutional/Governmental		Potable	101
Landscape	Irrigation	Potable	87
Landscape	Irrigation (a)	Non-Potable	54
Distribution System Water Loss		Potable	115
Other (Optional)	(b)	Potable	2
		Subtotal Potable	977
		Subtotal Non-Potable	54
		Total	**1,031**

NOTES:
(a) Recycled water use for irrigation at the Sharon Heights Golf and Country Club.
(b) Other water uses include other billed metered consumption (e.g., temporary meters and fire and hydrant services)

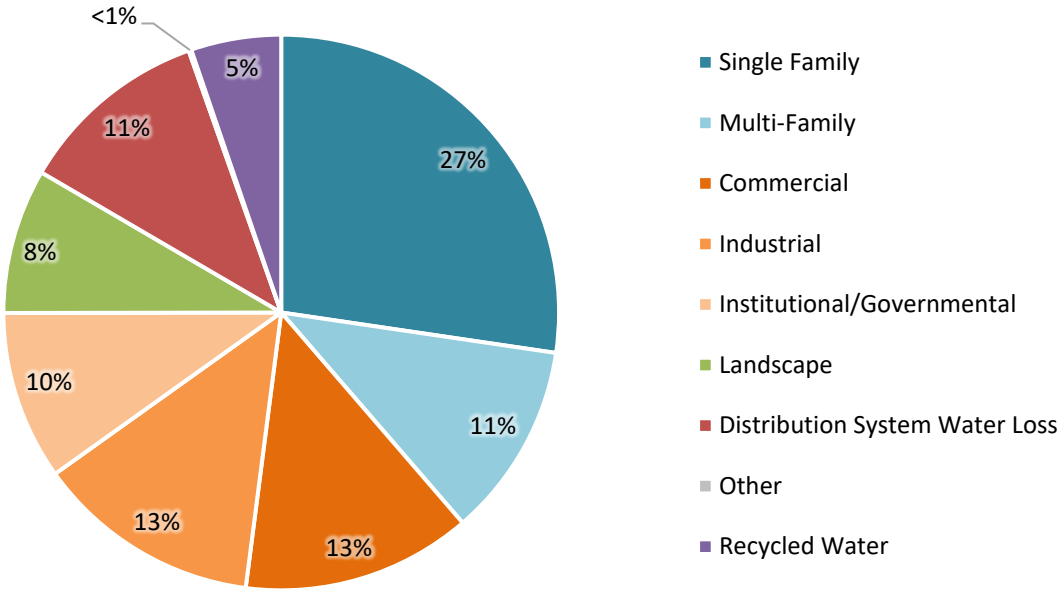

Figure 4-3 2025 Percentage of Total Water Demand by Sector

4.4 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.

Water loss is the sum of apparent and real losses. Apparent loss is associated with metering inaccuracies, billing and administrative errors, authorized unmetered uses (e.g., system flushing and firefighting), and unauthorized uses. Real loss is associated with physical loss of water through line breaks, leaks and seeps, and overflows of storage tanks. Since 2016, urban retail water suppliers have been required under CWC §10608.34 and California Code of Regulations (CCR) §638.1 et seq to quantify distribution system water losses using the AWWA Free Water Audit Software (referred to as "water loss audit reports"). **Table 4-3** summarizes the water loss audit reports submitted to DWR for the PWS in MPMW since 2021. The water loss audit reports are available through DWR's Water Use Efficiency Data Portal.[7]

[7] DWR's Water Use Efficiency Data Portal: https://wuedata.water.ca.gov/awwa_plans

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

PWS ID # (reported in DWR Table 2-1)	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
CA4110017	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR Notes: Suppliers will provide a link to WUE data submittals of their Water Loss Audit Reports.		
NOTE: (a) Water loss is reported from the AWWA Free Water Audit Software and is reported on a calendar year basis.		

In 2022, the SWRCB adopted water loss performance standards for urban retail water suppliers that would reduce water loss by nearly 35%. Effective starting in 2023, the SWRCB established individual volumetric standards for each urban retail water supplier that sets cost-effective levels of achievable water loss based on each water system's characteristics and budgets. Suppliers will be required to start meeting individual volumetric loss standards over a three-year period beginning January 2028. This water loss is one component of the MCCWL (SWRCB, 2022).

CWC §10631 (3)(c) requires that this UWMP demonstrate whether MPMW has met the distribution loss standards enacted by the SWRCB pursuant to CWC §10608.34. **Table 4-4** demonstrates MPMW's progress towards meeting the 2028 water loss standard. Per the most recently submitted AWWA water loss audit (CY 2024; DWR, 2025a), MPMW's apparent water loss is currently compliance with the standards, though real water loss currently exceeds the water loss standard. Apparent losses generally refer to water that is consumed but not accurately measured or billed, such as losses resulting from meter inaccuracies, data handling errors, or unauthorized consumption. Real losses refer to physical water losses from the distribution system, such as leakage from mains, service lines, valves, and storage facilities. As discussed in **Section 9**, MPMW's water loss management efforts include its recent Advanced Meter Infrastructure (AMI) Project, which is expected to help reduce these losses by improving system monitoring and leak detection capabilities.

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

PWS ID #	Did the SWRCB Calculate a Water Loss Standard for this PWS?	Real Water Loss					Apparent Water Loss				
		SWRCB Standard		Most Recent AWWA Loss Audit			SWRCB Standard		Most Recent AWWA Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss (b)	Number of Units	Volume of Total Real Loss (MG)	Real Water Loss per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss (a)	Number of Connections	Volume of Total Apparent Loss (MG)	Apparent Water Loss per Unit per Day
CA4110017	Yes	34.2	GPSCD	4,606	77.5	46.1	17.8	GPSCD	4,606	26.4	15.7

NOTES:
(a) GPSCD = Gallons per service connection per day.
(b) Provided by State Water Resources Control Board (SWRCB).
(c) Provided by AWWA (DWR, 2025a).
(d) Units in MG.

4.5 Projected Water Demand

Future water demands within MPMW's service area are estimated through the BAWSCA 2025 Demand Study effort and further revised by MPMW, as discussed in more detail below.

4.5.1 Basis of Demand Projections

A description of BAWSCA's 2025 Demand Study's goals and outcomes is provided below.

> In December 2025, BAWSCA completed the Regional Water Demand and Conservation Projections Report (Demand Study).[8] The goal of the Demand Study was to develop transparent, defensible, and uniform demand and conservation savings projections for each member agency using a common methodology to support both regional and individual agency planning efforts and compliance with the new statewide water efficiency targets required by Assembly Bill (AB) 1668 and Senate Bill (SB) 606.
>
> Through the Demand Study process, BAWSCA and the Wholesale Customers (1) quantified the total average-year water demand for each Wholesale Customer through 2050, (2) quantified passive and active conservation water savings potential for each individual Wholesale Customer through 2050, and (3) identified conservation programs with high water savings potential and/or BAWSCA Member Agency interest. Implementation of these conservation measures, along with passive conservation, is anticipated to yield an additional 16.14 million gallons per day (mgd) of water savings by 2050. Based on the revised water demand projections, the identified water conservation savings, increased development and use of other local supplies by the Wholesale Customers, and other actions, the collective purchases of the BAWSCA Member Agencies from the SFPUC are projected to stay below 184 mgd through 2050.
>
> As part of the Demand Study, each Wholesale Customer was provided with a demand model that can be used to support ongoing demand and conservation planning efforts, including UWMP preparation.

The Demand Study demand model also assesses the sensitivity of MPMW's water demand to weather and incorporates predicted weather and climate change data into the demand projections. Based on data published by Cal-Adapt's CMIP5 RCP 8.5 climate scenario, a predicted annual mean temperature increase of 1.77°F for San Mateo County was incorporated into the Demand Study forecast for the time period of 2025 to 2050. A description of the weather and climate change data incorporated into MPMW's demand model is provided in Section 5.4 of the BAWSCA Demand Study (BAWSCA, 2025). As a result, the demand projections presented in this section reflect considerations of climate change.

MPMW's projected water demands are estimated based on the population and employment projections discussed in **Section 3.3**, among other inputs. As discussed in **Section 3.3**, MPMW's population projections were developed using Plan Bay Area 2050 data as a starting point and further refined by the City's Community Development department by including population associated with completed multi-family residential developments and growth associated with the City's Housing Element projections (City of Menlo Park, 2024a).

4.5.2 Projected Total Water Demand

Projected total potable and non-potable water demand in five-year increments is summarized by sector in **Table 4-5** and **Figure 4-4**. Total demand is estimated to be 1,160 MG in 2050, an increase of 13% relative to the total actual demand in 2025 (1,031 MG). Over the same period, population is estimated to increase

[8] https://bawsca.org/water/use/2025_Demand_Study

by 56% and employment by 16% in the MPMW service area (**Section 3.3**). The smaller increase in projected demands compared to the relatively higher increases in population and employment projections is due to: (1) the majority of MPMW's population growth occurring in the multi-family residential sector, which typically uses less water than existing single-family residential customers, (2) residential demand making up a relatively smaller portion of MPMW's demands compared to other neighboring urban water supplier agencies, meaning an increase in population wouldn't be the main driver for significant increases in overall demands for MPMW, (3) continued water conservation practices assumed in the projections, and (4) the BAWSCA Demand Study utilizing historical use from 2022-2023 as the baseline for the projections, which were comparatively low water use years (see **Section 4.3**).

Recycled water projections include demands associated with irrigation at SHGCC, which is assumed to remain constant at approximately 54 MG per year per the BAWSCA Demand Study, and new demands associated with the Bayfront area, provided by WBSD (approximately 63 MG by 2050). The recycled water demands associated with the Bayfront area, which include both indoor and outdoor non-potable demands, were subtracted from the potable indoor commercial and landscape projected demands estimated from the BAWSCA Demand Study, as these potable demands would be converted to non-potable. The assumptions for the recycled water demand projections are further discussed in **Section 6.5.**

Potable water demand will be approximately 1,043 MG in 2050 within MPMW's service area, which is a 6.8% increase relative to the actual 2025 potable water demand of 977 MG. However, potable demand is projected to be 960 MG in 2030. The near-term decrease in potable demand is due to the projected distribution system losses being lower than 2025 actuals. However, demand projections for all other sectors in the near-term are close to the actual 2025 demands. Single-family residential demand is projected to decrease from 2025 to 2050.[9] In contrast, CII and multi-family residential demand is expected to grow consistently after 2030.

[9] Single-family residential demand is expected to be relatively stable over the planning horizon; however, with an increase in passive and active conservation (see **Section 4.5.3**), total demand including conservation results in a decrease in single-family residential demands from 2025 to 2050.

Table 4-5 Total Annual Uses of Potable and Non-Potable Water - Projected (DWR Table 4-2)

Use Type	Additional Description	Projected Water Use (a)					
		Potable or Non-Potable	2030	2035	2040	2045	2050 (opt)
Single Family		Potable	269	262	260	258	257
Multi-Family		Potable	136	159	182	204	226
Commercial	(b)	Potable	135	133	107	111	115
Commercial	(c)	Non-Potable	8	15	44	44	44
Industrial			132	137	140	144	147
Institutional/Governmental	(b)	Potable	93	96	99	101	104
Landscape		Potable	139	138	125	126	127
Landscape		Non-Potable	56	58	73	73	73
Distribution System Water Loss		Potable	56	58	61	63	65
Other (Optional)	(d)	Potable	1.4	1.4	1.4	1.4	1.4
Subtotal Potable			**960**	**985**	**975**	**1,008**	**1,043**
Subtotal Non-Potable			**64**	**73**	**117**	**117**	**117**
Total			**1,024**	**1,058**	**1,092**	**1,124**	**1,160**

NOTES:

(a) Volumes are in units of MG.

(b) The 2025 Demand Study provides combined projections for the commercial and institutional/governmental sectors; therefore, projections were separated based on the historical split in commercial and institutional/governmental in the past five years.

(c) The increase in non-potable commercial demand from 2035 to 2040 is due to additional dual-plumbed recycled water use as part of the Bayfront Recycled Water Project Phase 2 expansion (see **Section 6.5.3.1**).

(d) Includes temporary meters and fire service.

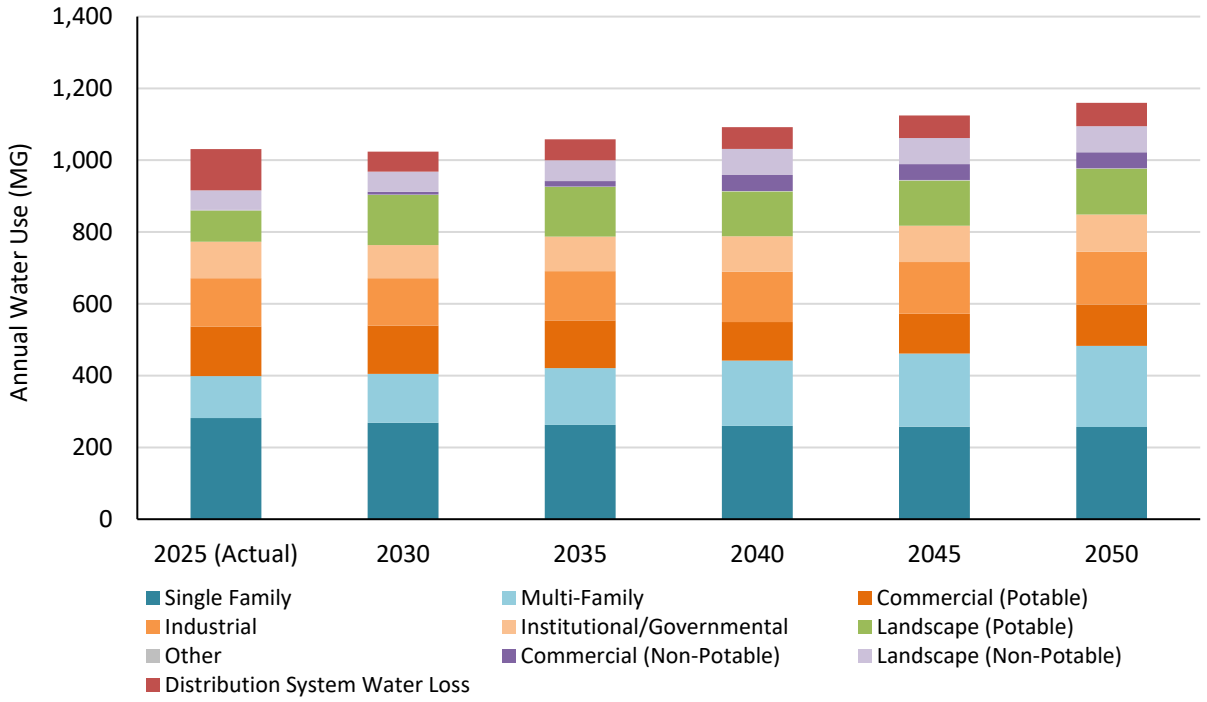

Figure 4-4 Total Uses of Potable and Non-Potable Water – Projected

4.5.3 Water Savings from Codes, Standards, Ordinances, or Transportation and Land Use Plans

☑ ***CWC §10631(d)(4)***

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

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

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

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

"Passive conservation" refers to water savings resulting from actions and activities that do not depend on direct financial assistance or educational programs implemented by water suppliers. These savings result primarily from: (1) the natural replacement of existing plumbing fixtures with water-efficient models. required under current plumbing code standards, (2) the installation of water-efficient fixtures and equipment in new buildings and retrofits as required under CALGreen Building Code Standards, (3) inclusion of low-water use landscaping and high-efficiency irrigation systems to minimize outdoor water use in new connections and projects in accordance with the State's Model Water Efficient Landscape Ordinance, and (4) restricted use of potable water for the irrigation of nonfunctional turf located on CII properties in accordance with AB 1572.

"Active conservation" refers to water savings resulting from MPMW's implementation of water conservation programs, education programs, and the offering of financial incentives (e.g., rebates). MPMW's current and planned active conservation programs, or Demand Management Measures (DMM), are discussed in **Section 9**.

The water demand projections presented herein consider both passive and active conservation savings, as shown in **Table 4-6**. The projected passive and active savings are estimated from the BAWSCA 2025 Demand Study and are shown in **Table 4-7**, respectively. By 2050, it is estimated that the water demand within MPMW's service area will be 1,224 MG without passive or active conservation savings. Passive conservation savings are projected to reduce this water demand by 51 MG (i.e., by 4.1%) and active conservation is projected to further reduce demands by 14 MG (i.e., by 1.1%). As such, it is estimated that annual water demands will be approximately 1,024 MG in 2030 and 1,160 MG in 2050 (**Figure 4-5**).

Table 4-6 Inclusion in Water Use Projections (DWR Table 4-3)

Are Future Water Savings Included in Projections?	Yes
If "Yes" to above: State the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found.	UWMP Section 4.5.3
Are Lower-Income Residential Demands Included in Projections?	Yes
(OPTIONAL) If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	UWMP Section 4.5.4
NOTES: All of MPMW's residential customers, regardless of income level, are metered and thus the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in DWR Table 4-2 and DWR Table 4-6.	

Table 4-7 Projected Total Water Demand and Projected Passive and Active Water Conservation

Water Conservation Type	Projected Total Water Demand (a)				
	2030	2035	2040	2045	2050
Projected Water Demand	1,048	1,096	1,140	1,181	1,224
Projected Water Conservation					
Passive Conservation	16	27	37	44	51
Active Conservation	9	11	12	13	14
Total Projected Demand	**1,024**	**1,058**	**1,092**	**1,124**	**1,160**

NOTES:
(a) Projected water demands and conservation are from the 2025 Demand Study, based on population and employment projections shown in **Table 3-2** and **Table 3-3**. Volumes are in units of MG.
(b) Total water demand is the sum of potable and non-potable water demand and includes metered water consumption and losses. The projected water demands include savings from plumbing codes and conservation efforts that MPMW plans to undertake. Totals may not sum due to rounding.

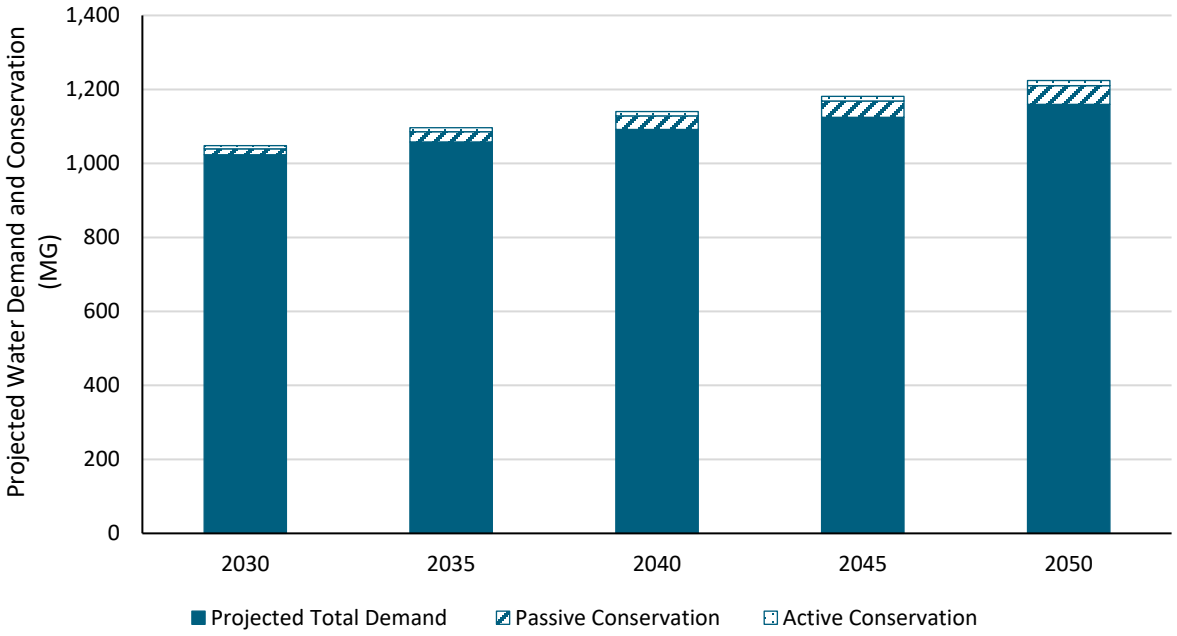

Figure 4-5 Projected Total Water Demand and Projected Water Conservation

4.5.4 Water Use by Lower Income Households

☑ ***CWC §10631.1***

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

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

As affirmed in **Table 4-6**, income residential demands are included in the projections of future water use. Per Health and Safety Code 50079.5, a lower income household is defined as a household with lower than 80% of its city's median income. All residential customers, regardless of income level, are metered. Thus, the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in the total water demand projections described above.

4.5.5 Characteristic Five-Year Water Use

☑ ***CWC §10635***

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

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

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

In accordance with CWC §10635(b)(3), UWMPs must provide a five-year Drought Risk Assessment (see **Section 7.5**). As a first step, DWR suggests that water suppliers estimate their unconstrained water demand for the next five years (2026-2030). Unconstrained water demand is water use in the absence of drought water use restrictions. These numbers can then be adjusted to estimate the five-years' cumulative drought effects. The Drought Risk Assessment presented in **Section 7.5** accounts for this unconstrained water demand. **Table 4-8** shows unconstrained demands for 2026-2030 for both normal weather and multiple-dry-year scenarios. As discussed in **Section 4.5.5**, the near-term decrease in demand is due to the projected distribution system losses being lower than 2025 actuals. However, demand projections for all other sectors in the near-term are close to the actual 2025 demands.

The Drought Risk Assessment must include a consideration of climate change impacts on demand. Hotter and drier weather may lead to an increased demand in landscape irrigation. MPMW's demand projections incorporate climate change considerations, including predicted temperature increases through 2050, as described in **Section 4.5.1**.

Table 4-8 Characteristic Five-Year Water Use (MG)

2026	2027	2028	2029	2030
1,030	1,028	1,027	1,025	1,024

NOTES:
The table shows unconstrained demand (i.e., demand in the absence of drought water use restrictions).

4.6 Water Use Sectors Not Included in Demand Projections

Historical and projected water demands for the water use sectors described in CWC §10631(d)(1)(G) through (I) and listed below were not included in MPMW's water demand calculations because they are not applicable to MPMW:

- Sales to other agencies – MPMW does not currently, nor does it plan to, sell water to other agencies.
- Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof – MPMW does not currently use, nor does it plan to use, water for saline water intrusion barriers, groundwater recharge, or conjunctive use.
- Agricultural – MPMW does not currently, nor does it plan to, provide water for agricultural uses.

4.7 Coordinating Water Use Projections

☑ ***CWC § 10631(h)***

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

MPMW provides the SFPUC with water use projections annually as part of reporting to the BAWSCA Annual Surveys and other BAWSCA-led water demand and supply coordination efforts (such as the Demand Study). As part of the coordination effort for the 2025 UWMP, and in compliance with CWC §10631(h), MPMW supplied BAWSCA with its water demand projections through 2050 for transmittal to the SFPUC.

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

The Water Conservation Act of 2009, also known as SB X7-7, required that urban retail water suppliers[10] reduce their baseline per capita water use by 20% by 2020. Because the CWC does not set an end date for reporting progress in meeting the 2020 Target, this section of the UWMP demonstrates MPMW's compliance with SB X7-7 in 2020.

5.1 Demonstration of Compliance with SB X7-7 2020 Target

☑ ***CWC §10608.40***

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

☑ ***CWC §10608.12***

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

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

Urban retail water suppliers may report on the requirements of SB X7-7 individually or as a member of a "Regional Alliance." MPMW is not a member of a Regional Alliance and this UWMP provides information on MPMW's progress towards meeting its SB X7-7 water conservation targets as an individual urban retail water supplier only.

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

☐	Supplier was not an Urban Water Supplier during or before the 2020 reporting cycle.					
Was Supplier part of a merger or consolidation since 2020?	**Regional Alliance Target or Individual Target?**	**2020 Target**	**Actual 2020 GPCD**	**Did Supplier Achieve Targeted Reduction for 2020?**	**Only for suppliers that did not meet the Target in 2020**	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	**Did Supplier meet the 2020 Target in 2025?**
No	Individual Target	204	160	Yes		

[10] CWC §10608.12 defines an urban retail water supplier as "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."

5.2 Urban Water Use Objective

☑ ***CWC § 10609.20***

(a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.

☑ ***CWC § 10609.22***

(a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year.

☑ ***CWC § 10609.24***

(a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:

(1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.

(2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.

(3) Documentation of the implementation of the performance measures for CII water use.

(4) A description of the progress made towards meeting the urban water use objective.

(5) The validated water loss audit report conducted pursuant to Section 10608.34.

(b) The department shall post the reports and information on its internet website.

(c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

In July 2024, California enacted the MCCWL regulation (implementing SB 606 and AB 1668) to support long-term water conservation and drought resilience. These regulations establish annual UWUO for water suppliers and introduce Performance Measures for CII water users.

The UWUO is a water budget-based approach to water use efficiency unique to each urban water supplier and consists of the following components: (1) residential indoor water standard, (2) residential outdoor water budget, (3) CII landscape outdoor water use standard (for landscapes with dedicated irrigation meters, (4) water loss standard, (5) variance, and (6) bonus. Suppliers will need to assess whether they meet their UWUO collectively (i.e., they are not required to comply with the individual standards if they meet the overall UWUO). Compliance with UWUOs is required beginning January 2027. Per the MCCWL regulation, over the next 25 years, the water efficiency standards for residential indoor and outdoor water use as well as CII outdoor water use will become increasingly stringent.

Beginning in 2024, agencies were required to report an annual UWUO. MPMW's UWUO submittals are available through DWR's Water Use Efficiency Data.[11] Although UWUO compliance projections are not required as part of an UWMP, they can provide valuable insight into the potential need and timing for additional conservation measures. For this reason, MPMW has elected to develop preliminary UWUO projections for its service areas and to compare these projections to projected regulated water uses.

[11] DWR's Water Use Efficiency Data Portal: https://wuedata.water.ca.gov/uwuo_plans

Table 5-2 summarizes MPMW's anticipated compliance with UWUOs through 2050 by comparing the water demand subject to UWUO compliance and projected UWUOs. The methodology for estimating MPMW's projected UWUOs and water demand subject to UWUO compliance is described in Section 6 of the BAWSCA Demand Study (BAWSCA, 2025). These estimates show that MPMW is anticipated to comply with its UWUOs through 2050 (see **Figure 5-1**).

Table 5-2 Current and Projected Urban Water Use Objectives Compliance

Year	Water Demand Subject to UWUO Compliance (a) (b)	UWUO Projections (High ETo) (a)	UWUO Projections (Low ETo) (a)
2025	537	874	
2030	609	790	748
2035	622	733	700
2040	639	726	698
2045	656	766	738
2050 (Opt)	675	806	778

NOTES:

(a) Volumes are in units of MG. The 2025 Demand Study evaluated two different evapotranspiration scenarios, a scenario in which there is high evapotranspiration (i.e., assumed higher outdoor use), and low evapotranspiration.

(b) Water demand subject to UWUO compliance includes single family, multi-family water, irrigation, and water loss sectors. These water use projections incorporate both passive and active conservation.

(c) 2025 compliance per the UWUO report submitted by the MPMW to DWR on December 22, 2025 (DWR, 2025b).

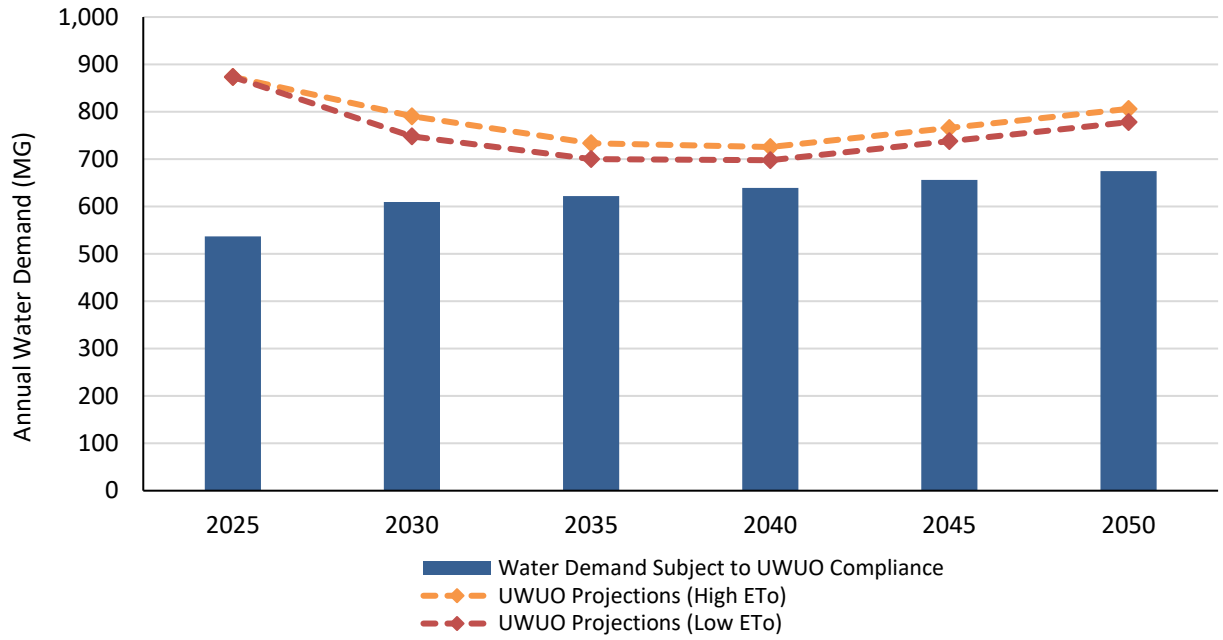

Figure 5-1 Current and Projected Urban Water Use Objectives Compliance

6 WATER SUPPLY CHARACTERIZATION

☑ ***CWC §10631***

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a) [in five-year increments to 20 years or as far as data is available]1, providing supporting and related information, including all of the following:

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

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

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

This section describes MPMW's current and potential water supplies, as well as assessment of the energy intensity used to operate MPMW's distribution system. MPMW's current water supplies consist of potable water purchased from the SFPUC RWS and non-potable water provided by WBSD.

To maintain consistency with the UWMPs prepared by the SFPUC and the other BAWSCA member agencies, much of the language describing the SFPUC wholesale water supply in the following sections is common language provided by BAWSCA, in coordination with the SFPUC (**Appendix D**).

6.1 Purchased Water

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

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

This section describes the sources of wholesale water provided by SFPUC, and the process for allocating water between SFPUC, BAWSCA, and wholesale customers.

6.1.1 Description of SFPUC RWS

Approximately 85% of the water supply to the SFPUC RWS originates in the Hetch Hetchy watershed, located in Yosemite National Park, and flows down the Tuolumne River into the Hetch Hetchy Reservoir. Water from the Hetch Hetchy watershed is managed through the Hetch Hetchy Water and Power Project. The remaining 15% of the water supply to the SFPUC RWS originates locally in the Alameda and Peninsula watersheds and is stored in six different reservoirs in Alameda and San Mateo Counties. Details of the various components of the SFPUC RWS are provided below and are shown on **Figure 6-1**. Information regarding the Hetch Hetchy, Alameda, and Peninsula water systems is sourced from common language provided by BAWSCA, in coordination with the SFPUC.

Figure 6-1 Regional Water System and Main Facilities

Water Distribution

The RWS consists of more than 280 miles of pipelines, 60 miles of tunnels, 11 reservoirs, five pump stations, two water filtration plants, and two treatment facilities for pH adjustment and/or disinfection. It includes the Hetch Hetchy Water and Power (HHWP) Project and the Bay Area water system facilities. The HHWP Project is generally composed of reservoirs, hydroelectric generation and transmission facilities, and water transmission facilities from the Hetch Hetchy Valley west to the Alameda East Portal of the Coast Range Tunnel in Sunol Valley. Water system components of the HHWP Project are also referred to as the Hetch Hetchy System. The local Bay Area water system is comprised of two parts—the Alameda System and the Peninsula System—generally consisting of the facilities west of the Alameda East Portal of the Coast Range Tunnel, including the 63,000-acre Alameda and Peninsula watersheds, storage reservoirs, two water filtration plants, and the distribution system that delivers water to both retail and wholesale customers. The Hetch Hetchy, Alameda, and Peninsula Systems are described in more detail below.

- Hetch Hetchy System: In the Hetch Hetchy System, water is diverted from the Tuolumne River watershed into the Hetch Hetchy Reservoir and is then transported in a series of tunnels and aqueducts from the Sierra Nevada to the San Joaquin Pipelines that cross the San Joaquin Valley to the Coast Range Tunnel, which connects to the Alameda System at the Alameda East Portal. Hetch Hetchy System water is disinfected at the Tesla Treatment Facility.
- Alameda System: The Alameda System includes two reservoirs, San Antonio Reservoir and Calaveras Reservoir, which collect water from the San Antonio Creek, Upper Alameda Creek, and Arroyo Hondo watersheds in Alameda County. San Antonio Reservoir also receives water from the Hetch Hetchy System. Conveyance facilities in the Alameda System connect the Hetch Hetchy System and Alameda System to the Peninsula System. The Bay Division Pipelines cross the South Bay to the Peninsula System delivering water to customers along the pipeline

route. The Sunol Valley Water Treatment Plant (SVWTP) filters and disinfects water supplied from San Antonio Reservoir and Calaveras Reservoir. The Sunol Valley Chloramination Facility treats Hetch Hetchy supplies with aqueous ammonia to form chloramines and with sodium hydroxide to adjust pH, then blended in the Alameda Siphons for delivery to Bay Area customers via the Irvington Tunnels.

- Peninsula System: The Peninsula System includes conveyance facilities connecting the Bay Division Pipelines to the distribution system in San Francisco and to other customers on the Peninsula. Two reservoirs, Crystal Springs Reservoir and San Andreas Reservoir, collect runoff from the San Mateo Creek watershed. Crystal Springs Reservoir also receives water from the Hetch Hetchy System. A third reservoir, Pilarcitos Reservoir, collects runoff from the Pilarcitos Creek watershed and directly serves one of SFPUC's Wholesale Customers, the Coastside County Water District (which includes the City of Half Moon Bay), along with delivering water to Crystal Springs and San Andreas Reservoirs. The Harry Tracy Water Treatment Plant (HTWTP) filters and disinfects water supplied from Crystal Springs Reservoir and San Andreas Reservoir before it is delivered to customers on the Peninsula and in San Francisco.

Water Treatment

The Hetch Hetchy Reservoir is the largest unfiltered water supply on the West Coast and one of only a few large unfiltered municipal water supplies in the nation. The water originates from well-protected wilderness areas in Yosemite National Park and flows down the Tuolumne River to Hetch Hetchy Reservoir. This water meets or exceeds all federal and State criteria for watershed protection. Water from Hetch Hetchy Reservoir, which is protected in pipes and tunnels as it is conveyed to the Bay Area, requires pH adjustment to control pipeline corrosion and disinfection for bacteria control. Based on the SFPUC's disinfection treatment practice, extensive bacteriological quality monitoring, and high operational standards, the U.S. Environmental Protection Agency (USEPA) and the SWRCB Division of Drinking Water (DDW) determined that the Hetch Hetchy water source meets federal and State drinking water quality requirements without the need for filtration.

The Tesla Treatment Facility was a key component of the SFPUC's Water System Improvement Program and enhances the high-quality water from the RWS. The facility has a capacity of 315 MGD, making it the third largest ultraviolet drinking water disinfection facility in the United States.

The SFPUC treats all water derived from sources other than Hetch Hetchy Reservoir at one of two water filtration facilities: the SVWTP or the HTWTP. The SVWTP primarily treats water from the Alameda System reservoirs and has a design capacity of 160 MGD. Treatment processes include powder activated carbon treatment for taste and odor control, coagulation, flocculation, sedimentation, filtration, disinfection, fluoridation, corrosion control treatment, and chloramination. The nearby Sunol Valley Chloramination Facility can also provide fluoridation, chloramination, and corrosion control treatment for Hetch Hetchy System and blending with water treated from the SVWTP. The HTWTP treats water from the Peninsula System reservoirs and has a design capacity of 140 MGD. Treatment processes at SVWTP include ozonation, coagulation, flocculation, filtration, disinfection, fluoridation, corrosion control treatment, and chloramination. The SFPUC completed major upgrades to the SVWTP in 2013 and to the HTWTP in 2015.

Water Storage

Most of the water delivered by the SFPUC is supplied by runoff from the upper Tuolumne River watershed on the western slope of the central Sierra Nevada. Three major reservoirs collect runoff: Hetch Hetchy, Cherry (also known as Lake Lloyd), and Lake Eleanor. The storage capacity of these three reservoirs is included in **Table 6-1**. A "water bank" in Don Pedro Reservoir is also integrated into

RWS operations.[12] Don Pedro Reservoir, which is jointly owned and operated by Modesto Irrigation District and Turlock Irrigation District (the Districts), is located on the Tuolumne River downstream of the Hetch Hetchy System.

San Francisco generates hydroelectric power through the HHWP Project as a by-product of water delivery and water supply management. Water released from Hetch Hetchy Reservoir is used for hydroelectric generation and provides instream flows when released downstream. Normally, only Hetch Hetchy Reservoir water supplies are exported to the Bay Area, while releases from Lake Eleanor and Cherry Reservoir are used to provide instream flows, satisfy the Districts' Raker Act allocations, and produce hydroelectric power. The HHWP Project includes four hydroelectric powerhouses along the Tuolumne River—Holm, Kirkwood, Moccasin, and Moccasin Low Head—that have a collective generating capacity of nearly 400 megawatts.

In the Bay Area, the SFPUC utilizes the local Peninsula and Alameda watersheds. Crystal Springs, San Andreas, and Pilarcitos Reservoirs, located in San Mateo County, capture local runoff in the Peninsula watershed, and Calaveras and San Antonio Reservoirs, located in Alameda County, capture local runoff in the Alameda watershed. In addition to capturing local runoff, San Andreas, San Antonio, and Crystal Springs Reservoirs provide storage for water conveyed to the Bay Area from the Hetch Hetchy System. These five local reservoirs are an important water supply source in the event there is an interruption to Hetch Hetchy System deliveries. The storage capacity of each of these Bay Area reservoirs is included in **Table 6-1**.

Prior to 2019, Calaveras Reservoir had been operating at one-third of its capacity due to restrictions imposed by the California Department of Water Resources Division of Safety of Dams (DSOD). The Calaveras Dam Replacement Project, which took place from 2011 to 2019, involved the construction of a new dam downstream of the then-existing dam. The DSOD restrictions on filling Calaveras Reservoir to full capacity have since been removed, and Calaveras Reservoir reached full capacity during the 2022-2023 winter season when it was refilled completely in January 2023 following the dam replacement project.

[12] The Turlock Irrigation District and Modesto Irrigation District (the Districts) have senior water rights compared to those held by the City and County of San Francisco for the Tuolumne River water diversions and are provided the first increment of flow in the Upper Tuolumne River watershed according to the apportionment set forth in the Raker Act of 1913 (38 Stat. 242). The water bank at Don Pedro Reservoir provides a credit and debit system, which allows the City and County of San Francisco to divert water upstream while meeting its obligations to the Districts. Through this agreement, the SFPUC may pre-deliver the Districts' Raker Act and contractual allocations and credit the water bank so that at other times the SFPUC may retain water upstream that would otherwise be allocated to the Districts while the Districts debit the water bank.

Table 6-1 Regional Water System Storage Capacity

RWS Reservoir	Storage Capacity in Acre-Feet (AF)	Storage Capacity in Billions of Gallons (BG)
Upcountry (a)		
Hetch Hetchy	360,360	117.4
Cherry (b)	273,500	89.1
Lake Eleanor	27,100	8.8
Water Bank (c)	570,000	185.7
Subtotal Upcountry	**1,230,960**	**401.0**
Local		
Calaveras (Alameda)	96,800	31.5
San Antonio (Alameda)	50,500	16.5
Crystal Springs (Peninsula) (d)	69,300	22.6
San Andreas (Peninsula) (e)	19,000	6.2
Pilarcitos (Peninsula) (f)	3,100	1.0
Subtotal Local	**238,700**	**77.8**
Total Regional Water System Storage (g)	**1,469,660**	**478.8**

NOTES:
(a) Three other regulating reservoirs are also part of the RWS: Early Intake, Priest, and Moccasin Reservoirs.
(b) Storage capacity shown includes flashboards, which are structures placed in a spillway to increase the capacity of a reservoir.
(c) The SFPUC may draw against a credit of up to 740,000 AF in storage in a water bank account in Don Pedro Reservoir; 170,000 AF of this water bank storage is only available under certain circumstances and for a limited time. For this reason, the SFPUC considers 570,000 AF in contributing to total storage for planning purposes.
(d) Crystal Springs Reservoir has a maximum storage capacity of 22.6 BG (at 294.6 feet). Based on permit conditions, the reservoir is currently operated at 286.6 feet (8 feet below capacity).
(e) San Andreas Reservoir has a maximum storage capacity of 6.2 BG (at 451.8 feet). Since August 2020, in response to safety concerns about the seismic stability of the dam and a directive from the Division of Safety of Dams, the SFPUC has held the maximum water level at approximately 447.8 feet (4 feet below capacity).
(f) Pilarcitos Reservoir has a maximum storage capacity of 1.0 BG (at 696.5 feet). Since April 2025, in response to safety concerns about the seismic stability of the dam and a directive from the Division of Safety of Dams, the SFPUC has held the maximum water level at approximately 681.5 feet (15 feet below capacity).
(g) For planning purposes, the total RWS storage is 1,469,660 AF. This includes 63,700 AF in dead storage (i.e., the volume in a reservoir below the lowest controllable level).

6.1.2 Wholesale Water Contractual Obligations

Under the terms of a 25-year contract WSA, the SFPUC sells water to 26 wholesale customers (collectively referred to as the Wholesale Customers). The SFPUC has associated individual water sales contracts with each Wholesale Customer, as well. Collectively, the Wholesale Customers receive over two-thirds of the RWS's annual deliveries, with the remaining approximately one-third provided to the SFPUC's retail customers located inside and outside of San Francisco (collectively referred to as

the Retail Customers). Of the 26 Wholesale Customers, 10 rely on SFPUC for 100% of their total supply. The remaining 16 Wholesale Customers rely on the SFPUC for a significant portion of their water supply needs, but also use other local and imported supplies to meet their retail water customers' demands, including, but not limited to, local groundwater and surface water, recycled water, and, in some cases, purchases from the Santa Clara Valley Water District and the State Water Project.

The WSA became effective on July 1, 2009, as its predecessor agreement, the 1984 Settlement Agreement and Master Water Sales Contract between the SFPUC and the Wholesale Customers (1984 Agreement), expired. The WSA, as amended and restated in 2025, describes the current contractual relationship between the SFPUC and the Wholesale Customers.

The WSA carries forward many components of the 1984 Agreement, including the SFPUC's "Supply Assurance" of 184 MGD to the Wholesale Customers. The SFPUC has agreed to deliver water to the Wholesale Customers up to the amount of the Supply Assurance, and this agreement is perpetual and survives the expiration of the WSA. The Supply Assurance is, however, subject to reduction due to water shortage, drought, scheduled RWS maintenance activities, and emergencies.

The Supply Assurance is shared among 24 of the 26 Wholesale Customers (all Wholesale Customers, which have "permanent" status, except the cities of San Jose and Santa Clara, which are "temporary, interruptible" customers). Twenty-three of these 24 Wholesale Customers have an "Individual Supply Guarantee" (ISG), which represents their dedicated individual share of the 184 MGD Supply Assurance. The ISGs are also perpetual and survive the expiration of the WSA. The City of Hayward is the 24th Wholesale Customer that shares in the Supply Assurance, but it does not have an ISG due to the terms of its 1962 individual water supply contract with the SFPUC that did not contain a fixed allocation of water. The City of Hayward's unspecified water supply allocation is included in the Supply Assurance as the difference between 184 MGD and the sum of the other 23 permanent Wholesale Customers' ISGs (22.1 MGD). If Hayward's water purchases from the RWS exceed 22.1 MGD over a period of three consecutive fiscal years (an event that has not occurred to date and is not projected to occur before 2050), the 23 Wholesale Customers with ISGs would be required to reduce their individual ISGs to accommodate the demands of Hayward.

Each Wholesale Customer also has an individual water sales contract with the SFPUC that describes the service area of the customer, identifies the location and size of service connections between the RWS and the customer's distribution systems, and in some instances contains additional specific provisions unique to the customer. The individual water sales contracts may be amended from time to time by the SFPUC and the applicable Wholesale Customer pursuant to the terms of the WSA.

MPMW's ISG is 4.456 MGD, or approximately 1,630 MG. Between 2021 and 2025, MPMW purchased between 51% and 60% of its ISG for use in MPMW's service area.

6.1.3 Future Water Supply Decisions

In the 2009 WSA, the SFPUC committed to make two decisions before the end of 2018 regarding future water supplies, with the prerequisite of the SFPUC having completed any necessary California Environmental Quality Act (CEQA) review relevant to those decisions:

- Whether or not to make the cities of San Jose and Santa Clara permanent customers of the RWS, if the SFPUC determines that RWS long-term water supplies are available to support their permanent status, and
- Whether or not to increase the Supply Assurance above 184 MGD to meet future Wholesale Customer demands.

Prior to 2018, the SFPUC determined that it was prudent to defer these decisions due to uncertainty about water supply availability and future growth patterns in the Bay Area, as well as unprecedented reductions in demands on the RWS, which indicated that total Wholesale Customer demands (including the demands of San Jose and Santa Clara, who do not share in the 184 MGD Supply Assurance) would be 173.9 MGD in 2040. Accordingly, the SFPUC and the Wholesale Customers amended the WSA in 2018, deferring the future water supply decisions to the end of 2028 to allow the SFPUC to conduct further water supply planning, including a reevaluation of RWS demands and supply options, and any necessary CEQA analysis. Based on current projections, Wholesale Customer demands (including the demands of San Jose and Santa Clara) will continue to be less than the 184 MGD Supply Assurance through the year 2050.

The SFPUC's planning efforts to support its decision regarding the status of San Jose and Santa Clara are a part of the SFPUC's Alternative Water Supply Program.

6.2 Groundwater

☑ ***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:

(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.

To date, MPMW has not utilized groundwater as a potable water source and does not expect to utilize groundwater as a regular source in the future. However, because the Lower Zone and the High Pressure Zone of its distribution system lack emergency storage (see **Section 3.5**), MPMW installed the Corporation Yard emergency supply well through its Emergency Storage and Supply Project in 2020 and is currently evaluating potential sites for underground reservoirs (see **Section 6.2.4**). Current and future use of groundwater and information related to the local groundwater basin is described in more detail below.

6.2.1 Basin Description and Status

MPMW overlies the southern end of the San Mateo Plain Groundwater Subbasin (groundwater basin number 2-009.03; DWR, 2004; or "subbasin") of the Santa Clara Valley Groundwater Basin. The Subbasin is not adjudicated, nor has it been found by DWR to be in a condition of overdraft. As part of the implementation of the Sustainable Groundwater Management Act (SGMA), the subbasin was ranked as a "very low priority" basin under the 2014 California Statewide Groundwater Elevation Monitoring (CASGEM) basin prioritization process and maintained this ranking in DWR's latest basin prioritization effort in 2019. The subbasin is therefore not subject to the requirements of SGMA.

6.2.1.1 Physical Setting

The subbasin is approximately 38,000 acres[13] and is bounded by the Santa Cruz Mountains on the west, San Francisco Bay and the Niles Cone subbasin on the east, the Westside Basin on the north near Burlingame Avenue and Coyote Point, and the San Francisquito Creek and the Santa Clara subbasin to the south. **Figure 6-2** shows the subbasin boundary, the surrounding subbasins of the Santa Clara Valley Groundwater Basin, and the location of the MPMW service area within the subbasin.

The subbasin is filled with alluvial fan deposits formed by tributaries to San Francisco Bay that drained across the basin and toward the center of the Bay (RWQCB, 2003; EKI et al., 2018). These alluvial fan deposits are interbedded with thick clay aquitards or confining layers and comprise the main water bearing formations within the subbasin. The major water bearing formation of the subbasin is the Quaternary alluvium, from which all larger yielding wells acquire their water. The Santa Clara Formation underlies the Quaternary alluvium and is the other water bearing formation of the subbasin. In general, the groundwater system is unconfined in the higher elevations, and confined or semiconfined at lower elevations closer to San Francisco Bay.

