CITY OF
MENLO PARK

2025 WATER SHORTAGE CONTINGENCY PLAN
Menlo Park Municipal Water

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2025 WATER SHORTAGE CONTINGENCY PLAN

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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.

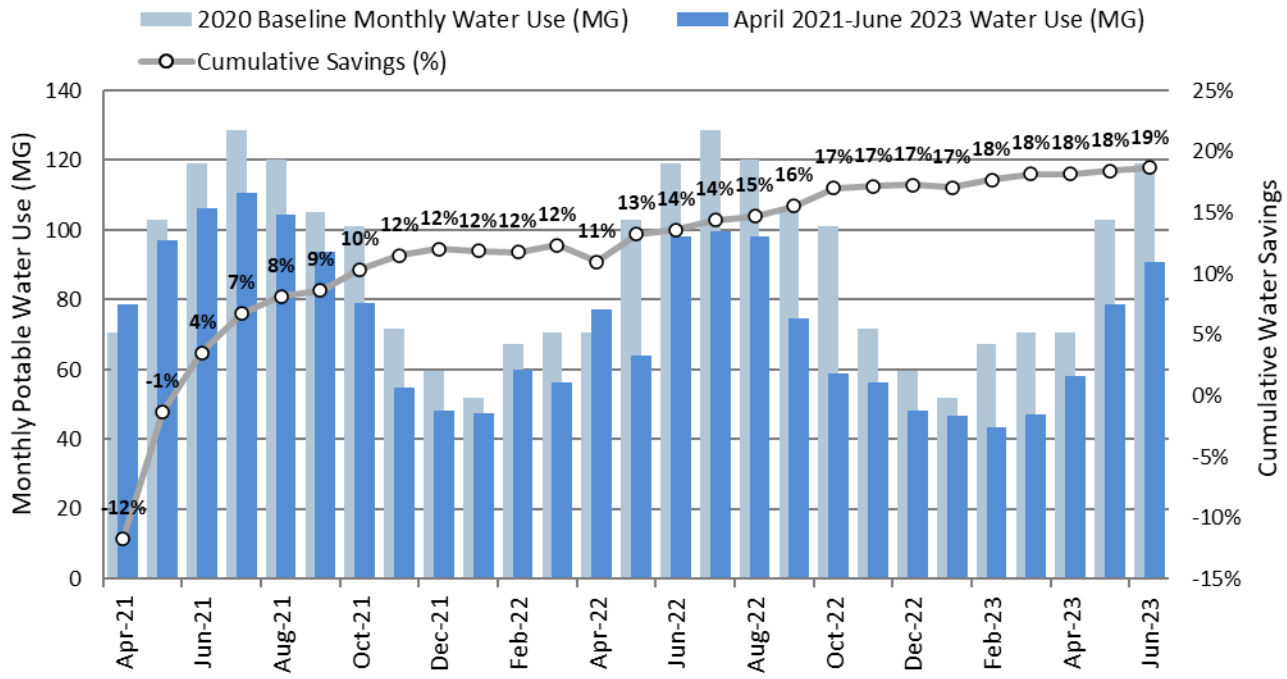

Figure 3-1 Monthly Water Use and Cumulative Water Use Reduction, 2021-2023

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.