Groundwater flow in the subbasin is generally from west-southwest to east-northeast, from the edge of the Santa Cruz Mountains to San Francisco Bay. Both the southern and eastern edges of the subbasin are political boundaries that are roughly coincident with County lines, rather than physical hydrogeologic barriers to groundwater flow (Fio and Leighton, 1995; RWQCB 2003; EKI et al., 2018). Depending upon temporally varying streamflow, recharge, and pumping conditions, groundwater flow likely occurs in variable directions across each boundary.

Natural recharge occurs by infiltration of water from streams that enter the valley from the upland areas within the drainage basin, including San Francisquito Creek, San Mateo Creek, and other smaller creeks, and by percolation of precipitation that falls directly on the land surface. Additional recharge occurs as a result of infiltration of applied irrigation water. Subbasin outflows include limited municipal and private well pumping and groundwater outflows across subbasin boundaries.

It is further noted that the United States Geological Survey has defined the "San Francisquito Cone" as a unique groundwater subbasin that is roughly coincident with the known lateral extent of the San Francisquito Creek alluvial fan deposits. The San Francisquito Cone subbasin underlies portions of MPMW and East Palo Alto, and overlaps with the southern end of the subbasin (see **Figure 6-2**). The San Francisquito Cone subbasin has been the subject of several hydrologic and water balance studies. As described in the Final Feasibility of Supplemental Groundwater Resources Development in Menlo Park and East Palo Alto (Todd Engineers, 2005), the San Francisquito Cone subbasin encompasses mountainous bedrock terrain and relatively flat alluvial fan deposits. The geology is composed of the coarse- and fine-grained alluvial deposits of San Francisquito Creek. The groundwater system includes a shallow

[13] Basin area is based on the SGMA 2019 Basin Prioritization results.

aquifer, a laterally extensive confining clay layer, and a multi-layered deep aquifer that extends to depths of up to 1,000 feet below ground surface. Storativity values indicate the shallow aquifer is unconfined and the deeper aquifer system is semi-confined. Pumping test and empirical transmissivity and well yield data indicate that development of a municipal supply wells within the San Francisquito Cone portion of the subbasin is feasible.

6.2.1.2 Groundwater Conditions

Groundwater use in the subbasin has been relatively limited for the last several decades, as the primary water supply source for the overlying population has been imported water from the SFPUC RWS. The only municipal water suppliers within the subbasin that utilize groundwater as a potable supply source are PAPMWC, O'Connor Tract Co-operative Water Company, and the City of East Palo Alto. Groundwater is also used for landscape or domestic irrigation purposes. Total groundwater production for water supply within the subbasin is approximately 2,300 AFY as of 2018 (EKI et al., 2018)[14], and no significant changes in groundwater use are known to have occurred since 2018 (EKI, 2025).

Based on limited available groundwater level information, the subbasin is currently in a relatively full and stable condition. However, historical information indicates that during past periods of high groundwater production in the 1850s to 1960s, groundwater levels in the subbasin were significantly lower and negative impacts including seawater intrusion and land subsidence were observed (EKI et al., 2018). A recent renewed interest in groundwater development in the subbasin has increased the need and interest in gaining a better understanding of the subbasin and evaluating the extent to which increased groundwater development can be pursued, while mitigating potential negative impacts. Details on the subbasin groundwater management efforts are described in the section below.

6.2.2 Groundwater Management

As stated above, the subbasin is currently designated by the DWR as a "very low priority" basin and is exempt from complying with SGMA. However, multiple entities overlying the subbasin have expressed interests in maintaining groundwater sustainability and/or established a formal role in the subbasin management.

The San Mateo County conducted a comprehensive groundwater basin assessment in 2018 (EKI et al., 2018). The study provided a more complete understanding of the subbasin hydrogeologic framework and groundwater flow and quality conditions. It also identified potential groundwater management strategies for the subbasin.

Informed by this study, San Mateo County has begun to participate in the CASGEM program. CASGEM is a groundwater elevation monitoring program that was developed by DWR per the requirements of SBx7-6. The objective of CASGEM is to establish a permanent, locally managed program of regular groundwater monitoring to track seasonal and long-term trends in groundwater elevations. The County provided initial notification to DWR of its intent to become the CASGEM Monitoring Entity for the subbasin in 2019. A CASGEM Monitoring Plan including a monitoring network of approximately ten wells throughout the subbasin was developed and submitted in 2020, and an update to the Monitoring Plan was prepared in April 2025, which included a monitoring network of nine wells. Compliance with CASGEM is an important first step in setting the subbasin up for long-term sustainable management and funding.

There has also been widespread agreement among the overlying cities, water suppliers and other interested parties that cooperative, sustainable groundwater management of the entire subbasin is

[14] The groundwater production value stated above excludes East Palo Alto which did not start pumping from its re-activated Gloria Way Well in 2018.

needed. Several entities have passed resolutions in support of sustainable groundwater management. In particular, the City adopted Resolution 6239 in 2014. As per this Resolution, the City is committed to: (1) working with other agencies and organizations to better understand the hydrology and geology of the San Francisquito Creek area; and (2) the sustainable management of local groundwater, including conjunctive water management and aggressive conservation, to protect its quality and ensure its availability during droughts and emergency situations.

The subbasin is currently not managed pursuant to any groundwater management plan (GWMP). However, the City of East Palo Alto adopted its own GWMP in 2015. The East Palo Alto GWMP addresses groundwater conditions within the jurisdictional boundary of the City of East Palo Alto in the southeastern portion of the subbasin (Todd Engineers, 2015). The East Palo Alto GWMP was prepared in accordance with AB 3030 and the amendments to AB 3030 provided by SB 1938 and AB 359.[15]

In addition, BAWSCA initiated work with San Mateo County and its member agencies to form the Groundwater Reliability Partnership (GRP) in 2015. The main focus of the GRP was to provide information regarding SGMA and other locally relevant groundwater management efforts to the BAWSCA member agencies and other interested parties. The GRP has not been active since 2018.

6.2.3 Historical Pumping and Supply Sufficiency

As discussed above, MPMW has not historically used groundwater as a potable water source (see **Table 6-2**).

Table 6-2 Groundwater Volume Pumped (DWR Table 6-1)

☒	Checked box indicates the Supplier does not pump groundwater. Proceed to the next table.
☐	Checked box indicates that all or part of the groundwater described below is desalinated. (OPTIONAL)

Groundwater Type	Water Type (OPTIONAL)	Location or Basin Name	2021	2022	2023	2024	2025
		Total	**0**	**0**	**0**	**0**	**0**

6.2.4 Projected Future Groundwater Use

MPMW purchases all of its potable water from the SFPUC RWS. Groundwater is currently not part of its potable water supply. However, as described previously, MPMW has long recognized the need for emergency storage and/or supply in the distribution system and has been pursuing the Emergency Water Storage and Supply Project for a number of years. After extensive planning, siting, and exploratory drilling efforts, in 2017, the first groundwater well was drilled in the City's Corporation Yard at 333 Burgess Drive. Based on aquifer testing data, the Corporation Yard Well can produce up to 1,500 gallons per minute (gpm) of emergency/backup supply to the Lower Zone. Construction of the above-grade facilities for the Corporation Yard well was completed in late 2020, and in early 2023, MPMW received approval from the SWRCB to operate the well as standby in emergencies.

MPMW is currently evaluating three sites for potential additional emergency wells as part of the Emergency Water Storage and Supply Project. Groundwater is currently not considered as a regular

[15] AB 3030 was signed into law in 1992 and provides a systematic procedure for an existing local agency to develop a Groundwater Management Plan.

normal or dry year supply for MPMW. The wells are envisioned to serve as a supplemental supply as needed during significant water shortages due to an emergency or drought conditions (see MPMW's Water Shortage Contingency Plan in **Appendix E**).

MPMW is also investigating locations for a future underground reservoir for the Lower Zone and High Pressure Zone. MPMW has identified two suitable sites for the reservoir; however, a final site selection has not yet been made. Extensive information regarding the Emergency Water Storage and Supply Project can be found on the City's website: https://www.menlopark.gov/Government/Departments/Public-Works/Capital-improvement-projects/Emergency-water-storagesupply.

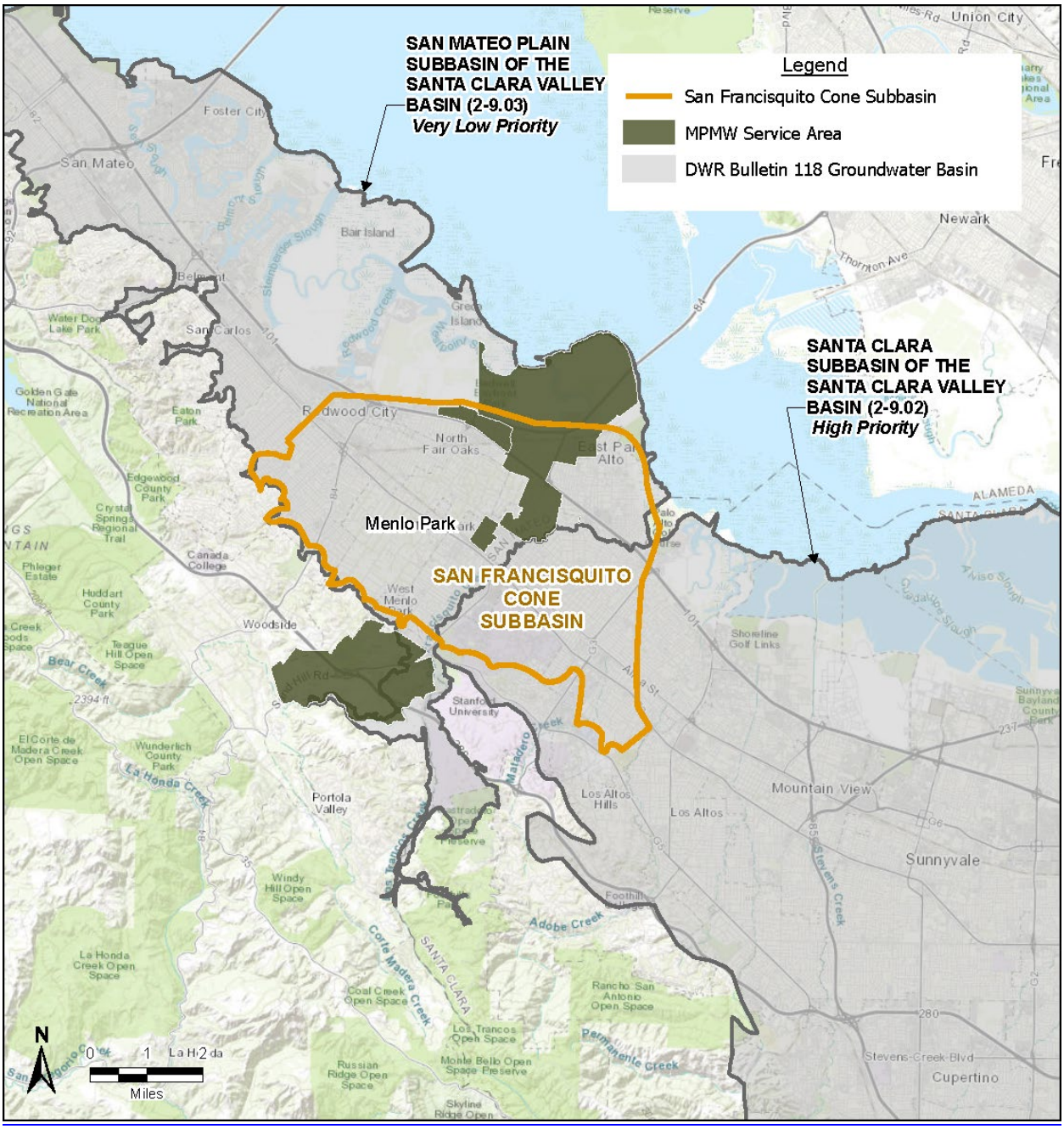

Figure 6-2 Groundwater Basins in the Vicinity of the MPMW Service Area

6.3 Surface Water

Water that is self-supplied to agencies from streams, lakes and reservoirs is considered a surface water supply. Although MPMW's potable water supply is originally derived from surface water, it is categorized as "purchased" water since the water is obtained from the SFPUC RWS. MPMW does not currently, nor does it plan to in the future, use self-supplied surface water as part of its water supply portfolio.

6.4 Stormwater

MPMW does not currently, nor does it plan to in the future, to use diverted stormwater as part of its water supply portfolio.

6.5 Wastewater and Recycled Water

☑ ***CWC §10633***

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

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

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

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

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

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

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

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

Recycling water involves treating wastewater to an acceptable level such that it can be reused for irrigation, cooling, and other non-potable applications. A key benefit of water recycling is its potential to offset the use of potable supplies. The regulatory requirements for recycled water are defined in the California Code of Regulations, Title 22, Article 3 (Title 22) and differ for different uses (e.g., irrigation for food crops, landscape, and recreation). Because recycled water is treated wastewater, its availability is closely linked to the location and treatment capability of the wastewater treatment plant that receives and treats wastewater from a water supplier's service area. The sections below describe wastewater collection and treatment for the MPMW service area and summarize MPMW's efforts with respect to recycled water planning and use.

6.5.1 Recycled Water Coordination

As described in **Section 2.5.3**, this UWMP has been prepared in coordination with WBSD, provides wastewater collection services to the MPMW service area and serves as the recycled water purveyor for the Sharon Heights Golf and Country Club and Bayfront recycled water service areas. MPMW, as the water purveyor, holds the recycled water rights and has delegated those rights to WBSD for these areas.

6.5.2 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.

☑ ***CWC §10633 (b)***

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

Wastewater in the MPMW service area is collected by WBSD, which also serves other customers within the remainder of Menlo Park, Atherton, sections of East Palo Alto, Portola Valley, Woodside, and unincorporated San Mateo and Santa Clara Counties. The WBSD collection system conveys wastewater through the Menlo Park Pumping Station located at the entrance to Bedwell Bayfront Park to the Silicon Valley Clean Water (SVCW) facilities in Redwood City for treatment and discharge to the San Francisco Bay. The volume of wastewater collected from the MPMW service area in 2025 was approximately 430 MG (**Table 6-3**).

The SVCW wastewater treatment plant (WWTP) is jointly owned and operated by WBSD and the Cities of Redwood City, Belmont, and San Carlos as a joint powers authority. The SVCW WWTP is located at the northeastern end of Redwood Shores, approximately nine miles from the northeastern boundary of the MPMW service area. The treatment processes at the SVCW WWTP involve the following: primary sedimentation, dual secondary treatment with fixed film reactors and activated sludge, filtration, disinfection using sodium hypochlorite, and dechlorination with sodium bisulfide. Discharge of the advanced secondarily treated effluent is permitted by the San Francisco Regional Water Quality Control Board (RWQCB).

A limited volume of wastewater is treated within the MPMW service area at the Sharon Heights Recycled Water Facility (RWF; see **Table 6-4**). The Sharon Heights RWF, located at the SHGCC, was constructed and managed by WBSD in coordination with MPMW. It is a 0.5 MGD satellite WWTP which produces tertiary-treated recycled water under Title 22 for reuse within a portion of MPMW's service area. Wastewater is diverted from WBSD's collection system and pumped into the RWF. The treatment process includes screening, membrane bioreactor, and UV disinfection. In 2025, approximately 96 MG of wastewater was treated at the Sharon Heights RWF, among which 54 MG was recycled and the remaining 42 MG was conveyed to SVCW WWTP for discharge. Recycled water uses are further described in the section below.

Table 6-3 Wastewater Collected Within Service Area in 2025 (DWR Table 6-2)

☐	Checked box indicates there is no wastewater collection system. Proceed to the next table.
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)
	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)

Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	**Wastewater Volume Metered or Estimated? (OPTIONAL)**	**Volume of Wastewater Collected from UWMP Service Area 2025 (a)**	**Name of Wastewater Treatment Plant (WWTP) and Place ID Number**	**Is WWTP Located Within UWMP Area?**
West Bay Sanitary District	Estimated	430	Redwood City Recycled Water (Silicon Valley Clean Water), Place ID 255832	No
Total Wastewater Received from UWMP Service Area in 2025:		**430**		

NOTES:

(a) Volumes are in units of MG.

(b) Total collected wastewater was estimated by summing the estimated indoor residential and indoor CII use in 2025. These indoor values were estimated assuming indoor use is about 95% of the water use during the minimum use month.

Table 6-4 Wastewater Treatment and Outcomes Within UWMP Service Area in 2025 (DWR Table 6-3)

☐	Checked box indicates no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.

Wastewater Treatment Plant Name and Place ID Number	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL)	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in DWR Table 6-2)	Total 2025 Volume of Water Treated	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area		Water Recycled Outside of UWMP Service Area		Effluent Discharge that is not a Permitted Recycled Water Use		Required Discharge for Instream Flow		Delivered to Another Entity for Additional Treatment		
				Treatment Level	Volume	Treatment Level	Volume	Treatment Level	Volume	Treatment Level	Volume	Treatment Level	Volume	Name of other entity
Sharon Heights Recycled Water Facility, Place ID 864895	No		96	Tertiary	54	--	--	--	--	--	--	Tertiary	42	WBSD
Total		--	**96**	--	**54**	--	--	--	--	--	--	--	**42**	--

NOTES:
(a) Volumes are in units of MG.
(b) Data provided by WBSD.
(c) Tertiary treated recycled water produced by the Sharon Heights Recycled Water Facility is either delivered to SHGCC for beneficial use or returned to the WBSD wastewater collection system

6.5.3 Recycled Water System Description

MPMW has been working with WBSD, which is the recycled water purveyor for the Sharon Heights Golf and Country Club and Bayfront recycled water service areas, to develop the recycled water system within MPMW's service area. WBSD is responsible for recycled water system operation and maintenance.

Currently, recycled water is only used at the SHGCC which is a 170-acre property located in the Upper Zone of MPMW's service area. The recycled water system consists of the Sharon Heights RWF, a pump station, recycled water distribution pipelines to the golf course irrigation system, and a solids disposal pipeline. In 2025, the satellite WWTP provided 54 MG recycled water to the SHGCC, offsetting demand in potable water purchased from SFPUC.

6.5.3.1 Recycled Water System Expansion

In 2018, WBSD began construction of the Sharon Heights RWF to serve recycled water to the SHGCC and the vicinity of the Stanford Linear Accelerator Center. Through that process, the City and WBSD entered into an agreement for WBSD to become the recycled water purveyor in that specific area. In 2023, the City and WBSD entered into another agreement for WBSD to become the recycled water purveyor in the Bayfront area (called Phase 1 in the District's Recycled Water Master Plan and consistent with the Bayfront Facilities Plan), with the opportunity to expand the recycled water service area in future phases of the project. The Bayfront Recycled Water Project is currently in active development, with recycled water delivery anticipated to begin as early as mid-2027.

Consistent with prior planning efforts, the Bayfront Recycled Water Facilities Plan recommends construction of a treatment facility (approximately 1 MGD; WBSD, 2023) along with associated pump stations and distribution infrastructure. At full buildout, the project is expected to provide recycled water for irrigation, cooling towers, indoor dual-plumbing, and other non-potable uses throughout the Bayfront area, significantly expanding recycled water use within MPMW's service area over the planning horizon.

Initial Phase 1 customers in the Bayfront area include residential and commercial developments that are being constructed or designed to receive recycled water without retrofits. Identified annual demands include sites such as Belle Haven Community Campus (1 MG), Lume (formerly Menlo Uptown; 5.8 MG), Vasara (formerly Menlo Portal; 3.3 MG), Tarlton Life Sciences (9.4 MG), among others. Future Phase 2 expansion areas are also being evaluated and may include additional sites such as Burgess Park (3.6 MG), Parkline SRI (39 MG), and the Civic Center (1.6 MG).

6.5.4 Potential, Current, and Projected Recycled Water Uses

☑ ***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.

☑ ***CWC § 10633 (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.

☑ ***CWC § 10633 (e)***

The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years.

Recycled water use projections for the MPMW service area are shown in **Table 6-5**, which include projected demands from SHGCC and demands associated with the planned Bayfront Recycled Water Project. SHGCC's future demand was assumed to remain constant at approximately 54 MG per year. Phase 1 of the Bayfront Recycled Water Project is projected to come online between 2028 and 2035 and provide approximately 4.1 MG per year of recycled water for irrigation and 15 MG per year for indoor non-potable uses. Phase 2 of the Bayfront Recycled Water Project is projected to come online between 2036 and 2040 and provide approximately 15 MG per year of recycled water for irrigation and 29 MG per year for indoor non-potable uses.

Table 6-5 Recycled Water Direct Beneficial Uses Within Service Area (DWR Table 6-4)

☐	Checked box indicates 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):	West Bay Sanitary District
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL):	West Bay Sanitary District
Supplemental Water Added in 2025 (volume). Include units (OPTIONAL):	0
Source of 2025 Supplemental Water (OPTIONAL):	--

Use Type	Water Type (after treatment if treated) (OPTIONAL)	Additional Information (as needed)	2025	2030	2035	2040	2045	2050 (opt)	Potential Recycled Water Use	
									Volume	Narrative page number (OPTIONAL)
Landscape irrigation (excl. golf courses)	Non-Potable	Irrigation in Bayfront area	0.0	2.1	4	19	19	19		
Golf course irrigation	Non-Potable	Irrigation of 170 acres of golf course at the SHGCC	54	54	54	54	54	54		
Commercial use	Non-Potable	Indoor non-potable use in Bayfront area	0	8	15	44	44	44		
		Total	**54**	**64**	**73**	**117**	**117**	**117**	**329**	**(c)**

NOTES:
(a) Volumes are in units of MG.
(b) Bayfront recycled water demands are estimated based on information provided by WBSD.
(c) Potential recycled water use volume is assumed to be the treatment capacity of the Sharon Heights RWF and Bayfront RWF.

6.5.5 Comparison of Previously Projected Use and Actual Use

☑ ***CWC § 10633 (e)***

A description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

The 2020 UWMP projected that 48 MG of recycled water would be delivered by 2025. In 2025, recycled water use in MPMW was approximately 54 MG. **Table 6-6** summarizes the recycled water use projected for 2025 in the 2020 UWMP and the actual recycled water use in 2025. In general, the MPMW's recycled water growth matches its projections.

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

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

Use Type	2020 Projection for 2025 (a)	2025 Actual Use (a)
Golf course irrigation	48	54
Total	**48**	**54**

NOTES:
(a) Volumes are in units of MG.

6.5.6 Actions to Encourage and Optimize Future Recycled Water Use

As part of the 2016 General Plan Update (i.e., ConnectMenlo), several new zoning district categories, including Office (or "O"), Life Science (or "LS"), and Mixed Use Residential (or "R-MU"), were adopted for consistency with the new Bayfront Area land use designations. The green and sustainable building requirements of these zoning districts include policies that promote recycled water use (see **Table 6-7**). Specifically, new development in the Bayfront Area is required to be dual plumbed for the internal use of recycled water. In addition, all new buildings 250,000 square feet or more in gross floor area should identify and use an alternate water source for all City approved non-potable applications such as on-site and offsite recycled water, or if recycled water is not feasible, incorporate conservation measures equivalent to the building's non-potable demand. As described in **Section 6.5.4**, the recycled water use within the MPMW service area is projected to increase by 63 MG by 2050, assuming development of the Bayfront RWF.

Table 6-7 Methods to Encourage Future Recycled Water Use (DWR Table 6-6)

☐	Checked box indicates that Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
6-20	Provide page location of narrative in UWMP		
Name of Action	**Description**	**Planned Implementation Year**	**Expected Increase in Recycled Water Use (a)**
Zoning Ordinance	Require new construction in the Bayfront area to incorporate recycled water measures	Ongoing	
		Total	**63**
		Total (acre-feet per [AF])	**194**
NOTES: (a) Volumes are in units of MG.			

6.6 Desalinated Water Opportunities

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

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

Opportunities to develop desalinated water supplies from ocean water, brackish surface, and brackish groundwater are being investigated by the BAWSCA as part of its Strategy 2050 (see **Section 7.3.4.1**). According to BAWSCA, there are high costs and intensive permitting requirements associated with desalination. However, it does potentially provide a substantial yield given the limited options for generating significant new water supplies for the region.

MPMW does not anticipate opportunities for development of desalinated water supplies within the planning horizon of this UWMP and this water supply is not being considered.

6.7 Water Exchanges and Transfers

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

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

6.7.1 Exchanges and Transfers

There are potential transfer and exchange opportunities within and outside of the SFPUC RWS. MPMW does not presently anticipate the need for water right transfers during normal year conditions. However, should that condition change in the future, it is possible that MPMW could purchase water from another agency or entity either within or outside of the SFPUC RWS. Within the SFPUC RWS, it is possible to transfer water entitlements and/or banked water among agencies. The Water Shortage Allocation Plan (WSAP) adopted by all BAWSCA agencies and the SFPUC provides the basis for voluntary transfers of water among BAWSCA agencies during periods when mandatory rationing is in effect on the SFPUC RWS (see **Section 7.1.1.1**). Some BAWSCA agencies have the capacity to rely on groundwater or other sources

during dry years and thus may be willing to transfer a portion of their wholesale water entitlement to other BAWSCA agencies in need of supply above their allocations.

Securing water from willing sellers outside the SFPUC RWS is a more complex process than transfers within the RWS, which requires both a contract with the seller agency and approval by the SFPUC. BAWSCA has the authority to plan for and acquire supplemental water supplies and continues to evaluate the feasibility of water transfers as part of its implementation of Strategy 2050 (see **Section 7.3.4.1**).

6.7.2 Emergency Interties

As discussed in **Section 3.4**, MPMW has 14 emergency interties with four adjacent water suppliers. Four connections (one metered, two hydrant) are with the Cal Water's Bear Gulch system; a metered connection with the O'Connor Tract Co-operative Water Company; a connection with the City of Redwood City; and eight interties with the City of East Palo Alto.

6.8 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.

This section lists the water supply projects that may be undertaken by both the wholesaler SFPUC and MPMW (in coordination with WBSD). The effects of these projects on MPMW's long-term water supply are not all quantifiable at this point in time, therefore not all of them are included as future supplies in **Table 6-8**. The local projects are also documented in the City's five-year Capital Improvement Plan (CIP), which is an annually-updated, planning document that provides a long-term approach for prioritizing and implementing new projects within the City. The most recent update to the City's CIP is the FY 2026-2030 CIP (City of Menlo Park, 2025).

6.8.1 SFPUC Water Supply Projects

MPMW's wholesaler water supplier SFPUC has been implementing its Water System Improvement Plan (WSIP) since it was adopted in 2008. The WSIP includes several water supply projects to address the level of service (LOS) Goals and Objective established in the WSIP and updated in February 2020. SFPUC has also developed an Alternative Water Supply Program (AWSP) to explore other projects that would increase overall water supply resiliency. These programs and future water supply projects are described in **Section 7.3.4.1**.

6.8.2 Emergency Water Supply Wells

As described in **Section 6.2.4**, MPMW completed construction of its first emergency groundwater well in 2020 and received approval from the SWRCB to operate the well as standby in emergencies. The City is currently evaluating three sites for potential additional emergency wells as part of the Emergency Water Storage and Supply Project. The total supply capacity is targeted at 3,000 gpm. In addition, MPMW is also investigating locations for a future underground reservoir for the Lower Zone and High Pressure Zone. MPMW has identified two suitable sites for the reservoir; however, a final site selection has not yet been

made. Extensive information regarding the Emergency Water Storage and Supply Project can be found on the City's website: https://www.menlopark.gov/Government/Departments/Public-Works/Capital-improvement-projects/Emergency-water-storagesupply.

6.8.3 Recycled Water

As described in **Section 6.5.3**, WBSD is in the process of constructing recycled water facility in the Bayfront Area. In 2023, the City and WBSD formalized an agreement designating WBSD as the recycled water purveyor for the Bayfront area, and the project is currently in active development. Phase 1 would serve residential and commercial customers that are being constructed or designed to receive recycled water, including Belle Haven Community Campus, Menlo Uptown, Menlo Portal, Tarlton Life Sciences, and other planned developments. Future expansion areas are also being evaluated. Consistent with prior planning efforts, the project is expected to include a recycled water treatment facility, pump stations, and distribution infrastructure to provide recycled water for irrigation, cooling towers, and other non-potable uses. Recycled water deliveries are anticipated to begin as early as mid-2027, with additional expansion opportunities over the planning horizon.

Table 6-8 Expected Future Water Supply Projects or Programs (DWR Table 6-7)

☐	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.
☒	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.
6-22	Provide page location of narrative in the UWMP.

Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (as needed)	Water Type (after treatment if treated) (OPTIONAL)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier (b) (c)
	Yes/no	If Yes, Supplier Name (a)					
Bayfront Recycled Water Project	Yes	WBSD	--	Tertiary	2027	All Year Types	63

NOTES:

(a) The recycled water purveyorship for both projects listed above have been delegated to WBSD. WBSD is responsible for the project development.

(b) Volumes are in units of MG.

(c) Expected increase in water supply is estimated based on information presented in the Recycled Water Project - Sharon Heights Mitigated Negative Declaration report (RMC, 2015) and information provided by WBSD.

(d) Projects to be constructed by SFPUC are documented in the narrative of this UWMP and in the SFPUC's 2025 UWMP.

6.9 Summary of Existing and Planned Sources of Water

MPMW's water supplies consist of potable water purchased from the SFPUC RWS and recycled water from MPMW's recycled water program. In 2025, MPMW purchased approximately 977 MG from the SFPUC RWS and produced approximately 54 MG of recycled water (see **Table 6-9**).

Reasonably available water supplies from the SFPUC RWS through 2050 are projected to be equivalent to MPMW's projected demand, and the total entitlement of supply is equal to MPMW's ISG of 1,630 MG. MPMW's ISG is MPMW's contractual entitlement to SFPUC wholesale water, which survives in perpetuity. In addition to the potable water supply from SFPUC RWS, approximately 54 MG and 63 MG of recycled water are projected to be supplied by the Sharon Heights and Bayfront Recycled Water Facilities per year, respectively. The recycled water supply is reported to the extent that it is needed to meet the recycled water demand identified in **Table 6-10**. Excess available supplies are not included. MPMW's total water supply projections are shown in **Table 6-10** in five-year increments through 2050. Although MPMW currently owns one groundwater well, groundwater will not normally be distributed to customers unless there is a significant water shortage and normal water supplies are low or unavailable (see MPMW's Water Shortage Contingency Plan in **Appendix E**). Therefore, groundwater is not included in the supply projections.

Table 6-9 Water Supplies – 2025 Actual (DWR Table 6-8)

Water Supply	Additional Description (As needed)	2025		
		Water Type (After treatment if treated) (OPTIONAL)	**Actual Volume**	**Total Entitlement** (OPTIONAL)
Purchased or Imported Water	SFPUC RWS	Potable	977	1,630
Recycled Water		Non-Potable	54	-
		Subtotal Potable	977	1,630
		Subtotal non-potable	54	--
		Total	**1,031**	**--**

NOTES:
(a) Volumes are in units of MG.
(b) Recycled water supplies are discretionary to match demand.

Table 6-10 Water Supplies – Projected (DWR Table 6-9)

Water Supply			Projected Water Supply (a)									
			2030		2035		2040		2045		2050 (opt)	
Water Supply	Additional Detail on Water Supply	Water Type (After treatment if treated) (OPTIONAL)	Reasonably Available Volume	Total Entitlement (OPTIONAL)	Reasonably Available Volume	Total Entitlement (OPTIONAL)	Reasonably Available Volume	Total Entitlement (OPTIONAL)	Reasonably Available Volume	Total Entitlement (OPTIONAL)	Reasonably Available Volume	Total Entitlement (OPTIONAL)
Purchased or Imported Water	SFPUC RWS (b)	Potable	946	1,630	965	1,630	950	1,630	977	1,630	1,007	1,630
Recycled Water	(c)	Non-Potable	64	--	73	--	117	--	117	--	117	--
Subtotal Potable			946	1,630	965	1,630	950	1,630	977	1,630	1,007	1,630
Subtotal Non-Potable			64	--	73	--	117	--	117	--	117	--
Total			**1,010**	**--**	**1,039**	**--**	**1,067**	**--**	**1,094**	**--**	**1,124**	**--**

NOTES:
(a) Volumes are in units of MG.
(b) The reasonably available supply volume is equal to MPMW's projected SFPUC purchases. For all years, the total SFPUC purchase volume is within the ISG of 1,630 MG.
(c) Recycled water supplies are discretionary to match demand.

6.10 Special Conditions

Special conditions including climate change effects, regulatory conditions and project development, and other locally applicable criteria may affect supply availability, as described in the following subsections.

6.10.1 Climate Change Effects

Information regarding the impacts of climate change on the SFPUC RWS supply was provided by BAWSCA in coordination with SFPUC and is provided below:

> Climate change has become an important factor in water resources planning in California and is frequently considered in urban water management planning, although the extent and precise effects of climate change remain uncertain. Increasing concentrations of greenhouse gases have caused and will likely continue to cause a rise in temperatures around the world, which will result in a wide range of changes in climate patterns. Moreover, observational data show that a warming trend occurred during the latter part of the 20th century, the first quarter of the 21st century, and will likely continue through the end of the 21st century. Numerous studies have been conducted to determine the potential impacts of climate change on water resources. These climate change impacts are likely to affect both the Tuolumne River watershed and local watersheds in the Bay Area and include the following:
>
> - Reductions in the average Sierra Nevada annual snowpack due to a rise in the snowline elevation and a shallower snowpack at lower elevations, and a shift in snowmelt runoff to earlier in the year;
> - Changes in the timing, annual average, intensity, and variability of precipitation, and an increased amount of precipitation falling as rain instead of as snow;
> - Long-term changes in watershed vegetation and increased incidence of wildfires that could affect water quality and quantity;
> - Sea level rise and an increase in saltwater intrusion;
> - Increase in water temperatures with accompanying potential adverse effects on some fisheries and water quality;
> - Increases in evaporation and concomitant increase in irrigation need; and
> - Changes in urban and agricultural water demand.
>
> SFPUC continues to study the effect of climate change on the RWS. These works are summarized below.

SFPUC Climate Change Studies

> The SFPUC views assessment of the effects of climate change as an ongoing need that requires regular updating to reflect improvements in climate science, atmospheric/ocean modeling, observations, and human response to the threat of greenhouse gas emissions. Climate change research by the SFPUC began in 2009 and continues to be refined.
>
> The SFPUC partnered with The Water Research Foundation to develop the Long-Term Vulnerability Assessment (LTVA) of the RWS. The study was conducted by the University of Massachusetts Amherst Hydrosystems Research Group with input from National Center for Atmospheric Research, other climate scientists, and Deltares. The goal of the LTVA is to help quantitatively and qualitatively assess to what extent climate change will be a threat to the RWS in comparison to, or in combination with, other external drivers of change over the next 50 years (2020-2070). The LTVA assessed the potential

effects of climate change on RWS water supply using a wide range of plausible increases in temperature and changes in precipitation to address the wide uncertainty in climate projections over the planning horizon. There are many uncertain factors, such as climate change, changing regulations, water quality, growth, and economic cycles, which may create vulnerabilities for the RWS's ability to meet Levels of Service. The uncertainties associated with the degree to which these factors will occur and how much risk they present to the water system are difficult to predict but were considered in this study. To address this planning challenge, the LTVA used a vulnerability-based planning approach to explore a range of future conditions to identify vulnerabilities, and to assess the risks associated with these vulnerabilities, which could lead to developing an adaptation plan that is flexible and robust to a wide range of future outcomes. The LTVA was completed in 2021, and the University of Massachusetts Amherst and The Water Research Foundation amended it in 2024.

The key findings of the LTVA are:

- Climate change exacerbates impacts from other external drivers of change and is not the single most important driver of vulnerability for the RWS;
- The RWS at a baseline demand of 227 MGD is resilient to changes in climate and other external drivers;
- The RWS water supply performance declines with reductions in mean precipitation but is mostly insensitive to increases in temperature;
- The RWS is more vulnerable to changes in demand and instream flow requirements than changes in mean annual temperature and precipitation; and
- The RWS is vulnerable to changes to mean climate when demand or regulatory instream flow requirements increase.

Further results and conclusions from the LTVA and its amendment are provided below:

- According to climate projections and expert elicitations, there is a central tendency of warming of +2°C and +4°C by 2040 and 2070 (RCP 8.5), respectively, with no clear direction of change in mean annual precipitation over the planning horizon;
- In the upcountry region, by 2040, most projections and elicitations of warming estimate between +1°C and +4°C, and precipitation changes range between -5% and +5%, compared to historical baseline; and by 2070, estimates of warming range between +3°C and +6°C, and precipitation changes range between -15% and +15% (RCP8.5);
- Changes in hydrology due to climate change affect the RWS's ability to meet water supply targets. At 227 MGD baseline demand, the RWS can sustain up to +4°C and -5% precipitation change before failing to meet targets for delivery reliability, frequency of 20% rationing, storage reliability, and duration of rationing;
- Precipitation change is an important driver for RWS performance. A decrease by 10% or more will cause RWS water supply targets to be missed. The climate projections and expert elicitations show that such a change in precipitation is possible by 2040, although unlikely. The likelihood of this change increases toward 2070;
- The RWS shows minor sensitivity to temperature change for the metrics evaluated in this study. Most metrics stay above target under warming conditions. However, warming conditions often magnify the loss in system performance if precipitation or demand change;

- Demand change appears to be a major driver of future RWS performance. An increase in demand by 15% (265 MGD) will lead to failure to meet rationing frequency targets under current climate conditions. At 265 MGD demand, the rationing frequency targets would be met if there is an increase in precipitation of 10%. If demand increases by 30%, the rationing target cannot be met even when precipitation increases by 40%, which is believed plausible but unlikely over the planning horizon;
- The RWS is particularly vulnerable to the state-amended new instream flow requirements below Don Pedro Dam, which represents a huge reduction in water available. Under all demand and climate scenarios the system reliability, defined as frequency of years without rationing, remains below 5%; and
- The RWS is also vulnerable to the draft Tuolumne voluntary agreement new instream flow requirements below Don Pedro Dam, which represents a large reduction in water available, although significantly less than for the state-amended new instream flow releases. The implementation of the draft Tuolumne voluntary agreement under current climate and demand conditions would reduce the system reliability to 75%, which corresponds to the effects of a reduction in average rainfall by 20% under the current Federal Energy Regulatory Commission agreement.

6.10.2 Regulatory Conditions and Project Development

Emerging regulatory conditions (e.g., issues surrounding the Bay-Delta Plan Amendment) may affect planned future projects and the characterization of future water supply availability and analysis. A detailed description of the potential impacts of Bay-Delta Plan implementation on RWS supply reliability is included in **Section 7.1.**

MPMW currently does not have any plans to develop new supply sources. However, MPMW is evaluating the potential use of groundwater as an alternate supply source beyond for emergency purposes. If MPMW does move forward with any plans to develop such supply projects, emerging regulatory conditions will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.10.3 Other Locally Applicable Criteria

Other locally applicable criteria may affect characterization and availability of an identified water supply (e.g., changes in regional water transfer rules may alter the availability of a water supply that had historically been readily available). Reliability of the RWS supply is further discussed in **Section 7.1**. MPMW does not have any current plans to develop new supply sources. If MPMW does move forward with any plans to develop supply projects, locally applicable criteria will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11 Energy Intensity

☑ ***CWC §10631.2***

(a) In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:
(1) An estimate of the amount of energy used to extract or divert water supplies.
(2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.
(3) An estimate of the amount of energy used to treat water supplies.
(4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.
(5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.
(6) An estimate of the amount of energy used to place water into or withdraw from storage.
(7) Any other energy-related information the urban water supplier deems appropriate.
(b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.
(c) The Legislature finds and declares that energy use is only one factor in water supply planning and shall not be considered independently of other factors.

MPMW used the "Total Utility Approach" defined by DWR in the UWMP Guidebook 2025 to report water-related energy consumption. Calendar year 2024 is selected as the one-year reporting period, and utility bills for the whole year are used as the source for energy consumption data. It is estimated that a total of approximately 316,359 kilowatt hours (kWh) of energy was consumed for operation of water facilities in MPMW's water system in 2024. As the total volume of potable water entering the system was 977 MG, the energy intensity was calculated to be 324 kWh/MG (**Table 6-11**).

Table 6-11 Recommended Energy Reporting: Single Delivery Product, Total Utility Approach (DWR Table O-1B)

Water Delivery Product	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control		
Start Date of Reporting Period	1/1/2024	**Sum of All Water Management Processes**	**Non-Consequential Hydropower**	
End Date of Reporting Period	12/31/2024			
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water	MG	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process		977	0	977
Energy Consumed (kWh)		316,359	0	316,359
Energy Intensity (kWh/vol. converted to MG)		324	0	324
Quantity of Self-Generated Renewable Energy				
0	kWh			
Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)				
Metered Data				
Data Quality Narrative:				
Volume of water data is from the SFPUC AMI meters. Energy usage is for water facilities and is from the MPMW's energy bills.				
Narrative:				
MPMW utilizes the pump station to convey water from the Upper Zone turnout to supplement demands and to fill the storage tanks.				

7 WATER SUPPLY RELIABILITY ASSESSMENT

This section assesses the reliability of MPMW's water supplies, with a specific focus on potential constraints, including purchased water supply availability, water quality, and climate change. The intent of this section is to identify any potential constraints that could affect the reliability of MPMW's supply during normal, single dry-year, and multiple dry-year hydrologic conditions.

All of MPMW's potable water supply is purchased from the SFPUC RWS and currently a portion of the irrigation use is served by recycled water produced by WBSD. The reliability of the SFPUC RWS is anticipated to vary greatly in different year types. MPMW has relied on the supply reliability estimates provided by the SFPUC for the RWS and the drought allocation structure provided by SFPUC and BAWSCA to estimate available RWS supplies in dry year types through 2050. In addition to the long-term reliability assessment, this section also presents a Drought Risk Assessment to evaluate MPMW's supply risks under a severe drought period lasting for the next five consecutive years (i.e., through 2030).

7.1 Constraints on Water Sources

☑ ***CWC §10631***

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

☑ ***CWC §10634***

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

☑ ***CWC §10635***

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

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

The following sections provide a summary of potential constraints on future water supply availability, water quality, and climate change.

7.1.1 Supply Availability

Detailed information is provided below regarding factors that impact the SFPUC RWS supply and MPMW's recycled water supply.

7.1.1.1 Purchased Water

The SFPUC has identified potential constraints on its water supplies. This section summarizes the availability of water supplies from the SFPUC RWC, including (1) key uncertainties that may affect those supplies, (2) the system's level of service goals and capital improvements that underpin supply reliability, as well as (3) the allocation methodologies applied during shortage conditions. The source for the information is the common language provided by the SFPUC and BAWSCA (see **Appendix D**).

> The 2018 adoption of the Bay-Delta Plan Amendment may significantly impact the supply available from the RWS. The SFPUC recognizes that the Bay-Delta Plan Amendment has been adopted and that,

given that it is now state law, the SFPUC must plan for a future in which it is fully implemented. The SFPUC also acknowledges that the plan is not self-implementing and therefore does not automatically go into effect. Similarly, there is active litigation at the appellate level regarding the Bay-Delta Plan Amendment. The SFPUC is also pursuing a voluntary agreement, known as the Healthy Rivers and Landscapes Program (HRL). The HRL is currently undergoing evaluation at the SWRCB. In fall of 2025, the SWRCB released a Scientific Basis Report evaluating the biological benefits of the Tuolumne River component of the HRL. The next step is for SWRCB to finalize this report including scientific peer review. At the same time, the SWRCB is undergoing CEQA evaluation of the Tuolumne HRL. No timeline has been provided for when the HRL will be considered for adoption by the SWRCB.

There are additional factors that could affect the availability of water supply regarding the SWRCB curtailments and agreements with Turlock and Modesto Irrigation Districts (Irrigation Districts) pertaining to instream flow obligations on the Tuolumne River. The following describes these and how they were incorporated into the water supply reliability analysis.

- During the last two drought periods, 2013-2016 and 2021-2023, the SWRCB implemented curtailments through emergency regulations and curtailment orders that attempted to limit diversions from Central Valley watersheds including the Tuolumne River at certain times. Due to the uncertain legality of the SWRCB's curtailment actions as well as the uncertainties regarding any potential future curtailment actions against San Francisco, the SFPUC's RWS supply reliability analyses do not assume curtailments are in effect.
- Through a 1966 agreement with the Irrigation Districts, who are more senior downstream appropriative water rights holders on the Tuolumne River, San Francisco may become responsible for up to approximately 51.7% of any flow releases the Federal Energy Regulatory Commission (FERC) may require through issuance of a new license for the Irrigation Districts' Don Pedro Hydropower Project. The exact flow contribution for which San Francisco may become responsible is highly uncertain and may depend on multiple currently unknown factors, including an anticipated Endangered Species Act biological opinion from the National Marine Fisheries Service and a Clean Water Act section 401 water quality certification from the SWRCB. San Francisco's potential responsibility for FERC-ordered flows may further depend on San Francisco's ability to enter into a new or extended agreement with the Irrigation Districts to offset a portion of San Francisco's flow contributions in exchange for payment. Due to the high levels of uncertainty surrounding the Irrigation Districts' FERC-relicensing process, as well as the unknown timing for license issuance, the SFPUC's RWS water supply reliability analyses do not assume additional water supply losses from any potential new FERC-ordered flow releases.
- The simulation of the Bay-Delta Plan Amendment scenario assumes that a 1996 agreement between San Francisco and the Irrigation Districts (the Side Agreement), which allows San Francisco to pay the Irrigation Districts in lieu of contributing a portion of current FERC-ordered flow releases, remains in effect, and that the San Francisco share of flows in excess of and not covered by the Side Agreement is approximately 51.7%. These assumptions were made for the purpose of completing the modeling for the UWMP update, and they do not represent a commitment by San Francisco or the Districts to any future agreement or of San Francisco accepting responsibility for any future FERC-ordered flow releases.

Bay-Delta Plan Amendment Updates

In December 2018, the SWRCB adopted amendments to the Bay-Delta Plan to establish water quality objectives for the San Francisco Bay-Delta watershed. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of

increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the San Francisco Bay-Delta. The Bay-Delta Plan Amendment requires the release of 30-50% of the "unimpaired flow"[16] on the three tributaries from February through June in every year type. In SFPUC modeling of the new flow standard, it is assumed that the required release is 40% of unimpaired flow.

If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet the projected water demands presented in this 2025 UWMP in normal years but is expected to experience supply shortages in single dry years or multiple dry years. Implementation of the Bay-Delta Plan Amendment could require rationing in all single dry years and multiple dry years.

Implementation of the Bay-Delta Plan Amendment remains uncertain for multiple reasons.

- Over a dozen lawsuits have been filed in both state and federal courts challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including a legal challenge filed by the federal government at the request of the U.S. Department of Interior, Bureau of Reclamation. This litigation is currently at the appellate level; and
- The Bay-Delta Plan Amendment is not self-implementing and does not automatically allocate responsibility for meeting its new flow requirements to San Francisco or any other water rights holders. Rather, the Bay-Delta Plan Amendment merely provides a regulatory framework for implementing water quality objectives, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, may be implemented through the water quality certification process set forth in section 401 of the Clean Water Act as part of the Federal Energy Regulatory Commission's licensing proceedings for the Don Pedro and La Grange hydroelectric projects. It is currently unclear when the license amendment process is expected to be completed. This process and the other regulatory and/or adjudicatory proceedings may face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the RWS).

In recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River," and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." On March 26, 2019, the SFPUC adopted Resolution No. 19-0057 to support the SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration.[17] On November 10, 2022, the SFPUC along with the Irrigation Districts signed a Memorandum of Understanding Advancing the Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan and Other Actions. Voluntary Agreements are now referred to as the Agreements to Support Healthy Rivers and Landscapes and negotiations remain ongoing.

[16] "Unimpaired flow represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds." (Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Dec. 12, 2018), p. 17, fn. 14, available at https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf.)

[17] California Natural Resources Agency, "Voluntary Agreements to Improve Habitat and Flow in the Delta and its Watersheds," available at https://files.resources.ca.gov/voluntary-agreements/.

Water System Improvement Program and Level of Service Goals

Initiated in 2008, SFPUC's WSIP is a $4.8 billion, multi-year capital program to upgrade the RWS as well as the SFPUC's local water system. The program is delivering capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high quality drinking water in an environmentally sustainable manner to its Retail and Wholesale Customers. The SFPUC structured WSIP to cost-effectively meet water quality requirements, improve seismic and delivery reliability goals through the year 2030, and fulfill water supply objectives through the year 2018. The SFPUC completed the San Francisco portion of WSIP in October 2020. As of June 30, 2025, the regional portion of WSIP was 99.3% complete, having repaired, replaced, and seismically upgraded crucial portions of the RWS; only two regional projects remain in planning and construction, while 49 regional projects have been completed or are in close-out. The SFPUC forecasts that the overall WSIP will be completed in June 2032.

The SFPUC undertook the WSIP to ensure the ability of the RWS to meet LOS Goals and Objectives for water quality, seismic reliability, delivery reliability, and water supply. The Water Supply LOS goal, stated in the WSIP and adopted in 2008, is to meet customer water needs in non-drought and drought periods. The SFPUC amended and updated the LOS Goals and Objectives in November 2023. The SFPUC's current LOS Goals and Objectives related to water supply include the following:

- Meet an average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years consistent with the Water Supply Agreement between San Francisco and its Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties;
- Meet dry-year delivery needs while limiting rationing to a maximum 20% system-wide reduction in water service during extended droughts;
- Diversify and improve use of new water sources and drought management, including groundwater, recycled water, conservation, transfers, storage expansion, purified water, desalinated water, and technological innovations that can increase supply and/or water use efficiency;
- Maintain San Francisco retail residential potable water use below 45 GPCD.
- Realize annual Real Water Losses of less than 10% of water supplied to San Francisco; and
- Meet 80% of San Francisco's Recreation and Parks Department irrigation demands with recycled water by December 31, 2025.

Drought Allocation Methodology

Tier One Drought Allocations

The WSA between the SFPUC and the Wholesale Customers includes as "Attachment H" a WSAP, also known as the Tier 1 Shortage Plan. This plan describes the method for allocating water from the RWS between the SFPUC's Retail Customers, on the one hand, and the Wholesale Customers collectively, on the other, during system-wide shortages caused by drought. The Tier 1 Shortage Plan applies only when the SFPUC determines that a system-wide water shortage due to drought exists, as set forth in a declaration of water shortage emergency by the SFPUC Commission; in the absence of such a declaration, the SFPUC also may opt to request voluntary cutbacks from its Retail and Wholesale Customers to achieve water use reductions. The SFPUC and the Wholesale Customers most recently amended the Tier 1 Shortage Plan in 2025.

The SFPUC allocates water under the Tier 1 Shortage Plan when it determines that the projected available water supply is less than projected system-wide water purchases for the upcoming Supply Year, defined as the period from July 1 through June 30. The following table shows the Retail Customers' share and the Wholesale Customers' share of the annual water supply available during shortages depending on the level of system-wide reduction in water use that is required. If the SFPUC determines that the level of system-wide reduction required during a shortage is greater than 20%, the SFPUC and the Wholesale Customers will meet to discuss the appropriate Retail and Wholesale Customers' shares of available water. The Retail and Wholesale Customers' shares of available water are also known as the Retail and Wholesale Customers' Tier 1 Allocations. The Wholesale Customers' Tier 1 Allocation will be apportioned among the individual Wholesale Customers based on a separate methodology, known as the Tier 2 Drought Response Implementation Plan (Tier 2 Plan), which is separately adopted by all the Wholesale Customers without the SFPUC's involvement as discussed further below.

Level of System-Wide Reduction in Water Use Required	Share of Available Water	
	SFPUC Share	Wholesale Customers Share
5% or less	35.5%	64.5%
6% through 10%	36.0%	64.0%
11% through 15%	37.0%	63.0%
16% through 20%	37.5%	62.5%

The Tier 1 Shortage Plan allows for voluntary transfers of shortage allocations between the SFPUC and any Wholesale Customer as well as between Wholesale Customers themselves. In addition, voluntary transfers of water "banked" by the SFPUC or a Wholesale Customer, through reductions in usage greater than required, may occur.

Under the Tier 1 Shortage Plan, as amended in 2018, if the Retail Customers' Tier 1 Allocation results in the Retail Customers receiving a "positive allocation" (i.e., a supply of additional water rather than a required reduction in water use), then the excess percentage for Retail is re-allocated to the Wholesale Customers' Tier 1 Allocation. The Retail Customers are also required to conserve a minimum of 5% for any level of reduction in system-wide water use. The additional water conserved by Retail Customers up to the minimum 5% level is deemed as remaining in RWS storage for inclusion in the calculation of projected available water in future successive dry years.

The Tier 1 Shortage Plan will expire at the end of the term of the WSA in 2034, unless the SFPUC and the Wholesale Customers mutually agree to revise or terminate it prior to that date.

Tier Two Drought Allocations

The Wholesale Customers have negotiated and adopted the Tier 2 Plan, referenced above, which allocates the Wholesale Customer Tier 1 Allocation from the Tier 1 Shortage Plan among each of the 26 Wholesale Customers. These Tier 2 Allocations are based on a formula that takes into account multiple factors for each Wholesale Customer including:

- Residential population;
- Non-residential "base" (i.e., indoor) use;
- Seasonal uses;
- Total RWS purchases in recent non-drought years; and
- Individual Supply Guarantee;

The Tier 2 Plan employs a structured, sequential, five-step method to allocate water to each Wholesale Customer. The allocations are constrained by minimum and maximum cutbacks, which establish the maximum final allocation and minimum guaranteed final allocation, respectively. No agency's final allocation can fall outside of these bounds. The allocation then proceeds by prioritizing indoor uses.

The subsequent steps systematically allocate the remaining available water based on different customer demands. First focusing on indoor demand, water is allocated based on an agency's residential population and the State residential efficient indoor standard (47 GPCD in 2025), followed by an allocation based on non-residential "base" (i.e., indoor) use. A limited amount of water is allocated based on seasonal use (e.g., cooling towers and irrigation). Finally, the remaining supply is allocated based on a weighted share of two-thirds RWS purchases in the recent non-drought years and one-third ISG.

The result of the Tier 2 Plan is each Wholesale Customers' proportion, expressed as a percentage, of the available Tier 1 Allocation (Allocation Factor).

The Tier 2 Plan requires that the Allocation Factors be calculated by BAWSCA each year in preparation for a potential water shortage emergency. As the Wholesale Customers change their water use characteristics (e.g., increases or decreases in RWS purchases and use of other water sources, changes in monthly water use patterns, or changes in population), the Allocation Factor for each Wholesale Customer will also change. However, for long-term planning purposes, each Wholesale Customer may use as its Allocation Factor, the value identified in the Tier 2 Plan when adopted.

The Tier 2 Plan was renegotiated and adopted by all Wholesale Customers in 2025.

7.1.1.2 Recycled Water

Recycled water currently supplies 5% of MPMW's total demand and is anticipated to supply 10% of MPMW's total demand by 2050 (see Sections 4 and 6). Recycled water is assumed to be a reliable and stable water supply source and is estimated to be available during all hydrologic years at a volume that meets MPMW's projected recycled water demands.

7.1.2 Water Quality

☑ ***CWC §10634***

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

Impaired water quality also has the potential to affect water supply reliability. All drinking water standards are set by the U.S. Environmental Protection Agency (USEPA) under the authorization of the Federal Safe Drinking Water Act of 1974. In California, the SWRCB, DDW can either adopt the USEPA standards or set more stringent standards, which are then codified in Title 22 of the CCR. There are two general types of drinking water standards:

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

As discussed in **Section 6.1.1**, surface water supplies available to the RWS include the Tuolumne River and local Bay Area reservoirs. Information is provided below regarding the water quality of the RWS per the common language provided by the SFPUC and BAWSCA.

> Most of the water supply originates in the upper Tuolumne River watershed high in the Sierra Nevada, where the watershed is protected from development and pollution. Water from Hetch Hetchy Reservoir is conveyed to the Bay Area through a system of pipes and tunnels and requires only primary disinfection, ultraviolet light disinfection at the Tesla Treatment Facility, and pH adjustment for corrosion control.
>
> The USEPA and SWRCB DDW have approved the use of this drinking water source without filtration. In contrast, water from the SFPUC's local watersheds requires filtration to meet drinking water quality standards. The SFPUC blends filtered and treated local water with water from Hetch Hetchy Reservoir, and most customers receive this blended supply. The SFPUC continuously monitors and tests both raw and treated water to ensure that water delivered to customers meets or exceeds federal and state drinking water and public health requirements. The SFPUC expects to continue relying on these high-quality water sources and does not anticipate future degradation of water quality.
>
> Each spring, the SFPUC publishes an annual water quality report (Consumer Confidence Report), available at www.sfpuc.gov/waterqualityreport.

MPMW has and will continue to meet all state and federal water quality regulations. MPMW routinely monitors its distribution system and the water that is treated and served to customers to ensure that water delivered to customers meets these drinking water standards. The results of the testing are summarized annually in Water Quality Reports (also known as "Consumer Confidence Reports"), which are available on the City's website: https://www.menlopark.gov/Government/Departments/Public-Works/Water-stormwater-and-solid-waste/Menlo-Park-Municipal-Water/Water-quality.

The results of SFPUC's and MPMW's water quality assessments show that SFPUC RWS watersheds have very low levels of contaminants, and that those contaminants that are found at low levels are associated with wildlife and, to a limited extent, human recreation. For the purposes of this UWMP, it is anticipated that this high-quality potable water source will continue to be available to MPMW through the planning horizon ending in the year 2050. Water quality is not expected to impact the reliability of MPMW's supplies.

7.1.3 Climate Change

☑ ***CWC §10631 (b) (1)***

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

Section 6.10 provides a summary of the assessments of the applicable climate change on supplies that MPMW has previously performed and those planned for the near term. The anticipated effects of climate change have been directly factored into MPMW's assessment of its supply reliability. MPMW is actively working with SFPUC and BAWSCA to further quantify and consider future climate change impacts as part of its ongoing supply and operations planning.

7.2 Reliability by Type of Year

☑ ***CWC §10635***

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

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

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

Identification of dry year periods consistent with the UWMP Guidebook 2025 methodology is provided in the language and supply projections provided by BAWSCA and the SFPUC in **Appendix D** and as presented in **Table 7-1** and **Table 7-2.** The data and methods used to develop these dry year supply availabilities are described in the sections, below.

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

Year Type	Base Year	Available Supplies if Year Type Repeats	
		☒	Checked box indicates quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: **Appendix D** and **Table 7-2**
		Volume Available	% of Average Supply
Average Year			**100%**
Single-Dry Year			
Consecutive Dry Years 1st Year			
Consecutive Dry Years 2nd Year			
Consecutive Dry Years 3rd Year			
Consecutive Dry Years 4th Year			
Consecutive Dry Years 5th Year			

NOTES:
(a) SFPUC provided this table to its wholesale customers under four scenarios. A description of the scenarios and corresponding tables can be found in **Appendix D**.

7.2.1 SFPUC Supply Modeled RWS Dry Year Supply Availability

As described in SFPUC's 2025 UWMP, SFPUC used the Hetch Hetchy and Local Simulation Model (HHLSM) to estimate SFPUC RWS supply availability for the water service reliability assessment and the Drought Risk Assessment. Additional information is provided below per the common language provided by SFPUC and BAWSCA:

> The SFPUC used its Hetch Hetchy and Local Simulation Model (HHLSM) to perform the water supply analyses for the supply reliability assessment and the drought risk assessment within the 2025 UWMP. HHLSM combines a historical record of hydrology from 1920 through 2025 with a current representation of RWS infrastructure and operations. The simulated operations include decisions on water supply rationing during droughts. The use of those results is described below.
>
> A key input for the HHLSM model is the anticipated level of demand on the RWS. Supply modeling results presented in the 2025 UWMP reflect an input of projected demands on the RWS consisting of (1) projected Retail Customer demands on the RWS (total Retail Customer demands minus local groundwater and recycled water supplies), and (2) projected Wholesale Customer purchases. The SFPUC has estimated total RWS demands for 2030 through 2050 and used these estimates in HHLSM simulations of RWS water supply reliability. The SFPUC has a Level of Service objective of meeting an average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years consistent with the WSA, under which the SFPUC has a contractual obligation to supply up to 184 MGD to the Wholesale Customers. Therefore, the SFPUC has also conducted modeling that assumes Wholesale Customer demand is 184 MGD to facilitate planning that supports meeting this Level of Service objective and contractual obligation.
>
> In a normal year SFPUC can provide up to 265 MGD of supply from the RWS. However, within the context of this document, normal year RWS supply is defined as the supply that will be used to meet the full demands on the RWS in a non-drought year.

Because of the uncertainty surrounding implementation of the Bay-Delta Plan Amendment, the SFPUC conducted a water service reliability assessment that includes: (1) a scenario in which the Bay-Delta Plan Amendment is implemented and (2) a scenario that considers the SFPUC system's current conditions without implementation of the Bay-Delta Plan Amendment (**Appendix D**). The two scenarios provide a bookend for the possible future scenarios regarding RWS supplies. The Bay-Delta Plan Amendment implementation start date is unknown; for the purposes of the supply reliability analysis, it is included in the 2030 modeling scenarios. The standardized tables associated with this UWMP contain the future scenario that assumes implementation of the Bay-Delta Plan Amendment.

Consistent with SFPUC's approach and guidance from SFPUC and BAWSCA, MPMW's UWMP presents results for the water service reliability assessment using projected demands on the RWS for supply scenario with full implementation of the Bay-Delta Plan Amendment assumed in 2030.

SFPUC modeling results for the scenario in which the Bay-Delta Plan Amendment is implemented, showing the total RWS supply available to Wholesale Customers during the characteristic year types, can be found in the SFPUC letter dated March 11, 2026 (**Appendix D**). These results show total Wholesale RWS supply shortfalls ranging from 31% to 48% of projected purchases during dry years.

For comparison purposes, results for the scenario without the Bay-Delta Plan Amendment can be found in the same SFPUC letter. These results indicated that SFPUC would be able to meet 100% of Wholesale projected purchases during all year types.

7.2.2 MPMW's Year-Type Characterization

As discussed in **Section 6.1.2**, in accordance with the SFPUC's perpetual obligation to MPMW's Supply Assurance, MPMW' has an ISG of 4.456 MGD, or 1,630 MG per year. SFPUC is obligated to provide MPMW with up to 100% of MPMW's ISG during normal years.

As detailed by BAWSCA in **Appendix D,** both the Tier One and Tier Two Plans were not designed for RWS shortages greater than 20%. In a memorandum dated March 11, 2026, BAWSCA provided a refined methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20%. In the absence of a negotiated approach for allocating RWS supply among the Wholesale Customers during shortages exceeding 20%, BAWSCA suggests that agencies apply these cutbacks equally across all agencies. The associated allocations based on the updated BAWSCA methodology are included as **Appendix D**.

For the purposes for the 2025 UWMP supply reliability analysis only, Wholesale Customer drought allocations assume an equal percent reduction across all agencies when the average Wholesale Customers' RWS shortages are greater than 20%. This allocation method is intended to serve as the preliminary basis for the 2025 UWMP supply reliability analysis. The analysis provided herein does not in any way imply an agreement by BAWSCA member agencies as to the exact allocation methodology. BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.

These percent reductions for the scenario that assumes the implementation of the Bay-Delta Plan Amendment in 2030 are included in Attachment B of the BAWSCA memorandum dated March 11, 2026 (**Appendix D**), which are reproduced for MPMW in **Table 7-2** below, for base year 2030 through 2050. The percent reductions shown in **Table 7-2** are applied to MPMW's projected potable demands listed in **Table 4-5** for each respective base year to calculate the projected dry-year RWS supplies shown in **Table 7-4** and **Table 7-5**.

Table 7-2 SFPUC RWS Supply Availability During Normal and Dry Years for Based Years 2030 through 2050 (Responds to DWR Table 7-1)

Base Year	Normal Year	Single Dry Year	Multiple Dry Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
2030	100%	69%	69%	58%	58%	58%	58%
2035	100%	67%	67%	57%	57%	57%	57%
2040	100%	65%	65%	55%	55%	55%	55%
2045	100%	63%	63%	53%	53%	53%	53%
2050	100%	62%	62%	52%	52%	52%	52%

NOTES:

(a) In normal years, SFPUC can sufficiently supply MPMW's projected potable demands. During normal years, SFPUC supplies are available up to MPMW's ISG of 1,630 MG.

(b) Dry-year water supply availability is presented in terms of percentage of projected RWS demands for each base year (**Table 4-5**) consistent the revised BAWSCA Drought Methodology that assumes equal percent cutbacks across all Wholesale Agencies.

(c) Results reflect scenario with Bay-Delta Plan Amendment implemented in 2030 and the projected RWS purchases.

7.3 Supply and Demand Assessment

☑ ***CWC §10635(a)***

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

Water supply changes during normal, single dry, and multiple dry years. The following sections compare MPMW's projected water demands, described in **Section 4**, with projected water supply availability during normal years, single dry years, and multiple dry year periods.

7.3.1 Normal Year Supply and Demand Assessment

Table 7-3 shows the projected supply and demand totals for a normal year. The supply and demand totals are consistent with those in **Table 6-10** and **Table 4-5**, respectively. MPMW is expected to have adequate water supplies during normal years to meet its projected demands through 2050.

Table 7-3 Normal Year Supply and Demand Comparison (DWR Table 7-2)

Potable Normal Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	960	985	975	1,008	1,043
Use totals	960	985	975	1,008	1,043
Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**

NOTES:
(a) The supply availability shown herein is equal to MPMW's projected SFPUC purchases. During normal years, SFPUC supplies are available up to MPMW's ISG of 1,630 MG.
(b) Volumes are in units of MG.

Non-Potable Normal Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	64	73	117	117	117
Use totals	64	73	117	117	117
Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**

NOTES:
(a) Volumes are in units of MG.

Total Normal Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	1,024	1,058	1,092	1,124	1,160
Use totals	1,024	1,058	1,092	1,124	1,160
Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
NOTES: (a) Volumes are in units of MG.					

7.3.2 Single-Dry Year Supply and Demand Assessment

The reliability of the SFPUC RWS supply is anticipated to vary greatly in different year types. As described above and detailed in **Appendix D,** MPMW has relied on the supply reliability estimates and the drought allocation structure provided by the SFPUC and BAWSCA to estimate available RWS supplies in dry years from 2030 through 2050. **Table 7-4** shows the projected supply and demand totals for the single dry year.

Table 7-4 Single Dry Year Supply and Demand Comparison – District Total (DWR Table 7-3)

Potable Single Dry Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	662	660	634	635	646
Use totals	960	985	975	1,008	1,043
Surplus/(Shortfall)	**(298)**	**(325)**	**(341)**	**(373)**	**(396)**
NOTES: (a) Volumes are in units of MG.					

Non-potable Single Dry Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	64	73	117	117	117
Use totals	64	73	117	117	117
Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
NOTES: (a) Volumes are in units of MG.					

Total Single Dry Year Supply and Demand

	2030	2035	2040	2045	2050
Supply totals	726	733	751	752	763
Use totals	1,024	1,058	1,092	1,124	1,160
Surplus/(Shortfall)	**(298)**	**(325)**	**(341)**	**(373)**	**(396)**
NOTES: (a) Volumes are in units of MG.					

7.3.3 Multiple Dry Year Supply and Demand Assessment

Based on the supply reliability estimates and allocation structure provided by SFPUC and BAWSCA, **Table 7-5** shows MPMW's projected supply and demand totals for multiple dry year periods extending five years.

Table 7-5 Five Consecutive Dry Years Supply and Demand Comparison (DWR Table 7-4)

Potable Consecutive Dry Year Supply and Demand

		2030	2035	2040	2045	2050 (Opt)
First year	Supply totals	662	660	634	635	646
	Use totals	960	985	975	1,008	1,043
	Surplus/(Shortfall)	**(298)**	**(325)**	**(341)**	**(373)**	**(396)**
Second year	Supply totals	557	561	536	534	542
	Use totals	960	985	975	1,008	1,043
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Third year	Supply totals	557	561	536	534	542
	Use totals	960	985	975	1,008	1,043
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Fourth year	Supply totals	557	561	536	534	542
	Use totals	960	985	975	1,008	1,043
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Fifth year	Supply totals	557	561	536	534	542
	Use totals	960	985	975	1,008	1,043
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**

NOTES:
(a) Volumes are in units of MG.

Table 7-5 Five Consecutive Dry Years Supply and Demand Comparison (DWR Table 7-4) (Continued)

Non-Potable Consecutive Dry Year Supply and Demand

		2030	2035	2040	2045	2050 (Opt)
First year	Supply totals	64	73	117	117	117
	Use totals	64	73	117	117	117
	Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
Second year	Supply totals	64	73	117	117	117
	Use totals	64	73	117	117	117
	Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
Third year	Supply totals	64	73	117	117	117
	Use totals	64	73	117	117	117
	Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
Fourth year	Supply totals	64	73	117	117	117
	Use totals	64	73	117	117	117
	Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**
Fifth year	Supply totals	64	73	117	117	117
	Use totals	64	73	117	117	117
	Surplus/(Shortfall)	**0**	**0**	**0**	**0**	**0**

NOTES:
(a) Volumes are in units of MG.

Table 7-5 Five Consecutive Dry Years Supply and Demand Comparison (DWR Table 7-4) (Continued)

Total Consecutive Dry Year Supply and Demand

		2030	2035	2040	2045	2050 (Opt)
First year	Supply totals	726	733	751	752	763
	Use totals	1,024	1,058	1,092	1,124	1,160
	Surplus/(Shortfall)	**(298)**	**(325)**	**(341)**	**(373)**	**(396)**
Second year	Supply totals	620	635	653	651	659
	Use totals	1,024	1,058	1,092	1,124	1,160
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Third year	Supply totals	620	635	653	651	659
	Use totals	1,024	1,058	1,092	1,124	1,160
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Fourth year	Supply totals	620	635	653	651	659
	Use totals	1,024	1,058	1,092	1,124	1,160
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**
Fifth year	Supply totals	620	635	653	651	659
	Use totals	1,024	1,058	1,092	1,124	1,160
	Surplus/(Shortfall)	**(403)**	**(423)**	**(439)**	**(474)**	**(500)**

NOTES:
(a) Volumes are in units of MG.

7.3.4 Uncertainties in Dry Year Water Supply Projections

As shown in the above tables, significant water supply shortfalls are currently projected in future single and multiple dry years, directly because of Bay-Delta Plan Amendment implementation. However, numerous uncertainties remain in the implementation of the Bay-Delta Plan Amendment as discussed in **Section 7.1.1.1** and below. The water supply projections presented above likely represent a worst-case scenario in which the Bay-Delta Plan Amendment is implemented without the SFPUC and SWRCB reaching a Voluntary Agreement and do not account for implementation of SFPUC's AWSP, described in more detail below. Under this supply scenario, SFPUC appears not to be able to meet its contractual obligations (i.e., Level of Service goals) and MPMW's forecasted demands during droughts.

BAWSCA also provided individual agency drought allocations for the without Bay-Delta Plan Amendment scenario in Attachment B of the March 11, 2026, memorandum (**Appendix D**), which are reproduced for MPMW in **Table 7-6**. The water supply reliability projections without the Bay-Delta Plan Amendment likely represents a highly optimistic water supply reliability outcome. These projections indicated that without the Bay-Delta Plan Amendment SFPUC would be able to supply 100% of projected RWS demands in all year types through 2050. The large disparity in projected water supply reliability between these two scenarios demonstrates the current level of uncertainty.

Table 7-6 The MPMW's SFPUC RWS Supply Availability During Normal and Dry Years for Base Years 2030 through 2050 without Bay-Delta Plan Amendment

Base Year	Normal Year	Single Dry Year	Multiple Dry Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
2030	100%	100%	100%	100%	100%	100%	100%
2035	100%	100%	100%	100%	100%	100%	100%
2040	100%	100%	100%	100%	100%	100%	100%
2045	100%	100%	100%	100%	100%	100%	100%
2050	100%	100%	100%	100%	100%	100%	100%

NOTES:
(a) SFPUC can sufficiently supply MPMW's projected potable demands for each hydrologic year type for the scenario in which the Bay-Delta Plan Amendment is not implemented. In this scenario, SFPUC supplies are available up to MPMW's ISG of 1,630 MG.
(b) Volumes are in units of MG.
(c) Source Attachment B of the BAWSCA memorandum dated March 11, 2026.
(d) Results reflect scenario without Bay-Delta Plan Amendment implemented in 2030 and the projected RWS purchases.

The current sources of uncertainty in the dry year water supply projections are summarized below:

- **Implementation of the Bay-Delta Plan Amendment is under negotiation.** The SFPUC is continuing negotiations with the SWRCB on implementation of the Bay-Delta Plan Amendment for water supply cutbacks, particularly during droughts. The SFPUC, in partnership with other key stakeholders, has proposed a voluntary substitute agreement to the Bay-Delta Plan Amendment, the HRL, that provides a collaborative approach to protect the environment and plan for a reliable and high-quality future potable water supply. This is a dynamic situation, and the projected drought cutback allocations may need to be revised before the next (i.e., 2030) UWMP depending on the outcome of ongoing negotiations.
- **Benefits of the AWSP are not accounted for in current supply projections.** As discussed in **Section 7.3.4.1** and **Appendix D**, SFPUC is exploring options to increase its supplies through the

AWSP. Implementation of feasible projects developed under the AWSP is not yet reflected in the supply reliability scenarios presented herein and is anticipated to reduce the projected RWS supply shortfalls.

- **Methodology for Tier One and Tier Two Wholesale drought allocations have not been established for wholesale shortages greater than 20%.** As discussed in **Section 7.1.1**, the current Tier One and Tier Two Plans are not designed for RWS supply shortages of greater than 20%. For UWMP planning purposes per BAWSCA guidance, the Tier One Wholesale share for a 16% to 20% supply reduction (62.5%) has been applied for reductions greater than 20%, and an equal percent reduction has been applied across all Wholesale agencies for Tier Two. BAWSCA member agencies have not formally agreed to adopt this shortage allocation methodology and are in discussions about jointly developing an alternative allocation method that would consider additional equity factors if SFPUC is unable to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.
- **RWS demands are subject to change.** The RWS supply availability is dependent upon the system demands. As discussed in **Section 7.2**, the supply scenarios are based on the total projected Wholesale Customer purchases provided by BAWSCA to SFPUC in March 2026. Many BAWSCA agencies have refined their projected demands during the UWMP process after these estimates were provided to SFPUC. Furthermore, the RWS demand projections are subject to change in the future based upon future housing needs, increased conservation, and development of additional local supplies.
- **Frequency and duration of cutbacks are also uncertain.** While the projected shortfalls presented in the UWMP appear severe in the Bay-Delta Plan Amendment scenario, the actual frequency and duration of such shortfalls are uncertain. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls.

As such, MPMW has placed high priority on working with BAWSCA and SFPUC in the upcoming years to better refine the estimates of RWS supply reliability and may amend this UWMP when new information becomes available.

The above uncertainties notwithstanding, BAWSCA's current drought allocation cutbacks will require MPMW to apply its WSCP Stage 5 for water use restrictions between 40-50% (see **Appendix E**) and will affect MPMW's short- and long-term water management decisions. As described further below, MPMW is working independently and with the other BAWSCA agencies to identify regional mitigation measures to improve reliability for regional and local water supplies and meet its customers' water needs. If conditions for large drought cutbacks to the RWS persist, MPMW will need to implement additional demand management practices to invoke strict restrictions on potable water use and accelerate efforts to develop alternate supplies of water.

Because water supply reliability assumptions may change over time due to future drought conditions, regulatory requirements, SFPUC supply assumptions, and local supply planning, MPMW recommends that City planning and Community Development review efforts for future development projects rely on the most current information available at the time of review. Projects requiring Water Supply Assessments or other water supply evaluations should coordinate with MPMW staff before relying on the drought cutback projections presented in this UWMP.

7.3.4.1 Strategies and Actions to Address Dry Year Supply Shortfalls

Although there remains significant uncertainty in future supply availability, discussed above, MPMW, SFPUC, and BAWSCA have developed strategies and actions to address the projected dry year supply

shortfalls, as discussed in the common language provided by SFPUC and BAWSCA. These efforts are discussed in the following sections.

Strategy 2050 Future Water Supply Projects and Programs

MPMW is supporting BAWSCA in the development of its Strategy 2050, a regional assessment of member agencies' water supply needs.

Strategy 2050 will identify the water supply and demand management needs and opportunities for the BAWSCA region and establish a framework to collectively support water reliability and resilience. The main objectives of Strategy 2050 include:

- Providing a comprehensive picture of the region's supply and demand management needs and options;
- Establishing a framework for collectively maintaining and improving regional water supply reliability and resilience;
- Elevating awareness of and supporting the region's interests in new and emerging regulations that impact water supply and demand management;
- Expanding regional dialogue and collaboration to collectively address common needs;
- Closing the gap on funding needed for water supply resilience and reliability; and
- Supporting availability of affordable water supplies and demand management strategies to all customers.

Strategy 2050 is actively evaluating opportunities to enhance water supply reliability in the BAWSCA region, including projects involving physical infrastructure and actions involving non-infrastructure interventions, such as policies, programs, and/or contractual agreements. A total of 70 local and regional projects and actions will be considered, including stormwater capture projects, technical assistance programs for onsite reuse, groundwater banking partnerships, new and replacement well projects, and interties development and optimization, among others. Strategy 2050 will evaluate the water reliability under a range of potential future conditions and make recommendations on priorities and next steps for implementation.

Strategy 2050 plan is anticipated to be completed by 2027. From 2027 onward, the Strategy 2050 effort is anticipated to involve implementing the actions identified in the plan, tracking and reporting on the progress, and incorporating the findings from the implementation activities into BAWSCA's following fiscal year Work Plan.

WSIP Dry Year Water Supply Projects

With WSIP, the SFPUC has undertaken several water supply projects to meet dry-year demands. Those projects include the following:

- **Calaveras Dam Replacement Project.** Calaveras Dam is in the East Bay near a seismically active fault zone, and following the Loma Prieta earthquake in 1989, it was determined to be seismically vulnerable. To address the dam's vulnerability, the SFPUC constructed a new dam of equal height downstream of the existing dam. This project was completed in 2022. Calaveras Reservoir was completely refilled in 2023 and is now operating at full capacity.
- **Alameda Creek Recapture Project.** The Alameda Creek Recapture Project includes new facilities in and around an existing quarry pit in Sunol Valley to recover the loss of water supply associated with instream flow release and bypass requirements related to the Calaveras Dam Replacement Project. The project is anticipated to be completed in 2032.

- **Lower Crystal Springs Dam Improvements.** The Lower Crystal Springs Dam Improvements Project was completed in May 2012. The related joint San Mateo County/SFPUC Bridge Replacement Project to replace the bridge across the Lower Crystal Springs Dam was completed in January 2019.

- **Regional Groundwater Storage and Recovery Project.** The Regional Groundwater Storage and Recovery (RGSR) Project is a strategic partnership between the SFPUC and three Wholesale Customers in San Mateo County: the California Water Service Company (serving South San Francisco and Colma), the City of Daly City, and the City of San Bruno. The project sustainably manages groundwater and surface water resources to provide the RWS with additional supplies during times of drought. During years of normal or heavy rainfall, the SFPUC provides additional surface water from the RWS to the three agencies in northern San Mateo County, allowing them to reduce the amount of groundwater that they pump from the southern Westside Groundwater Basin. Over time, the reduced pumping allows the aquifer to naturally recharge and result in increased groundwater storage of up to 61,000 acre-feet of new water supply available during dry years. As of December 2025, the SFPUC had accumulated approximately 14 billion gallons of groundwater storage credits (about 43,093 acre-feet) through the project.

  The RGSR project has two phases. Phase 1, which included building thirteen production wells and treatment facilities, is complete. Phase 2 design began in early 2020 and covers rehabilitating and reinstalling well pumps, installing two new variable frequency drivers, and conducting start-up testing and well disinfection. Pumps at Hickey, Southwood Drive, and Mission well were rehabilitated, packed, and stored due to staff shortages, operational challenges, and elevated ammonia levels at the Southwood Drive well; they may be reinstalled later. Construction on Phase 2B began in 2024 and would transport groundwater from SFPUC South San Francisco Main Well to California Water Service Company Treatment Station in South San Francisco. The project will make improvements at the existing well site which includes mechanical, electrical, structural, and corrosion protection upgrades. The SFPUC also prepared a conceptual engineering report and initiated design work for additional treatment to address the high ammonia levels at the South Spruce Lane Well and Treatment Facility. Minor amounts of groundwater pumping from RGSR wells have occurred during start-up testing and monthly maintenance.

- **Regional Groundwater Treatment Improvements Project.** The SFPUC approved this new project in the 10-Year Water Enterprise Capital Improvement Program for FY 2021-2030. The project includes treatment facilities for several of the RGSR project wells to address groundwater quality issues that have emerged since the wells were constructed.

- **Water Transfers.** During the planning and implementation of the WSIP, the SFPUC pursued a long-term agreement to transfer 2 MGD from Modesto irrigation District to the SFPUC in drought years. Negotiations with Modesto Irrigation District ended in 2012 when an agreement could not be reached. The dry-year transfer project is now being included as part of the new SFPUC Alternative Water Supply Program and is described in further detail below.

Alternative Water Supply Program

In 2019, the SFPUC established the AWSP to identify and plan water supply and storage projects and actions that increase the dry-year reliability of the RWS. Based on the 2045 planning horizon that the SFPUC applied in its February 2024 Alternative Water Supply (AWS) Plan, the SFPUC anticipates a water supply gap will occur in future dry years. The AWSP aims to help fill the gap through local and regional capital projects. The February 2024 AWS Plan identified six regional projects that might

partially address the future water supply gap and the priorities for this planning effort. Since the development of that plan, three projects have been deferred (Daly City Recycled Water Expansion, Alameda County Water District-Union Sanitary District Purified Water, and Calaveras Reservoir Expansion) and one project has been canceled (Los Vaqueros Reservoir Expansion). The AWSP is continuing to pursue the following two projects:

- **PureWater Peninsula**. PureWater Peninsula (formerly known as the Crystal Springs Purified Water Project) is a purified water project that could provide 6 MGD of additional potable water supply to the RWS through surface water augmentation at the SFPUC's Crystal Springs Reservoir. The currently proposed project involves treating wastewater effluent from Silicon Valley Clean Water at a new advanced purified water facility located on the Peninsula and transmitting that purified water to Crystal Springs Reservoir, where it would blend with RWS surface water supplies before the SFPUC treats it again at Harry Tracy Water Treatment Plant. A future phase could provide an additional 6 MGD of additional potable water supply to the RWS. Project partners include the SFPUC, Silicon Valley Clean Water, BAWSCA, Mid-Peninsula Water District, California Water Service Company, City of Redwood City, City of Foster City, and City of San Mateo.
- **South Bay Purified Water**. In 2023, the SFPUC, the City of San Jose, and the City of Santa Clara completed an initial feasibility study for the South Bay Purified Water project, envisioned as a 10 MGD purified water project that would serve the local demands of San Jose and Santa Clara during all types of water years and deliver an additional volume of water supply to the RWS in dry years. Currently, Valley Water is working with San Jose and Santa Clara to design a larger project to meet broader regional needs. The SFPUC's participation in this project will be based on the regional benefits to the RWS customers. This project may also assist the SFPUC with its decision regarding San Jose and Santa Clara's status as RWS customers, discussed above.

If both AWS projects that SFPUC staff has identified through the current planning process can be implemented, there would still be a supply shortfall to meet projected needs associated with implementation of the Bay-Delta Plan Amendment. Furthermore, both alternative water supply options are in the planning phase and are subject to changes in institutional structure and design. Given the limited availability of water supply alternatives, unless the supply risks are significantly reduced, the SFPUC will continue to plan, develop, and implement all potential projects that can help bridge the anticipated water supply gap during droughts.

Outside of the AWSP, the following additional regional projects are included in the Agreements to Support Healthy Rivers and Landscapes. Progress on these water supply options will be guided by scientific monitoring and collaborative decision making.

- **Groundwater Banking.** Groundwater banking projects in the Modesto Irrigation District and Turlock Irrigation District service areas could provide the SFPUC with some additional water supply to meet instream flow releases in dry years, reducing water supply impacts on the RWS. A feasibility study of this option is included in the Agreements to Support Healthy Rivers and Landscapes.
- **Inter-Basin Collaborations.** Inter-Basin Collaborations could include establishing a partnership between interests on the Tuolumne River (such as the SFPUC) and those on the Stanislaus River, which would allow responsibility for streamflow to be assigned variably based on the annual hydrology. The Tuolumne system tends to spill more excess flow in wetter years than the Stanislaus system, and this excess flow could be shaped and credited to meet Stanislaus system requirements, while New Melones Reservoir in the Stanislaus

system is refilling. Then the stored water could be partially used to provide required streamflow to meet Stanislaus and Tuolumne requirements in future dry years.

- **Dry-Year Transfers.** The SFPUC initiated discussions with irrigation districts under WSIP to secure a dry-year transfer (see WSIP Dry-Year Water Supply Projects section above). While no transfer was secured, the SFPUC continues to engage in discussions with irrigation districts to explore potential transfer opportunities.

The SFPUC's AWS Plan published in February 2024 included a planning framework for the SFPUC to consider water supply needs and related tradeoffs, guide the decisions to proceed with environmental review, and continue the development of projects that can best meet anticipated water supply needs. In June 2025, the SFPUC prepared a progress report that provided status updates on the AWS projects. In 2027, the SFPUC plans to review and revise its AWS Plan based on updated information.

Menlo Park Municipal Water Strategies and Actions

In addition to the management tools and options discussed below, MPMW has been involved directly and through BAWSCA to advocate for an alternative to the Bay-Delta Plan Amendment, including submitting letters in 2017 and 2021 (see **Appendix F**). These letters identify, among other things, the significant impact to local water supply reliability, and enumerate concerns regarding the fact that the SFPUC RWS supply allocations do not meet the Level of Service Goals included in the Water Supply Agreement (WSA) (see **Section 7.1.1.1**) and, therefore, SFPUC is not meeting its contractual obligations to the Wholesale Customers.

As described in **Section 7.4** and **Section 9.1**, MPMW is committed to improving its supply reliability, including support of recycled water and development of groundwater supply sources and continued commitment to its water conservation program.

7.4 Water Supply Management Tools and Options

☑ ***CWC §10620 (f)***

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

At a regional level, MPMW maintains active involvement in the work that SFPUC and BAWSCA are doing with respect to optimizing the use of regional water supplies and pursuing additional supplies. These efforts are detailed above in **Section 7.3.4.1**.

In addition to supporting SFPUC and BAWSCA, MPMW will continue to track WBSD's recycled water system plans. Further discussion of anticipated expansion of WBSD's recycled water system can be found in **Section 6.5.3**. If additional recycled water is made available, the potable water demands will be less than the current projections and therefore the resultant supply shortage will likely be smaller.

MPMW has also been implementing, and plans to continue to implement, the demand management measures described in **Section 9**. Further, in response to the anticipated future dry-year shortfalls, MPMW has developed a robust WSCP that systematically identifies ways in which MPMW can reduce water demands. The WSCP is included in **Appendix E**.

7.5 Drought Risk Assessment

☑ ***CWC §10635(b)***

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

(1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.

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

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

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

In addition to the long-term water service reliability assessment presented above, the Drought Risk Assessment evaluates MPMW's supply risks under a severe drought period lasting for the next five consecutive years after the assessment is completed, i.e., from 2026 through 2030. The Drought Risk Assessment is intended to inform the DMMs and water supply projects and programs to be included in the UWMP (**Section 9**). Suppliers may conduct an interim update or updates to this Drought Risk Assessment within the five-year cycle of its UWMP update (i.e., before the 2030 UWMP).

7.5.1 Data, Methods, and Basis for Water Shortage Condition

This evaluation considers historical drought hydrology and plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

As a first step to the Drought Risk Assessment, MPMW estimated unconstrained water demand for the next five years (i.e., 2026-2030). Unconstrained water demand is the expected water use in the absence of drought water use restrictions. The characteristic five-year water demand is described in **Section 4**.

The available potable water supplies assumed in the Drought Risk Assessment are based upon the same methodology and assumptions used for the long-term water service reliability assessment (**Section 7.3**) and rely on information provided by SFPUC and BAWSCA (**Appendix D**). Details of how MPMW's available supplies are then estimated as part of the Drought Risk Assessment are provided below.

7.5.2 Drought Risk Assessment Individual Water Source Reliability

As described in **Section 6**, MPMW purchases imported surface water from the SFPUC RWS for potable uses and utilizes recycled water for non-potable uses.

MPMW's available potable water supplies during the five-consecutive-year drought are based upon information provided by SFPUC and BAWSCA included in **Appendix D**. The data and methods used to determine the RWS supply for the Drought Risk Assessment dry-year sequence are the same as those described in the **Section 7.2.1**. The SFPUC used the HHLSM with the design drought sequence to perform

the water supply analyses and simulate the water supply shortage conditions over the five-year drought period.

Because the start date of the implementation of the Bay-Delta Plan Amendment is unknown, the Drought Risk Assessment considers the supply scenario without the implementation of the Bay-Delta Plan Amendment.

7.5.3 Drought Risk Assessment Total Water Supply and Use Comparison

Table 7-7 provides a comparison of the water supply sources available to MPMW with the total projected water use for an assumed drought period of 2026 through 2030 for the scenario without implementation of the Bay-Delta Plan Amendment since the start date of implementation is unknown.

MPMW has developed a WSCP (**Appendix E**) to address water shortage conditions resulting from any cause (e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.). The WSCP identifies a variety of actions that MPMW will implement to reduce demands and further ensure supply reliability at various levels of water shortage. MPMW intends to implement its WSCP to reduce water use and address the supply shortfalls. It should be noted again that numerous uncertainties exist in the assumptions that drive the above projected dry year shortage estimates and that the current Tier One and Tier Two Plans are not designed for RWS supply shortages of greater than 20%. BAWSCA member agencies have not formally agreed to adopt this shortage allocation methodology and are in discussions about jointly developing an alternative allocation method that would consider additional equity factors if SFPUC is unable to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.

MPMW's supply is expected to be sufficient to meet demands in an extended five-year drought period. However, given the current uncertainty discussed in **Section 7.1**, MPMW could update its Drought Risk Assessment prior to the 2030 UWMP update if significant new information becomes available. CWC §10635(b) permits urban water suppliers to conduct an interim update or updates to their Drought Risk Assessment within the five-year cycle of its UWMP update. MPMW anticipates that by the 2030 UWMP update, SFPUC will provide more specific information about the AWSP, with estimated water supply contributions from such projects. Additionally, MPMW expects that SFPUC will provide more specific information and a refined estimate of the Bay-Delta Plan Amendment impacts to the SFPUC supply.

MPMW recommends that users of its 2025 UWMP contact MPMW staff for potential updates to the Drought Risk Assessment presented in the 2025 UWMP for their planning projects.

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

2026	Total
Total Water Use	1,030
Total Supplies	1,030
Surplus/Shortfall without WSCP Action	**0**
2027	**Total**
Total Water Use	1,028
Total Supplies	1,028
Surplus/Shortfall without WSCP Action	**0**
2028	**Total**
Total Water Use	1,027
Total Supplies	1,027
Surplus/Shortfall without WSCP Action	**0**
2029	**Total**
Total Water Use	1,025
Total Supplies	1,025
Surplus/Shortfall without WSCP Action	**0**
2030	**Total**
Total Water Use	1,024
Total Supplies	1,024
Surplus/Shortfall without WSCP Action	**0**

NOTES:
(a) Volumes are in units of MG.

8 WATER SHORTAGE CONTINGENCY PLANNING

☑ ***CWC §10640***

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

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

The WSCP for MPMW is included in this UWMP as **Appendix E**. The WSCP serves as a standalone document to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios. The primary objective of the WSCP is to ensure that MPMW has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions.

Consistent with CWC §10632, the WSCP includes six levels to address shortage conditions ranging from up to 10% to greater than 50% shortage, identifies a suite of demand mitigation measures for MPMW to implement at each level, and identifies procedures for MPMW to annually assess whether or not a water shortage is likely to occur in the coming year, among other things.

A summary of the key elements of the WSCP including water shortage levels and demand-reduction actions is shown in **Table 8-1**, **Table 8-2**, and **Table 8-3**. Additional details are provided in **Appendix E.**

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

☒	Checked box indicates the supplier uses the standard six levels of water shortage (and supplier will not complete this table).		
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**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%		

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

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	**Supply Augmentation Methods and Other Actions by Water Supplier**	**How much is this going to reduce the shortage gap?**		**Additional Explanation or Reference** (OPTIONAL)
		Volume or Percentage	**Shortage Gap Reduction Value**	
2	Other	Percentage	(a)	Conduct coordination with BAWSCA, SFPUC, and other Menlo Park water agencies (California Water Service, O'Connor Cooperative Water Tract, East Palo Alto, Palo Alto Park Mutual Water Company).
5	Stored Emergency Supply	Percentage	(b)	Implement emergency water supply provisions identified in the ERP.
5	Stored Emergency Supply	Percentage	(b)	Use emergency groundwater well(s).

NOTES:

(a) Actual reductions will depend on the agency's ability to implement programs, customer participation levels, and coordination with BAWSCA, SFPUC, and other Menlo Park water agencies.

(b) Actual reductions will depend on the available supply volume from the emergency groundwater supply.

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

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	**Demand Reduction Actions**	**How much is this going to reduce the shortage gap?**		**Additional Explanation or Reference** (OPTIONAL)	**Penalty, Charge, or Other Enforcement?**
		Volume or Percentage	**Shortage Gap Reduction Value**		
0	Other - Require automatic shut of hoses	Percentage	(a)	• Hoses must be equipped with a shut-off valve for washing vehicles, sidewalks, walkways, or buildings.	Yes
0	Water Features - Restrict water use for decorative water features, such as fountains	Percentage	(a)	• Ornamental fountains shall use only re-circulated or recycled water.	Yes
0	Other - Prohibit use of potable water for washing hard surfaces	Percentage	(a)	• Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns.	Yes
0	Landscape - Restrict or prohibit runoff from landscape irrigation	Percentage	(a)	• Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces.	Yes
0	Landscape - Limit landscape irrigation to specific times	Percentage	(a)	• Potable water cannot be applied to outdoor landscapes during and up to 48 hours after measurable rainfall.	Yes
0	Landscape - Other landscape restriction or prohibition	Percentage	(a)	• Potable water shall not be used to irrigate ornamental turf on public street medians.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
0	CII - Lodging establishment must offer opt out of linen service	Percentage	(a)	• Hotels and motels shall provide guests an option whether to launder towels and linens daily. Hotels and motels shall prominently display notice of this option in each bathroom using clear and easily understood language.	Yes
0	CII - Restaurants may only serve water upon request	Percentage	(a)	• Restaurants and other food service operations shall serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency.	Yes
0	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	(a)	• Broken or defective plumbing and irrigation systems must be repaired or replaced within a reasonable period.	Yes
0	Pools and Spas - Require covers for pools and spas	Percentage	(a)	• Recreational water features shall be covered when not in use.	Yes
0	Other	Percentage	(a)	• Single-pass cooling systems on new construction shall not be allowed.	Yes
1	Expand Public Information Campaign	Percentage	1%	• Initiate public outreach to inform customers that there is a water shortage emergency.	No
1	Implement or Modify Drought Rate Structure or Surcharge	Percentage	6%	• Implement Stage 1 drought surcharge.	Yes
1	Other	Percentage	0%	• Newly constructed homes and buildings must irrigate with drip or microspray only.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
2	Expand Public Information Campaign	Percentage	1%	• Evaluate if participation in BAWSCA's subscription water conservation programs can be increased. • Increase public outreach for added restrictions and prohibitions, and to provide information regarding fines or penalties for non-compliance.	No
2	Other	Percentage	0%	• Train City staff and billing contractor customer service representatives how to respond to customer calls, reports and complaints.	No
2	Other	Percentage	1%	• Evaluate options to capture water during routine flushing of water mains.	No
2	Implement or Modify Drought Rate Structure or Surcharge	Percentage	5-6%	• Implement Stage 2 drought surcharge.	Yes
2	Landscape - Limit landscape irrigation to specific days	Percentage	7-11%	• Irrigating outdoor ornamental landscapes or turf with potable water is limited to no more than two (2) days per week on a schedule established by the Director and posted on the City's website, except for hand watering. Water customers may be granted an exception upon review and approval of a Drought Response Plan by the Public Works Director pursuant to such policies and procedures as may be established by the Public Works Director provided that such plan results in an equivalent or greater reduction in water use.	Yes
2	Other - Require automatic shut of hoses	Percentage	0%	• Hand watering must be with a continuously monitored hose fitted with an automatic shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use or monitored.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
3	Expand Public Information Campaign	Percentage	1-2%	• Increase public outreach for added restrictions and prohibitions, and to provide information how to report water waste to the City. • Increase public outreach to the top 10% water users in each customer category.	No
3	Increase Water Waste Patrols	Percentage	1%	• Coordinate with Police code enforcement to investigate water waste reports.	Yes
3	Other	Percentage	0%	• Request cooperation from Menlo Park Fire District to reduce fire training water use.	No
3	Implement or Modify Drought Rate Structure or Surcharge	Percentage	5-6%	• Implement Stage 3 drought surcharge.	Yes
3	Other water feature or swimming pool restriction	Percentage	1%	• Permits for construction of new pools shall include a requirement that MPMW water shall not be used to fill new pools.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Percentage	1%	• Vehicles may only be washed at vehicle washing facilities using recycled or recirculating water.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
4	Expand Public Information Campaign	Percentage	1-2%	• Increase public outreach for added restrictions and prohibitions and provide frequent updates of supply conditions. • Increase public outreach to the top 20% water users in each customer category.	No
4	Other	Percentage	0%	• Evaluate staff resources. May include hiring temporary staff or training additional City staff to assist with customer service and enforcement. • Consider increasing fines for multiple violations.	No
4	Decrease Line Flushing	Percentage	1%	• Reevaluate routine flushing of water mains except when necessary to address immediate health or safety concerns.	Yes
4	Implement or Modify Drought Rate Structure or Surcharge	Percentage	5-6%	• Implement Stage 4 drought surcharge.	Yes
4	Landscape - Limit landscape irrigation to specific days	Percentage	19%	• Irrigating outdoor ornamental landscapes or turf with potable water is limited to no more than one (1) day per week on a schedule established by the Director and posted on the City's website, except for hand watering. Water customers may be granted an exception upon review and approval of a Drought Response Plan by the Public Works Director pursuant to such policies and procedures as may be established by the Public Works Director provided that such plan results in an equivalent or greater reduction in water use.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
4	Other - Prohibit use of potable water for construction and dust control	Percentage	0%	• Potable water shall not be used for construction or dust control.	Yes
4	Other	Percentage	1%	• Potable water shall not be used for commercial vehicles that provide street washing, sweeping, or cleaning.	Yes
5	Expand Public Information Campaign	Percentage	1%	• Increase public outreach for added restrictions and prohibitions and communication critical shortage conditions.	No
5	Other	Percentage	0%	• Activate the City's emergency response structure, which may include partial or full Emergency Operations Center activation. • Consider increasing fines for multiple violations.	
5	Increase Water Waste Patrols	Percentage	0%	• Coordinate with law enforcement agencies to address enforcement challenges.	Yes
5	Moratorium or Net Zero Demand Increase on New Connections	Percentage	0%	• Halt installations of new potable water meters (temporary or permanent) or meter upgrades except if a valid, unexpired building permit has been issued for the project; or the project is necessary to protect the public's health, safety, and welfare.	Yes
5	Other	Percentage	0%	• Halt issuing statements of immediate ability to serve or provide potable water service.	Yes
5	Implement or Modify Drought Rate Structure or Surcharge	Percentage	5-6%	• Implement Stage 5 drought surcharge.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
5	Other	Percentage	0%	• Coordinate with CA Dept of Public Health, County Public Health Department and other emergency response agencies regarding water quality and public health issues. • Prepare to coordinate with State (SWRCB, DWR) and County (Department of Emergency Management) for emergency response support and funding. • Set up emergency notification lists for medical/dental facilities, public facilities, large users, food and beverage facilities, and critical businesses. • Prioritize water service for essential uses and critical facilities.	No
5	Other	Percentage	40-50%	• Develop water budgets for all accounts. • Water use shall not exceed water budgets established for each customer.	Yes
5	Landscape - Other landscape restriction or prohibition	Percentage	0%	• Hand watering outdoor ornamental landscapes is only allowed between designated hours, as determined by the Public Works Director. • Existing irrigation systems shall not be expanded.	Yes
5	Landscape - Other landscape restriction or prohibition	Percentage	22-24%	• Turf irrigation is prohibited at all times, including artificial turf.	Yes
6	Expand Public Information Campaign	Percentage	1%	• Issue urgent emergency notifications to all customers using all available channels and provide clear instructions regarding water availability and restrictions.	No
6	Moratorium or Net Zero Demand Increase on New Connections	Percentage	0%	• Halt installations of new potable water meters (temporary or permanent) even if a valid, unexpired building permit has been issued for the project.	Yes

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

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value		
6	Other	Percentage	0%	• Consider increasing fines for multiple violations.	Yes
6	Other	Percentage	50-60%	• Increase water budget reduction requirements.	Yes
6	Implement or Modify Drought Rate Structure or Surcharge	Percentage	5-6%	• Implement Stage 6 drought surcharge.	Yes
6	Other	Percentage	0%	• Implement other short-term emergency actions from the Emergency Response Plan. • Continue to coordinate with State (SWRCB, DWR) and County (Department of Emergency Management) for emergency response support and funding. • Continue to coordinate with emergency response agencies. • Activate emergency response procedures and request mutual aid.	No
6	Landscape - Prohibit all landscape irrigation	Percentage	0%	• Hand watering outdoor ornamental landscapes is prohibited at all times.	Yes

NOTES:

(a) As the demand reduction actions associated with Shortage Level 0 are currently implemented year-round no matter the hydrologic year type, no additional savings are expected.

(b) Actions from a lower stage are assumed to continue during a higher stage unless replaced with a more stringent measure.

(c) Reported demand reduction percentages reflect standalone estimates for each action. These estimates are not strictly additive because multiple actions may target the same end uses or customer behaviors, and combined implementation may result in overlapping or reinforcing effects. For example, irrigation restrictions and water allocation programs both reduce outdoor water use and may achieve similar savings when implemented together, whereas public information and enforcement actions may improve compliance of other water use restrictions.

(d) Actions with 0% savings are not anticipated to reduced demand by 0% but instead are unable to be quantified.

9 DEMAND MANAGEMENT MEASURES

☑ ***CWC §10631 (e)***

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

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

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

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

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

(vi) Water conservation program coordination and staffing support.

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

This section provides an overview of MPMW's current and planned DMMs, which include specific types and groupings of water conservation measures typically implemented by water suppliers. MPMW administers several of its DMMs through participation in BAWSCA's Regional Water Conservation Program. The following sections describe BAWSCA's Regional Water Conservation Program and the nature and extent of the specific DMMs implemented by MPMW.

9.1 BAWSCA Regional Water Conservation Program

MPMW administers several of its DMMs through BAWSCA's Regional Water Conservation Program. The following section describes BAWSCA's Regional Water Conservation Program and the nature and extent of the specific DMMs implemented by MPMW.

BAWSCA manages a Regional Water Conservation Program comprised of several programs and initiatives that support and augment Member Agencies' and customers' efforts to use water more efficiently. These efforts extend limited water supplies that are available to meet both current and future water needs; increase drought reliability of the existing water system; and save money for both the Member Agencies and their customers.

The implementation of the Regional Water Conservation Program builds upon the Demand Study (completed in December of 2025). These efforts include both Core Programs (implemented regionally throughout the BAWSCA service area) and Subscription Programs (funded by individual Member Agencies that elect to participate and implement them within their respective service areas).

BAWSCA's Core Conservation Programs include organizing classes focused on sustainable and water-efficient landscape design, assistance related to automated metering infrastructure, and other associated programs that work to promote smart water use and practices. BAWSCA's Subscription Programs include numerous rebate programs, educational programs that can be offered to area

schools, technical assistance to Member Agencies in evaluating water loss, and programs that use data analytics to provide customized water-saving recommendations to customers. In total, BAWSCA offers 24 programs to its Member Agencies and that number continues to grow over time.

Each fiscal year, BAWSCA prepares an Annual Water Conservation Report that documents several conservation program metrics exemplifying the benefits of the Regional Water Conservation Program to all 26 of BAWSCA Member Agencies. Additionally, the report highlights how all 26 Member Agencies participate in one or more of the Subscription Programs offered by BAWSCA, such as rebates, water loss management and large landscape audits. The Demand Study indicates that through a combination of active and passive conservation, 16.14 mgd will be conserved by BAWSCA's Member Agencies by 2050.

The Core Programs provided as a part of the Regional Water Conservation Program include conservation measures that benefit from regional implementation and provide overall regional benefit and are funded through the annual BAWSCA budget. The Subscription Programs are conservation measures that individual agencies must elect to participate in and whose benefits are primarily realized within individual water agency service areas. As such, the Subscription Programs are funded by individual member agencies, based on their participation level.

Although the BAWSCA Regional Water Conservation Program was designed and available at a regional level, most of the implementation of the individual programs within the MPMW service area is done by MPMW staff. MPMW is actively participating in the following Subscription Programs.

- EarthCapades School assembly Program
- Water Conservation School Education Program
- Large Landscape Program
- Lawn Be Gone! Rebate Program
- Lawn Be Gone! Inspection Services Program
- Rain Barrel Rebate Program
- Smart Irrigation Controller Program
- Water Loss Management Program
- Residential Self-Audit Toolkit Program
- WaterSense Fixtures Bulk Order Program
- Irrigation Hardware Rebate Program

MPMW's implementation, and participation in, the Core and Subscription Programs are described in detail below, as they relate to MPMW's implementation of the DMMs.

9.2 Agency Water Conservation

MPMW implements all of the DMMs, as described below.

9.2.1 DMM 1 – Water Waste Prevention Ordinances

As discussed in the WSCP, MPMW has the authority within Section 7.35 of the City's Municipal Code to require water rationing and conservation and to enforce penalties. MPMW's current WSCP stage and water waste prohibitions in effect were adopted in 2021 in Resolution 6630.

Prohibitions to prevent water waste are included as the Non-Drought Stage of MPMW's 2025 WSCP, and remain in place at all times, irrespective of water supply conditions. The Non-Drought Stage includes the following water waste prohibitions:

- Hoses must be equipped with a shut-off valve for washing vehicles, sidewalk, walkways, or buildings.
- Ornamental foundations shall use only re-circulated or recycled water.
- Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns.
- Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces.
- Potable water cannot be applied to outdoor landscapes during and up to 48 hours after measurable rainfall.
- Potable water shall not be used to irrigate ornamental turf on public street medians.
- Hotels and motels shall provide guests an option whether to launder towels and linens daily. Hotels and motels shall prominently display notice of this option in each bathroom using clear and easily understood language.
- Restaurants and other food service operations shall serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency.
- Broken or defective plumbing and irrigation systems must be repaired or replaced within a reasonable period.
- Recreational water features shall be covered when not in use.
- Single-pass cooling systems on new construction shall not be allowed.

In subsequent stages of the WSCP, the water waste prohibitions become increasingly restrictive to respond to water shortages. MPMW also promotes a program by the State that encourages residents to report incidents of water waste at savewater.ca.gov.

9.2.2 DMM 2 – Metering

☑ ***CWC §526 (a)***

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

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

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

☑ ***CWC §527 (a)***

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

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

MPMW has water meters on each water service connection, with the exception of fire services. All of the meters within the MPMW service area are read at least on a monthly basis. Some non-residential and multi-family customers also have separate irrigation meters to monitor water use for landscape irrigation separately from indoor uses. The City's updated Water Efficient Landscaping Ordinance (effective February 2016) requires non-residential projects to install a separate irrigation meter if landscaped areas meet specific size thresholds.

Per the City's 2020-2025 five-year CIP, MPMW began installing AMI in 2024. As of the end of 2025, over 90% of meters have been replaced or retrofit to AMI. Implementation of AMI allows MPMW to automate meter reading and provide real-time water use data to MPMW staff and customers that can be used to aggressively target leaks and atypically high water use during normal years and periods of water shortage. MPMW also intends to provide a customer portal for accounts with AMI meters. The system can better identify water waste and improve customer service.

9.2.3 DMM 3 – Conservation Pricing

As of May 2026, MPMW's current water rate structure for all customers includes a monthly fixed meter charge based on meter size, plus a capital surcharge and a tiered water consumption charge based on water usage.[18] However, the City has initiated a rate study that will propose water rates effective July 1, 2026. The proposed water consumption charges for all customer classes will change from tiered rates to uniform rates for all. MPMW has scheduled a water rate public hearing for June 9, 2026. If the proposed rates are adopted, they will go into effect on July 1, 2026.

In addition, MPMW's water rate structure also includes drought surcharge rates, which are applied temporarily upon implementation of the WSCP and are designed to recover drought-related expenditures and lost revenue. The drought surcharge rates increase according to each stage of the WSCP as declared by the City Council.

[18] Current City of Menlo Park five-year water rate structure including drought surcharge rates are located online at http://www.menlopark.gov/waterrates.

9.2.4 DMM 4 – Public Education and Outreach

MPMW implements a number of public education and outreach initiatives with support from the BAWSCA Regional Water Conservation Program. Specific initiatives include:

- EarthCapades School Assembly Program: MPMW facilitates the school assemblies performed by EarthCapades at schools within its service area. The EarthCapades' performances combine age-appropriate state science standards with circus skills, juggling, music, storytelling, comedy, and audience participation to teach environmental awareness, water science, and conservation. EarthCapades' assemblies are designed to include local water source and watershed education and specific information pertaining to the MPMW service area. MPMW and BAWSCA provide specific information to EarthCapades regarding the SFPUC RWS and other topics (e.g., recycled water). EarthCapades integrates this information into the specific scripts used for assemblies conducted within the MPMW service area.

- Water Conservation School Education Program: The water conservation school education program, formerly known as the Water-Wise school education program, is provided by AM Conservation Group, Inc. (a contractor to BAWSCA) to 5th grade students within the MPMW service area. AM Conservation Group, Inc. works directly with teachers and schools to provide them with turnkey, in-classroom water conservation curriculum and indoor and outdoor water conservation kits (i.e., the water-Wise Kits). The Water-Wise curriculum has been designed to be implemented by teachers, and easily understood and taken back into the home by the students. The Water-Wise Kits include water saving devices that can be installed at the student's homes (e.g., low-flow showerheads and faucet aerators) and a water audit that the students can perform with their parents.

  The students are provided with the motivation, information, and tools they need to perform an in-home water audit. The information and material provided to the teachers and students also includes methods that can be used to quantify the water savings as a result of installing the equipment contained in the kit and performing the recommended, water-conserving actions. After the student performs the audit and installs the water and energy saving devices, affidavits signed by the parents are returned to the school, collected by the teacher, and forwarded to AM Conservation Group, Inc. for documentation of measure implementation and the estimated water savings. AM Conservation Group, Inc. then prepares a final report for distribution to MPMW.

  Additionally, a reward system is available for classrooms to opt into that rewards the class with a $100 cash prize if the surveys that are administered to students after the in-home audit receive at least an 80% response rate.

- Water efficient landscape education classes: MPMW hosts a series of Water-Efficient Landscape Education Classes developed by BAWSCA that are free to the public and are designed to introduce homeowners and landscape professionals to the concepts of sustainable landscape design. The classes focus on creating beautiful, water-efficient gardens as an alternative to lawns. Examples of specific class topics include "Lawn Replacement 101", "Drought Tolerant Plants", and "From Graywater to Green Garden", among others. MPMW began implementing this program again in 2023 and hosts 2-3 classes every Spring and Fall. MPMW encourages water conservation and markets its rebate programs and water-saving fixture giveaways through the landscape education classes.

- Hosting information booths at fairs and public events: The City sets up information tables with flyers and water-saving WaterSense fixture giveaways at both City libraries for six months out of

the year. Additionally, tables are set up at large City-sponsored public events to distribute information regarding MPMW's water conservation programs..

- Informative website, online tools, or social media: The City maintains pages on its website (www.menlopark.gov/waterconservation) that are dedicated to its water conservation program. The website provides information regarding its rebate programs, water-saving fixture giveaways, drought regulations, conservation tips and interactive tools such as the consumption calculator. MPMW also posts outreach materials on its NextDoor, Instagram, Twitter and Facebook accounts.
- Media campaigns and other outreach: MPMW encourages water conservation and markets its rebate programs and water-savings fixture giveaways through direct mail, online newsletters, local newspapers, yard signs, City owned television monitor slides, posting flyers at City owned facilities and water billing/ solid waste inserts.

9.2.5 DMM 5 – Programs to Assess and Manage Distribution System Real Loss

Distribution system water loss was estimated to be approximately 6% of total water demand between 2021 and 2024. In 2024, MPMW hired a consultant to conduct a comprehensive acoustic leak detection audit. During field work, the technicians surveyed MPMW's entire active distribution system. If a leak was detected, a comprehensive acoustic evaluation was performed to pinpoint the location of the leak. A total of nine suspected leaks were detected with a collective estimated flow rate of 9.5 gpm. These locations were investigated and leaks, if discovered, were resolved.

Per the City's 2020-2025 five-year CIP, MPMW has installed AMI and upgraded over 90% of water meters. The AMI system will help evaluate water use and be instrumental in detecting leaks to mitigate distribution system losses.

9.2.6 DMM 6 – Water Conservation Program Coordination and Staffing Support

Water conservation is currently managed by a Sustainability Specialist with staff resources equating to 0.40 full-time equivalent. Contact information for water conservation staff is listed below:

Phone: 650-330-6750

Email: water@menlopark.gov

MPMW's water conservation program is funded through its water fund. The total water conservation program budget for FY 2025-26 is $202,500, including the cost for participation in the Subscription Programs through BAWSCA's Regional Water Conservation Program.

9.2.7 DMM 7 – Other DMMs

Other DMMs provided by MPMW, in addition to those discussed above, include the following:

- Water-Saving Fixtures Giveaway: MPMW offers its residential customers free water-saving fixtures. MPMW encourages its customers to pick up and utilize the following free water saving fixtures from City Hall:
    - Bathroom aerator – uses 1 gpm
    - Kitchen aerator – uses 1.5 gpm
    - Low-flow shower head - uses 1.5 gpm
    - Toilet leak detection tablets (2 tablets per packet)
    - Water conserving hose nozzles (with shut-off valve)
    - 5-minute shower timers

- Large Landscape Audits: MPMW administers the BAWSCA Large Landscape Audits program to commercial and multi-family residential customers, as described below. Waterfluence, BAWSCA's contractor, implements the program:
    - Landscape Analysis Program: MPMW currently offers a Large Landscape Analysis ($1,400 value) for free to multi-family and commercial accounts. An irrigation expert evaluates landscapes and provides customers with a personalized report on how they can improve water efficiency and save water.
    - Large Landscape Water Budgets: MPMW distributes water budgets to select accounts and has recently targeted irrigation accounts, which include a mix of churches, parks, schools, homeowner associations, and office complexes. However, the program can be applied to any account MPMW chooses. Currently, MPMW provides and tracks water budgets for approximately 100 irrigation accounts. These customers also have access to the Waterfluence portal to track their usage and water budgets.
- Lawn be Gone! Turf Replacement Rebates and Lawn Be Gone! Inspection Services Program: MPMW administers the BAWSCA Lawn Be Gone! turf replacement rebate program for its residential and commercial customers. MPMW offers its customers $3 per square foot of turf removed and replaced with drought tolerants plants or permeable surfaces. MPMW previously capped the rebate at $1,400 per account, but the cap was removed in June 2014. In order to qualify for participation in the Lawn Be Gone! Program, the new landscape must include at least 50% live plant coverage, with the difference installing permeable hardscape.All plants must be low water use plants from the BAWSCA-approved plant list. Global Sun Landscape, BAWSCA's contractor, performs the inspection services for this program. A pre- and post-inspection is required for the rebate to be approved. This program offers MPMW's customers a financial incentive to reduce their outdoor water use and create permanent and lasting water savings. Also, because eligible landscapes must include front yards and areas visible to the public, this program has an educational and public-outreach element that provides free yard signs with information about lawn be gone to program participants (i.e., demonstrating to the wider public that low water use landscaping can be an attractive alternative to lawns and encouraging conversations about responsible water use among neighbors).
- Rain Barrel Rebate Program: MPMW administers the BAWSCA Rain Barrel Rebate program in partnership with the San Mateo Countywide Water Pollution Prevention Program (a program of the City/County Association of Governments of San Mateo County). MPMW offers rebates of up to $200 for the purchase and installation of qualifying rain barrels and cisterns. This program is only offered to residential customers. BAWSCA and MPMW review installation images and receipt documentation and approve applications. Rain barrels are a low-cost system that allow customers to supplement their water supply with a sustainable source and help preserve local watersheds by retaining rainfall.
- Smart Irrigation Controller Program: This program works with Rachio, BAWSCA's contractor, to offer residential customers a Rachio 3 Smart Sprinkler Controller at a discounted price. Residential customers can receive 15% off of the purchase of a Rachio Smart Irrigation Controller by purchasing through the link www.rachio.com/redeem. The Rachio 3 Smart Sprinkler Controller allows users to save up to 20% or more on their annual outdoor water use. The controller allows residents to check and manage watering from anywhere with their smartphone by creating tailored schedules and make automatic weather adjustments.
- Irrigation Hardware Rebate Program: This program provides rebates to MPMW customers for the purchase of efficient irrigation hardware to enhance irrigation efficiency and reduce water use.

The program offers rebates up to $5 for high-efficiency sprinkler nozzles, $10 for spray bodies with pressure regulation and $30 for large rotors.

- Smart Irrigation Project: MPMW is currently implementing its Smart Irrigation Project that will upgrade the aging irrigation controllers to an advanced wireless smart irrigation system. The proposed controllers will include new water saving technologies and irrigation software. The units will include leak detection technologies to promptly detect water leaks and moisture sensors which automatically adjust the amount of water to be applied based on soil saturation. Each controller will be synced to irrigation software compatible with City issued mobile devices thereby allowing staff to schedule and address maintenance needs efficiently. These features are estimated to conserve water consumption by up to 30% upon project completion.

9.3 Implementation over the Past Five Years

Table 9-1 summarizes the DMMs implemented by MPMW and the extent of implementation (e.g., number of kits, number of rebates) each of the programs listed under DMM-4 and DMM-7 each year between 2021 and 2025. Through implementation of the DMMs, MPMW has been able to significantly reduce water demands in its service area and help its customers to achieve water and cost savings.

9.4 Implementation to Achieve Water Use Targets and Urban Water Use Objectives

All the DMMs described above contributed to MPMW's compliance with SB X7-7 2020 target GPCD. As described in **Section 5.2**, in July 2024, California enacted the MCCWL regulation implementing SB 606 and AB 1668 to support long-term water conservation and drought resilience. Starting in 2023, CWC §10609 requires that urban retail water suppliers develop UWUOs that are based on specific standards for certain water use sectors.

BAWSCA's 2025 Demand Study developed water demand and conservation projections through 2050 for each member agency. As described in **Section 4.5**, the 2025 Demand Study estimates projected water demands and quantifies passive and active conservation water savings potential. As discussed in **Section 5.2,** the 2025 Demand Study projections estimate that MPMW's water use is expected to be below the UWUO standards. MPMW will need to continuously monitor its service area water demand subject to the UWUO standards and make program changes as necessary to maintain compliance.

Table 9-1 Summary of DMMs and Implementation over the Past Five Years (2021-2025)

DMM Category	Program or Activity	Target Sector	Nature of Implementation	Extent of Implementation
4	School Education Program: EarthCapades Assemblies	SF, MF	School assemblies that teach water science and conservation to students, including local water source and watershed education and specific information pertaining to the MPMW service area. MPMW participates through the BAWSCA Regional Water Conservation Program.	CY 2021: 4 CY 2022: 5 CY 2023: 3 CY 2024: 6 CY 2025: 7
4	Water-Wise School Education Kits and Curriculum	SF, MF	Fifth grade teachers are provided with a water conservation curriculum. Kits are distributed to 5th grade students that enable them to install water saving devices and perform a water audit in their home. MPMW participates through the BAWSCA Regional Water Conservation Program.	CY 2021: 0 CY 2022: 373 CY 2023: 46 CY 2024: 0 CY 2025: 0
4	Water Efficient Landscape Education Classes	SF, MF	Free classes developed by BAWSCA and hosted by MPMW provide information regarding water efficient landscaping and MPMW's water conservation programs. The classes focus on creating beautiful, water-efficient gardens as an alternative to lawns, and include "Lawn Replacement 101," "Drought Tolerant Plants," and "From Graywater to Green Garden," among others. MPMW participates through the BAWSCA Regional Water Conservation Program.	CY 2021: 0 CY 2022: 0 CY 2023: 3 CY 2024: 5 CY 2025: 6
4	Information Booths at Public Events	SF, MF, CII And IRR	At public events, MPMW distributes information and materials to participants regarding its water conservation programs.	CY 2021: 0 events CY 2022: 3 events CY 2023: 5 events CY 2024: 4 events CY 2025: 5 events
4	Other Public Outreach	SF, MF, CII And IRR	MPMW encourages water conservation and markets its rebate programs and water-saving fixture giveaways through newsletters, local newspapers, and water bill inserts. MPMW also maintains water conservation program pages on its website and posts outreach materials on its social media accounts: www.menlopark.gov/waterconservation.	No tracked
7	Free Water-Saving Fixtures	SF, MF	Water-saving fixture kits are available to residential customers at City Hall, and include a bathroom aerator, a kitchen aerator, a low-flow shower head, two (2) toilet leak detection tablets, and water conserving hose nozzles (with shut-off valve).	Not tracked

Table 9-1 Summary of DMMs and Implementation over the Past Five Years (2021-2025) Continued

DMM Category	Program or Activity	Target Sector	Nature of Implementation	Extent of Implementation
7	Landscape Analysis Program	MF, CII	Free landscape analysis surveys (value of $1,400) are offered to commercial and multi-family residential accounts, and provide customers with reports on how to improve landscape water efficiency. MPMW participates through the BAWSCA Regional Water Conservation Program.	CY 2021: 1 participant CY 2022: 1 participant CY 2023: 5 participants CY 2024: 2 participants CY 2025: 1 participant
7	Large Landscape Water Budgets	IRR, SF	MPMW provides and track water budgets for approximately the top 100 irrigation accounts, including churches, parks, schools, HOA's and office complexes.	CY 2021: 96 sites CY 2022: 96 sites CY 2023: 96 sites CY 2024: 96 sites CY 2025: 96 sites
7	Lawn Be Gone! Turf Replacement Rebates	SF, MF, CII	Customers are offered $3 per square foot of turf removed and replaced with water-efficient landscaping. The new landscape must include at least 50% live plant coverage, permeable hardscape, and all plants must be low water use plants from the BAWSCA-approved plant list. The rebate was previously capped at $1,400, but as of 17 June 2014, the rebate cap was removed. MPMW participates through the BAWSCA Regional Water Conservation Program.	CY 2021: 4 accounts CY 2022: 2 accounts CY 2023: 7 accounts CY 2024: 4 accounts CY 2025: 0 accounts
7	Rain Barrel Program	SF, MF	MPMW administers this program in partnership with the San Mateo Countywide Water Pollution Prevention Program (a program of the City/County Association of Governments of San Mateo County). MPMW offers rebates of up to $200 per barrel for the purchase and installation of qualifying rain barrels and cisterns.	CY 2022: 0 rebates CY 2023: 3 rebates CY 2024: 2 rebates CY 2025: 6 rebates
7	Smart Irrigation Controller Rebates	SF	Customers are offered a Rachio 3 Smart Sprinkler Controller at a discounted price which allows users to save 20% or more on their outdoor water use. The controller allows customers to check and manage watering from anywhere with their smartphone, create tailored schedules, and make automatic weather adjustments.	CY 2021: 6 rebates CY 2022: 11 rebates CY 2023: 14 rebates CY 2024: 9 rebates CY 2025: 5 rebates
7	Irrigation Hardware Rebate Program	SF, MF, CII	This program provides rebates to MPMW customers for the purchase of efficient irrigation hardware to enhance irrigation efficiency and reduce water use. The program offers rebates up to $5 for high-efficiency sprinkler nozzles, $10 for spray bodies with pressure regulation and $30 for large rotors.	CY 2022: 0 rebates CY 2023: 3 rebates CY 2024: 2 rebates CY 2025: 6 rebates

10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

☑ ***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. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

This section provides information on a public hearing, the adoption process for the UWMP and WSCP, the adopted UWMP and WSCP submittal process, plan implementation, and the process for amending the adopted UWMP or WSCP for MPMW.

10.1 Inclusion of All 2025 Data

This UWMP includes water use and planning data for the entire calendar year of 2025, per the 2025 UWMP Guidebook.

10.2 Notice of Preparation

☑ ***CWC §10621***

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

☑ ***CWC §10642***

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

☑ ***CGC §6066***

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

Pursuant to CWC §10621(b), on February 18, 2026, MPMW sent a letter to BAWSCA, each BAWSCA member agency, San Mateo County, and other local agencies informing them that MPMW was in the process of updating its UWMP and WSCP and soliciting their input in the update process. A listed of the entities contacted is provided in **Appendix B**. The letter was sent more than 60 days before the public hearing as required by code. A sample outreach letter is included in **Appendix B**.

10.3 Notice of Public Hearing

Prior to adopting the UWMP, MPMW held an in-person and virtual public hearing to present information on its UWMP and WSCP on June 23, 2026 at 6 P.M.

The same relevant entities that were notified of the UWMP and WSCP preparation above were noticed again with the specific date, time, and location of the hearing at least two weeks prior to the public hearing. The notice to the public, as specified in CGC §6066, and letters to relevant agencies can be found in **Appendix C.**

10.3.1 Notice to Cities and Counties

☑ ***CWC §10631 (a)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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.

On MONTH DAY, 2026, MPMW sent a letter to each of the above mentioned entities informing them of the locations the Public Review Draft 2025 UWMP and the updated WSCP would be available for review and welcoming their input and comments on the document. The Public Review Draft 2025 UWMP and the WSCP were available for public review on MPMW's website. The letter also informed the agencies that the UWMP and WSCP public hearing would be occurring at the City Council meeting on June 23, 2026. **Table 10-1** lists the cities and counties that were notified. Copies of these letters are provided in **Appendix C**.

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

City Name	60 Day Notice	Notice of Public Hearing
City of Menlo Park	X	X
See note (a)	X	X
County Name	**60 Day Notice**	**Notice of Public Hearing**
San Mateo County	X	X

NOTE:
(a) See **Appendix B** and **Appendix C** for the full list of cities and agencies that MPMW provided notification to.

10.3.2 Notice to the Public

MPMW issued public notifications soliciting public input during the preparation of 2025 UWMP and the WSCP. On MONTH DAY, 2026 and MONTH DAY, 2026, MPMW published a notice in the *San Francisco Examiner* informing the public that the 2025 UWMP and the WSCP would be available for public review on MPMW's website, consistent with requirements of CGC §6066. The notice also provided instructions on how to view the UWMP and WSCP prior to the hearing, the revision schedule, contact information of the UWMP and WSCP preparer, and informed the public that the 2025 UWMP and WSCP public hearing would be held at the City Council meeting on June 23, 2026. Copies of the newspaper announcements are included in **Appendix C**.

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.

☑ ***CGC §7291***

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

As described above, MPMW informed the public and the appropriate agencies of (1) its intent to prepare a UWMP and the associated WSCP, (2) where the UWMP and WSCP were available for public review, and (3) when the public hearing regarding the UWMP and WSCP would be held. All notifications were completed in compliance with the stipulations of CGC §6066.

This UWMP was adopted by Resolution No. XXX by the City Council during its June 23, 2026 meeting. The WSCP included as **Appendix E** was adopted by Resolution No. XXX during the same meeting. Copies of the resolutions are included in **Appendix G**.

10.5 Plan Submittal

☑ ***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.

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

☑ ***CWC §10635***

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

☑ ***CWC §10644***

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

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

☑ ***CWC §10645***

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

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

This UWMP and WSCP were submitted to DWR within 30 days of adoption and by the July 1, 2026, deadline. The submittal was done electronically through Water Use Efficiency Data Portal, an online submittal tool. The adopted UWMP and WSCP were also sent to the California State Library and to the cities and counties listed in **Table 10-1** no later than 30 days after adoption.

10.6 Public Availability

A copy of the adopted 2025 UWMP and associated WSCP will be available for public review in City Hall during normal business hours and on MPMW's website within 30 days of filing the UWMP with DWR.

10.7 Amending an Adopted UWMP or Water Shortage Contingency Plan

☑ ***CWC §10621***

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

☑ ***CWC §10644***

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

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

If the UWMP or WSCP are amended, each of the steps for notification, public hearing, adoption and submittal will also be followed for the amended document.

11 REFERENCES

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Appendix A: UWMP Completed Checklist

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and overview	Pages LD-1 to LD-3
x	x	Chapter 1	10630.5	Each plan shall include a simple description of the Supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter.	Plan preparation	Pages LD-1 to LD-3
x	x	Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	Plan preparation	Page 2-1
x	N/A	Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	Plan preparation	Page 2-1 and DWR Table 2-1
x	x	Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	Plan preparation	Page 2-2 and DWR Table 2-2
x	x	Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	Plan preparation	Page 2-2 and DWR Table 2-3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan preparation	Pages 2-4 and 2-5, 10-2
x	x	Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan preparation	Page 1-3, 2-3 and 2-4, 10-1
x	n/a	Section 2.4.1	10631(h)	Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source.	Plan preparation	Pages 2-3 and 2-4, 4-16 and DWR Table 2-4
	x	Section 2.4.1	10631(h)	Wholesale Suppliers will provide their Suppliers with identification and quantification of the existing and planned sources of water available from the Wholesale Supplier to the Supplier during various water year types.	Plan preparation	N/A
x	x	Chapter 3.0	10631(a)	Describe the Supplier service area.	System description	Pages 3-1 to 3-2
x	x	Section 3.3	10631(a)	Describe the climate of the Supplier's service area.	System description	Pages 3-3 to 3-5
x	x	Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	System description	Pages 3-6 to 3-7 and DWR Table 3-1

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier's water management planning.	System description	Pages 3-7 to 3-9
x	x	Section 3.5	10631(a)	Describe the land uses within the service area… include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area.	System description and baselines	Page 3-10
	Optional	Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System water use	Pages 4-2 to 4-5, 4-9 to 4-12, DWR Table 4-1 and DWR Table 4-2
x	Optional	Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	System water use	Page 4-6 to 4-8 and DWR Table 4-5
x	N/A	Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	System water use	Pages 4-6 to 4-8 and DWR Table 4-6
x	N/A	Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the Supplier.	System water use	Page 4-14 and DWR Table 4-3
x	N/A	Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System water use	Pages 4-12 to 4-15 and DWR Table 4-3
x	N/A	Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System water use	Pages 4-12 to 4-15 and DWR Table 4-3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	N/A	Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall… Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.	System water use	Pages 4-12 to 4-15 and DWR Table 4-3
x	x	Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System water use	Page 4-15
	x	Section 5.1	10608.36	Wholesale Suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their Retail Suppliers achieve targeted water use reductions.	Baselines and targets	N/A
x	N/A	Section 5.2	10608.4	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	Baselines and targets	Page 5-1 and DWR Table 5-1

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System supplies	Pages 6-1 to 6-26
x	x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	System supplies	Pages 6-25 to 6-29 and 7-1 to 7-15
x	x	Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	Water supplies and recycled water	Pages 6-7 to 6-11 and DWR Table 6-1
x	x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System supplies	Pages 6-9 to 6-10
x	x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System supplies	Pages 6-8 to 6-9

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump.	System supplies	N/A
x	x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins… (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin…	Water supplies and recycled water	Pages 6-8 to 6-9
x	x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins… describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	Water supplies and recycled water	Pages 6-9 to 6-10
x	x	Section 6.2.2.	10631(b)(4)(C)	If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	System supplies	Pages 6-7 to 6-10
x	x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System supplies	Pages 6-7 to 6-10
x	x	Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	System supplies	6-25 to 6-26, DWR Table 6-8 and DWR Table 6-9
x	x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System supplies	Pages 6-21 to 6-22

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	N/A	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods.	System supplies (recycled water)	Pages 6-13 to 6-15 and DWR Table 6-2
x	x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System supplies (recycled water)	Pages 6-14 to 6-16 and DWR Table 6-3
x	x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	System supplies (recycled water)	Pages 6-17 to 6-21 and DWR Table 6-4
x	x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System supplies (recycled water)	Pages 6-17 to 6-19 and DWR Table 6-4
x	x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected.	System supplies (recycled water)	Pages 6-17 to 6-21, DWR Table 6-4 and DWR Table 6-5
x	x	Section 6.2.5	10633(f)	Describe the actions that may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System supplies (recycled water)	Pages 6-20 to 6-21 and DWR Table 6-6
x	x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	System supplies (recycled water)	Pages 6-20 to 6-21

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System supplies	Page 6-21 and DWR Table 6-7
x	x	Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years.	System supplies	Pages 6-22 to 6-24, 7-17 to 7-21 and DWR Table 6-7
x	x	Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain.	System suppliers, energy intensity	Pages 6-30 to 6-31 and DWR Table O-1B
x	N/A	Section 7.1	10634	Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability.	Water supply reliability assessment	Pages 7-6 to 7-7
x	x	Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years.	Water supply reliability assessment	Pages 7-8 to 7-15, DWR Table 7-1, DWR Table 7-2, DWR Table 7-3, and DWR Table 7-4
x	x	Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water supply reliability assessment	Pages 7-17 to 7-21

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water supply reliability assessment	Pages 7-22 to 7-24 and DWR Table 7-5
x	x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive years.	Water supply reliability assessment	Page 7-22
x	x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water supply reliability assessment	Pages 7-22 to 7-23
x	x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period.	Water supply reliability assessment	Pages 7-23 to 7-24 and DWR Table 7-5
x	x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water supply reliability assessment	Pages 6-27 to 6-29
x	x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water shortage contingency planning	Appendix E
x	x	Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	Water shortage contingency planning	Appendix E

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability.	Water shortage contingency planning	Appendix E
x	x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the Supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water shortage contingency planning	Appendix E
x	x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water shortage contingency planning	Appendix E and DWR Table 8-1
x	x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories.	Water shortage contingency planning	Appendix E, Page 8-1, and DWR Table 8-1
x	x	Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water shortage contingency planning	Appendix E, Page 8-2, and DWR Table 8-2
x	x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water shortage contingency planning	Appendix E, Pages 8-3 to 8-10, and DWR Table 8-3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water shortage contingency planning	Appendix E, Page 8-2, DWR Table 8-2 and DWR Table 8-3
x	x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions.	Water shortage contingency planning	Appendix E, Pages 8-3 to 8-10, and DWR Table 8-3
x	x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water shortage contingency planning	Appendix E, Pages 8-2 to 8-10, DWR Table 8-2 and DWR Table 8-3
x	x	Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	Water shortage contingency plan	Appendix E
x	x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water shortage contingency planning	Appendix E
x	x	Section 8.5	10632(a)(5)(B), 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water shortage contingency planning	Appendix E
x	N/A	Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water shortage contingency planning	Appendix E
x	x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	Water shortage contingency planning	Appendix E

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. *Water Shortage Emergencies* .	Water shortage contingency planning	Appendix E
x	x	Section 8.7	10632(a)(7)(C)	Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water shortage contingency planning	Appendix E
x	x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	Appendix E
x	x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	Appendix E
x	N/A	Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, *Excessive Residential Water Use During Drought* .	Water shortage contingency planning	Appendix E
x	N/A	Section 8.9	10632(a)(9)	Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water shortage contingency planning	Appendix E

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water shortage contingency planning	Appendix E
x	N/A	Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water shortage contingency planning	Appendix E
x	x	Section 8.12	10632(c)	Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan.	Water shortage contingency planning	Appendix E
x	N/A	Sections 9.1	10631(e)(1)	Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand management measures	Pages 9-1 to 9-10
N/A	x	Sections 9.2	10631(e)(2)	Wholesale Suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and Supplier assistance program.	Demand management measures	N/A
x	n/a	Chapter 10	10608.26(a)	Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan adoption, submittal, and implementation	Pages 10-2 to 10-3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan.	Plan adoption, submittal, and implementation	Page 10-2 and DWR Table 10-1
x	x	Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 2026.	Plan adoption, submittal, and implementation	Pages 10-3 to 10-4
x	x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP.	Plan adoption, submittal, and implementation	Pages 10-1 to 10-4, Appendix B and Appendix C
x	x	Section 10.2.2	10642	The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water.	Plan adoption, submittal, and implementation	Page 10-2 and DWR Table 10-1
x	x	Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	Plan adoption, submittal, and implementation	Page 10-4, Appendix G
x	x	Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	Plan adoption, submittal, and implementation	Page 10-4
x	x	Section 10.4	10644(a)(1)	Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption.	Plan adoption, submittal, and implementation	Page 10-4

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location
x	x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically.	Plan adoption, submittal, and implementation	Page 10-4
x	x	Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	Plan adoption, submittal, and implementation	Page 10-5
x	x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	Page 10-4
x	x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	Page 10-4
x	x	Section 10.6	10621(c)	If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan adoption, submittal, and implementation	N/A

Appendix B: UWMP Agency Notification Letter

NOTICE OF PREPARATION DISTRIBUTION LIST

Alameda County Water District

Bay Area Water Supply and Conservation Agency

California Water Service Company

City of Brisbane / Guadalupe Valley Municipal Improvement District

City of Burlingame

City of Daly City

City of East Palo Alto

City of Foster City / Estero Municipal Improvement District

City of Hayward

City of Millbrae

City of Milpitas

City of Mountain View

City of Palo Alto

City of Redwood City

City of San Bruno

City of Santa Clara

City of Sunnyvale

Coastside County Water District

Menlo Park Fire Protection District

Mid-Peninsula Water District

North Coast County Water District

Purissima Hills Water District

San Jose Municipal Water System

San Mateo County

Santa Clara Valley Water District

Stanford University

Town of Hillsborough

Westborough Water District

West Bay Sanitary District

From: Scott Jaw
Sent: Wednesday, February 18, 2026 10:21 AM
To: 'Jonathan.Wunderlich@acwd.com'; 'laura.hidas@acwd.com'; 'mbozorginia@brisbaneca.org'; 'jflanagan@ci.brisbane.ca.us'; 'kokada@burlingame.org'; 'tmcauliffe@burlingame.org'; 'swagner@calwater.com'; 'mbolzowski@calwater.com'; 'dsmithson@calwater.com'; 'mrogren@coastsidewater.org'; 'cbrennan@coastsidewater.org'; 'gkrauss@dalycity.org'; 'jcosgrove@dalycity.org'; 'mvining@cityofepa.org'; 'hjaved@cityofepa.org'; 'zdanish@fostercity.org'; 'ycappello@fostercity.org'; 'alex.ameri@hayward-ca.gov'; 'cheryl.munoz@hayward-ca.gov'; 'pwillis@hillsborough.net'; 'ecooney@hillsborough.net'; 'kwuelfing@midpeninsulawater.org'; 'SScheidt@midpeninsulawater.org'; 'ccentis@ci.millbrae.ca.us'; 'HRuiz@ci.millbrae.ca.us'; 'emarshall@milpitas.gov'; 'Lisa.Au@mountainview.gov'; 'elizabeth.flegel@mountainview.gov'; 'acarr@nccwd.com'; 'trudock@purissimawater.org'; 'coryb@purissimawater.org'; 'watermanager@redwoodcity.org'; 'jchapel@redwoodcity.org'; 'SSalazar@sanbruno.ca.gov'; 'DBosch@sanbruno.ca.gov'; 'Jeffrey.provenzano@sanjoseca.gov'; 'Nicole.Harvie@sanjoseca.gov'; 'JRamirez@SantaClaraca.gov'; 'ltam@santaclaraca.gov'; 'envhealth@smcgov.org'; 'egdiaz@smcgov.org'; 'info@papmwc.org'; 'juliann@stanford.edu'; 'Bmanning@stanford.edu'; 'wcheong@sunnyvale.ca.gov'; 'rchinnakotla@sunnyvale.ca.gov'; 'VGin@valleywater.org'; 'KStruve@valleywater.org'; 'JWu@valleywater.org'; 'DSausele@valleywater.org'; 'pmairena@westboroughwater.org'; 'milpitasworks@ci.milpitas.ca.gov'; 'adriana.artola@paloalto.gov'; 'lisa.bilir@paloalto.gov'; 'tsmegal@bawsca.org'; 'sramirez@westbaysanitary.org'; 'jbeyer@westbaysanitary.org'; 'oconnorwater@gmail.com'; 'fpb@menlofire.gov'
Cc: Azalea A. Mitch; Andrea Mosqueda; Michael G. Fu
Subject: Notice of Preparation of the City of Menlo Park's 2025 Urban Water Management Plan

Notice of Preparation of the City of Menlo Park's 2025 Urban Water Management Plan and Water Shortage Contingency Plan

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the City of Menlo Park's, Menlo Park Municipal Water (City) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The City is currently reviewing its existing UWMP and WSCP, which were updated in 2021, and considering revisions to the documents. The UWMP integrates land use, water needs and supply, and demand management measures to document the City's ability to provide a reliable supply of water to its customers. The associated WSCP considers dry-year water supply planning, including strategies to address six levels of water supply shortage conditions. The updated UWMP and WSCP are due by July 1, 2026. We invite your agency's participation in this revision process.

The City coordinates with its wholesale water supplier, nearby water agencies, relevant public entities, and other interested parties in preparing the UWMP and WSCP. A draft of the 2025 UWMP and WSCP will be made available for public review, and a public hearing will be scheduled in 2026. If you would like more information regarding the 2025 UWMP and WSCP, and the schedule for updating these documents, or if you would like to participate in the preparation of the 2025 UWMP and WSCP, please contact Scott Jaw at:

City of Menlo Park, Menlo Park Municipal Water
701 Laurel Street,
Menlo Park, CA 94025
Phone: (650) 330-6694
Email: scjaw@menlopark.gov

Sincerely,

Scott Jaw
Associate Engineer

Appendix C: UWMP Public Hearing Notification Letter

Appendix D: SFPUC and BAWSCA Supply Reliability Letters and Common Language for 2025 UWMPs

March 11, 2026

TO: BAWSCA Member Agencies

FROM: Danielle McPherson, Senior Water Resources Specialist
Tom Francis, Water Resources Manager

SUBJECT: San Francisco Regional Water System Supply Reliability for 2025 Urban Water Management Plans

On March 11, 2026, the San Francisco Public Utilities Commission (SFPUC) provided a letter with analysis on the Regional Water System (RWS) supply reliability for use in your 2025 Urban Water Management Plans (UWMPs). This memorandum transmits that letter (Attachment A) and provides additional context regarding individual agency cutbacks outlined in Attachment B.

Regulatory and Demand Scenarios
To account for the ongoing uncertainty surrounding the State Water Resources Control Board's Bay-Delta Plan Amendment, the SFPUC modeled water supply reliability under two regulatory scenarios and two demand scenarios:

- **Regulatory Scenarios:**
  1. With implementation of the Bay-Delta Plan Amendment.
  2. Without implementation of the Bay-Delta Plan Amendment.

- **Demand Scenarios:**
  1. Projected SFPUC retail demand and Wholesale Customer purchases for 2030-2050.
  2. Projected SFPUC retail demand for 2050 and the Wholesale Customer Supply Assurance of 184 MGD.

Key Findings and Impacts on Allocation
Attachment B provides specific cutbacks for each agency based on Demand Scenario 1 (projected RWS demand). Please note the following critical impacts on how these shortages are managed:

- **Extreme Shortages Under Bay-Delta Implementation:** Under the "With Bay-Delta Plan" scenario, system-wide cutbacks exceed the SFPUC's Level of Service Goal to limit system-wide cutbacks to 20% or less. In these instances, the Water Supply Agreement (WSA) allows for negotiated allocations between

retail and Wholesale Customers collectively. In the absence of a negotiated agreement, SFPUC has applied the Tier 1 split for a system-wide cutback up to 20%.

- **Application of the Tier 2 Plan:** The Tier 2 Drought Response Implementation Plan only applies during system-wide shortages of 20% or less. Because the "With Bay-Delta Plan" scenario results in wholesale cutbacks ranging from 31% to 48%, the Tier 2 Plan cannot be applied.
- **BAWSCA Recommendation:** In the absence of a negotiated approach for allocating RWS supply among the Wholesale Customers during shortages exceeding 20%, BAWSCA suggests that agencies apply these cutbacks equally across all agencies for their 2025 UWMPs.
- **"Without Bay-Delta" Scenario:** The SFPUC analyses do not anticipate any cutbacks during the required five-year drought sequence under the "Without Bay-Delta Plan" scenario.

Guidance for 2025 UWMP Reporting

For the 2020 UWMPs, most member agencies utilized the "With Bay-Delta Plan" scenario for their standard tables and included the "Without Bay-Delta Plan" scenario in supplemental tables or appendices. BAWSCA understands that the SFPUC intends to follow this same approach for its own 2025 UWMP.

Note on Future Modeling (HRL Program)

While the SFPUC previously indicated it would model the Tuolumne River Healthy Rivers and Landscapes Program (HRL), they have not provided that modeling at this time due to significant implementation uncertainties.

Enclosed: Attachment A – 2025 UWMP Supply Reliability Letter_2026-03-11
Attachment B – 2025 UWMP Wholesale Customer Dry Year Allocations

cc: Tom Smegal
Allison Schutte

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

525 Golden Gate Ave
San Francisco, CA 94102
(415) 554-3155
sfpuc.gov

March 11, 2026

Danielle McPherson
Senior Water Resources Specialist
Bay Area Water Supply and Conservation Agency
155 Bovet Road, Suite 650
San Mateo, CA 94402

Dear Ms. McPherson,

This letter contains the supply reliability of the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) that the SFPUC has prepared for the 2025 Urban Water Management Plan (UWMP), which the Wholesale Customers may also use in their respective 2025 UWMPs. The SFPUC has assessed the RWS's supply reliability under the following planning scenarios:

1. Projected supply reliability for years 2030 through 2050, assuming total demand is equivalent to the sum of the projected retail and wholesale demands on the RWS, which includes Wholesale Customer purchase projections provided to the SFPUC by BAWSCA on March 4, 2026 (refer to Table 1 below).
2. Projected supply reliability for 2050, assuming total demand is equivalent to the sum of the projected retail demands on the RWS and the Wholesale Customers' Supply Assurance of 184 MGD.
3. Under each of the above demand conditions, projected supply reliability for the following scenarios: (a) with implementation of the 2018 amendments to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan Amendment) and (b) without implementation of the Bay-Delta Plan Amendment.

Table 1. Retail and Wholesale RWS Demand Assumptions Used for Supply Reliability Modeling (MGD)

	2025[1]	2030	2035	2040	2045	2050
Retail	61.1	62.7	61.2	61.9	64.0	66.7
Wholesale[2]	130.1	133.9	136.3	140.6	144.1	148.4
Total	**191.2**	**196.6**	**197.5**	**202.5**	**208.1**	**215.1**

[1] 2025 demands are from the FY 2024-25 Table J-1 water use calculations, prepared pursuant to the Water Supply Agreement between the SFPUC and the Wholesale Customers.

[2] 2030 through 2050 Wholesale Customer purchase projections were provided to the SFPUC by BAWSCA on March 4, 2026, and include demands for the cities of San Jose and Santa Clara.

The total amount of water the SFPUC can deliver to the Retail and Wholesale Customers from the RWS depends on several factors, including (1) the amount of water that is available to the SFPUC from natural runoff, (2) the amount of water in reservoir storage, and (3) the amount of water that the SFPUC releases from the RWS for purposes other than customer deliveries (e.g., instream flow releases below RWS reservoirs). For planning purposes, the SFPUC “average year” or “normal year” is based on historical hydrology under conditions that allow the RWS reservoirs to be filled over the course of the snowmelt season, allowing full deliveries to customers. For “dry-year” supply scenarios, the SFPUC plans its water deliveries using a water-supply planning methodology with reference to a simulated 8.5-year design drought.

In each demand scenario for 2030 through 2050, the SFPUC estimated RWS deliveries using the standard SFPUC procedure, which includes adding increased levels of rationing as needed in dry years to balance the demands on the RWS with available water supply. The five consecutive dry-year sequence shown in the tables below represent years 2 through 6 of the design drought. The SFPUC chose this sequence because year 2 is the first year in which system-wide water use reductions could take effect, as the design drought sequence generally begins year 1 with full reservoirs. All simulations that the SFPUC has prepared for its 2025 UWMP have increased levels of rationing in the final years of the design drought sequence. The SFPUC has presented the results in the standardized format prescribed by DWR.

Assumptions about the status of the dry-year water supply projects included in the SFPUC’s Water System Improvement Program (WSIP) are provided below in Table 2 titled “WSIP Project Assumptions for RWS Supply Modeling.” The table reflects instream flow requirements at San Mateo and Alameda Creeks,

as described in the UWMP "common language" that the SFPUC provided to BAWSCA and the Wholesale Customers separately from this letter.

The SFPUC utilized the Water Shortage Allocation Plan (WSAP) that is incorporated in the Water Supply Agreement between the SFPUC and the Wholesale Customers to allocate the RWS supply available during dry years between the Retail Customers and the Wholesale Customers in the 2025 UWMP supply reliability analysis. The WSAP, also known as the Tier 1 Plan, defines the method for allocating between the Retail Customers collectively and Wholesale Customers collectively the available RWS supplies during system-wide shortages. The SFPUC and the Wholesale Customers most recently amended the WSAP in 2025. Also in 2025, the Wholesale Customers adopted an updated Tier 2 Plan, which allocates the collective Wholesale Customers' share of available RWS supplies from the Tier 1 Plan among each of the 26 Wholesale Customers. The WSAP addresses shortages that require a system-wide reduction in water use of 20% or less, consistent with the SFPUC's Level of Service Goal. For any shortage scenario requiring a system-wide reduction in water use above 20% in the supply reliability analysis, the SFPUC applied the Tier 1 Plan's allocation of supplies between the Retail Customers and Wholesale Customers for a shortage requiring a system-wide reduction in water use of 16-20%.

Because of the uncertainty surrounding implementation of the Bay-Delta Plan Amendment, the RWS supply reliability assessment evaluates two future supply scenarios: (1) with implementation of the Bay-Delta Plan Amendment, and (2) without implementation of the Bay-Delta Plan Amendment. It is unknown when implementation may begin on the Bay-Delta Plan Amendment; for the purposes of the 2025 UWMP analysis, the SFPUC included it beginning in the 2030 modeling scenarios (see Tables 4a-4g and 6).

The SFPUC incorporated additional modeling assumptions in the 2025 UWMP analysis regarding the State Water Resources Control Board curtailments and assumptions regarding agreements with Turlock and Modesto Irrigation Districts pertaining to instream flow obligations.

1. During the last two drought periods, 2013-2016 and 2021-2023, the State Water Resources Control Board implemented curtailments through emergency regulations and curtailment orders that attempted to limit diversions from Central Valley watersheds including the Tuolumne River at certain times. Due to the uncertain legality of the State Water Resources Control Board's curtailment actions as well as the

uncertainties regarding any potential future curtailment actions against San Francisco, the SFPUC's RWS supply reliability analyses do not assume curtailments are in effect.

2. Through a 1966 agreement with the Modesto and Turlock Irrigation Districts (Districts), who are more senior downstream appropriative water rights holders on the Tuolumne River, San Francisco may become responsible for up to approximately 51.7% of any flow releases the Federal Energy Regulatory Commission (FERC) may require through issuance of a new license for the Districts' Don Pedro Hydropower Project. The exact flow contribution for which San Francisco may become responsible is highly uncertain and may depend on multiple currently unknown factors, including an anticipated Endangered Species Act biological opinion from the National Marine Fisheries Service and a Clean Water Act section 401 water quality certification from the State Water Resources Control Board. San Francisco's potential responsibility for FERC-ordered flows may further depend on San Francisco's ability to enter into a new or extended agreement with the Districts to offset a portion of San Francisco's flow contributions in exchange for payment. Due to the high levels of uncertainty surrounding the Districts' FERC-relicensing process, as well as the unknown timing for license issuance, the SFPUC's RWS water supply reliability analyses do not assume additional water supply losses from any potential new FERC-ordered flow releases.
3. The simulation of the Bay-Delta Plan Amendment scenario assumes that a 1996 agreement between San Francisco and the Districts (the Side Agreement), which allows San Francisco to pay the Districts in lieu of contributing a portion of current FERC-ordered flow releases, remains in effect, and that the San Francisco share of flows in excess of and not covered by the Side Agreement is approximately 51.7%. These assumptions were made for the purpose of completing the modeling for the UWMP update, and they do not represent a commitment by San Francisco or the Districts to any future agreement or of San Francisco accepting responsibility for any future FERC-ordered flow releases.

Based on current projected demands, supply modeling for the two future supply scenarios shows significantly different supply reliability projections for the RWS:

- <u>With implementation of the Bay-Delta Plan Amendment</u>: Under this scenario, using the demand assumptions shown in Table 1, RWS supplies are expected to range from full availability in an average year

(100%) to as low as 57% in multiple dry years when compared to water supplies in an average year. In other words, RWS supplies could be reduced by up to 43% in a multi-year drought. See Tables 4a-4g and 6.

- Without implementation of the Bay-Delta Plan Amendment: Under this scenario, using demand assumptions shown in Table 1, there are no anticipated shortages of RWS supplies. See Tables 5a-5g and 7.

Table 8 below provides the Wholesale Customer purchase projections and Wholesale Customer allocation of RWS supply for the five-year drought risk assessment from 2026 to 2030. The supply projections for 2026 to 2030 are based on a linear growth from 2025 to 2030 levels of demand as calculated by BAWSCA. This table does not assume implementation of the Bay-Delta Plan Amendment because the start of implementation remains uncertain.

In the forthcoming 2025 UWMP, the SFPUC acknowledges that it has a Level of Service objective to meet an average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years, as well as a contractual obligation to supply 184 MGD to the Wholesale Customers, subject to reduction under certain conditions. The SFPUC will, accordingly, include the results of modeling based on a Wholesale Customer demand of 184 MGD to facilitate planning that supports meeting this Level of Service objective and its contractual obligations. The results of this modeling will be in an appendix to the 2025 UWMP prepared by the SFPUC. The RWS supply projections shown in the tables below are more accurately characterized as supplies that will be used to meet projected Retail and Wholesale Customer demands.

It is our understanding that you will pass this information on to the Wholesale Customers. If you have any questions or need additional information, please do not hesitate to contact Jennifer Lee at jenlee@sfwater.org or (415) 551-4563.

Sincerely,

Steven R. Ritchie

Steven R. Ritchie
Assistant General Manager, Water Enterprise

Table 2: WSIP Project Assumptions for RWS Supply Modeling

Projects	Base Year 2025	Base Year 2030 and Beyond	Base Year 2040 and Beyond
Lower Crystal Springs Dam Improvements	Crystal Springs storage not fully restored	Crystal Springs storage not fully restored	Crystal Springs storage not fully restored
Regional Groundwater Storage and Recovery (GSR) Project	GSR account partially filled at spring 2020 level of 43,000 AF; GSR recovery rate of 5.2 MGD[a]	GSR account fully filled; GSR recovery rate of 5.2 MGD[a]	GSR account fully filled; GSR recovery rate of 6.2 MGD[a]
Alameda Creek Recapture Project	Project not built	Project built and operating	Project built and operating
Dry-Year Transfers	Not in effect	Not in effect	Not in effect

a. The GSR Project was intended to provide 7.2 MGD over 7.5 years, however current limitations on the number of wells available will result in deliveries less than 7.2 MGD over 7.5 years.

Table 3: Projected Total Regional Water System Supply Utilized and Portion of Regional Water System Supply Utilized by Wholesale Customers in Normal Years [For Table 6-9]:

RWS Supply	2030	2035	2040	2045	2050
RWS Supply Utilized (MGD)	196.6	197.5	202.5	208.1	215.1
RWS Supply Utilized by Wholesale Customers[a] (MGD)	133.9	136.3	140.6	144.1	148.4

a. RWS supply utilized by Wholesale Customers from 2030 through 2050 is equivalent to Wholesale Customer purchase projections provided to the SFPUC by BAWSCA on March 4, 2026, and includes demands for the cities of San Jose and Santa Clara.

Basis of Water Supply Data: With Implementation of the Bay-Delta Plan Amendment

Table 4a: Basis of Water Supply Data [For Table 7-1], Base Year 2030, With Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2030	196.6	100%	133.9	
Single dry year	2030	147.5	75%	92.2	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2030	147.5	75%	92.2	Same as above.
Consecutive 2nd dry year	2030	123.9	63%	77.4	Same as above.
Consecutive 3rd dry year	2030	123.9	63%	77.4	Same as above.
Consecutive 4th dry year	2030	123.9	63%	77.4	Same as above.
Consecutive 5th dry year	2030	123.9	63%	77.4	Same as above.

Table 4b: Basis of Water Supply Data [For Table 7-1], Base Year 2035, With Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2035	197.5	100%	136.3	
Single dry year	2035	146.2	74%	91.3	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2035	146.2	74%	91.3	Same as above.
Consecutive 2nd dry year	2035	124.4	63%	77.8	Same as above.
Consecutive 3rd dry year	2035	124.4	63%	77.8	Same as above.
Consecutive 4th dry year	2035	124.4	63%	77.8	Same as above.
Consecutive 5th dry year	2035	124.4	63%	77.8	Same as above.

Table 4c: Basis of Water Supply Data [For Table 7-1], Base Year 2040, With Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2040	202.5	100%	140.6	
Single dry year	2040	145.8	72%	91.1	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2040	145.8	72%	91.1	Same as above.
Consecutive 2nd dry year	2040	123.5	61%	77.2	Same as above.
Consecutive 3rd dry year	2040	123.5	61%	77.2	Same as above.
Consecutive 4th dry year	2040	123.5	61%	77.2	Same as above.
Consecutive 5th dry year	2040	123.5	61%	77.2	Same as above.

Table 4d: Basis of Water Supply Data [For Table 7-1], Base Year 2045, With Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2045	208.1	100%	144.1	
Single dry year	2045	145.7	70%	91.0	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2045	145.7	70%	91.0	Same as above.
Consecutive 2nd dry year	2045	122.8	59%	76.7	Same as above.
Consecutive 3rd dry year	2045	122.8	59%	76.7	Same as above.
Consecutive 4th dry year	2045	122.8	59%	76.7	Same as above.
Consecutive 5th dry year	2045	122.8	59%	76.7	Same as above.

Table 4e: Basis of Water Supply Data [For Table 7-1], Base Year 2050, With Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2050	215.1	100%	148.4	
Single dry year	2050	146.2	68%	91.4	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2050	146.2	68%	91.4	Same as above.
Consecutive 2nd dry year	2050	122.6	57%	76.6	Same as above.
Consecutive 3rd dry year	2050	122.6	57%	76.6	Same as above.
Consecutive 4th dry year	2050	122.6	57%	76.6	Same as above.
Consecutive 5th dry year	2050	122.6	57%	76.6	Same as above.

Table 4f: Basis of Water Supply Data [For Table 7-1], Base Year 2050, With Bay-Delta Plan Amendment and Wholesale Demands at 184 MGD Supply Assurance

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2050	250.7	100%	184.0	
Single dry year	2050	145.4	58%	90.9	At shortages 20% or greater, wholesale allocation is assumed to be 62.5% and retail allocation is 37.5%.
Consecutive 1st dry year	2050	145.4	58%	90.9	Same as above.
Consecutive 2nd dry year	2050	120.3	48%	75.2	Same as above.
Consecutive 3rd dry year	2050	120.3	48%	75.2	Same as above.
Consecutive 4th dry year	2050	120.3	48%	75.2	Same as above.
Consecutive 5th dry year	2050	120.3	48%	75.2	Same as above.

Table 4g: Projected RWS Supply Availability [Alternative to Table 7-1], Years 2030-2050, With Bay-Delta Plan Amendment

Year Type	2030	2035	2040	2045	2050	2050 (with 184 MGD Supply Assurance)
Average year	100%	100%	100%	100%	100%	100%
Single dry year	75%	74%	72%	70%	68%	58%
Consecutive 1st dry year	75%	74%	72%	70%	68%	58%
Consecutive 2nd dry year	63%	63%	61%	59%	57%	48%
Consecutive 3rd dry year	63%	63%	61%	59%	57%	48%
Consecutive 4th dry year	63%	63%	61%	59%	57%	48%
Consecutive 5th dry year	63%	63%	61%	59%	57%	48%

Basis of Water Supply Data: Without Implementation of the Bay-Delta Plan Amendment

Table 5a: Basis of Water Supply Data [For Table 7-1], Base Year 2030, Without Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2030	196.6	100%	133.9	
Single dry year	2030	196.6	100%	133.9	
Consecutive 1st dry year	2030	196.6	100%	133.9	
Consecutive 2nd dry year	2030	196.6	100%	133.9	
Consecutive 3rd dry year	2030	196.6	100%	133.9	
Consecutive 4th dry year	2030	196.6	100%	133.9	
Consecutive 5th dry year	2030	196.6	100%	133.9	

Table 5b: Basis of Water Supply Data [For Table 7-1], Base Year 2035, Without Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2035	197.5	100%	136.3	
Single dry year	2035	197.5	100%	136.3	
Consecutive 1st dry year	2035	197.5	100%	136.3	
Consecutive 2nd dry year	2035	197.5	100%	136.3	
Consecutive 3rd dry year	2035	197.5	100%	136.3	
Consecutive 4th dry year	2035	197.5	100%	136.3	
Consecutive 5th dry year	2035	197.5	100%	136.3	

Table 5c: Basis of Water Supply Data [For Table 7-1], Base Year 2040, Without Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2040	202.5	100%	140.6	
Single dry year	2040	202.5	100%	140.6	
Consecutive 1st dry year	2040	202.5	100%	140.6	
Consecutive 2nd dry year	2040	202.5	100%	140.6	
Consecutive 3rd dry year	2040	202.5	100%	140.6	
Consecutive 4th dry year	2040	202.5	100%	140.6	
Consecutive 5th dry year	2040	202.5	100%	140.6	

Table 5d: Basis of Water Supply Data [For Table 7-1], Base Year 2045, Without Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2045	208.1	100%	144.1	
Single dry year	2045	208.1	100%	144.1	
Consecutive 1st dry year	2045	208.1	100%	144.1	
Consecutive 2nd dry year	2045	208.1	100%	144.1	
Consecutive 3rd dry year	2045	208.1	100%	144.1	
Consecutive 4th dry year	2045	208.1	100%	144.1	
Consecutive 5th dry year	2045	208.1	100%	144.1	

Table 5e: Basis of Water Supply Data [For Table 7-1], Base Year 2050, Without Bay-Delta Plan Amendment

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2050	215.1	100%	148.4	
Single dry year	2050	215.1	100%	148.4	
Consecutive 1st dry year	2050	215.1	100%	148.4	
Consecutive 2nd dry year	2050	215.1	100%	148.4	
Consecutive 3rd dry year	2050	215.1	100%	148.4	
Consecutive 4th dry year	2050	215.1	100%	148.4	
Consecutive 5th dry year	2050	215.1	100%	148.4	

Table 5f: Basis of Water Supply Data [For Table 7-1], Base Year 2050, Without Bay-Delta Plan Amendment and Wholesale Demands at 184 MGD Supply Assurance

Year Type	Base Year	RWS Volume Available (MGD)	% of Average Supply	Wholesale Volume Available (MGD)	Notes on Calculation of Wholesale Allocation of RWS
Average year	2050	250.7	100%	184.0	
Single dry year	2050	225.6	90%	158.9	At 10% shortage, wholesale allocation is 64% (144.4 MGD) and retail allocation is 36% (81.2 MGD). Retail allocations above 66.7 MGD are re-allocated to Wholesale Customers, per the Water Supply Agreement. Therefore, 14.5 MGD is added to wholesale allocation, bringing it to 158.9 MGD.
Consecutive 1st dry year	2050	225.6	90%	158.9	Same as above.
Consecutive 2nd dry year	2050	225.6	90%	158.9	Same as above.
Consecutive 3rd dry year	2050	225.6	90%	158.9	Same as above.
Consecutive 4th dry year	2050	225.6	90%	158.9	Same as above.
Consecutive 5th dry year	2050	225.6	90%	158.9	Same as above.

Table 5g: Projected RWS Supply [Alternative to Table 7-1], Years 2030-2050, Without Bay-Delta Plan Amendment

Year Type	2030	2035	2040	2045	2050	2050 (with 184 MGD Supply Assurance)
Average year	100%	100%	100%	100%	100%	100%
Single dry year	100%	100%	100%	100%	100%	90%
Consecutive 1st dry year	100%	100%	100%	100%	100%	90%
Consecutive 2nd dry year	100%	100%	100%	100%	100%	90%
Consecutive 3rd dry year	100%	100%	100%	100%	100%	90%
Consecutive 4th dry year	100%	100%	100%	100%	100%	90%
Consecutive 5th dry year	100%	100%	100%	100%	100%	90%

Supply Projections for Consecutive Five Dry Year Sequences

Table 6: Projected Multiple Dry Years RWS Wholesale Allocation [For Table 7-4], With Bay-Delta Plan Amendment

	2030	2035	2040	2045	2050	2050 (with 184 MGD Supply Assurance)
First year	92.2	91.3	91.1	91.0	91.4	90.9
Second year	77.4	77.8	77.2	76.7	76.6	75.2
Third year	77.4	77.8	77.2	76.7	76.6	75.2
Fourth year	77.4	77.8	77.2	76.7	76.6	75.2
Fifth year	77.4	77.8	77.2	76.7	76.6	75.2

Table 7: Projected Multiple Dry Years RWS Wholesale Allocation [For Table 7-4], Without Bay-Delta Plan Amendment

	2030	2035	2040	2045	2050	2050 (with 184 MGD Supply Assurance)
First year	133.9	136.3	140.6	144.1	148.4	158.9
Second year	133.9	136.3	140.6	144.1	148.4	158.9
Third year	133.9	136.3	140.6	144.1	148.4	158.9
Fourth year	133.9	136.3	140.6	144.1	148.4	158.9
Fifth year	133.9	136.3	140.6	144.1	148.4	158.9

Table 8: Projected RWS Supply for 5-Year Drought Risk Assessment [For Table 7-5]

Year	2026	2027	2028	2029	2030
Wholesale Purchase Projections[a] (MGD)	130.9	131.6	132.4	133.2	133.9
RWS Supply Utilized by Wholesale Customers[b] (MGD)	130.9	131.6	132.4	133.2	133.9

a. Wholesale Purchase Projections for 2026-2030 assume a linear growth between 2025 actual demands and 2030 projections, as calculated by BAWSCA.
b. This table does not assume implementation of the Bay-Delta Plan Amendment because the start of implementation remains uncertain.

Basis for SFPUC's Water Supply Reliability Modeling

Actual (2025) and Projected (2030-2050) RWS Purchases

Agency	ISG	2025[1]	2030	2035	2040	2045	2050
Alameda CWD	13.76	10.08	11.25	11.56	12.00	12.45	13.76
Brisbane / GVMID	0.98	0.68	0.94	0.95	0.97	0.97	0.97
Burlingame	5.23	3.23	3.92	3.99	4.15	4.30	4.44
Coastside CWD	2.18	1.01	1.17	1.16	1.16	1.16	1.16
CWS Total	35.68	29.50	27.04	26.89	26.93	26.80	26.89
Daly City	4.29	3.55	4.29	4.29	4.29	4.29	4.29
East Palo Alto	3.46	1.72	1.19	1.19	1.19	1.18	1.19
Estero MID	5.90	3.78	3.90	3.92	3.93	3.91	3.90
Hayward	22.09	13.66	14.74	15.66	16.82	18.14	19.71
Hillsborough	4.09	2.32	2.09	2.08	2.09	2.11	2.12
Menlo Park	4.46	2.72	2.58	2.64	2.71	2.76	2.83
Mid-Peninsula WD	3.89	2.34	2.82	2.97	3.18	3.39	3.43
Millbrae	3.15	1.81	1.91	1.99	2.09	2.18	2.29
Milpitas	9.23	4.68	5.30	5.35	5.41	5.46	5.52
Mountain View	12.46	7.69	7.87	8.12	8.59	9.04	9.55
North Coast CWD	3.84	2.58	2.23	2.29	2.37	2.36	2.36
Palo Alto	16.58	9.31	8.30	8.20	8.15	8.15	8.18
Purissima Hills WD	1.63	1.51	1.36	1.35	1.36	1.36	1.37
Redwood City	10.93	7.43	6.84	6.54	6.73	6.91	7.09
San Bruno	3.25	1.03	1.85	2.27	2.68	2.68	2.68
San Jose		3.99	4.50	4.50	4.50	4.50	4.50
Santa Clara		2.91	4.50	4.50	4.50	4.50	4.50
Stanford	3.03	1.59	1.77	1.96	2.02	2.07	2.13
Sunnyvale	12.58	10.28	10.72	11.15	11.92	12.58	12.58
Westborough WD	1.32	0.70	0.82	0.80	0.84	0.88	0.91
Total	**184.00**	**130.1**	**133.9**	**136.3**	**140.6**	**144.1**	**148.3**

[1] Source: FY 2024-25 J-Table

Basis for SFPUC's Water Supply Reliability Modeling

Actual (2025) and Projected (2026-2030) RWS Purchases

Agency	2025	2026	2027	2028	2029	2030
Alameda CWD	10.08	10.32	10.55	10.78	11.02	11.25
Brisbane / GVMID	0.68	0.73	0.78	0.83	0.89	0.94
Burlingame	3.23	3.36	3.50	3.64	3.78	3.92
Coastside CWD	1.01	1.05	1.08	1.11	1.14	1.17
CWS Total	29.50	29.00	28.51	28.02	27.53	27.04
Daly City	3.55	3.70	3.85	4.00	4.14	4.29
East Palo Alto	1.72	1.62	1.51	1.40	1.30	1.19
Estero MID	3.78	3.80	3.83	3.85	3.88	3.90
Hayward	13.66	13.87	14.09	14.31	14.53	14.74
Hillsborough	2.32	2.27	2.23	2.18	2.14	2.09
Menlo Park	2.72	2.69	2.67	2.64	2.61	2.58
Mid-Peninsula WD	2.34	2.44	2.53	2.63	2.73	2.82
Millbrae	1.81	1.83	1.85	1.87	1.89	1.91
Milpitas	4.68	4.80	4.93	5.05	5.18	5.30
Mountain View	7.69	7.73	7.76	7.80	7.83	7.87
North Coast CWD	2.58	2.51	2.44	2.37	2.30	2.23
Palo Alto	9.31	9.11	8.91	8.71	8.50	8.30
Purissima Hills WD	1.51	1.48	1.45	1.42	1.39	1.36
Redwood City	7.43	7.32	7.20	7.08	6.96	6.84
San Bruno	1.03	1.20	1.36	1.52	1.69	1.85
San Jose	3.99	4.09	4.20	4.30	4.40	4.50
Santa Clara	2.91	3.23	3.54	3.86	4.18	4.50
Stanford	1.59	1.62	1.66	1.70	1.73	1.77
Sunnyvale	10.28	10.37	10.46	10.55	10.63	10.72
Westborough WD	0.70	0.72	0.75	0.77	0.80	0.82
Total	**130.1**	**130.9**	**131.6**	**132.4**	**133.2**	**133.9**

For UWMP Tables 7-1 through Table 7-4

Base Year	2025
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**2026**	**2027**	**2028**	**2029**	**2030**
Wholesale RWS Demand	130.12	130.88	131.64	132.40	133.16
Wholesale RWS Supply	130.12	130.88	131.64	132.40	133.16
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2025 RWS Purchases**	**2026**	**2027**	**2028**	**2029**	**2030**
Alameda CWD	10.08	10.08	11.25	11.56	12.00	12.45
Brisbane / GVMID	0.68	0.68	0.68	0.68	0.68	0.68
Burlingame	3.23	3.23	3.23	3.23	3.23	3.23
Coastside CWD	1.01	1.01	1.01	1.01	1.01	1.01
CWS Total	29.50	29.50	29.50	29.50	29.50	29.50
Daly City	3.55	3.55	3.55	3.55	3.55	3.55
East Palo Alto	1.72	1.72	1.72	1.72	1.72	1.72
Estero MID	3.78	3.78	3.78	3.78	3.78	3.78
Hayward	13.66	13.66	13.66	13.66	13.66	13.66
Hillsborough	2.32	2.32	2.32	2.32	2.32	2.32
Menlo Park	2.72	2.72	2.72	2.72	2.72	2.72
Mid-Peninsula WD	2.34	2.34	2.34	2.34	2.34	2.34
Millbrae	1.81	1.81	1.81	1.81	1.81	1.81
Milpitas	4.68	4.68	4.68	4.68	4.68	4.68
Mountain View	7.69	7.69	7.69	7.69	7.69	7.69
North Coast CWD	2.58	2.58	2.58	2.58	2.58	2.58
Palo Alto	9.31	9.31	9.31	9.31	9.31	9.31
Purissima Hills WD	1.51	1.51	1.51	1.51	1.51	1.51
Redwood City	7.43	7.43	7.43	7.43	7.43	7.43
San Bruno	1.03	1.03	1.03	1.03	1.03	1.03
San Jose	3.99	3.99	3.99	3.99	3.99	3.99
Santa Clara	2.91	2.91	2.91	2.91	2.91	2.91
Stanford	1.59	1.59	1.59	1.59	1.59	1.59
Sunnyvale	10.28	10.28	10.28	10.28	10.28	10.28
Westborough WD	0.70	0.70	0.70	0.70	0.70	0.70
Total	**130.12**	**130.12**	**131.28**	**131.59**	**132.03**	**132.48**

For UWMP Tables 7-1 through Table 7-4

Base Year	2030
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	133.9	133.9	133.9	133.9	133.9
Wholesale RWS Supply	92.2	77.4	77.4	77.4	77.4
Percent Cutback	31%	42%	42%	42%	42%

		Projected Supply by Year Type				
Agency	**2030 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.25	7.75	6.50	6.50	6.50	6.50
Brisbane / GVMID	0.94	0.65	0.54	0.54	0.54	0.54
Burlingame	3.92	2.70	2.27	2.27	2.27	2.27
Coastside CWD	1.17	0.81	0.68	0.68	0.68	0.68
CWS Total	27.04	18.61	15.63	15.63	15.63	15.63
Daly City	4.29	2.95	2.48	2.48	2.48	2.48
East Palo Alto	1.19	0.82	0.69	0.69	0.69	0.69
Estero MID	3.90	2.69	2.25	2.25	2.25	2.25
Hayward	14.74	10.15	8.52	8.52	8.52	8.52
Hillsborough	2.09	1.44	1.21	1.21	1.21	1.21
Menlo Park	2.58	1.78	1.49	1.49	1.49	1.49
Mid-Peninsula WD	2.82	1.94	1.63	1.63	1.63	1.63
Millbrae	1.91	1.31	1.10	1.10	1.10	1.10
Milpitas	5.30	3.65	3.06	3.06	3.06	3.06
Mountain View	7.87	5.42	4.55	4.55	4.55	4.55
North Coast CWD	2.23	1.54	1.29	1.29	1.29	1.29
Palo Alto	8.30	5.72	4.80	4.80	4.80	4.80
Purissima Hills WD	1.36	0.94	0.79	0.79	0.79	0.79
Redwood City	6.84	4.71	3.95	3.95	3.95	3.95
San Bruno	1.85	1.27	1.07	1.07	1.07	1.07
San Jose	4.50	3.10	2.60	2.60	2.60	2.60
Santa Clara	4.50	3.10	2.60	2.60	2.60	2.60
Stanford	1.77	1.22	1.02	1.02	1.02	1.02
Sunnyvale	10.72	7.38	6.20	6.20	6.20	6.20
Westborough WD	0.82	0.57	0.48	0.48	0.48	0.48
Total	**133.92**	**92.2**	**77.4**	**77.4**	**77.4**	**77.4**

For UWMP Tables 7-1 through Table 7-4

Base Year	2035
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	136.32	136.32	136.32	136.32	136.32
Wholesale RWS Supply	91.3	77.8	77.8	77.8	77.8
Percent Cutback	33%	43%	43%	43%	43%

		Projected Supply by Year Type				
Agency	**2035 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.56	7.74	6.60	6.60	6.60	6.60
Brisbane / GVMID	0.95	0.64	0.54	0.54	0.54	0.54
Burlingame	3.99	2.67	2.28	2.28	2.28	2.28
Coastside CWD	1.16	0.78	0.66	0.66	0.66	0.66
CWS Total	26.89	18.01	15.35	15.35	15.35	15.35
Daly City	4.29	2.87	2.45	2.45	2.45	2.45
East Palo Alto	1.19	0.80	0.68	0.68	0.68	0.68
Estero MID	3.92	2.63	2.24	2.24	2.24	2.24
Hayward	15.66	10.49	8.93	8.93	8.93	8.93
Hillsborough	2.08	1.39	1.19	1.19	1.19	1.19
Menlo Park	2.64	1.77	1.51	1.51	1.51	1.51
Mid-Peninsula WD	2.97	1.99	1.69	1.69	1.69	1.69
Millbrae	1.99	1.33	1.14	1.14	1.14	1.14
Milpitas	5.35	3.58	3.05	3.05	3.05	3.05
Mountain View	8.12	5.44	4.63	4.63	4.63	4.63
North Coast CWD	2.29	1.53	1.31	1.31	1.31	1.31
Palo Alto	8.20	5.49	4.68	4.68	4.68	4.68
Purissima Hills WD	1.35	0.90	0.77	0.77	0.77	0.77
Redwood City	6.54	4.38	3.73	3.73	3.73	3.73
San Bruno	2.27	1.52	1.30	1.30	1.30	1.30
San Jose	4.50	3.01	2.57	2.57	2.57	2.57
Santa Clara	4.50	3.01	2.57	2.57	2.57	2.57
Stanford	1.96	1.31	1.12	1.12	1.12	1.12
Sunnyvale	11.15	7.47	6.36	6.36	6.36	6.36
Westborough WD	0.80	0.54	0.46	0.46	0.46	0.46
Total	**136.32**	**91.3**	**77.8**	**77.8**	**77.8**	**77.8**

For UWMP Tables 7-1 through Table 7-4

Base Year	2040
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	140.57	140.57	140.57	140.57	140.57
Wholesale RWS Supply	91.1	77.2	77.2	77.2	77.2
Percent Cutback	35%	45%	45%	45%	45%

		Projected Supply by Year Type				
Agency	**2040 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	12.00	7.78	6.59	6.59	6.59	6.59
Brisbane / GVMID	0.97	0.63	0.53	0.53	0.53	0.53
Burlingame	4.15	2.69	2.28	2.28	2.28	2.28
Coastside CWD	1.16	0.75	0.64	0.64	0.64	0.64
CWS Total	26.93	17.45	14.79	14.79	14.79	14.79
Daly City	4.29	2.78	2.36	2.36	2.36	2.36
East Palo Alto	1.19	0.77	0.65	0.65	0.65	0.65
Estero MID	3.93	2.54	2.16	2.16	2.16	2.16
Hayward	16.82	10.90	9.24	9.24	9.24	9.24
Hillsborough	2.09	1.35	1.15	1.15	1.15	1.15
Menlo Park	2.71	1.75	1.49	1.49	1.49	1.49
Mid-Peninsula WD	3.18	2.06	1.75	1.75	1.75	1.75
Millbrae	2.09	1.35	1.15	1.15	1.15	1.15
Milpitas	5.41	3.51	2.97	2.97	2.97	2.97
Mountain View	8.59	5.57	4.72	4.72	4.72	4.72
North Coast CWD	2.37	1.53	1.30	1.30	1.30	1.30
Palo Alto	8.15	5.28	4.48	4.48	4.48	4.48
Purissima Hills WD	1.36	0.88	0.75	0.75	0.75	0.75
Redwood City	6.73	4.36	3.69	3.69	3.69	3.69
San Bruno	2.68	1.74	1.47	1.47	1.47	1.47
San Jose	4.50	2.92	2.47	2.47	2.47	2.47
Santa Clara	4.50	2.92	2.47	2.47	2.47	2.47
Stanford	2.02	1.31	1.11	1.11	1.11	1.11
Sunnyvale	11.92	7.73	6.55	6.55	6.55	6.55
Westborough WD	0.84	0.55	0.46	0.46	0.46	0.46
Total	**140.57**	**91.1**	**77.2**	**77.2**	**77.2**	**77.2**

For UWMP Tables 7-1 through Table 7-4

Base Year	2045
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	144.11	144.11	144.11	144.11	144.11
Wholesale RWS Supply	91	76.7	76.7	76.7	76.7
Percent Cutback	37%	47%	47%	47%	47%

		Projected Supply by Year Type				
Agency	**2045 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	12.45	7.86	6.63	6.63	6.63	6.63
Brisbane / GVMID	0.97	0.61	0.52	0.52	0.52	0.52
Burlingame	4.30	2.72	2.29	2.29	2.29	2.29
Coastside CWD	1.16	0.73	0.62	0.62	0.62	0.62
CWS Total	26.80	16.92	14.26	14.26	14.26	14.26
Daly City	4.29	2.71	2.28	2.28	2.28	2.28
East Palo Alto	1.18	0.75	0.63	0.63	0.63	0.63
Estero MID	3.91	2.47	2.08	2.08	2.08	2.08
Hayward	18.14	11.45	9.65	9.65	9.65	9.65
Hillsborough	2.11	1.33	1.12	1.12	1.12	1.12
Menlo Park	2.76	1.75	1.47	1.47	1.47	1.47
Mid-Peninsula WD	3.39	2.14	1.80	1.80	1.80	1.80
Millbrae	2.18	1.38	1.16	1.16	1.16	1.16
Milpitas	5.46	3.45	2.91	2.91	2.91	2.91
Mountain View	9.04	5.71	4.81	4.81	4.81	4.81
North Coast CWD	2.36	1.49	1.26	1.26	1.26	1.26
Palo Alto	8.15	5.14	4.34	4.34	4.34	4.34
Purissima Hills WD	1.36	0.86	0.72	0.72	0.72	0.72
Redwood City	6.91	4.36	3.68	3.68	3.68	3.68
San Bruno	2.68	1.69	1.43	1.43	1.43	1.43
San Jose	4.50	2.84	2.40	2.40	2.40	2.40
Santa Clara	4.50	2.84	2.40	2.40	2.40	2.40
Stanford	2.07	1.31	1.10	1.10	1.10	1.10
Sunnyvale	12.58	7.94	6.70	6.70	6.70	6.70
Westborough WD	0.88	0.55	0.47	0.47	0.47	0.47
Total	**144.11**	**91.0**	**76.7**	**76.7**	**76.7**	**76.7**

For UWMP Tables 7-1 through Table 7-4

Base Year	2050
Scenario	With BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	148.35	148.35	148.35	148.35	148.35
Wholesale RWS Supply	91.4	76.6	76.6	76.6	76.6
Percent Cutback	38%	48%	48%	48%	48%

		Projected Supply by Year Type				
Agency	**2050 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.25	7.67	6.43	6.43	6.43	6.43
Brisbane / GVMID	0.94	0.60	0.50	0.50	0.50	0.50
Burlingame	3.92	2.65	2.22	2.22	2.22	2.22
Coastside CWD	1.17	0.71	0.60	0.60	0.60	0.60
CWS Total	27.04	16.51	13.84	13.84	13.84	13.84
Daly City	4.29	2.64	2.22	2.22	2.22	2.22
East Palo Alto	1.19	0.73	0.61	0.61	0.61	0.61
Estero MID	3.90	2.41	2.02	2.02	2.02	2.02
Hayward	14.74	11.18	9.37	9.37	9.37	9.37
Hillsborough	2.09	1.30	1.09	1.09	1.09	1.09
Menlo Park	2.58	1.70	1.43	1.43	1.43	1.43
Mid-Peninsula WD	2.82	2.09	1.75	1.75	1.75	1.75
Millbrae	1.91	1.34	1.13	1.13	1.13	1.13
Milpitas	5.30	3.36	2.82	2.82	2.82	2.82
Mountain View	7.87	5.57	4.67	4.67	4.67	4.67
North Coast CWD	2.23	1.45	1.22	1.22	1.22	1.22
Palo Alto	8.30	5.02	4.21	4.21	4.21	4.21
Purissima Hills WD	1.36	0.84	0.70	0.70	0.70	0.70
Redwood City	6.84	4.26	3.57	3.57	3.57	3.57
San Bruno	1.85	1.65	1.38	1.38	1.38	1.38
San Jose	4.50	2.77	2.32	2.32	2.32	2.32
Santa Clara	4.50	2.77	2.32	2.32	2.32	2.32
Stanford	1.77	1.28	1.07	1.07	1.07	1.07
Sunnyvale	10.72	7.75	6.50	6.50	6.50	6.50
Westborough WD	0.82	0.54	0.45	0.45	0.45	0.45
Total	**133.92**	**88.8**	**74.4**	**74.4**	**74.4**	**74.4**

For UWMP Tables 7-1 through Table 7-4

Base Year	2026
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**2026**	**2027**	**2028**	**2029**	**2030**
Wholesale RWS Demand	130.1	130.9	131.6	132.4	133.2
Wholesale RWS Supply	130.1	130.9	131.6	132.4	133.2
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2025 RWS Purchases**	**2026**	**2027**	**2028**	**2029**	**2030**
Alameda CWD	10.08	10.08	11.25	11.56	12.00	12.45
Brisbane / GVMID	0.68	0.68	0.68	0.68	0.68	0.68
Burlingame	3.23	3.23	3.23	3.23	3.23	3.23
Coastside CWD	1.01	1.01	1.01	1.01	1.01	1.01
CWS Total	29.50	29.50	29.50	29.50	29.50	29.50
Daly City	3.55	3.55	3.55	3.55	3.55	3.55
East Palo Alto	1.72	1.72	1.72	1.72	1.72	1.72
Estero MID	3.78	3.78	3.78	3.78	3.78	3.78
Hayward	13.66	13.66	13.66	13.66	13.66	13.66
Hillsborough	2.32	2.32	2.32	2.32	2.32	2.32
Menlo Park	2.72	2.72	2.72	2.72	2.72	2.72
Mid-Peninsula WD	2.34	2.34	2.34	2.34	2.34	2.34
Millbrae	1.81	1.81	1.81	1.81	1.81	1.81
Milpitas	4.68	4.68	4.68	4.68	4.68	4.68
Mountain View	7.69	7.69	7.69	7.69	7.69	7.69
North Coast CWD	2.58	2.58	2.58	2.58	2.58	2.58
Palo Alto	9.31	9.31	9.31	9.31	9.31	9.31
Purissima Hills WD	1.51	1.51	1.51	1.51	1.51	1.51
Redwood City	7.43	7.43	7.43	7.43	7.43	7.43
San Bruno	1.03	1.03	1.03	1.03	1.03	1.03
San Jose	3.99	3.99	3.99	3.99	3.99	3.99
Santa Clara	2.91	2.91	2.91	2.91	2.91	2.91
Stanford	1.59	1.59	1.59	1.59	1.59	1.59
Sunnyvale	10.28	10.28	10.28	10.28	10.28	10.28
Westborough WD	0.70	0.70	0.70	0.70	0.70	0.70
Total	**130.12**	**130.12**	**131.28**	**131.59**	**132.03**	**132.48**

For UWMP Tables 7-1 through Table 7-4

Base Year	2030
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	133.9	133.9	133.9	133.9	133.9
Wholesale RWS Supply	133.9	133.9	133.9	133.9	133.9
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2030 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.25	11.25	11.25	11.25	11.25	11.25
Brisbane / GVMID	0.94	0.94	0.94	0.94	0.94	0.94
Burlingame	3.92	3.92	3.92	3.92	3.92	3.92
Coastside CWD	1.17	1.17	1.17	1.17	1.17	1.17
CWS Total	27.04	27.04	27.04	27.04	27.04	27.04
Daly City	4.29	4.29	4.29	4.29	4.29	4.29
East Palo Alto	1.19	1.19	1.19	1.19	1.19	1.19
Estero MID	3.90	3.90	3.90	3.90	3.90	3.90
Hayward	14.74	14.74	14.74	14.74	14.74	14.74
Hillsborough	2.09	2.09	2.09	2.09	2.09	2.09
Menlo Park	2.58	2.58	2.58	2.58	2.58	2.58
Mid-Peninsula WD	2.82	2.82	2.82	2.82	2.82	2.82
Millbrae	1.91	1.91	1.91	1.91	1.91	1.91
Milpitas	5.30	5.30	5.30	5.30	5.30	5.30
Mountain View	7.87	7.87	7.87	7.87	7.87	7.87
North Coast CWD	2.23	2.23	2.23	2.23	2.23	2.23
Palo Alto	8.30	8.30	8.30	8.30	8.30	8.30
Purissima Hills WD	1.36	1.36	1.36	1.36	1.36	1.36
Redwood City	6.84	6.84	6.84	6.84	6.84	6.84
San Bruno	1.85	1.85	1.85	1.85	1.85	1.85
San Jose	4.50	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50	4.50
Stanford	1.77	1.77	1.77	1.77	1.77	1.77
Sunnyvale	10.72	10.72	10.72	10.72	10.72	10.72
Westborough WD	0.82	0.82	0.82	0.82	0.82	0.82
Total	**133.92**	**133.92**	**133.92**	**133.92**	**133.92**	**133.92**

For UWMP Tables 7-1 through Table 7-4

Base Year	2035
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	136.3	136.3	136.3	136.3	136.3
Wholesale RWS Supply	136.3	136.3	136.3	136.3	136.3
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2035 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.56	11.56	11.56	11.56	11.56	11.56
Brisbane / GVMID	0.95	0.95	0.95	0.95	0.95	0.95
Burlingame	3.99	3.99	3.99	3.99	3.99	3.99
Coastside CWD	1.16	1.16	1.16	1.16	1.16	1.16
CWS Total	26.89	26.89	26.89	26.89	26.89	26.89
Daly City	4.29	4.29	4.29	4.29	4.29	4.29
East Palo Alto	1.19	1.19	1.19	1.19	1.19	1.19
Estero MID	3.92	3.92	3.92	3.92	3.92	3.92
Hayward	15.66	15.66	15.66	15.66	15.66	15.66
Hillsborough	2.08	2.08	2.08	2.08	2.08	2.08
Menlo Park	2.64	2.64	2.64	2.64	2.64	2.64
Mid-Peninsula WD	2.97	2.97	2.97	2.97	2.97	2.97
Millbrae	1.99	1.99	1.99	1.99	1.99	1.99
Milpitas	5.35	5.35	5.35	5.35	5.35	5.35
Mountain View	8.12	8.12	8.12	8.12	8.12	8.12
North Coast CWD	2.29	2.29	2.29	2.29	2.29	2.29
Palo Alto	8.20	8.20	8.20	8.20	8.20	8.20
Purissima Hills WD	1.35	1.35	1.35	1.35	1.35	1.35
Redwood City	6.54	6.54	6.54	6.54	6.54	6.54
San Bruno	2.27	2.27	2.27	2.27	2.27	2.27
San Jose	4.50	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50	4.50
Stanford	1.96	1.96	1.96	1.96	1.96	1.96
Sunnyvale	11.15	11.15	11.15	11.15	11.15	11.15
Westborough WD	0.80	0.80	0.80	0.80	0.80	0.80
Total	**136.32**	**136.32**	**136.32**	**136.32**	**136.32**	**136.32**

For UWMP Tables 7-1 through Table 7-4

Base Year	2040
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	140.6	140.6	140.6	140.6	140.6
Wholesale RWS Supply	140.6	140.6	140.6	140.6	140.6
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2040 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	12.00	12.00	12.00	12.00	12.00	12.00
Brisbane / GVMID	0.97	0.97	0.97	0.97	0.97	0.97
Burlingame	4.15	4.15	4.15	4.15	4.15	4.15
Coastside CWD	1.16	1.16	1.16	1.16	1.16	1.16
CWS Total	26.93	26.93	26.93	26.93	26.93	26.93
Daly City	4.29	4.29	4.29	4.29	4.29	4.29
East Palo Alto	1.19	1.19	1.19	1.19	1.19	1.19
Estero MID	3.93	3.93	3.93	3.93	3.93	3.93
Hayward	16.82	16.82	16.82	16.82	16.82	16.82
Hillsborough	2.09	2.09	2.09	2.09	2.09	2.09
Menlo Park	2.71	2.71	2.71	2.71	2.71	2.71
Mid-Peninsula WD	3.18	3.18	3.18	3.18	3.18	3.18
Millbrae	2.09	2.09	2.09	2.09	2.09	2.09
Milpitas	5.41	5.41	5.41	5.41	5.41	5.41
Mountain View	8.59	8.59	8.59	8.59	8.59	8.59
North Coast CWD	2.37	2.37	2.37	2.37	2.37	2.37
Palo Alto	8.15	8.15	8.15	8.15	8.15	8.15
Purissima Hills WD	1.36	1.36	1.36	1.36	1.36	1.36
Redwood City	6.73	6.73	6.73	6.73	6.73	6.73
San Bruno	2.68	2.68	2.68	2.68	2.68	2.68
San Jose	4.50	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50	4.50
Stanford	2.02	2.02	2.02	2.02	2.02	2.02
Sunnyvale	11.92	11.92	11.92	11.92	11.92	11.92
Westborough WD	0.84	0.84	0.84	0.84	0.84	0.84
Total	**140.57**	**140.57**	**140.57**	**140.57**	**140.57**	**140.57**

For UWMP Tables 7-1 through Table 7-4

Base Year	2045
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	144.1	144.1	144.1	144.1	144.1
Wholesale RWS Supply	144.1	144.1	144.1	144.1	144.1
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2045 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	12.45	12.45	12.45	12.45	12.45	12.45
Brisbane / GVMID	0.97	0.97	0.97	0.97	0.97	0.97
Burlingame	4.30	4.30	4.30	4.30	4.30	4.30
Coastside CWD	1.16	1.16	1.16	1.16	1.16	1.16
CWS Total	26.80	26.80	26.80	26.80	26.80	26.80
Daly City	4.29	4.29	4.29	4.29	4.29	4.29
East Palo Alto	1.18	1.18	1.18	1.18	1.18	1.18
Estero MID	3.91	3.91	3.91	3.91	3.91	3.91
Hayward	18.14	18.14	18.14	18.14	18.14	18.14
Hillsborough	2.11	2.11	2.11	2.11	2.11	2.11
Menlo Park	2.76	2.76	2.76	2.76	2.76	2.76
Mid-Peninsula WD	3.39	3.39	3.39	3.39	3.39	3.39
Millbrae	2.18	2.18	2.18	2.18	2.18	2.18
Milpitas	5.46	5.46	5.46	5.46	5.46	5.46
Mountain View	9.04	9.04	9.04	9.04	9.04	9.04
North Coast CWD	2.36	2.36	2.36	2.36	2.36	2.36
Palo Alto	8.15	8.15	8.15	8.15	8.15	8.15
Purissima Hills WD	1.36	1.36	1.36	1.36	1.36	1.36
Redwood City	6.91	6.91	6.91	6.91	6.91	6.91
San Bruno	2.68	2.68	2.68	2.68	2.68	2.68
San Jose	4.50	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50	4.50
Stanford	2.07	2.07	2.07	2.07	2.07	2.07
Sunnyvale	12.58	12.58	12.58	12.58	12.58	12.58
Westborough WD	0.88	0.88	0.88	0.88	0.88	0.88
Total	**144.11**	**144.11**	**144.11**	**144.11**	**144.11**	**144.11**

For UWMP Tables 7-2 through Table 7-4

Base Year	2050
Scenario	Without BDP

Basis of Water Supply Data

Consecutive Dry Year	**1st/Single**	**2nd**	**3rd**	**4th**	**5th**
Wholesale RWS Demand	148.3	148.3	148.3	148.3	148.3
Wholesale RWS Supply	148.3	148.3	148.3	148.3	148.3
Percent Cutback	0%	0%	0%	0%	0%

		Projected Supply by Year Type				
Agency	**2050 Proj. RWS**	**1st/Single Dry Year**	**2nd Dry Year**	**3rd Dry Year**	**4th Dry Year**	**5th Dry Year**
Alameda CWD	11.25	12.45	12.45	12.45	12.45	12.45
Brisbane / GVMID	0.94	0.97	0.97	0.97	0.97	0.97
Burlingame	3.92	4.30	4.30	4.30	4.30	4.30
Coastside CWD	1.17	1.16	1.16	1.16	1.16	1.16
CWS Total	27.04	26.80	26.80	26.80	26.80	26.80
Daly City	4.29	4.29	4.29	4.29	4.29	4.29
East Palo Alto	1.19	1.18	1.18	1.18	1.18	1.18
Estero MID	3.90	3.91	3.91	3.91	3.91	3.91
Hayward	14.74	18.14	18.14	18.14	18.14	18.14
Hillsborough	2.09	2.11	2.11	2.11	2.11	2.11
Menlo Park	2.58	2.76	2.76	2.76	2.76	2.76
Mid-Peninsula WD	2.82	3.39	3.39	3.39	3.39	3.39
Millbrae	1.91	2.18	2.18	2.18	2.18	2.18
Milpitas	5.30	5.46	5.46	5.46	5.46	5.46
Mountain View	7.87	9.04	9.04	9.04	9.04	9.04
North Coast CWD	2.23	2.36	2.36	2.36	2.36	2.36
Palo Alto	8.30	8.15	8.15	8.15	8.15	8.15
Purissima Hills WD	1.36	1.36	1.36	1.36	1.36	1.36
Redwood City	6.84	6.91	6.91	6.91	6.91	6.91
San Bruno	1.85	2.68	2.68	2.68	2.68	2.68
San Jose	4.50	4.50	4.50	4.50	4.50	4.50
Santa Clara	4.50	4.50	4.50	4.50	4.50	4.50
Stanford	1.77	2.07	2.07	2.07	2.07	2.07
Sunnyvale	10.72	12.58	12.58	12.58	12.58	12.58
Westborough WD	0.82	0.88	0.88	0.88	0.88	0.88
Total	**133.92**	**144.11**	**144.11**	**144.11**	**144.11**	**144.11**

Appendix E: Menlo Park Municipal Water's Water Shortage Contingency Plan

CITY OF
MENLO PARK

2025 WATER SHORTAGE CONTINGENCY PLAN
Menlo Park Municipal Water

PUBLIC DRAFT | May 2026
EKI Environment & Water, Inc.

EKI ENVIRONMENT & WATER, INC.

www.ekiconsult.com
2001 Junipero Serra Blvd, Suite 300 • Daly City, CA 94014

2025 WATER SHORTAGE CONTINGENCY PLAN

Menlo Park Municipal Water

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TABLES

ATTACHMENTS

ABBREVIATIONS AND ACRONYMS

AF	Acre-feet
AMI	Automated Meter Infrastructure (AMI)
BAWSCA	Bay Area Water Supply and Conservation Agency
Bay-Delta Plan Amendment	Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
CA	California
CII	Commercial, Industrial, and Institutional
COVID-19	Coronavirus Disease 2019
CWC	California Water Code
DRT	Drought Response Tool
DWR	California Department of Water Resources
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ERP	Emergency Response Plan
FY	Fiscal Year
GPCD	Gallons Per Capita Per Day
gpm	Gallons per minute
MG	Million gallons
MPMW	Menlo Park Municipal Water
RWS	Regional Water System
SFPUC	San Francisco Public Utilities Commission
SOE	State of Emergency
SWRCB	State Water Resources Control Board
UWMP	Urban Water Management Plan
WARN	Water/Wastewater Agency Response Network
WSCP	Water Shortage Contingency Plan

1 INTRODUCTION

☑ ***CWC § 10640***

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

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

Menlo Park Municipal Water's (MPMW's) Water Shortage Contingency Plan (WSCP) is developed to serve as a flexible framework of planned response measures to mitigate future water supply shortages. This WSCP builds upon and supersedes the WSCP that was presented in the 2020 Urban Water Management Plan (UWMP).

The WSCP includes the stages of response to a water shortage caused by drought or by supply interruptions caused by infrastructure failure, regulatory mandate, or catastrophic human-caused or natural events. The primary objective of the WSCP is to ensure that MPMW has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. The WSCP also includes procedures to conduct an annual assessment of water supply and demand in order to determine whether water shortage conditions are likely to exist in the forthcoming year, and to proactively begin the process of implementing WSCP stages of action, as appropriate.

This WSCP has been prepared in accordance with California Water Code (CWC) § 10640 and CWC § 10632 of the Urban Water Management Plan Act (UWMP Act). Text from the UWMP Act has been included in grey text boxes with italicized font at beginning of relevant sections of this WSCP. The information presented in the respective WSCP sections and the associated text and tables are collectively intended to fulfill the requirements of that sub-section of the UWMP Act.

MPMW has authority within Section 7.35 of City of Menlo Park's (City's) Municipal Code to require water rationing and conservation and to enforce penalties. Municipal Code Section 7.35 is included as **Attachment 1** of this WSCP.

MPMW developed this WSCP based on the following guiding principle:

> *Eliminate water waste, prioritize the reduction of non-essential water uses, and preserve water uses that are essential to the health, safety, welfare, and economic vitality of MPMW's customers during periods of water shortage.*

Practically, this principle guides MPMW to ask for a shared contribution from all of its customers towards meeting water reduction goals during periods of water shortage. It further directs MPMW to focus its water conservation efforts on reducing discretionary water uses such as outdoor irrigation, while attempting to minimize economic and other impacts to its residential and commercial customers.

MPMW also adopted a Water Service Priority Policy by Resolution No. 6187, in compliance with requirements of Government Code Section 65589.7. The Water Service Priority Policy prioritizes water service to proposed developments that include units for lower income households.

2 WATER SUPPLY RELIABILITY ANALYSIS

☑ ***CWC § 10632 (a) (1)*** *The analysis of water supply reliability conducted pursuant to Section 10635.*

This section provides a summary of MPMW's water supply reliability analysis in Section 7 of MPMW's 2025 UWMP, recognizing that the WSCP is intended to be a standalone document that can be adopted and amended independently.

MPMW relies on the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS) for all of its potable water supply. In accordance with the SFPUC's perpetual obligation to MPMW's Supply Assurance, MPMW has an Individual Supply Guarantee (ISG) of 4.456 million gallons per day, or 1,630 million gallons (MG) per year. MPMW also uses recycled water for non-potable uses. Recycled water is currently supplying 5% of MPMW's total demand and is anticipated to supply 10% of MPMW's total demand by 2050. The recycled water supply is expected to be 100% reliable in all year types.

MPMW's supply reliability relies largely on the reliability of the SFPUC RWS. The SFPUC has committed to, among other things, meeting the retail and wholesale customers' average annual water demand during non–drought years and meeting dry-year delivery needs while limiting rationing to a maximum 20% system-wide reduction in water service during extended droughts. However, several potential constraints have been identified on the future supply availability of the SFPUC RWS. One of the key factors is the adoption of the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment). If the Bay-Delta Plan Amendment is implemented, the SFPUC is anticipated to have sufficient supplies to meet the projected water demands in normal years but would experience significant supply shortages in single dry years or multiple dry years.

Based on the current allocation methodology[1] and SFPUC dry year cutbacks, MPMW is anticipated to experience up to 396 MG (34%) supply shortfall in single dry years by 2050 and up to 500 MG (43%) supply shortfall in multiple dry years by 2050.

However, numerous uncertainties remain in the implementation of the Bay-Delta Plan Amendment and the allocation of the available supply between the wholesale customers. The resultant actual supply reliability and the frequency of supply shortfalls for MPMW cannot be known currently. MPMW has placed high priority on working with SFPUC and the Bay Area Water Supply and Conservation Agency (BAWSCA) to better refine the estimates of RWS supply reliability and may revise its UWMP accordingly. The SFPUC and BAWSCA have also been taking various actions to improve the reliability of the RWS supply, including implementing a number of dry year water supply projects, exploring alternative water supplies, and implementing Long-Term Reliable Water Supply Strategy recommendations.

As part of the supply reliability analysis, MPMW has conducted a Drought Risk Assessment, which evaluates the effects on available water supply sources of an assumed five-year drought commencing the year after the assessment is completed (i.e., from 2026 through 2030). MPMW's supply is expected to be sufficient to meet demands during the five consecutive dry years.

[1] The SFPUC and the wholesale customers have negotiated and adopted a plan to allocate the RWS supply during system-wide shortages of 20% or less. To address the instances where the supply shortfalls are projected to be greater than 20%, BAWSCA has developed a revised methodology to allocate the RWS supply. This allocation method is intended to serve as the preliminary basis for the 2025 UWMP supply reliability analysis and does not in any way imply an agreement by BAWSCA member agencies as to the exact allocation methodology. Details on the SFPUC RWS supply reliability are provided by the SFPUC and the BAWSCA and are documented in Section 7 as well as Appendix D of the 2025 UWMP.

MPMW has developed this WSCP to address water shortage conditions resulting from any cause (e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.). The WSCP identifies a variety of actions that MPMW will implement to reduce demands and further ensure supply reliability at various levels of water shortage.

3 PRIOR DROUGHT ACTIONS

This section summarizes the MPMW's experience during recent droughts, including the 2014-2017 and 2021-2023 drought periods, with a focus on the sequence of State, regional, and local actions, the effectiveness of implemented measures, and key lessons learned. Understanding how water use responded to past drought conditions provides an important foundation for the development of this WSCP.

3.1 2014-2017 Drought

On April 1, 2015, Governor Brown issued the fourth in a series of Executive Orders regarding actions necessary to address California's severe drought conditions. Executive Order B-29-15 directed the State Water Resources Control Board (SWRCB) to impose the first ever mandatory restrictions on urban water suppliers to achieve a statewide 25% reduction in potable urban water usage through February 2016. The Executive Order also requires commercial, industrial, and institutional (CII) users to implement water efficiency measures, prohibits irrigation with potable water of ornamental turf in public street medians, and prohibits irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems, along with numerous other directives.

On 5 May 2015, the SWRCB adopted Resolution 2015-0032 that mandates minimum actions by water suppliers and their customers to conserve water supplies into 2016 and assigns a mandatory water conservation savings goal to each water supplier based on their residential gallons per capita per day (R-GPCD) water use. The Office of Administrative Law approved the regulations and modified the CWC on May 18, 2015. On February 2, 2016, the SWRCB voted to extend the emergency regulations until October 2016 with some modifications. On May 9, 2016, the Governor issued Executive Order B-37-16, which directed the SWRCB to extend the emergency regulations through the end of January 2017 as well as make certain water use restrictions permanent. On May 18, 2016, the SWRCB adopted Resolution 2016-0029 that adjusts the water conservation savings goal and replaces the February 2016 emergency regulation. The SWRCB is expected to take separate action to make some of the requirements of the regulations permanent in response to the Executive Order.

The mandatory conservation standards included in CWC §865(c) ranged from 8% for suppliers with an R-GPCD below 65 R-GPCD, up to 36% for suppliers with an R-GPCD of greater than 215 GPCD. As with previous emergency drought regulations adopted by the SWRCB in 2014, the new water conservation regulation was primarily intended to reduce outdoor urban water use. Based on the SWRCB's Regulatory Framework Tier 4 residential per capita use of 88.6 GPCD, MPMW was required to reduce water use by 16% relative to its 2013 water use.

Prior to the 2015 SWRCB Resolution, the City Council had already declared Stage 2 of the 2014 WSCP to respond to 2014 SWRCB actions. Stage 2 of the 2014 WSCP called for an up to 20% water reduction and included prohibitions that targeted water waste and discretionary outdoor uses. This stage of action remained in place to meet the 2015 SWRCB mandated reduction target.

During the June 2015 through February 2016 compliance period, the City surpassed its water use reduction target of 16% with a cumulative saving of 38% relative to its 2013 use. The reductions were largely due to high savings (up to a 50% reduction in total demand) during the summer and fall months, likely corresponding to large cutbacks in irrigation water use.

The 2014 WSCP was updated as part of the 2015 UWMP. In June 2016, the City adopted its 2015 UWMP and associated WSCP update. In April 2017, the Governor Brown ended the drought State of Emergency. On May 2, 2017, Resolution 6383 revoked the City's drought declaration and enacted Stage 1 of its 2015

WSCP, which is a no-drought stage that maintains prohibitions to prevent water waste per State regulations.

3.2 2021-2023 Drought

State and Regional Actions

Beginning in April 2021, California entered a period of drought conditions marked by a series of escalating State, regional, and local actions. Governor Gavin Newsom issued an initial drought State of Emergency (SOE) in April 2021, which expanded statewide by October 2021.

Between April 2021 and December 2023, Governor Newsom and the State agencies implemented a series of actions to reduce water use throughout the State in response to the drought conditions. In July 2021, Governor Newsom issued executive order N-10-21 calling on a statewide voluntary reduction in water use by 15% compared to 2020 levels. In January 2022, the SWRCB adopted an emergency drought regulation that prohibited specific water waste activities identified in the Governor's October 2021 proclamation. In May 2022, the SWRCB adopted emergency regulations that, among other actions, required suppliers to enter Stage 2 of their WSCP. The requirement was lifted in March 2023 and the drought SOE was officially terminated in September 2024.

During this same period, SFPUC and BAWSCA coordinated drought response actions in response to local water supply conditions. SFPUC initially issued a request to voluntarily curtail water use by 15% in July 2021. As drought conditions worsened, SFPUC declared a Water Shortage Emergency in November 2021 and called for a 10% voluntary reduction in water usage system-wide, followed by implementation of drought surcharge. In response to the SWRCB's May 2022 emergency regulations, the SFPUC adopted a system-wide voluntary water use reduction of 11% associated with Stage 2 of the SFPUC's WSCP and maintained voluntary reductions through April 2023.

Menlo Park Municipal Water Drought Response

MPMW initiated administrative drought response measures in April 2021 and initiated Stage 1 drought response measures in March 2022, including expanded water conservation programs, prohibition of wasteful water use, and customer communications and notifications. The City formally entered Stage 2 of its 2020 WSCP in May 2022, implementing measures such as intensified customer outreach, outdoor irrigation restrictions to two days per week, and drought surcharges.

Figure 3-1 below shows the MPMW's monthly and cumulative water use reductions between April 2021 and June 2023, compared to the baseline year of 2020. Water use reductions were observed shortly after initial actions were implemented, with measurable savings beginning in July 2021. Over time, cumulative water use reductions increased as drought conditions persisted, and response measures intensified.

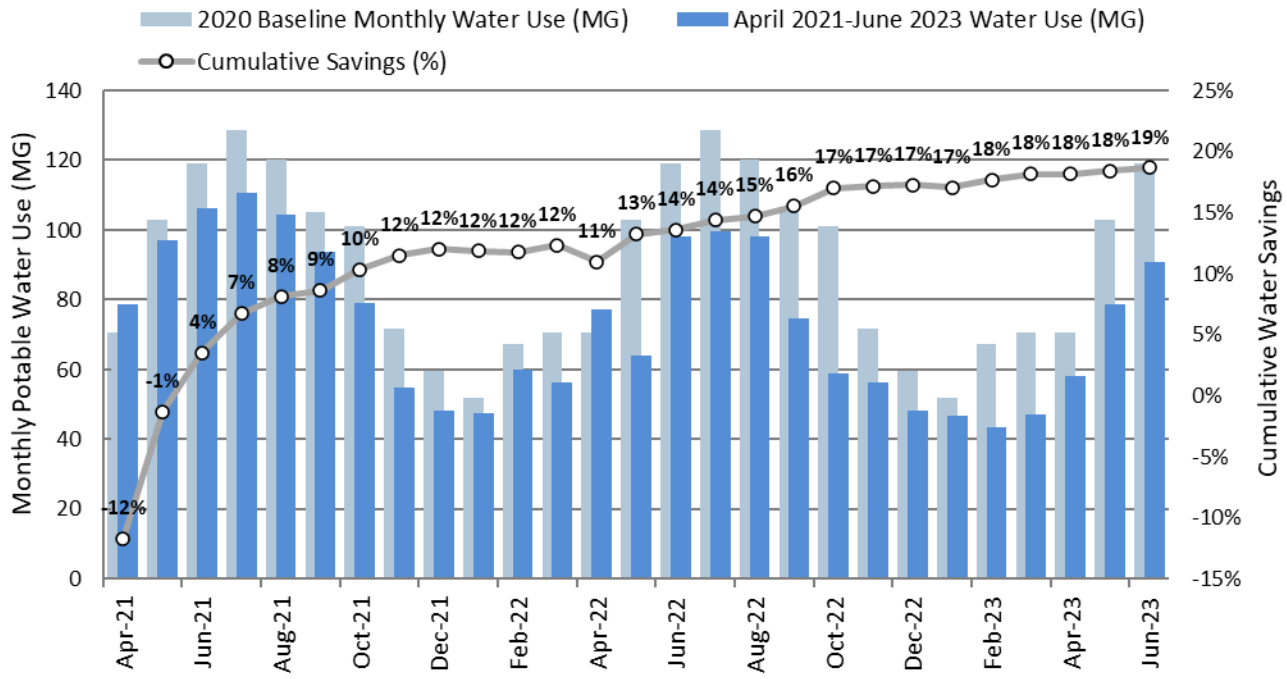


Figure 3-1 Monthly Water Use and Cumulative Water Use Reduction, 2021-2023

Effectiveness of Drought Response

As shown on **Figure 3-1**, cumulative water savings reached 13% by May 2022 after implementing Stage 1 measures. Implementation of MPMW's WSCP Stage 2 additionally provided 1-6% of cumulative water savings, reaching 19% by the end of the drought.

Overall water savings during the 2021-2023 drought were lower than those achieved during the 2014-2017 drought, when cumulative reductions reached approximately 38%. This is likely due to a combination of factors, including differing State restrictions, the effects of demand hardening, and messaging fatigue from both the drought and the COVID-19 pandemic. Additionally, water use in 2020 was likely deflated and influenced by pandemic-related behavior. Comparison to a 2020 baseline year may result in conservative estimates of savings achieved during the drought.

MPMW's experience during the 2021-2023 drought highlights these key considerations for future drought planning:

- Administrative actions and messaging without water use restrictions can drive early-stage savings prior to formal WSCP stage implementation.
- Continued long-term reductions in per capita water use have reduced discretionary demand, making additional cutbacks more difficult to achieve compared to prior droughts. As discussed in Section 4 of the UWMP, per capita water use has decreased since 2015 even though 2015 was an extreme drought year during which mandatory conservation requirements were in effect.
- The timing and effectiveness of conservation messaging significantly influence customer response. Initial drought awareness drives reductions, but sustained engagement is challenging due to messaging fatigue, particularly when overlapping with other major events such as the pandemic.

4 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

☑ ***CWC § 10632 (a) (2)***

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

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

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

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

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

(iii) Existing infrastructure capabilities and plausible constraints.

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

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

☑ ***CWC § 10632.1***

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

☑ ***CWC § 10632.2***

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

On an annual basis, MPMW will conduct an Annual Supply-Demand Assessment (Annual Assessment) to identify whether there is likely to be a water shortage condition in the following year. Because MPMW's sole source of potable water supply is from the SFPUC RWS, the evaluation of MPMW supplies for a particular year will be based on information provided by the SFPUC or BAWSCA. MPMW will conduct the Annual Assessment as part of a coordinated effort led by BAWSCA. The procedure used by BAWSCA in conducting an Annual Assessment is outlined in **Attachment 2** of this WSCP.

5 WATER SHORTAGE LEVELS

☑ ***CWC § 10632 (a) (3)***

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

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

Consistent with the requirements of CWC §10632(a)(3), this WSCP is based on the six water shortage levels (also referred to as "stages") shown in **Table 5-1**. These shortage stages are intended to address shortages caused by any condition, including catastrophic interruption of water supplies. **Table 5-1** summarizes the water supply reductions and supply conditions associated with each stage of action.

Table 6-1 describe the customer restrictions and prohibitions and actions to be taken by MPMW staff associated with each stage of action. Specific prohibitions and MPMW's actions are discussed in more detail below. The monthly and cumulative annual water savings impacts associated with each restriction, prohibition and consumption reduction method were quantitatively estimated using the Drought Response Tool (DRT) for each stage of action (see **Section 6.3**).

Table 5-1 Water Shortage Contingency Plan Levels (DWR Table 8-1)

Shortage Level	Percent Shortage Range	Shortage Response Actions
No-Drought	N/A	• Includes water waste prohibitions effective at all times.
1	Up to 10%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use of up to 10% due to water supply shortages or an emergency. • Includes implementation of mandatory restrictions on end uses, as well as agency actions (see **Table 6-1**).
2	Up to 20%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 10% to 20% due to water supply shortages or emergency. • Includes implementation of mandatory restrictions on end uses, as well as agency actions (see **Table 6-1**).

Table 5-1 Water Shortage Contingency Plan Levels (DWR Table 8-1) Continued

Shortage Level	Percent Shortage Range	Shortage Response Actions
3	Up to 30%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 20% to 30% due to water supply shortages or emergency. • Includes implementation of mandatory restrictions on end uses, as well as agency actions (see **Table 6-1**).
4	Up to 40%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 30% to 40% due to water supply shortages or emergency. • Includes implementation of mandatory restrictions on end uses, as well as agency actions (see **Table 6-1**).
5	Up to 50%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 40% to 50% due to water supply shortages or emergency. • Includes implementation of mandatory restrictions on end uses and water use budgets for customers, as well as agency actions and groundwater supply augmentation (see **Table 6-1**).
6	>50%	• Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use greater than 50% due to water supply shortages or emergency. • Includes implementation of mandatory restrictions on end uses and water use budgets for customers, as well as agency actions and groundwater supply augmentation (see **Table 6-1**).

6 SHORTAGE RESPONSE ACTIONS

☑ ***CWC § 10632 (a) (4)***

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

(A) Locally appropriate supply augmentation actions.

(B) Locally appropriate demand reduction actions to adequately respond to shortages.

(C) Locally appropriate operational changes.

(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

☑ ***CWC § 10632 (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.

This section describes the response actions MPMW will take to deal with the shortages associated with each of the six stages enumerated in **Section 5** (**Table 5-1**).

6.1 Demand Reduction Methods

As discussed above and shown in **Table 6-1**, the WSCP lists the demand reduction methods that MPMW will implement during each stage of action to reduce MPMW's water consumption and encourage reduction in water use by its customers. The monthly and cumulative annual water savings impacts associated with each restriction, prohibition and consumption reduction method were quantitatively estimated using the DRT for each stage of action, see **Attachment 3**.

A main focus of MPMW's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. The public outreach efforts that MPMW will implement to respond to a water shortage are described in **Section 8**.

6.1.1 Operational Changes

The WSCP lists the operational changes that MPMW will implement during each stage of action including measures to: (1) reduce system losses through a reduction in line flushing and fire training exercises, (2) increase enforcement and patrols, (3) develop water budgets, and in certain conditions, (4) implement a moratorium on new services.

6.1.2 Prohibitions on End Uses

MPMW has the authority to restrict or prohibit specific water use practices during water shortages (Municipal Code Section 7.35). Restrictions and prohibitions associated with each stage of action are presented in **Table 6-1**. As discussed above, these responses focus on the reduction of non-essential water uses such as ornamental landscape irrigation, and preserve water uses that are essential to the health, safety, welfare, and economic vitality of MPMW's customers.

In addition, several mandatory prohibitions are enforced at all times as part of the Non-Drought Stage to eliminate water waste, which include each of the prohibitions on end uses that are anticipated to be mandated by the SWRCB in response to Executive Order B-37-16. Prohibitions in subsequent stages go beyond the SWRCB requirements and become increasingly restrictive.

6.1.3 Defining Water Features

☑ ***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 required by CWC §10632, MPMW distinguishes between "decorative water features" such as ponds, lakes, and fountains that are artificially supplied with water and "recreational water features" such as swimming pools and spas. Prohibitions on water use for decorative water features are listed separately from those for recreational water features (see **Table 6-1**).

6.2 Supply Augmentation

As shown in **Table 6-1**, the City will utilize its emergency supply well(s) as supply augmentation during Stages 5 and 6. MPMW has constructed one emergency groundwater well (the Corporation Yard Well) which can produce up to 1,500 gallons per minute (gpm) of supply to the Lower Zone. MPMW is currently evaluating three sites for potential additional emergency wells as part of the Emergency Water Storage and Supply Project. Water supply from the emergency supply well(s) is currently not considered in MPMW's planning for normal or dry year supply. The well(s) will provide augmented supply for MPMW in the event of significant water shortage due to severe drought conditions, an earthquake, or other emergency.

According to the Corporation Yard Well's Initial Study/Mitigation Negative Declaration document (Infrastructure Engineering Corporation, 2016), operating the well at 900 gpm over a 30-day failure on the SFPUC RWS will supply 119 acre-feet (AF) of water. The IS/MND has estimated that the well could provide 1,900 AF over the course of a year without a significant impact to the groundwater basin.

Table 6-1 also includes other actions that the City will take, including coordination with other agencies, implementing drought surcharge, increasing water waste patrols, etc.

Table 6-1 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Agency Actions	Customer Water Use Restrictions
0	--	1. Hoses must be equipped with a shut-off valve for washing vehicles, sidewalks, walkways, or buildings. 2. Ornamental fountains shall use only re-circulated or recycled water. 3. Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns. 4. Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces. 5. Potable water cannot be applied to outdoor landscapes during and up to 48 hours after measurable rainfall. 6. Potable water shall not be used to irrigate ornamental turf on public street medians. 7. Hotels and motels shall provide guests an option whether to launder towels and linens daily. Hotels and motels shall prominently display notice of this option in each bathroom using clear and easily understood language. 8. Restaurants and other food service operations shall serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency. 9. Broken or defective plumbing and irrigation systems must be repaired or replaced within a reasonable period. 10. Recreational water features shall be covered when not in use. 11. Single-pass cooling systems on new construction shall not be allowed. 12. Other measures as may be approved by the State Water Resources Control Board or City Council Resolution.
1	1. Initiate public outreach to inform customers that there is a water shortage emergency. 2. Implement Stage 1 drought surcharge.	1. Continue with “no drought” restrictions and prohibitions except where superseded by more stringent requirements. 2. Newly constructed homes and buildings must irrigate with drip or microspray only. 3. Other measures as may be approved by City Council Resolution.

Table 6-1 Demand Reduction Actions (DWR Table 8-2) Continued

Shortage Level	Agency Actions	Customer Water Use Restrictions
2	1. Continue with actions and measures from Stage 1. 2. Increase public outreach for added restrictions and prohibitions, and to provide information regarding fines or penalties for non-compliance. 3. Coordinate with BAWSCA, SFPUC, and other Menlo Park water agencies (California Water Service, O'Connor Cooperative Water Tract, East Palo Alto, Palo Alto Park Mutual Water Company). 4. Evaluate if participation in BAWSCA's subscription water conservation programs can be increased. 5. Train City staff and billing contractor customer service representatives how to respond to customer calls, reports and complaints. 6. Evaluate options to capture water during routine flushing of water mains. 7. Implement Stage 2 drought surcharge.	1. Continue with Stage 1 restrictions and prohibitions except where superseded by more stringent requirements. 2. Irrigating outdoor ornamental landscapes or turf with potable water is limited to no more than two (2) days per week on a schedule established by the Director and posted on the City's website, except for hand watering. Water customers may be granted an exception upon review and approval of a Drought Response Plan by the Public Works Director pursuant to such policies and procedures as may be established by the Public Works Director provided that such plan results in an equivalent or greater reduction in water use. 3. Hand watering must be with a continuously monitored hose fitted with an automatic shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use or monitored. 4. Other measures as may be approved by City Council Resolution.
3	1. Continue with actions and measures from Stage 2. 2. Increase public outreach for added restrictions and prohibitions, and to provide information how to report water waste to the City. 3. Increase public outreach to the top 10% water users in each customer category. 4. Coordinate with Police code enforcement to investigate water waste reports. 5. Request cooperation from Menlo Park Fire District to reduce fire training water use. 6. Implement Stage 3 drought surcharge.	1. Continue with Stage 2 restrictions and prohibitions except where superseded by more stringent requirements. 2. Permits for construction of new pools shall include a requirement that MPMW water shall not be used to fill new pools. 3. Vehicles may only be washed at vehicle washing facilities using recycled or recirculating water. 4. Other measures as may be approved by City Council Resolution.

Table 6-1 Demand Reduction Actions (DWR Table 8-2) Continued

Shortage Level	Agency Actions	Customer Water Use Restrictions
4	1. Continue with actions and measures from Stage 3. 2. Increase public outreach for added restrictions and prohibitions and provide frequent updates of supply conditions. 3. Increase public outreach to the top 20% water users in each customer category. 4. Evaluate staff resources. May include hiring temporary staff or training additional City staff to assist with customer service and enforcement. 5. Reevaluate routine flushing of water mains except when necessary to address immediate health or safety concerns. 6. Consider increasing fines for multiple violations. 7. Implement Stage 4 drought surcharge.	1. Continue with Stage 3 restrictions and prohibitions except where superseded by more stringent requirements. 2. Irrigating outdoor ornamental landscapes or turf with potable water is limited to no more than one (1) day per week on a schedule established by the Director and posted on the City's website, except for hand watering. Water customers may be granted an exception upon review and approval of a Drought Response Plan by the Public Works Director pursuant to such policies and procedures as may be established by the Public Works Director provided that such plan results in an equivalent or greater reduction in water use. 3. Potable water shall not be used for construction or dust control. 4. Potable water shall not be used for commercial vehicles that provide street washing, sweeping, or cleaning. 5. Other measures as may be approved by City Council Resolution.
5	1. Continue with actions and measures from Stage 4. 2. Use emergency groundwater well(s). 3. Increase public outreach for added restrictions and prohibitions and communicate critical shortage conditions. 4. Activate the City's emergency response structure, which may include partial or full Emergency Operations Center activation. 5. Coordinate with law enforcement agencies to address enforcement challenges. 6. Halt installations of new potable water meters (temporary or permanent) or meter upgrades except if a valid, unexpired building permit has been issued for the project; or the project is necessary to protect the public's health, safety, and welfare. 7. Halt issuing statements of immediate ability to serve or provide potable water service. 8. Consider increasing fines for multiple violations. 9. Develop water budgets for all accounts.	1. Continue with Stage 4 restrictions and prohibitions except where superseded by more stringent requirements. 2. Water use shall not exceed water budgets established for each customer. 3. Hand watering outdoor ornamental landscapes is only allowed between designated hours, as determined by the Public Works Director. 4. Turf irrigation is prohibited at all times, including artificial turf. 5. Existing irrigation systems shall not be expanded. 6. Other measures as may be approved by City Council Resolution.

Table 6-1 Demand Reduction Actions (DWR Table 8-2) Continued

Shortage Level	Agency Actions	Customer Water Use Restrictions
5 (Conti.)	10. Implement Stage 5 drought surcharge. 11. Coordinate with CA Dept of Public Health, County Public Health Department and other emergency response agencies regarding water quality and public health issues. 12. Prepare to coordinate with State (SWRCB, DWR) and County (Department of Emergency Management) for emergency response support and funding. 13. Prioritize water service for essential uses and critical facilities. 14. Implement emergency water supply provisions identified in the ERP.	
6	1. Continue with actions and measures from Stage 5. 2. Issue urgent emergency notifications to all customers using all available channels and provide clear instructions regarding water availability and restrictions. 3. Activate emergency response procedures and request mutual aid. 4. Halt installations of new potable water meters (temporary or permanent) even if a valid, unexpired building permit has been issued for the project. 5. Consider increasing fines for multiple violations. 6. Increase water budget reduction requirements. 7. Implement other short-term emergency actions from the Emergency Response Plan. 8. Implement Stage 6 drought surcharge. 9. Continue to coordinate with emergency response agencies. 10. Continue to coordinate with State (SWRCB, DWR) and County (Department of Emergency Management) for emergency response support and funding. 11. Continue to provide bulk water stations and/or coordinate water hauling.	1. Continue with Stage 5 restrictions and prohibitions except where superseded by more stringent requirements. 2. Hand watering outdoor ornamental landscapes is prohibited at all times. 3. Other measures as may be approved by City Council Resolution.

6.3 Shortage Response Action Effectiveness

In order to evaluate and ensure that effective actions will be implemented with the proper level of intensity, MPMW employed the DRT, an Excel spreadsheet model developed by EKI Environment and Water, Inc. The DRT model calculates monthly savings anticipated by implementing each stage of action as detailed below.

6.3.1 Baseline Water Use Profile

Using the DRT, MPMW developed a baseline water use profile that reflected usage patterns within MPMW's service area by major water use sector during calendar year 2023 to 2025 and was used to guide development of the WSCP. Key findings from this analysis are presented below.

Residential Per Capita Demand

MPMW's current residential water demand is approximately 62 R-GPCD. This R-GPCD is close to the BAWSCA-wide average of 58.87 R-GPCD and is significantly less than the statewide average of 96 R-GPCD.[2]

Estimated Proportion of Outdoor Water Use

As shown on **Figure** 6-1, outdoor water use, which can generally be considered as a "discretionary water use", was estimated to be approximately 43% of the MPMW's potable consumption during the baseline time period (2023-2025). Dedicated irrigation meters for potable water accounted for 26% of the total potable irrigation demand, indicating that approximately 74% of outdoor water use is not metered with a separate meter, and is therefore more difficult to track and directly target.

The proportion of outdoor water use within both residential and commercial sectors (43% and 38%, respectively) indicates that there is potential to achieve moderate potable water savings across these sectors, simply by focusing on outdoor uses. As further shown on **Figure 6-2**, the seasonal variation in baseline potable water use reflects increased irrigation demands during the summer and fall months. Therefore, the greatest potential for reductions in non-essential water use are expected during these months.

[2] City of Menlo Park and BAWSCA average R-GPCD for fiscal year 2024-2025 obtained from BAWSCA's Annual Survey (BAWSCA, 2026). Statewide average for the same period calculated using SAFER Clearinghouse data.

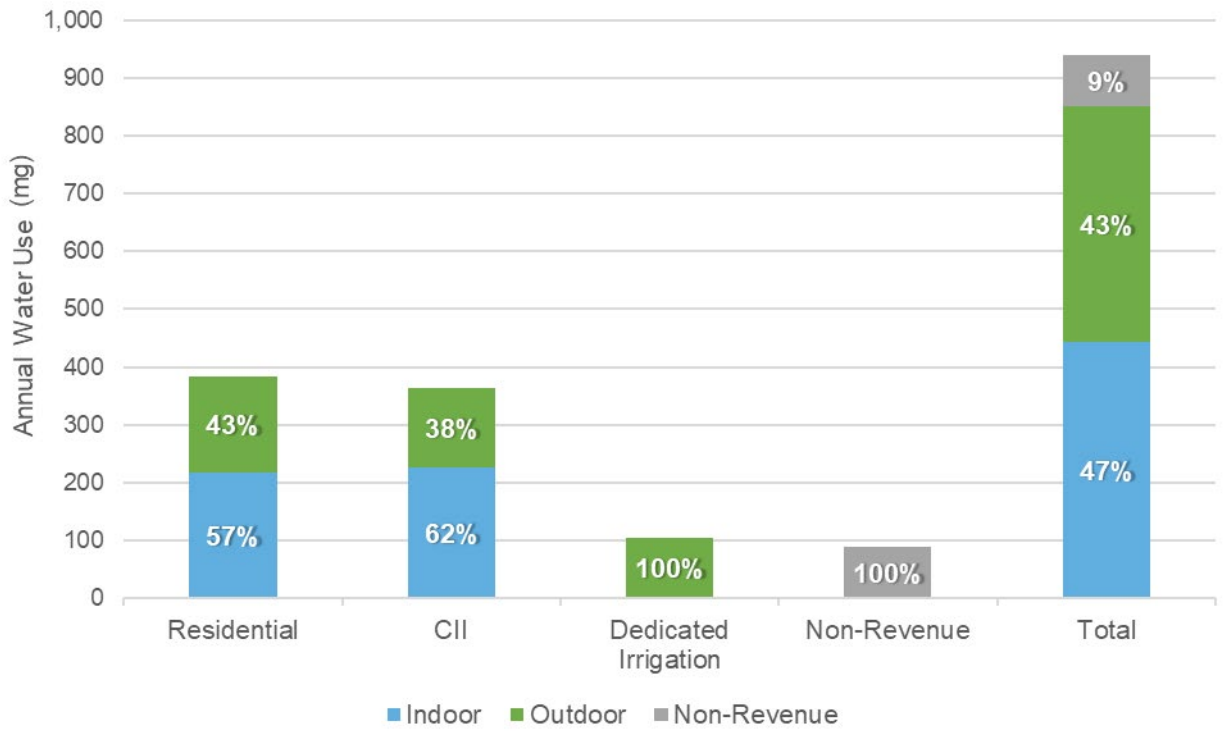


Figure 6-1 Baseline Year Annual Indoor vs. Outdoor Water Use

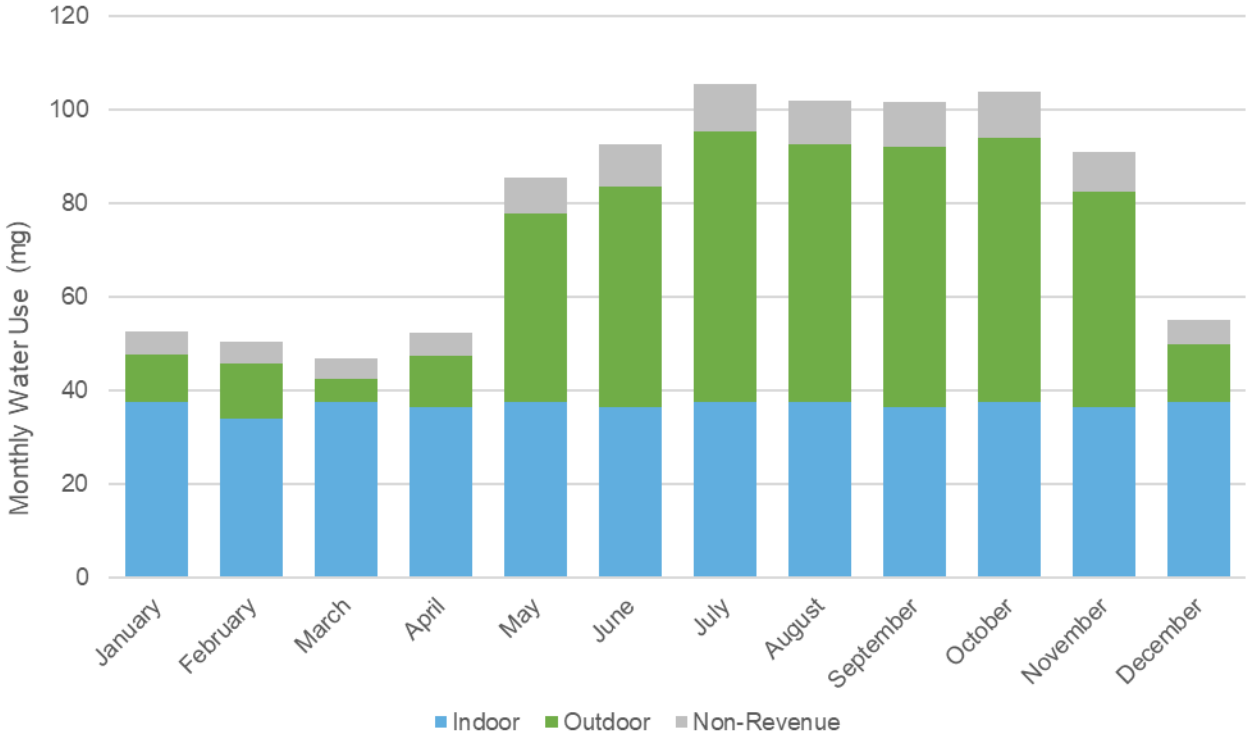


Figure 6-2 Baseline Monthly Indoor vs Outdoor Water Use

6.3.2 Shortage Response Action Effectiveness

The DRT provides a quantitative framework that allows MPMW to systematically estimate the monthly and cumulative annual demand reductions expected to result from particular combinations of drought response actions and associated implementation rates. Data inputs to the DRT include total production, class-specific water use, population, and assumptions regarding the split between indoor and outdoor water use for each customer class.

For each drought response action, the user specifies:

- The customer class(es) and end use(s) that are affected.
- The percent savings for that end use for each account that implements the action. These are based on evaluations reported in the literature, or where such studies are not available, on best estimates based on MPMW's experience.
- The percentage of accounts assumed to implement the action, which is presumed to be the result of the intensity level of MPMW's program implementation, including but not limited to, marketing and enforcement activities.

An additional critical DRT user input is a set of constraints on demand reductions to ensure that usage levels do not endanger health and safety or result in unacceptable economic impacts. The DRT will not permit estimated usage reductions to violate these constraints, regardless of the demand reduction actions selected. The constraints are:

- A minimum residential indoor per capita daily usage of 25 gallons,
- A maximum residential outdoor usage reduction of 100%,
- A maximum CII indoor usage reduction of 30%, and
- A maximum CII outdoor usage reduction of 100%.

Based on the foregoing data, the DRT model calculates the resulting monthly savings. MPMW adjusted the combination of actions and implementation levels to achieve the targeted savings levels at each of the six stages of action.

For each of the stages of action, the modeling targeted the mid-range of the required demand reduction range, specifically:

- 5% for Stage 1,
- 15% for Stage 2,
- 25% for Stage 3,
- 35% for Stage 4,
- 45% for Stage 5, and
- 55% for Stage 6.

MPMW's shortage response actions are summarized in **Table 6-1**. Key DRT inputs and outputs for each of the stages of action are reproduced in **Attachment 3**, including the water shortage reduction actions, savings assumptions, and implementation rates that are required for MPMW to achieve the required annual demand reductions for each of the six stages of action. At each stage, there are two types of demand-reduction actions identified:

- Restrictions on customer water usage; and
- Consumption reduction actions by MPMW to encourage decreased water usage.

Many actions are implemented across a number of stages, some at increasing implementation levels. Therefore the actions in **Table 6-1** are listed as a row under the first stage at which they are implemented in the Department of Water Resources (DWR) Tables 8-2 and 8-3 in the 2025 UWMP.

6.4 Catastrophic Supply Interruption

Catastrophic supply interruptions may be caused by a regional power outage, an earthquake, or other disaster. MPMW benefits from two levels of emergency planning: planning by SFPUC and its own emergency planning work. In the event of a catastrophic supply interruption, the response procedures that MPMW would follow are described in:

- SFPUC Emergency Operations Plan (EOP);
- San Mateo County's Operational Area EOP Potable Water Procurement and Distribution Annex;
- City of Menlo Park's EOP; and
- MPMW's Emergency Response Plan (ERP).

Actions described in the SFPUC EOP focus on maintaining flow within, and from, the SFPUC RWS pipelines. SFPUC's emergency preparedness procedures are described in detail in **Attachment 4**. City of Menlo Park's EOP was written in coordination with the County of San Mateo's Operational Area EOP Potable Water Procurement and Distribution Annex (County of San Mateo, 2004).

Together, these EOPs provide the framework for responding to major emergencies or disasters associated with natural disasters, technological incidents, and national security/terrorism emergencies. Sections of these EOPs outline specific strategies to prepare for, mitigate, respond to, and recover from an emergency or disaster that affects the water utilities that serve the population within San Mateo County and the City, in particular.

MPMW's emergency planning efforts particularly to its water distribution system are summarized below.

6.4.1 MPMW Emergency Response Plan

In accordance with the Emergency Services Act, MPMW has developed an ERP. This ERP guides response to unpredicted catastrophic events that might impact water delivery including regional power outages, earthquakes or other disasters. The ERP outlines standard operating procedures for all levels of emergency, from minor accidents to major disasters. **Table 6-2** summarizes actions included in the ERP for specific catastrophic effects. MPMW's most recent ERP is dated 2021 and will be updated by December 31, 2026 as required per Section 2013 of America's Water Infrastructure Act of 2018.

A water supply interruption may result in a partial or full interruption of potable supply for MPMW and adjacent water suppliers. Therefore, the City plans for four levels of action triggers that depends on the severity and duration of a supply interruption. **Table 6-3** summarizes MPMW's actions under each water supply action trigger.

As discussed in Sections 6.2 of the 2025 UWMP, MPMW has constructed one emergency groundwater well (the Corporation Yard Well) which can produce up to 1,500 gpm of emergency/backup supply to the Lower Zone. Reservoir storage and an additional one or two emergency wells are being considered to achieve additional storage and another 1,500 gpm of supply capacity (for a total of 3,000 gpm). As the emergency storage and groundwater well(s) comes on-line, MPMW will add important redundancy and flexibility to its system and will have additional ability to manage catastrophic short-term interruptions in service.

Table 6-2 Preparation Actions for Catastrophes[3]

Possible Catastrophe	Summary of Actions
Earthquake	• Shut-off isolation valves and use of spare piping for ruptured mains • Storage supplies for service interruption • Portable and emergency generators available for facilities • Procedures for assessing water quality, notifying public, and disinfecting system
Flooding	• Portable and emergency generators available for facilities • Storage supplies for service interruption • Procedures for assessing water quality, notifying public, and disinfecting system
Toxic Spills (interrupts Agency Supply)	• Use of local groundwater • Procedures for assessing water quality, notifying public and disinfecting system
Fire	• Storage supplies for fire flows • Mutual aid plans and responders identified • Portable and emergency generators available for facilities
Power outage or grid failure	• Portable and emergency generators available for facilities
Severe Winter Storms	• Portable and emergency generators available for facilities
Hot Weather	• Portable and emergency generators available for facilities

[3] With completion of MPMW's Corporation Yard Well, MPMW may use groundwater supplies from the Corporation Yard Well depending on the impact to water supplies.

Table 6-3 Activation Action in Response to Supply Interruptions

Response Category	Sample Activation Triggers	Potential Activation Actions*
Level 0	• Changes in SFPUC wholesale water blends due to seasonal changes or plant maintenance • No loss in water supply	• None
Level 1	• Possible partial or full shutdown of SFPUC water supply source • Potential turnout threat	• Fill reservoirs and standby • Activate security monitoring of critical facilities • Mandatory rationing • Contact bottled water companies • Open water distribution points on reservoirs • Request assistance through Water/Wastewater Agency Response Network (WARN) agreement
Level 2	• Complete loss of SFPUC supply (lasting <24 hours*)	• Notify customers • Operate reservoirs • Close turnout(s) • Turn on pump stations • Open key isolation valves • Mandatory rationing • Contact bottled water companies • Open distribution points on reservoirs • Request assistance through WARN agreement
Level 3 (possible EOC activation)	• Complete loss of SFPUC supply (lasting>24 hours) (a)	• Notify customers • Turn on wells • Open interties • Open remaining isolation valves • Mandatory rationing • Contact bottled water companies • Open water distribution points on reservoirs • Request assistance through WARN agreement

NOTES:
(a) The 24-hour period is an estimate only. The actual time period shall be the length of time that the City can supply reservoir water.

7 SEISMIC RISK ASSESSMENT

☑ ***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.

Ballantyne Consulting completed a Seismic Vulnerability Assessment for MPMW's water distribution system in July 2017. The report was incorporated into the MPMW 2018 Water Master Plan.[4]

In addition, as part of MPMW's Sand Hill Reservoir #2 Roof Replacement Project, Beyaz & Patel, Inc. performed a structural and seismic evaluation of Reservoir #2 and developed structural and seismic design criteria for the project. Construction of the Reservoir #2 Roof Replacement project is anticipated to start in 2026.

[4] MPMW's 2018 Water Master Plan can be accessed at: https://www.menlopark.gov/Government/Departments/Public-Works/Water-stormwater-and-solid-waste/Menlo-Park-Municipal-Water/Water-projects-and-plans/Water-system-master-plan.

8 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.

Each stage of the WSCP is implemented with a formal declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use due to a water supply shortage or emergency. Procedures for water shortage declaration and termination are detailed below in **Section 8.1**.

Even before formal declaration of a water shortage, a public information program will be activated to provide customers with as much advance notice as possible. Following declaration of a shortage, MPMW's customers would need to be provided notice of water shortage rules and regulations via a variety of media and communications methods.

Coordination between MPMW and with other public agencies can begin prior to formal declaration of a water shortage and can be accomplished through regular meetings, e-mail group updates, and presentations. In a regional water shortage scenario, MPMW would use the public outreach resources and materials provided by BAWSCA and/or the SFPUC. In addition to these materials, MPMW may develop its own materials to communicate with customers, such as a dedicated customer service hotline, and expand its normal public outreach to support its water conservation efforts (see Section 9 of the 2025 UWMP). Communication and public outreach actions to be taken by MPMW under each shortage level are detailed in Table 6-1.

As discussed in Section 9 of the 2025 UWMP, the City has a sustainability specialist dedicated to water conservation. Staff time dedicated to water conservation and enforcement action will increase with the severity of a supply shortage. Additional duties may be assigned to current employees or hiring of temporary staff may be considered to meet staffing needs during extreme water shortages.

8.1 Water Shortage Declaration and Termination Procedures

The provisions of each water shortage stage of action are triggered upon the City Council's determination that a Governing Authority has required MPMW to achieve a voluntary or mandatory reduction in water use because of water shortage conditions.

The stage of action will become effective after the City Council declares a particular stage of action and MPMW has notified its customers of this determination. Once effective, the provisions of a water shortage stage of action will stay in effect until: (1) the City Council declares a different stage of action; or (2) the City Council determines that the water shortfall condition no longer exists and MPMW has notified its customers of this determination.

After the termination of the water shortage conditions, MPMW will oversee any remaining termination and WSCP review activities. These activities could include:

- Publicize gratitude for the community's cooperation.
- Restore water utility operations, organization, and services to pre-event levels.
- Document the event and response and compile applicable records for future reference.
- Collect cost accounting information, assess revenue losses and financial impact, and review deferred projects or programs.
- Debrief staff to review effectiveness of actions, to identify the lessons learned, and to enhance response and recovery efforts in the future.
- Update the WSCP, as needed.

9 COMPLIANCE AND ENFORCEMENT

☑ ***CWC § 10632 (a) (6)*** *For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.*

Enforcement of MPMW's water use restrictions and prohibitions focuses on soliciting cooperation from water customers who are unaware of the restrictions or have failed to comply with the provisions of the City's Water Conservation Ordinance (City Municipal Code Title 7, Chapter 7.35) and this WSCP. If discussions with the customer are unsuccessful in obtaining compliance, MPMW is authorized to issue penalties to customers that violate the restrictions and prohibitions. The City's current compliance and enforcement procedures are adopted in City Resolution No. 6383.

Table 9-1 describes the penalties, charges, and other enforcement actions that MPMW is authorized to take after each violation of the WSCP. The City takes progressively increasing actions associated with more egregious levels of violations. Actions range from a warning after the first violation, up to a $500 fine and discontinuance of water service after the sixth violation. As shown in **Table 9-2**, customers will incur additional charges for installation and removal of flow restricting devices and disconnection and reconnection of service if MPMW deems these actions necessary. Customers may contest a fine by submitting a written appeal to the Public Works Director within thirty (30) days of the fine.

Additionally, as shown in **Table 6-1**, MPMW will facilitate compliance with the WSCP by employing increasing levels of customer service, public outreach, and water-waste patrols with increasing shortage levels.

The City employees and members of the public may report water waste complaints through the City's website at www.menlopark.gov/waterwaste. Staff is available to provide information and respond to complaints. Staff may also seek assistance from other City Departments in responding to complaints and enforcing water use restrictions.

Table 9-1 Enforcement of Water Use Restrictions and Prohibitions

Violation	Enforcement Action or Penalty
1st	Warning Only. Educate customer on proper water conservation practices
2nd	$50 fine
3rd	$100 fine
4th	$200 fine and review by the Public Works Director (or his or her designee) to determine if a flow restricting device should be installed
5th	$500 fine, and review by the Public Works Director (or his or her designee) to determine if water service should be discontinued
6th	$500 fine and water service shall be discontinued
References: (1) City of Menlo Park, Resolution No. 6383, Resolution of the City Council of the City of Menlo Park Adopting a Water Conservation Plan, 2 May 2017.	

Table 9-2 Charges for Installation or Removal of Flow Restricting Devices and Disconnection or Reconnection of Service

Meter Size	Installation Cost	Removal Cost
Charges for Installation or Removal of Flow Restricting Devices		
5/8" to 2"	$155.00	$155.00
3" or larger	Actual Cost	Actual Cost
Charges for Disconnecting and Reconnecting Service		
All sizes	$155.00	$155.00
References: (1) City of Menlo Park, Resolution No. 6383, Resolution of the City Council of the City of Menlo Park Adopting a Water Conservation Plan, 2 May 2017.		

10 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 § 10632.3***

It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.

As discussed above, MPMW has authority within Section 7.35 of the City's Municipal Code to require water rationing and conservation and to enforce penalties. Municipal Code Section 7.35 is included as **Attachment 1** of this WSCP. The City's current WSCP stage and water waste prohibitions in effect were adopted in 2021 in Resolution 6630.

MPMW shall declare a water shortage emergency in accordance with Water Code Chapter 3 (commencing with Section 350) of Division 1. MPMW shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency. A list of contacts for other water suppliers within the City of Menlo Park, and the County of San Mateo is provided below:

California Water Service, Bear Gulch District	(650) 561-9709
O'Connor Tract Co-operative Water	(650) 321-2723
Palo Alto Park Mutual Water Company	(650) 322-6903
San Mateo County Environmental Health	(650) 372-6200

MPMW is a member of BAWSCA and anticipates coordinating with other Member Agencies via BAWSCA during a water shortage or emergency on the SFPUC RWS.

11 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.

In the event of a drought, if MPMW anticipates significant loss in revenue due to decreased consumption, MPMW may increase its water rates so that customers are charged for the actual cost of providing water during a shortage. These rates will be specified in MPMW's water rate schedule, as approved by the City Council and in accordance with Proposition 218 requirements.

Black & Veatch Management Consulting prepared a Water Rate Study for MPMW in March 2026 (Black & Veatch Management Consulting, 2026). The study includes an analysis of projected revenue and expenditure impacts resulting from implementation of the 2025 WSCP during periods of water shortage. To promote financial stability during water supply shortages, the 2026 Water Rate Study includes drought surcharge rates designed to compensate for lost revenue due to decreased volumetric water sales and additional expenses related to implementation of the WSCP. As of May 2026, MPMW's current water rate structure for all customers includes a monthly fixed meter charge based on meter size, plus a capital surcharge and a tiered water consumption charge based on water usage. However, new water rates will be proposed at the June 9, 2026 Council Meeting that will change from tiered rates to uniform rates for all.

The drought surcharge rates are levied on all usage temporarily until MPMW determines that water supply conditions have returned to normal and drought-related expenditures and lost revenue have been recovered[5].

As shown in **Table 6-1**, the City will enforce a drought surcharge rate in each water shortage level. The City's drought surcharge rate prohibits excessive water use pursuant to CWC §365 et seq. The cost of compliance with CWC §365 et seq. has been considered in the development of the drought rate schedule in the 2026 Water Rate Study.

In addition, MPMW manages an emergency reserve fund to address the potential financial impacts of a severe drought. The City may also defer expense on capital improvement projects during a severe drought.

[5] Current City of Menlo Park five-year water rate structure including drought surcharge rate located online at https://www.menlopark.gov/Government/Departments/Public-Works/Water-stormwater-and-solid-waste/Menlo-Park-Municipal-Water/Water-rates.

12 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.*

MPMW monitors water use through analysis of wholesale water purchases and customer meter readings. SFPUC's Automated Meter Infrastructure (AMI) Eye On Water portal provides real-time turnout meter reads which allows MPMW to monitor wholesale water purchases. In addition, each customer account is metered. Some non-residential and multi-family customers also have separate irrigation meters to monitor water use for landscape irrigation separately from indoor uses. The City's Water Efficient Landscaping Ordinance requires non-residential projects to install a separate irrigation meter if landscaped areas meet specific size thresholds.

In 2024, MPMW began replacing or retrofitting meters as part of its AMI project. By the end of 2025, approximately 95% of water meters have been converted to the AMI system. Hourly reads for these meters come through the automated system. The remaining meters are still manually read by MPMW staff. MPMW is in the process of upgrading the remaining meters. During a supply shortage, MPMW will continue to monitor water use to determine the effectiveness of the customer response to the implementation of this WSCP. Hourly water meter readings allow MPMW to document atypically high water use, possibly caused by leaks, and notify individual customers to resolve the cause of the high water use.

Pursuant to California Code of Regulations Title 23 §991, MPMW reports monthly water use and production to the SWRCB.[6] Water systems that are experiencing a severe water shortage, or systems that have been identified by the SWRCB or Local Primacy Agency staff to be at-risk of experiencing a severe water shortage may be required to submit drought-related data more frequently to the State to facilitate better coordination of assistance and emergency tracking.

[6] Water supplier monthly reports can be accessed at https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html

13 WSCP REFINEMENT PROCEDURES

☑ ***CWC § 10632 (a) (10)*** *Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.*

The WSCP is implemented as an adaptive management plan. MPMW will evaluate the need to revise its WSCP every year after performing its Annual Assessment. The evaluation will consider effectiveness of WSCP actions and any anticipated water supply shortages assessed by the Annual Assessment. If the WSCP is revised, the City Council will adopt a new resolution adopting the revised WSCP, and if necessary, declare a water shortage level to implement.

14 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

☑ ***CWC § 10632 (c)*** *The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.*

MPMW informed the public and the appropriate agencies of: (1) its intent to prepare a WSCP, (2) where the WSCP was available for public review, and (3) when the public hearing regarding the WSCP would be held. All notifications were completed in compliance with the stipulations of Section 6066 of the Government Code.

A copy of the adopted 2025 WSCP including any amendments will be provided to DWR, the California State Library, San Mateo County, and SFPUC within 30 days of the adoption. An electronic copy of the adopted 2025 WSCP will be submitted to the DWR using the DWR online submittal tool.

A copy of the adopted 2025 WSCP will be available for public review in the City Hall during normal business hours and on MPMW website within 30 days after filing the plan with DWR.

15 REFERENCES

BAWSCA, 2026. *Bay Area Water Supply and Conservation Agency Annual Survey FY 2024-25*, March 2026.

Beyaz & Patel, Inc., 2019. *Preliminary Design Report for Sand Hill Reservoir #2 Roof Replacement Project*, April 2019.

Black & Veatch Management Consulting, 2026. *City of Menlo Park Water Rate Study 2026*, March 2026.

County of San Mateo, 2004. *San Mateo County/Operational Area Emergency Operations Plan, Potable Water Procurement and Distribution Annex*, *3rd Edition*, July 2004.

Infrastructure Engineering Corporation, 2016. *Corporation Yard Emergency Back-Up Water Supply Well No. 1 Initial Study/Mitigated Negative Declaration*, April 2016.

BAWSCA, 2026. *Bay Area Water Supply and Conservation Agency Annual Survey FY 2024-25*, March 2026.

Attachment 1: Section 7.35 of City of Menlo Park's Municipal Code

Chapter 7.35
WATER CONSERVATION

Sections:

7.35.010 Purpose.

The purpose of this chapter is to promote water conservation and provide the city with the flexibility to respond to a drought emergency whether it be emergency regulations adopted by the State Water Board, or drought-related actions imposed by the San Francisco public utilities commission. (Ord. 1011 § 4 (part), 2014: Ord. 1010 § 4 (part), 2014).

7.35.020 Water conservation.

Upon the adoption of emergency water conservation regulations by the State Water Board and within the timelines prescribed by the State Water Board, or drought-related actions imposed by the San Francisco public utilities commission, the city council of the city of Menlo Park shall adopt by resolution a water conservation plan that mandates those water conservation measures. (Ord. 1011 § 4 (part), 2014: Ord. 1010 § 4 (part), 2014).

7.35.030 Penalty.

Any violations of the water conservation plan shall be an infraction or enforced as provided in the resolution adopted pursuant to Section 7.35.020. (Ord. 1011 § 4 (part), 2014: Ord. 1010 § 4 (part), 2014).

Attachment 2: SFPUC's Annual Water Supply and Demand Assessment Procedures

SECTION 2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

The SFPUC has a robust process for assessing its annual water supply and demand. This process involves considering a range of input factors unique to the SFPUC's water supplies and system configuration and provides the SFPUC with flexibility to consider new factors. The SFPUC reports on an assessment of its system's water supply and demand to the State through the following methods:

- On or before July 1 of each year, the SFPUC prepares a Water Supply and Demand Assessment (WSDA), consistent with California Water Code Section 10632.1 requirements, by evaluating the total amount of water it expects to be in storage within the RWS that year and comparing that amount to expected Retail and Wholesale Customer demands. The following subsections outline the SFPUC's procedures for preparing the annual WSDA.
- Every month, the SFPUC completes the SWRCB's Drought and Conservation Reporting on the SAFER Clearinghouse online portal.

2.1 DEMAND ASSESSMENT

To calculate unconstrained customer demand on the RWS for the purpose of its annual WSDA, the SFPUC collects information on the demands of both the Retail and Wholesale Customers. The SFPUC estimates retail customer demand based on the best available information to date, typically including the previous year's demands as well as consideration of current demand use patterns or other conditions impacting demands, such as weather and growth. For estimated wholesale demands, each February, the SFPUC receives from BAWSCA a report of estimated Wholesale Customer demands on the RWS for the upcoming year. BAWSCA compiles this report based on demand estimates it receives from each of its 26 member agencies. The SFPUC estimates the relatively small demands of Cordilleras Mutual Water Company and Groveland CSD, its other two wholesale customers for the purposes of its UWMP, that are not parties to the WSA and are not BAWSCA member agencies as it does the demands of its retail customers: based on the best available information to date, typically including the previous year's demands as well as consideration of current demand use patterns or other conditions impacting demands, such as weather and growth.

2.2 SUPPLY ASSESSMENT

The RWS collects water from the Upper Tuolumne River watershed in the Sierra Nevada and from the local Alameda and Peninsula watersheds. The RWS draws an average of 85% of its supply from the Tuolumne River watershed. This water feeds into an aqueduct system delivering water 167 miles by gravity to Bay Area reservoirs and customers. The remaining 15% of the RWS supply is drawn from local surface waters in the Alameda and Peninsula watersheds. The percentage split between the Upper Tuolumne River and Bay Area watersheds varies from year to year depending on the water year hydrology and operational circumstances.

To evaluate water supply conditions each year, the SFPUC uses measurements of precipitation and snowpack in the watersheds above Hetch Hetchy, Cherry, and Eleanor Reservoirs. The Cooperative Snow Survey (conducted

by the SFPUC in partnership with state and federal agencies) evaluates snowpack conditions every year beginning in late January. The SFPUC also estimates snowpack conditions using information from the Airborne Snow Observatory, which is a developing technology that uses aerial surveys to quantify snowpack, along with other sources. The SFPUC maintains a hydrologic model of the upcountry watersheds that uses this information to project runoff for the coming year. This process also includes a statistical analysis of additional expected precipitation. In addition to projected runoff, the determination of projected available water supply also considers stored water throughout the RWS, water acquired by the SFPUC from non-SFPUC sources, reservoir losses, and allowances for carryover storage.

Additionally, the SFPUC accounts for groundwater provided by the San Francisco Groundwater Supply Project for the in-City retail system and recycled water provided for irrigation at Harding Park, Fleming, and Sharp Park Golf Courses.

The RWS relies on precipitation and snowmelt captured and stored in its reservoirs. During droughts, water supply deliveries can exceed inflows, requiring the use of water stored in previous years to meet demands. Because of the importance of carry-over storage, the SFPUC constantly monitors and evaluates water supply conditions in the RWS, updating look-ahead forecasts as a year's hydrology and operations change. Generally, in early winter of any year, SFPUC staff can begin providing a forecast of water supply conditions for the upcoming year based on known and anticipated winter and spring precipitation and snowpack. The predictive power of this forecast improves greatly through the spring. The annual precipitation, snowmelt, and carry-over storage together constitute the SFPUC's reservoir storage conditions. Using data for each of these factors, the SFPUC can determine whether the reservoir system will be capable of serving full deliveries to its customers. Section 2.4 describes the system modeling SFPUC conducts.

The SFPUC sells water to 26 wholesale customers (collectively referred to as the Wholesale Customers) under the terms of a 25-year contract known as the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County (WSA) and associated individual water sales contracts with each Wholesale Customer. Collectively, the Wholesale Customers on average receive over two-thirds of the RWS's annual deliveries, with the remaining approximately one-third provided to the SFPUC's retail customers.

The WSA carries forward many components of its predecessor agreement, including the SFPUC's "Supply Assurance" of 184 million gallons per day (MGD) to the Wholesale Customers. The SFPUC has agreed to deliver water to the Wholesale Customers up to the amount of the Supply Assurance, and this agreement is perpetual and survives the expiration of the WSA. The Supply Assurance is, however, subject to reduction due to water shortage, drought, scheduled RWS maintenance activities, and emergencies. As part of the Phased Water System Improvement Plan (WSIP) in 2008, the SFPUC established a temporary 265 MGD annual average limitation on water deliveries from RWS watersheds, the "Interim Supply Limitation" (ISL). The SFPUC has allocated the ISL between the Retail Customers and Wholesale Customers as follows:

- Retail supply allocation: 81 MGD
- Wholesale supply allocation: 184 MGD

Table 2-1 shows the availability of RWS supplies for the SFPUC's Retail Customers and Wholesale Customers in normal years. Table 2-2 shows the current and projected RWS supply needs to meet Retail and Wholesale Customer demands based on information and projections presented in the SFPUC's 2025 UWMP.

Table 2-1. Regional Water System Supply Availability in Normal Years (MGD)

RWS Supply	2030	2035	2040	2045	2050
Retail Customers[a, b]	81	81	81	81	81
Wholesale Customers[c, d]	184	184	184	184	184
Total RWS Supplies	265	265	265	265	265

a Groundwater and recycled water are assumed to be used before RWS supplies to meet retail demand. However, if these alternative supplies are not available, up to 81 MGD of RWS supply could be used in normal years.

b The SFPUC reports Groveland CSD as a wholesale customer in its UWMP, but the SFPUC otherwise considers Groveland CSD a retail customer and includes Groveland CSD's demands (approximately 0.3 MGD) within the retail supply allocation of 81 MGD.

c Projected Wholesale Customer deliveries are limited to 184 MGD, including the demands of the cities of San Jose and Santa Clara, which are supplied on a temporary and interruptible basis.

d Cordilleras Mutual Water Company is a wholesale customer of the SFPUC, but is not a party to the WSA or a BAWSCA member agency, and it is not included in the Wholesale Customer supply allocation of 184 MGD. The demands of Cordilleras Mutual Water Company are minor (projected to be less than 0.01 MGD).

Table 2-2. Regional Water System Supply Utilized in Normal Years (MGD)

RWS Supply	2030	2035	2040	2045	2050
Retail Customers[a, b]	62.7	61.2	61.9	64.0	66.7
Wholesale Customers[c, d]	133.9	136.3	140.6	144.1	148.4
Total RWS Supplies	196.6	197.5	202.5	208.1	215.1

a Groundwater and recycled water are assumed to be used before RWS supplies to meet retail demand. However, if these alternative supplies are not available, up to 81 MGD of RWS supply could be used in normal years.

b The SFPUC reports Groveland CSD as a wholesale customer in its UWMP, but the SFPUC otherwise considers Groveland CSD a retail customer and includes Groveland CSD's demands (approximately 0.3 MGD) within the retail supply allocation of 81 MGD.

c Projected Wholesale Customer deliveries are limited to 184 MGD, including the demands of the cities of San Jose and Santa Clara, which are supplied on a temporary and interruptible basis.

d Cordilleras Mutual Water Company is a wholesale customer of the SFPUC, but is not a party to the WSA or a BAWSCA member agency, and it is not included in the Wholesale Customer supply allocation of 184 MGD. The demands of Cordilleras Mutual Water Company are minor (projected to be less than 0.01 MGD).

2.3 INFRASTRUCTURE CONSIDERATIONS

On an ongoing basis, three groups within the SFPUC's Water Enterprise – Hetch Hetchy Water and Power, Water Supply and Treatment Division, and Hydrology and Water Systems – conduct analyses of the RWS that incorporate planned facility outages and multiple levels of projected system demands to evaluate operational capabilities and plan for potential water delivery constraints. These three groups meet quarterly to share plans and coordinate how facility outages, changes in service area demand, wet or dry weather, and other variables shape the operating plans each year. Facility outages due to maintenance or upgrades are coordinated in an adaptive manner to respond to changes as they occur. For new water supplies or new capital projects related to supply distribution, impacts on the

RWS are evaluated extensively prior to initiation of any changes. Results from these modeling efforts are considered in the annual WSDA.

2.4 SYSTEM MODELING

To proactively plan for conditions that would result in a shortage of water supplies, the SFPUC models conditions using a hypothetical drought that is more severe than what the RWS has historically experienced. This drought sequence is referred to as the "design drought" and serves as the basis for planning and modeling of future scenarios. The design drought consists of an 8.5-year sequence of dry conditions.

In applying its water supply planning methodology, the SFPUC performs an initial model simulation of the system for the design drought sequence and then reviews the ability of the system to deliver water to the service area through the entire design drought sequence. If the projected water supply runs out before the end of the design drought sequence in the initial model run, system-wide water use is reduced by applying water supply reductions and the scenario is re-run. This process continues iteratively until a model simulation of the system is achieved in which the water supply in storage at the end of the design drought sequence is brought to the system "dead pool," where no additional storage is available for delivery (currently simulated as 96,775 acre-feet). Drawing system storage down to the dead pool without going below it indicates that water supply delivery, including the adjusted amount of water use, is maintained through the design drought sequence.

Estimated levels of water supply reduction and corresponding storage threshold values that initiate each level of supply reduction can then be used to simulate the operation of the system through the historical record of hydrology, or to evaluate system water supply conditions during an ongoing drought. While the design drought sequence does not occur in the historical hydrology, the reduced water use and storage threshold values that are adjusted to allow a system configuration to maintain water delivery through the design drought sequence can be used to evaluate system performance in the historical record, or as a basis for comparing with real-time system conditions. Through use of this planning method, the SFPUC can simulate a response to declining water supply in storage that is appropriate for the system conditions being evaluated.

The SFPUC plans its water deliveries using indicators for demand reduction that are developed through analysis with the design drought sequence. As a result, the SFPUC system operations are designed to provide sufficient carry-over water in SFPUC reservoirs to continue delivering water, although at reduced levels, during multiple-year droughts.

2.5 DECISION-MAKING PROCESS

Regardless of the expectation of shortage conditions, as part of the normal course of business, the SFPUC provides a water supply condition update to its executive team every two weeks throughout the year. Pursuant to the Water Shortage Allocation Plan (WSAP), also known as the Tier 1 Shortage Plan, that is incorporated in the WSA and described further in Section 3 below, the SFPUC also provides an initial estimate of available water supply for the upcoming Supply Year (defined as the period between July 1 through June 30) to its Wholesale Customers on February 1 every year. A Wholesale Customer Annual Meeting is held in February at which the SFPUC makes a

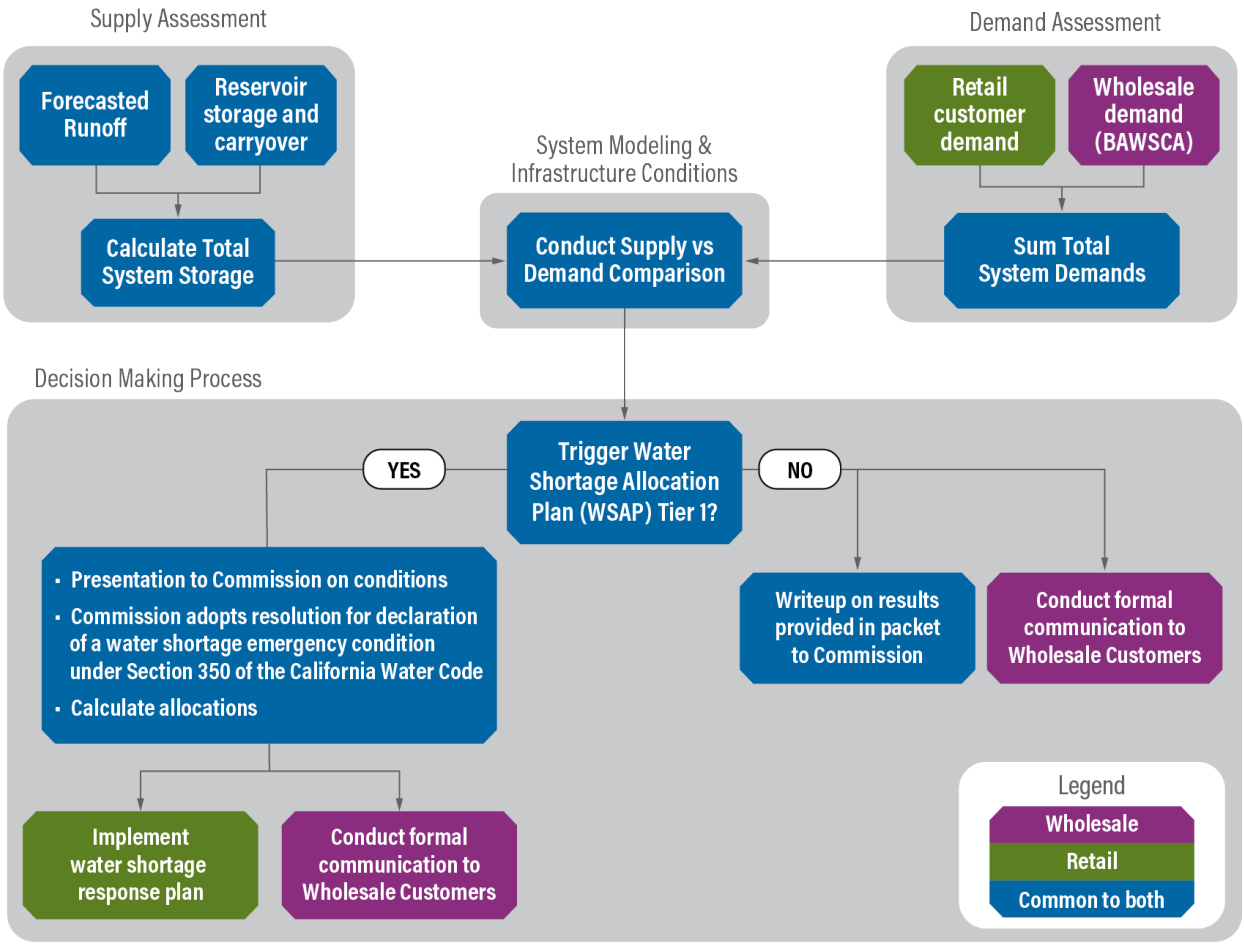
presentation on current water supply conditions and forecasts. The SFPUC issues a revised estimate of available water supply for the upcoming Supply Year on March 1 and uses the snow survey that occurs in the first week of April and an associated runoff forecast to refine an estimated total system storage expected on July 1. By the middle of April, the SFPUC issues a final estimate of available water supply and determines whether there will be a system-wide shortage for the coming Supply Year.

If the SFPUC determines that a water shortage exists, the SFPUC may call for voluntary demand reductions among its customers or issue a declaration of water shortage emergency pursuant to California Water Code section 350 et seq. In support of a declaration of water shortage emergency, SFPUC staff will deliver a presentation to the Commission with information that explains the basis for the shortage conditions, such as conditions of precipitation to date, snowpack, and storage levels, with more information as necessary depending on the particulars of the supply forecast. Depending on the level of shortage, the SFPUC may determine that voluntary actions by its Retail and Wholesale Customers will be sufficient to accomplish the necessary reduction in water use throughout its service area or that mandatory actions will be required.

Prior to initiating any water delivery reductions to its retail customers, whether it be initial implementation of delivery reductions or implementing a different water shortage level, the SFPUC will outline a water shortage response plan to address the following: the water supply situation; proposed demand reduction objectives; alternatives to demand reductions; methods to calculate water use allocations and adjustments; compliance methodology and enforcement measures; and budget considerations. Details on the expected allocation program are described further in Section 4. SFPUC staff will present this water shortage response plan at a regularly scheduled Commission meeting and advertise it in accordance with the requirements of Section 6066 of the California Government Code. Water demand reductions that are applicable to Wholesale Customers will be formally communicated following the Commission's declaration of a water shortage emergency under Section 350 of the California Water Code.

An example of the general WSDA process for water shortages caused by a drought is presented in Figure 2-1 for illustrative purposes. Other non-drought water shortages may not trigger the WSAP and therefore would not follow the same process shown below. For more information about procedures in response to non-drought water shortages, such as those caused by a catastrophic supply interruption, see Section 10.

Figure 2-1: Water Supply and Demand Assessment Process



Attachment 3: Drought Response Tool Quantitative Assessment

Drought Response Tool

1 - Home

Menlo Park Municipal Water

Enter Agency Information	
Agency Name	Menlo Park Municipal Water
Total Population Served	17,042
Conservation Goal (%)	5%
Drought Stage	Stage 1
Number of Residential Accounts	3,672
Number of Commercial, Industrial, and Institutional (CII) Accounts	428
Number of Dedicated Irrigation Accounts	135
Baseline Year(s)	Average 2023-2025
Percentage of Residential Indoor Use During Minimum Month (%)	85%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.
6 - DROUGHT RESPONSE TRACKING	Track production and water savings against the conservation target.

Drought Response Tool

1 - Home

Menlo Park Municipal Water

For questions about this tool or for additional information, contact:

Anona Dutton, P.G., C.Hg.
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(650) 292-9100

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2 - Input Baseline Year (Average 2023-2025) Water Use

Menlo Park Municipal Water

Input Baseline Year (Average 2023-2025) Production and Water Use

Units: (mg)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (mg)	Residential Water Use (mg)	CII Water Use (mg)	Dedicated Irrigation Water Use (mg)	Non-Revenue Water Use (mg)	Total R-GPCD	Comments
January	53	23	22	2	5	44	
February	50	24	20	2	5	50	
March	47	22	19	2	4	41	
April	52	23	23	2	5	44	
May	86	38	33	8	8	72	
June	93	35	35	14	9	68	
July	106	40	41	15	10	75	
August	102	39	37	17	9	73	
September	102	39	37	17	9	76	
October	104	38	40	15	10	72	
November	91	39	35	8	8	76	
December	55	26	21	3	5	49	

3 - Baseline Year (Average 2023-2025) Water Use Profile

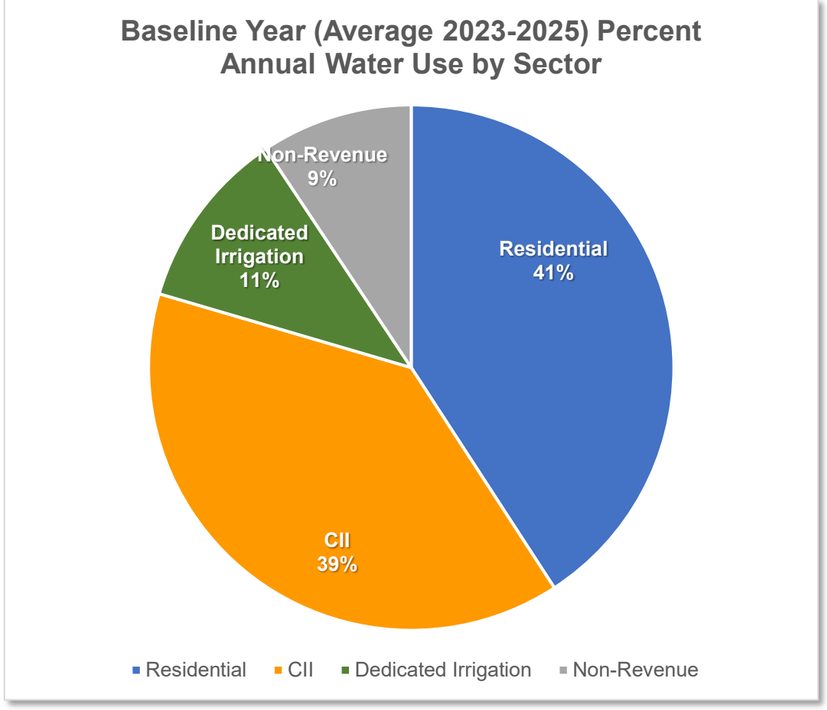
Menlo Park Municipal Water

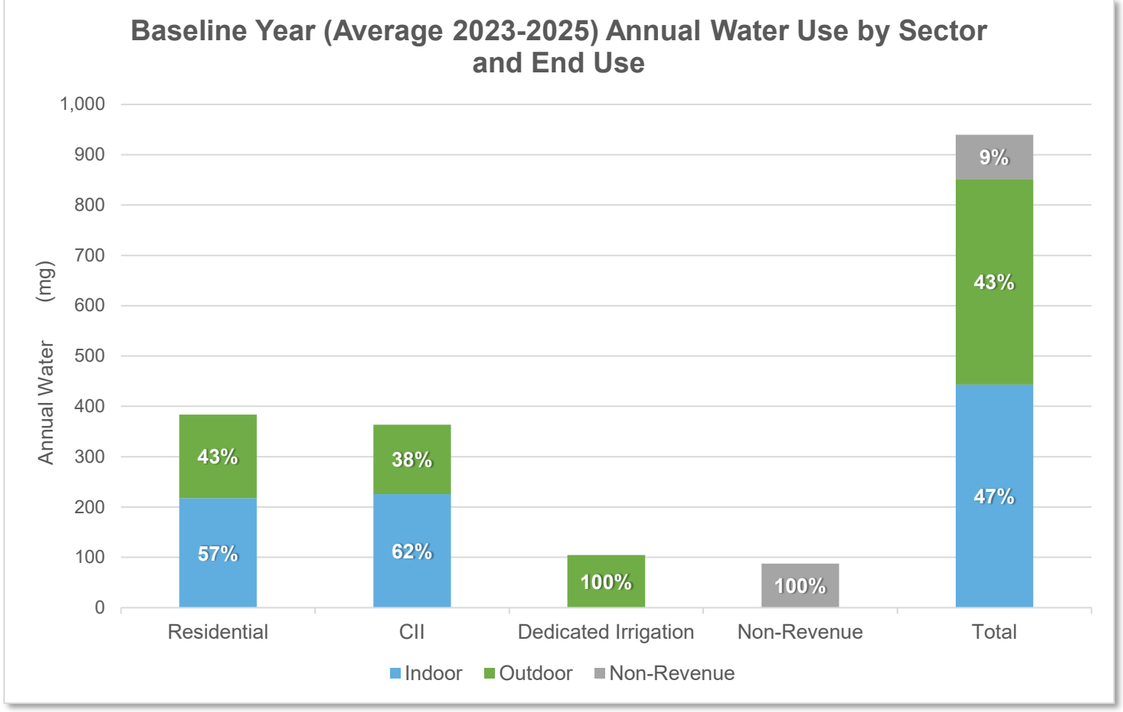
Baseline Year (Average 2023-2025) Annual Water Use Summary

Units: (mg)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

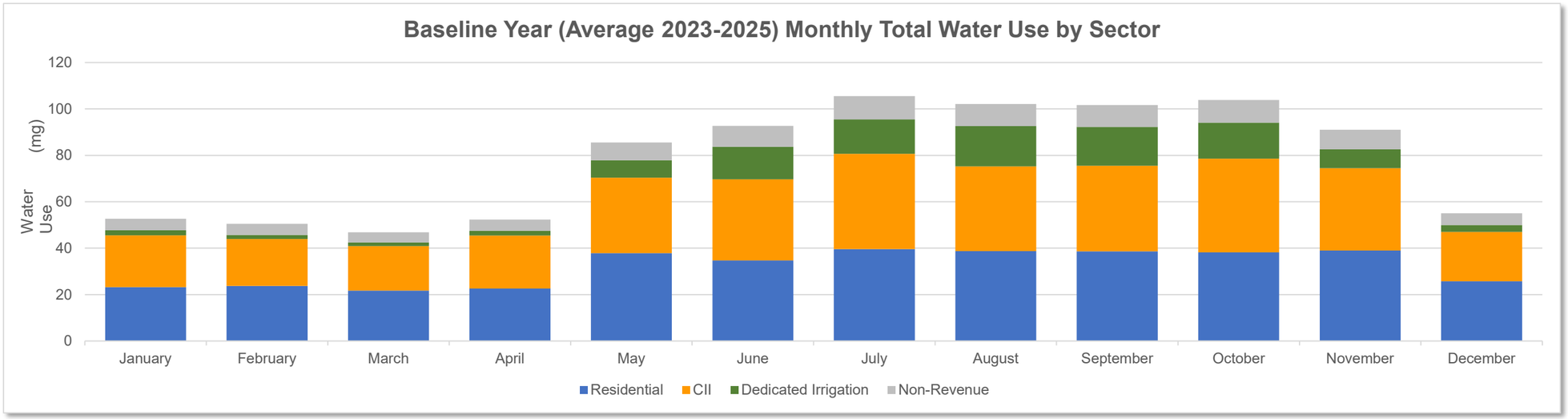
Water Use	Total Production (mg)	Water Use (mg)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	940	384	364	105	88	
Total Indoor	443	218	226	--	--	
Total Outdoor	409	166	138	105	--	
Total Non-Revenue	88	--	--	--	88	
Total Indoor %	47%	57%	62%	0%	--	
Total Outdoor %	43%	43%	38%	100%	--	
Total Non-Revenue %	9%	--	--	--	100%	

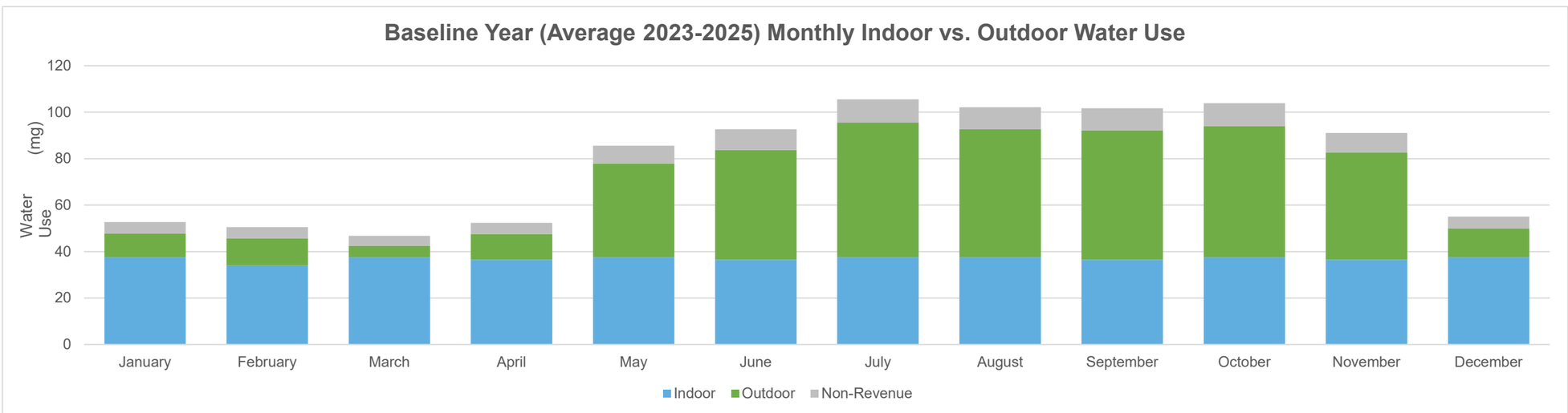




3 - Baseline Year (Average 2023-2025) Water Use Profile

Menlo Park Municipal Water



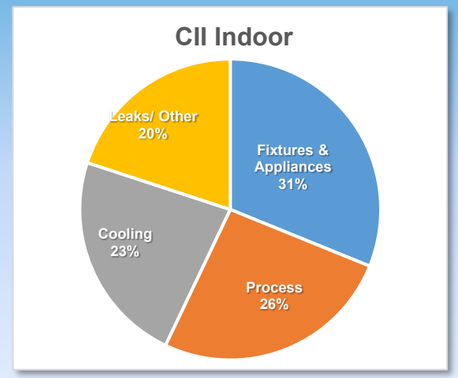


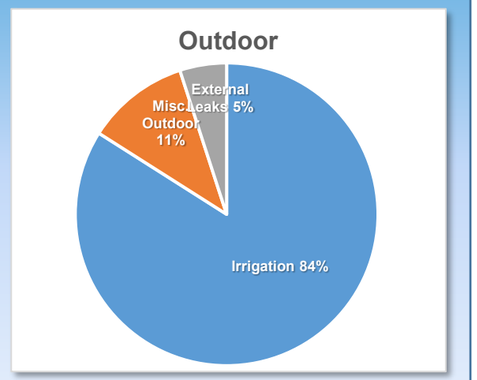
4 - Drought Response Actions - Stage 1

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
September 1952	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
January 1910	100%	of Baseline CII Outdoor Water Use
March 1901	100%	of Baseline Dedicated Irrigation Water Use
May 1900	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 1

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**35%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 1

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	50%	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☐		50%	--	--
Water Efficiency Workshops, Public Events	All	☐	0.5%	25%	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☐	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☐	45%	50%	DWR, 2015	Target 50% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	**1%**	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☐			--	--
Establish Drought Hotline	All	☐			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☐	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 1

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☐	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 1

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 1

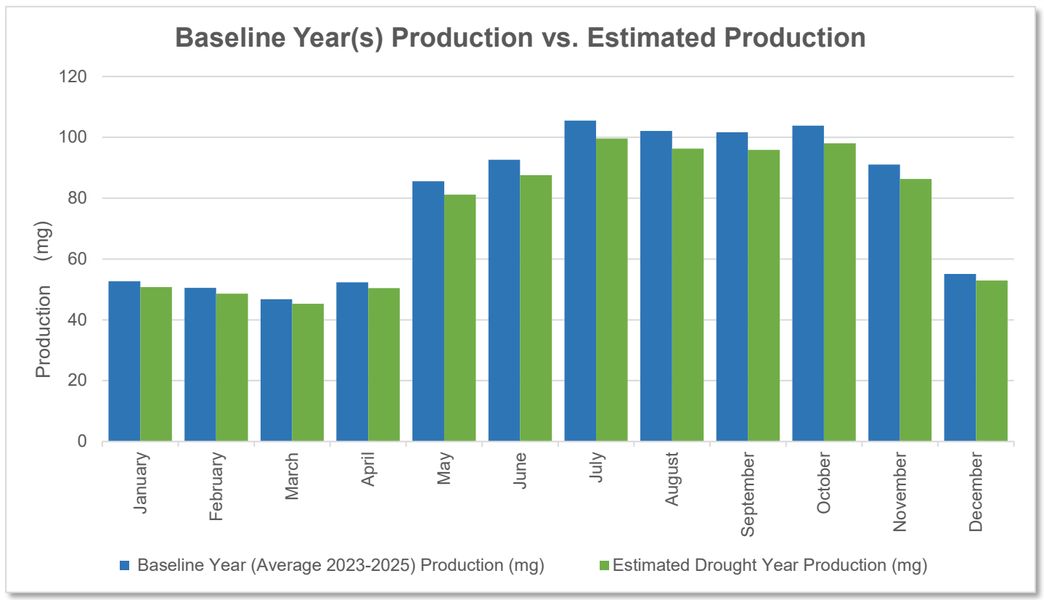
Menlo Park Municipal Water

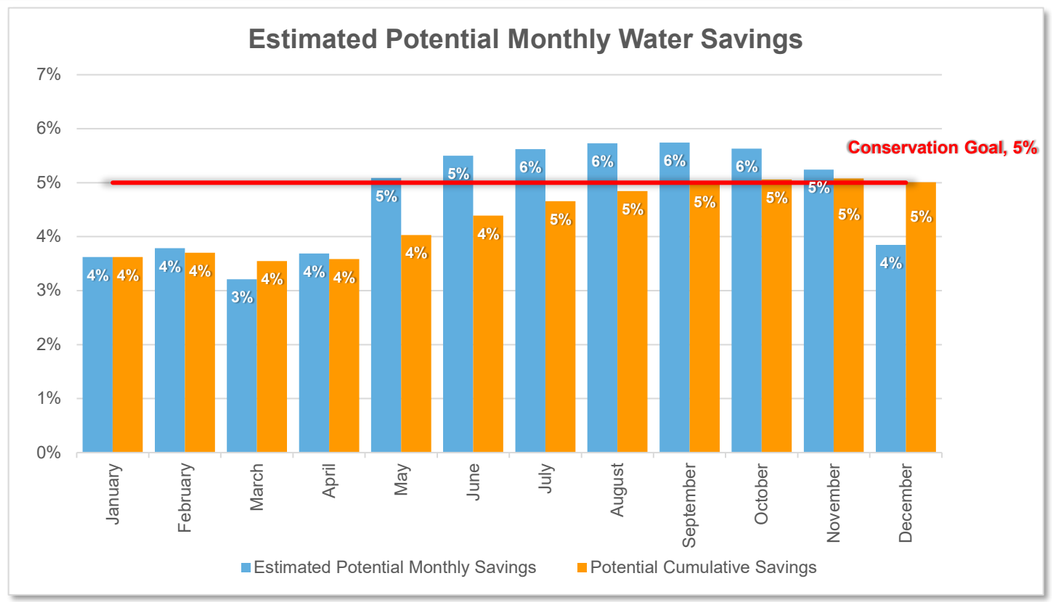
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	51	4%	4%	5%	
February	50	49	4%	4%	5%	
March	47	45	3%	4%	5%	
April	52	50	4%	4%	5%	
May	86	81	5%	4%	5%	
June	93	88	5%	4%	5%	
July	106	100	6%	5%	5%	
August	102	96	6%	5%	5%	
September	102	96	6%	5%	5%	
October	104	98	6%	5%	5%	
November	91	86	5%	5%	5%	
December	55	53	4%	5%	5%	



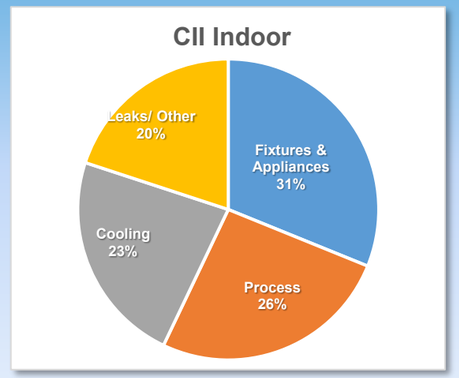


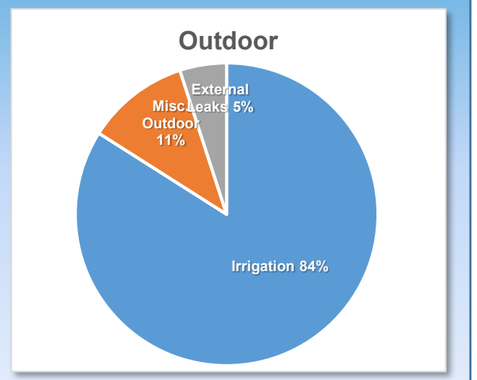
4 - Drought Response Actions - Stage 2

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 2

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**55%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 2

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**55%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☐	0.5%	25%	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	**2%**	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☐			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☐	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 2

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☐	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 2

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 2

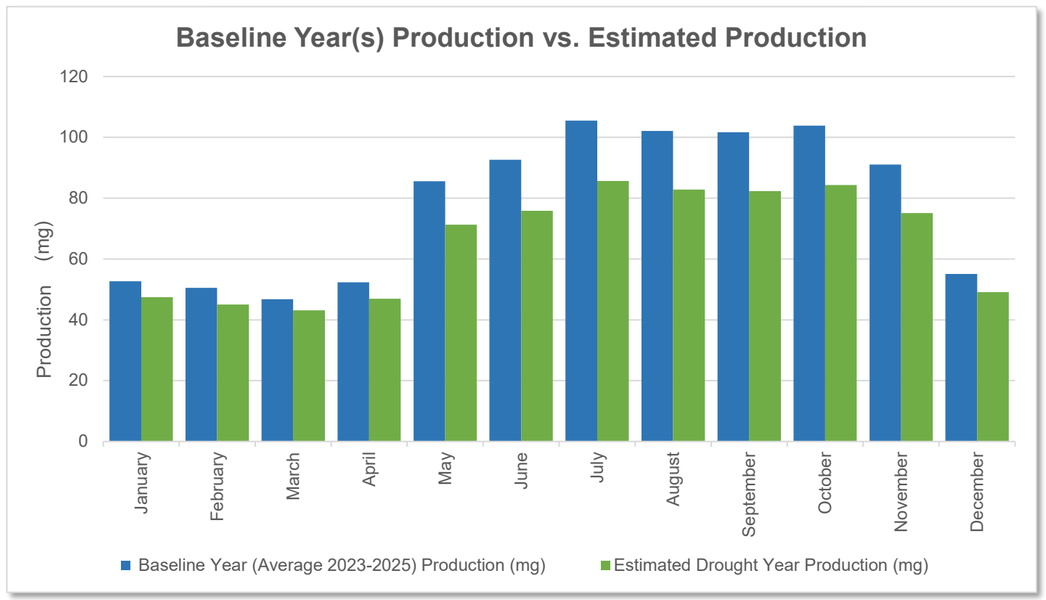
Menlo Park Municipal Water

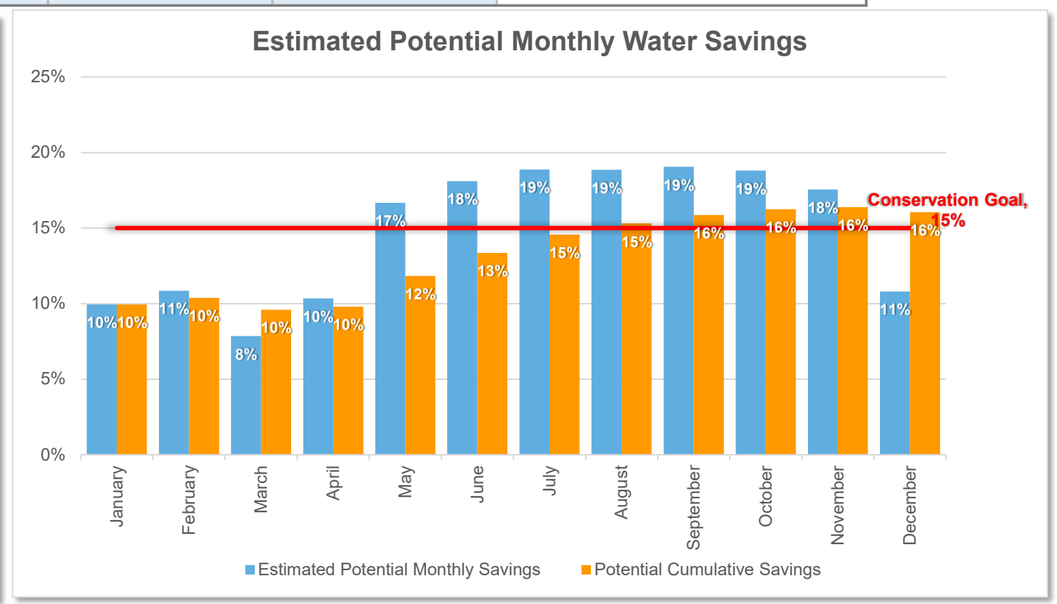
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	47	10%	10%	15%	
February	50	45	11%	10%	15%	
March	47	43	8%	10%	15%	
April	52	47	10%	10%	15%	
May	86	71	17%	12%	15%	
June	93	76	18%	13%	15%	
July	106	86	19%	15%	15%	
August	102	83	19%	15%	15%	
September	102	82	19%	16%	15%	
October	104	84	19%	16%	15%	
November	91	75	18%	16%	15%	
December	55	49	11%	16%	15%	



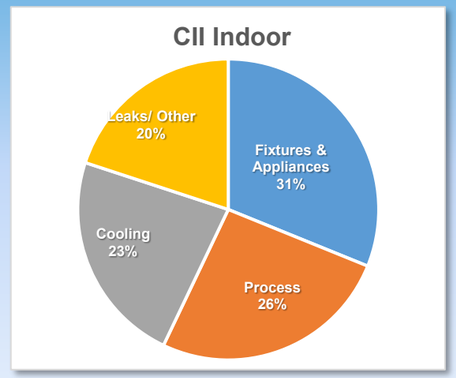


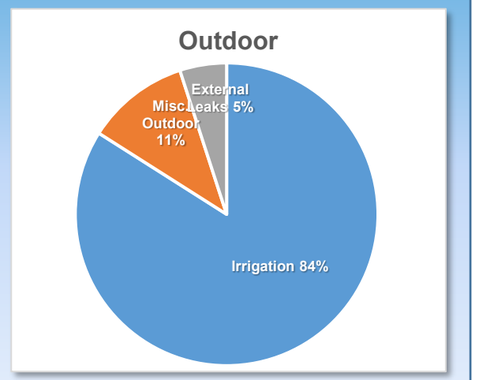
4 - Drought Response Actions - Stage 3

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 3

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**75%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 3

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**65%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	**4%**	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**75%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 3

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► Agency Drought Actions / Restrictions						
► Residential						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**75%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► CII						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**75%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 3

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 3

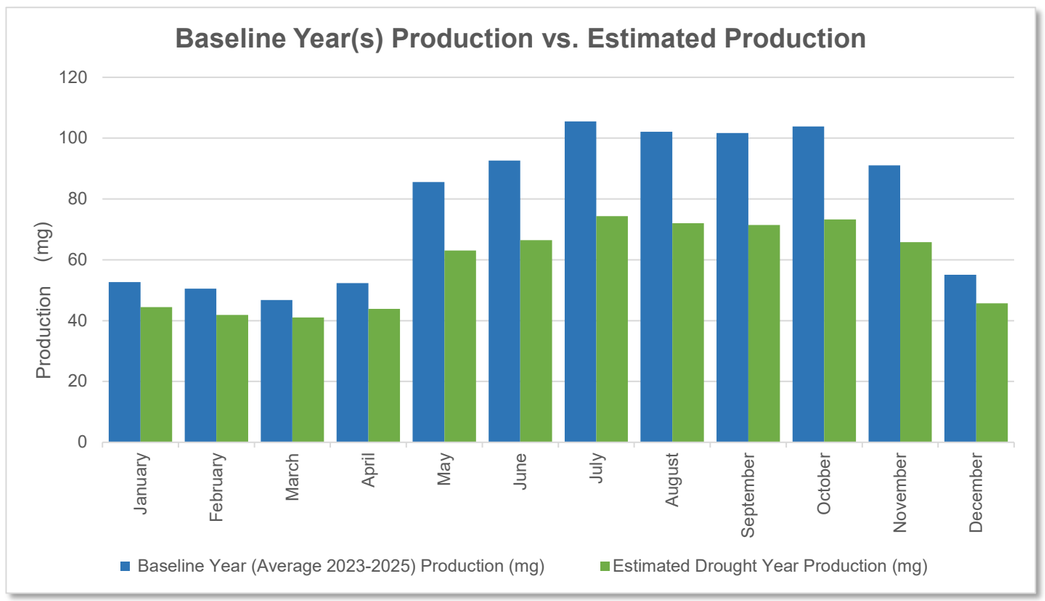
Menlo Park Municipal Water

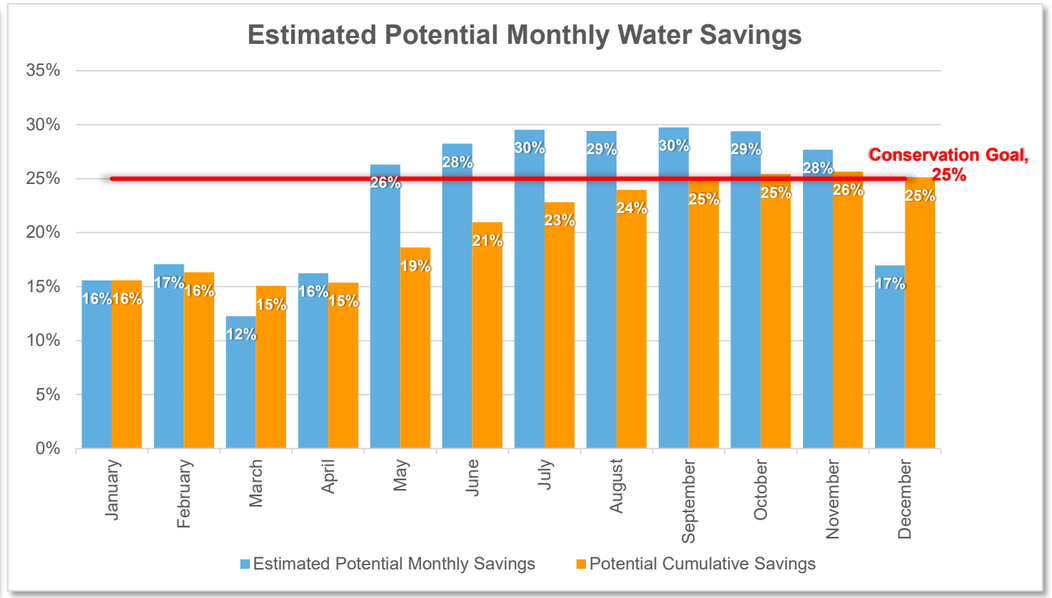
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	44	16%	16%	25%	
February	50	42	17%	16%	25%	
March	47	41	12%	15%	25%	
April	52	44	16%	15%	25%	
May	86	63	26%	19%	25%	
June	93	66	28%	21%	25%	
July	106	74	30%	23%	25%	
August	102	72	29%	24%	25%	
September	102	71	30%	25%	25%	
October	104	73	29%	25%	25%	
November	91	66	28%	26%	25%	
December	55	46	17%	25%	25%	





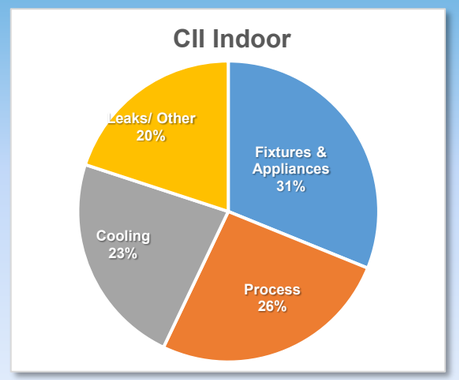
Drought Response Tool

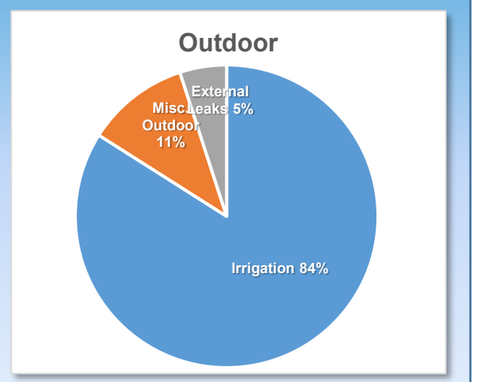
4 - Drought Response Actions - Stage 4

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 4

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**75%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 4

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**65%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☑	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**65%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 4

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► Agency Drought Actions / Restrictions						
► Residential						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	60%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**65%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► CII						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	60%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**65%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 4

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 4

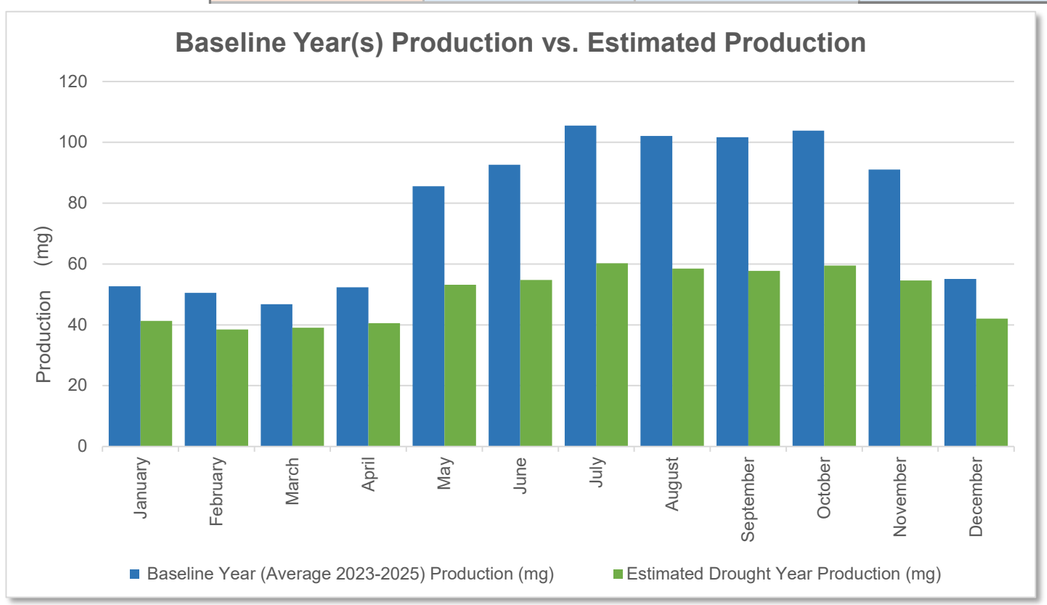
Menlo Park Municipal Water

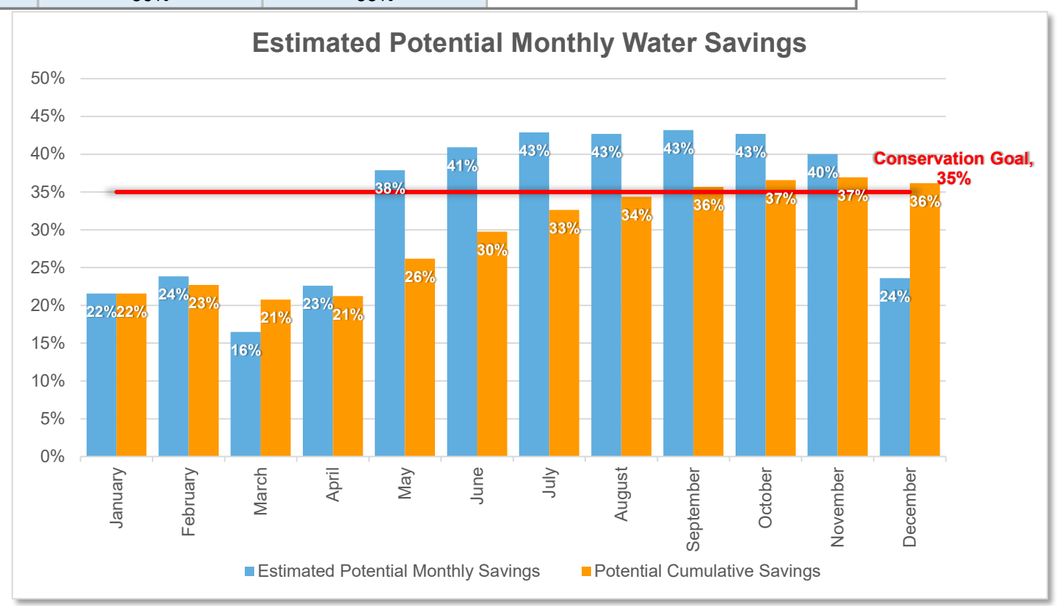
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	41	22%	22%	35%	
February	50	38	24%	23%	35%	
March	47	39	16%	21%	35%	
April	52	41	23%	21%	35%	
May	86	53	38%	26%	35%	
June	93	55	41%	30%	35%	
July	106	60	43%	33%	35%	
August	102	59	43%	34%	35%	
September	102	58	43%	36%	35%	
October	104	60	43%	37%	35%	
November	91	55	40%	37%	35%	
December	55	42	24%	36%	35%	



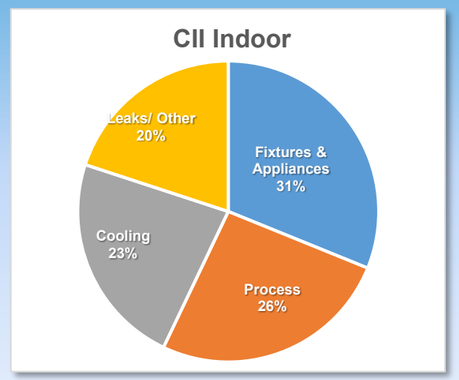


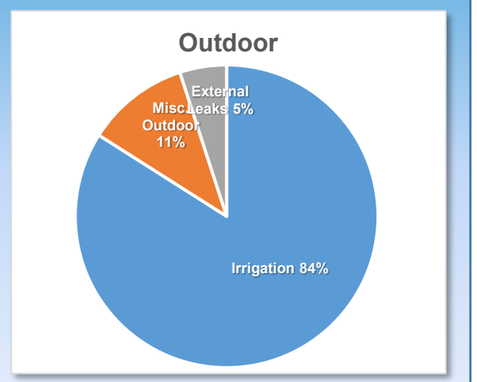
4 - Drought Response Actions - Stage 5

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 5

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**75%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 5

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**70%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☑	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☑			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**80%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☑	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	**55%**	--	--

4 - Drought Response Actions - Stage 5

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	60%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**80%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☑	10%	50%	--	--
Establish Water Budget - 25% Reduction	All Residential Uses	☐	25%	55%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	60%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**80%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☑	10%	50%	--	--
Establish Water Budget - 25% Reduction	All CII uses	☐	25%	60%	--	--
Establish Water Budget - 35% Reduction	All CII uses	☐	35%	55%	--	--

4 - Drought Response Actions - Stage 5

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 5

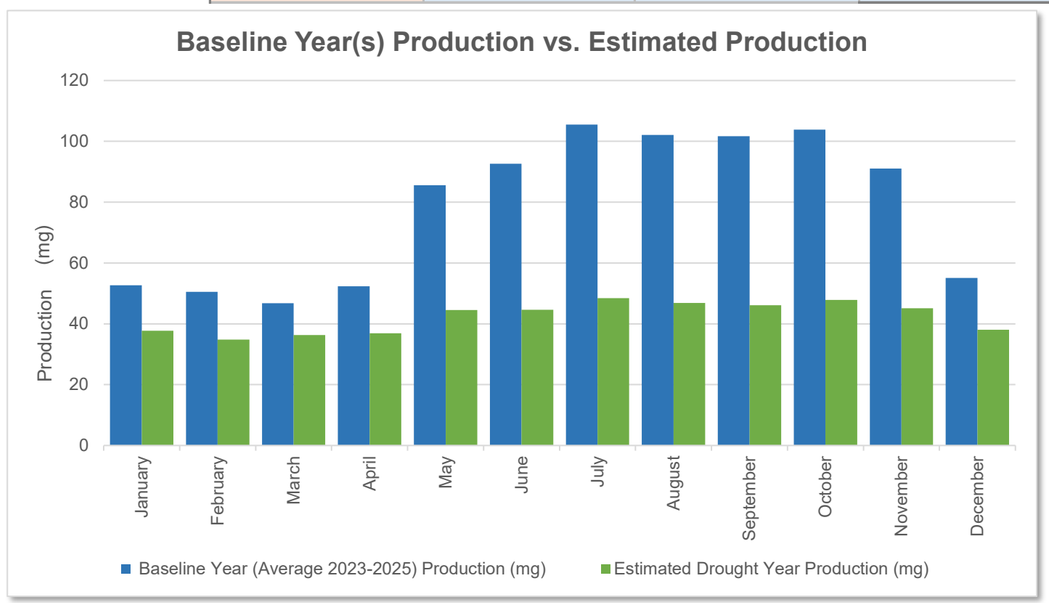
Menlo Park Municipal Water

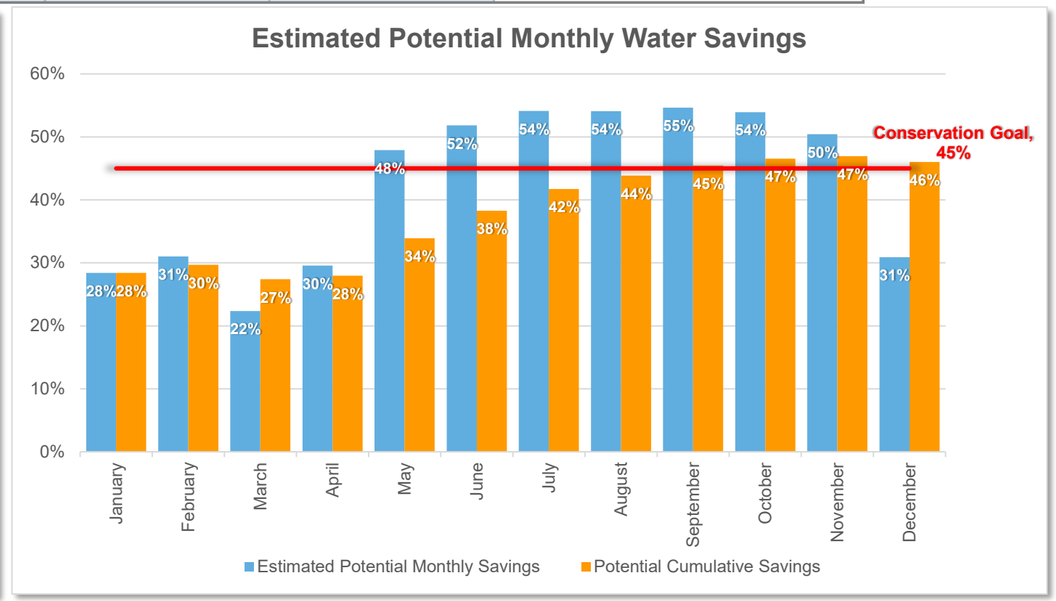
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	38	28%	28%	45%	
February	50	35	31%	30%	45%	
March	47	36	22%	27%	45%	
April	52	37	30%	28%	45%	
May	86	45	48%	34%	45%	
June	93	45	52%	38%	45%	
July	106	48	54%	42%	45%	
August	102	47	54%	44%	45%	
September	102	46	55%	45%	45%	
October	104	48	54%	47%	45%	
November	91	45	50%	47%	45%	
December	55	38	31%	46%	45%	





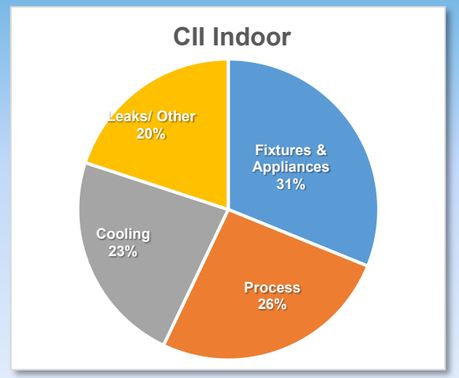
Drought Response Tool

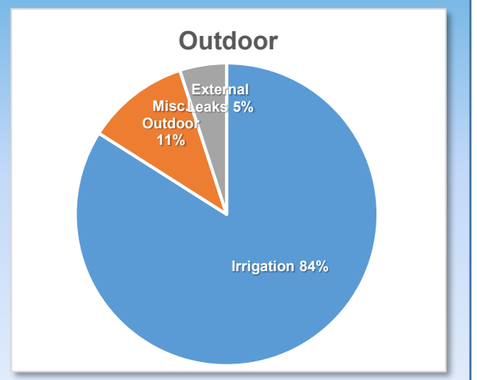
4 - Drought Response Actions - Stage 6

Menlo Park Municipal Water

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**62%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 6

Menlo Park Municipal Water

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**80%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 6

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**70%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☑	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☑			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**95%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☑	75%	50%	--	--

4 - Drought Response Actions - Stage 6

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**95%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 25% Reduction	All Residential Uses	☑	**25%**	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**95%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 25% Reduction	All CII uses	☐	25%	60%	--	--
Establish Water Budget - 35% Reduction	All CII uses	☑	**35%**	50%	--	--

4 - Drought Response Actions - Stage 6

Menlo Park Municipal Water

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 6

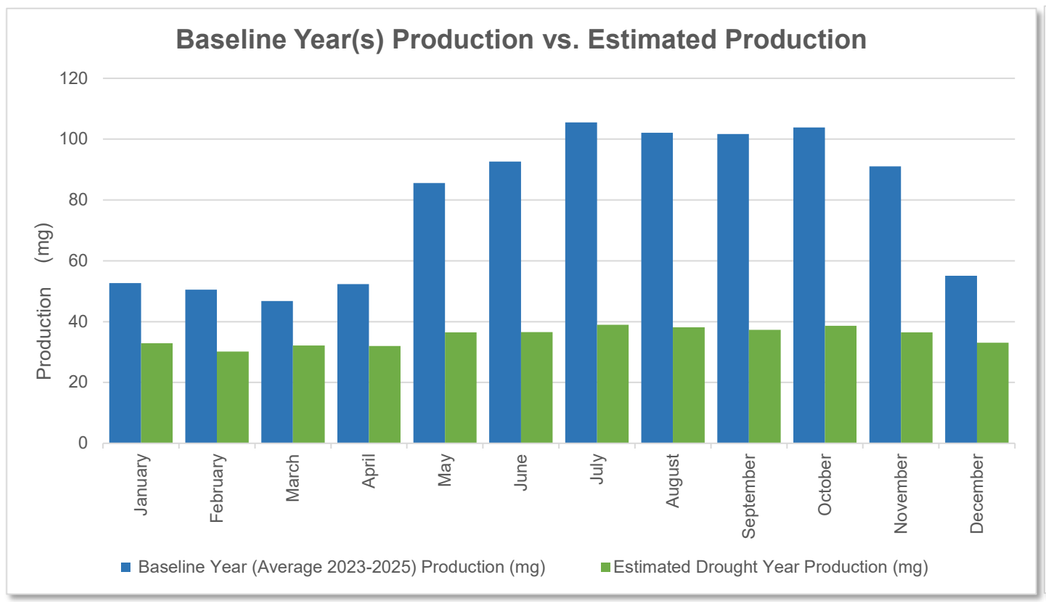
Menlo Park Municipal Water

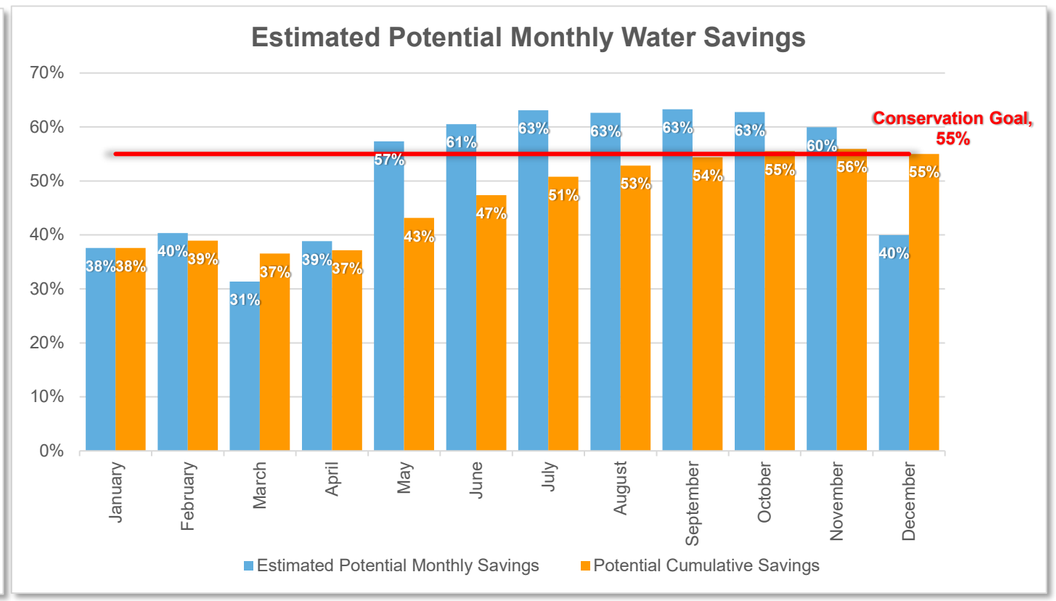
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (Average 2023-2025) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	53	33	38%	38%	55%	
February	50	30	40%	39%	55%	
March	47	32	31%	37%	55%	
April	52	32	39%	37%	55%	
May	86	36	57%	43%	55%	
June	93	37	61%	47%	55%	
July	106	39	63%	51%	55%	
August	102	38	63%	53%	55%	
September	102	37	63%	54%	55%	
October	104	39	63%	55%	55%	
November	91	36	60%	56%	55%	
December	55	33	40%	55%	55%	





Attachment 4: SFPUC Emergency Response Procedures

SECTION 10 PREPARATION FOR CATASTROPHIC SUPPLY INTERRUPTION

The SFPUC maintains various planning documents and strategies that collectively address its emergency preparedness and planned response in the event of a catastrophic interruption of water supplies due to power outages, earthquakes, or other disasters. These plans are described in the following subsections 10.1 (Emergency Preparedness Plans), 10.2 (Emergency Drinking Water Planning), and 10.3 (Power Outage Preparedness and Response). Subsection 10.4 further addresses the Seismic Risk Assessment and Mitigation Plan required by California Water Code Section 10632.5.(a). Should a catastrophic interruption occur, the SFPUC will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency (California Government Code, California Emergency Services Act Article 2, Section 8558).

10.1 EMERGENCY PREPAREDNESS PLANS

Following the 1989 Loma Prieta earthquake, the SFPUC created a departmental Emergency Operations Plan (EOP). The SFPUC EOP was originally released in 1992 and has since been updated as necessary. The SFPUC EOP addresses a broad range of potential emergency situations that may affect the SFPUC and supplements the City's Emergency Response Plan, which was prepared by the Department of Emergency Management and most recently updated in 2017. The purpose of the SFPUC EOP is to describe the SFPUC's emergency management organization, roles and responsibilities, and emergency policies and procedures.

In addition, the SFPUC's enterprises each have their own emergency plans (in alignment with the SFPUC EOP), which detail that entity's specific emergency management organization, roles and responsibilities, emergency policies and procedures, and response to hazardous events (e.g., hazardous materials, power interruption, etc.). In 2025, the SFPUC developed a Water Emergency Operations Plan (Water EOP) to comply with the America's Water Infrastructure Act passed in 2018. The Water EOP integrates directly into, and functions as an annex to, the SFPUC EOP. The Water EOP addresses SFPUC water transmission and distribution systems and identifies the agency's enterprises, divisions, and bureaus with direct roles and responsibilities for those systems. The SFPUC EOP functions as a front end for the SFPUC's enterprise EOPs, covering emergency response at the department level, while each enterprise EOP covers enterprise-specific information on the enterprise's emergency organization and response procedures specific to enterprise responsibilities, assets, technical scope, and operations.

The SFPUC exercises its EOPs on a regular basis by conducting emergency exercises and through real-world response. Through these exercises and activations, the SFPUC learns how well the plans and procedures will or will not work in response to an emergency. EOP improvements are based on the results of these exercises and real-world event response and evaluation. The SFPUC also has an emergency response training plan that is based on federal, State, and local standards and exercise and incident improvement plans. SFPUC employees have emergency training assignments based on their emergency response roles, as identified in the EOPs.

The types of events affecting the SFPUC that require emergency plans include but are not limited to:

- Major earthquake
- Loss of power
- Loss of water supply
- Major fire
- Hazardous material release that threatens water supply or environment
- Major pipeline breaks
- Dam incident
- Significant outage of SFPUC services
- Man-made or intentional acts of terrorism resulting in damage to the system or interruption in service

In addition to the documents described above, the SFPUC also maintains various plans and procedures that deal with the possibility of alternate supply schemes and options. These plans and procedures include:

- Emergency Disinfection and Recovery Plan
- Emergency Response Action Plan
- Emergency Drinking Water Equipment and Alternatives Report
- Disinfection of SFPUC Water Trailers Procedure
- San Francisco Water Division Hydrant Manifold Standard Operating Procedure

10.2 EMERGENCY DRINKING WATER PLANNING

The SFPUC has implemented several projects to increase its capability to provide emergency drinking water during a catastrophic emergency. These projects include:

- Completion of many WSIP projects and other capital upgrades to improve security, detection, and communication (see Section 10.4);
- Development of public information and educational materials for residents and businesses;
- Construction of a disinfection and fill station at the existing San Francisco Zoo well, and obtaining a permit to utilize this well as a standby emergency drinking water source;
- Construction of six wells as part of the San Francisco Groundwater Supply Project, two of which also serve as emergency drinking water supplies, including a distribution system to fill emergency water tankers;
- Purchase and engineering of emergency-related equipment, including water tanker trucks and water distribution manifolds, to help with distribution post-disaster; and
- Coordination of planning with other City departments, neighboring jurisdictions, and other public and private partners to maximize resources and supplies for emergency response.

The SFPUC also maintains a Water Quality Notifications and Communications Plan. Initially prepared in 1996 and most recently updated in 2022, this plan provides contact information and guidelines on notifications that SFPUC staff will issue in the event of water quality impacts that warrant communications internally and externally with the State, the Wholesale Customers, and/or public. The plan treats water quality issues as potential or actual supply problems, which fall under the emergency response structure of the SFPUC EOP.

10.3 POWER OUTAGE PREPAREDNESS AND RESPONSE

The SFPUC's water transmission system is primarily gravity fed from Hetch Hetchy Reservoir to the City. Within the in-City distribution system, key pump stations have generators on site, and all others have connections in place that would allow the use of portable generators.

Although power outages would not greatly impact water conveyance throughout the RWS because it is gravity fed, the SFPUC has prepared for potential regional power outages as follows:

- The Tesla Treatment Facility, the Sunol Valley Water Treatment Plant (SVWTP), the Sunol Valley Chloramination Facility (SVCF), and the San Antonio Pump Station (SAPS) have back-up power on site in the form of generators. Additionally, SVWTP, SVCF, and SAPS would not be impacted by a failure of the regional power grid because these facilities are powered by hydropower generated by Hetch Hetchy Water and Power via the Calaveras Substation.
- Both the Harry Tracy Water Treatment Plant and the Baden Pump Station (part of the Peninsula System) have back-up generators in place.
- Administrative facilities that may act as emergency operation centers also have back-up power.
- The SFPUC has a water supply connection with the Santa Clara Valley Water District (Valley Water or VW), known as the SFPUC-VW Intertie, which also has back-up generators in place.
- Additionally, as described in the next section, various WSIP projects expanded the SFPUC's ability to remain in operation during power outages and other emergency situations.

10.4 SEISMIC RISK ASSESSMENT AND MITIGATION PLAN

As part of the SFPUC's Facilities Reliability Program and WSIP, the SFPUC performed an extensive multi-year evaluation of seismic risks to its water system that resulted in major capital improvements to increase seismic reliability. The goals of WSIP include enhancing the ability of the SFPUC water system to meet identified levels of service goals for water quality, seismic reliability, delivery reliability, and water supply. One of the reasons the SFPUC developed WSIP was to reduce the likelihood of shortages, thereby reducing the likelihood of needing to implement the WSCP. Several WSIP projects located in San Francisco improved the seismic reliability of the in-City distribution system, such as additional wells that can be used as emergency drinking water sources. Many WSIP projects related to the RWS outside of San Francisco, the majority of which are now complete, addressed both seismic reliability and overall system reliability. The SFPUC completed the San Francisco portion of WSIP as of October 2020 and forecasts that the overall WSIP will be complete in June 2032.

WSIP seismic levels of service (LOS) informed development of WSIP capital projects and guided program implementation. The LOS established post-earthquake delivery and recovery objectives under the following seismic scenarios:

- Magnitude 7.9 event on the San Andreas fault
- Magnitude 7.3 event on the Hayward fault
- Magnitude 6.9 event on the Calaveras fault

An assessment of seismic risk and resilience is contained in the body of analysis performed to support the WSIP. The risks associated with the seismic scenarios considered are reflected in the delivery objectives established in the LOS, specifically:

- Delivery of winter month demand 24 hours after a major earthquake, and
- Delivery of average day demand 30 days after a major earthquake

In addition to the improvements that have or will come from the WSIP, the SFPUC has already constructed system interties for use during catastrophic emergencies, short-term facility maintenance and upgrade activities, and times of water shortages. These are listed below:

- **EBMUD-Hayward-SFPUC Emergency Intertie:** An intertie that may transfer up to 30 MGD among East Bay Municipal Utility District (EBMUD), the City of Hayward (an SFPUC Wholesale Customer), and SFPUC to boost water supply reliability during emergencies. EBMUD and the SFPUC own these facilities jointly, while the City of Hayward maintains and operates them in coordination with EBMUD and the SFPUC.
- **SFPUC-Valley Water Intertie:** The SFPUC and Valley Water maintain a 40-MGD intertie between their two systems at Milpitas to exchange water during emergencies and planned maintenance (as mentioned in Section 10.3). The intertie has been used on several occasions during maintenance of Valley Water's system.
- **South Bay Aqueduct Intertie:** An intertie connecting the South Bay Aqueduct and the SFPUC's San Antonio Reservoir that the SFPUC used in 1991-1992 for a two-year water transfer. The SFPUC may upgrade this intertie to receive State Water Project water in the event of a future emergency.

The WSIP also includes projects related to standby power facilities at various locations. These projects provide for standby electrical power at six critical facilities to keep them in operation during power outages and other emergency situations. Permanent engine generators are located at four locations (San Pedro Valve Lot, Millbrae Facility, Alameda West, and Harry Tracy Water Treatment Plant), while hookups for portable engine generators are at two locations (San Antonio Reservoir and Calaveras Reservoir).

The City also has a Hazards and Climate Resilience Plan which was last updated in July 2025, see www.onesanfrancisco.org/hazards-and-climate-resilience-plan. This plan is a roadmap to minimizing the impacts of natural hazards and climate change on buildings, infrastructure, and communities. The plan also serves as San Francisco's Local Hazard Mitigation Plan which it updates every five years to include the latest understanding of natural hazards and climate change impacts, local risks, and community priorities. Examples of hazards analyzed in the plan include dam or reservoir failure, flooding, drought, and wildfire.

Appendix F: Letters from Menlo Park Municipal Water to SWRCB, BAWSCA, and SFPUC

CITY OF MENLO PARK

March 3, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
Cal/EPA Headquarters
1001 "I" Street, 24th Floor
Sacramento, CA 95814-0100
commentletters@waterboards.ca.gov

Re: Comment Letter – 2016 Bay-Delta Plan Amendment & SED

Dear Ms. Townsend:

We are submitting the following comments regarding the *Recirculated Draft Substitute Environmental Document in Support of Potential Changes to the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality* (SED). In addition, we would like to incorporate by reference separate comments submitted by the Bay Area Water Supply and Conservation Agency (BAWSCA) and the San Francisco Public Utilities Commission (SFPUC) that provide more detail of the SED proposal's impact on our Menlo Park Municipal Water District (MPMWD) service area and the region.

Under the SED, the State Water Resources Control Board (SWRCB) proposes substantial changes to flow objectives for the Tuolumne River. These changes are anticipated to result in significantly reduced surface water available for diversions, thereby causing significant, potentially unavoidable impacts to water supply and the environment. Below we provide relevant information that the SWRCB must consider in conducting its analysis of the SED's impacts:

- As a wholesale customer of SFPUC that purchases 100% of its potable water supply from the San Francisco Regional Water System, water supply available to the MPMWD under the SED proposal could be reduced more than 50% under drought conditions for multiple consecutive years.

- MPMWD has made significant strides in water conservation in the past 10 years. Total water use decreased 31.5% from 3.25 million gallons per day (MGD) to 2.23 MGD.

- Based on our 2015 Urban Water Management Plan, a 50% cut to water supply would force MPMWD to take a number of significant actions including developing water budgets for all water accounts and notifying account holders, and not approving new potable water connections, new temporary meters or permanent meters, except under special circumstances.

- MPMWD serves water to 3,600 residential customers and over 250 businesses and other non-residential customers. Potential consequences of the SED proposal include health and safety concerns due to lack of potable supplies, major job losses, slower economic growth and delayed community development in our service area.

- Since outdoor use represents a relatively small proportion of our commercial, industrial, and institutional account water demand, commercial, industrial, and institutional customers generally have fewer opportunities to reduce water use without changing their operations or incurring significant economic impacts.

- MPMWD relies 100% on SFPUC water. MPMWD's only other emergency supply is via interconnections with adjacent water agencies. However, these adjacent water agencies also rely primarily on SFPUC water, so a 50% cut to SFPUC water would be detrimental to our system's ability to provide water to our customers.

In the light of these aforementioned impacts as well as those articulated in the BAWSCA and SFPUC comment letters incorporated here by reference, the MPMWD requests that environmental and economic impacts of any shortage on the San Francisco Regional Water System, and the associated lost jobs and delayed development, be fully and adequately analyzed as part of the SWRCB's proposed flow alternatives. Such full and adequate analysis should be given at least equal weight with all other elements of the SWRCB's subsequent deliberations and decision making.

Last, the Governor has indicated his strong support for negotiated voluntary agreements to resolve these issues. We request that the SWRCB provide adequate time for voluntary agreements to be reached amongst the stakeholders prior to any action on the SED. Please give this settlement process a chance for success instead of expediting implementation of the current proposal. We share BAWSCA's commitment to continue working closely with the diverse interests and stakeholders to develop that shared solution.

If you have any questions about this letter, please do not hesitate to contact me by phone at (650) 330-6725 or by email at jicmurphy@menlopark.org.

Sincerely,

Justin Murphy
Public Works Director

CITY OF MENLO PARK

May 27, 2021

Bay Area Water Supply and Conservation Agency (BAWSCA)
Nicole Sandkulla, CEO / General Manager
155 Bovet Rd, Suite 650
San Mateo, CA 94402

Subject: BAWSCA Methodology for Cutbacks Greater than 20 Percent for the 2020 Urban Water Management Plan

Dear Ms. Sandkulla,

As we prepare our Urban Water Management Plan, we appreciate BAWSCA's support and assistance in clarifying the San Francisco Public Utility Commission's (SFPUC) Regional Water System (RWS) supply reliability data, obtaining and creating Urban Water Management Plans (UWMP) common language, and developing a methodology that the BAWSCA agencies can use for cutbacks greater than 20 percent.

As stated in your February 18, 2021 memorandum, because there is no method for allocating supplies for cutbacks greater than 20 percent, BAWSCA recommended "*when the average Wholesale Customers' RWS shortages are greater than 20 percent, an equal percent reduction will be applied across all agencies.*" With the close deadline for agencies to adopt and submit their UWMPs to the Department of Water Resources by July 1, we appreciate that BAWSCA could quickly develop a methodology that the Wholesale Customers could use in their respective UWMPs.

We have included BAWSCA's equal percent reductions for cutbacks greater than 20 percent in our 2020 UWMP for planning purposes, however, we must go on record that we are not in agreement with this methodology. We understand that the Wholesale Customers will begin discussing and negotiating new Tier 2 calculations later this year, a process that could take upwards of 18 months, and we look forward to be part of that process.

As you are aware, SFPUC's supply reliability data does not meet their contractual obligation (also known as level of service goals) to supply Wholesale Customers with not more than a 20 percent cutback (WSA Section 3.11C4). We know that BAWSCA, in its role of administering the contract on behalf of the Wholesale Customers, will continue to prioritize SFPUC's need to meet its contractual obligations and urge them to expedite water supply projects in order to meet the total 184 million gallons per day (MGD) supply guarantee to all of the Wholesale customers, including MPMW's individual supply guarantee of 4.456 MGD.

We appreciate BAWSCA's diligence and perseverance in administering the contract on behalf of the Wholesale Customers and ensuring that SFPUC meets its contractual obligations, specifically their level of service goals.

Sincerely,

Nicole Nagaya

Nicole Nagaya
Public Works Director

cc: Nira Doherty, City Attorney
Christopher Lamm, Assistant Public Works Director
Pam Lowe, Senior Civil Engineer

CITY OF MENLO PARK

May 27, 2021

San Francisco Public Utilities Commission
Paula Kehoe, Director of Water Resources
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

RE: SFPUC Supply Reliability for the 2020 Urban Water Management Plan

Dear Ms. Kehoe,

As we prepare our Urban Water Management Plan, we appreciate the water supply reliability data and common language provided by the San Francisco Public Utilities Commission (SFPUC) to the Bay Area Water Supply and Conservation Agency (BAWSCA) for the Wholesale Customers on memorandums dated January 22, 2021, March 19, 2021, and March 30, 2021.

The supply reliability data with the Bay-Delta Plan does not meet SFPUC's contractual obligation (also known as level of service goals) to supply Wholesale Customers with not more than a 20 percent cutback. Section 3.11C4 of the 2019 Water Supply Agreement states that "*San Francisco will use its best efforts to identify potential sources of dry year water supplies and establish the contractual and other means to access and deliver those supplies in sufficient quantity to meet a goal of not more than 20 percent system-wide shortage in any year of the design drought.*"

SFPUC needs to meet its contractual obligations and we urge you to expedite the Alternative Water Supply Project in order to meet the total 184 million gallons per day (MGD) supply guarantee to all of the Wholesale customers, including MPMW's individual supply guarantee of 4.456 MGD.

Sincerely,

Nicole Nagaya

Nicole Nagaya
Public Works Director

cc: Nira Doherty, City Attorney
Christopher Lamm, Assistant Public Works Director
Pam Lowe, Senior Civil Engineer

CITY OF MENLO PARK

June 7, 2021

San Francisco Public Utilities Commission
Paula Kehoe, Director of Water Resources
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

RE: Request to Rerun Water Supply Reliability Model

Dear Ms. Kehoe,

We understand that SFPUC's climate change study, the *Long Term Vulnerability Assessment and Adaptation Plan for the SFPUC Water Enterprise* completed in partnership with the Water Research Foundation, will be released in the summer of 2021 and can be used to help frame the issue of climate change impacts on the water supplies delivered via the San Francisco Regional Water System, including but not limited to the Tuolumne River.

On May 25, our City Council adopted a resolution adopting our 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan. If the climate change study provides merit to study a shorter Drought Period, we request that SFPUC prepare an appendix with updated supply reliability that we can consider including in our UWMP.

Thank you for considering this request.

Sincerely,

DocuSigned by:
Drew Combs
52C1D491348F4A3...

Drew Combs
Mayor

cc: Vice Mayor Betsy Nash
City Councilmember Jen Wolosin
City Councilmember Ray Mueller
City Councilmember Cecilia Taylor
Starla Jerome-Robinson, City Manager
Nira Doherty, City Attorney

Appendix G: Resolution No. XXX, Adopting The 2025 Urban Water Management Plan, Resolution No. XXX, Adopting the 2025 Water Shortage Contingency Plan, for Menlo Park Municipal Water

Prepared by:

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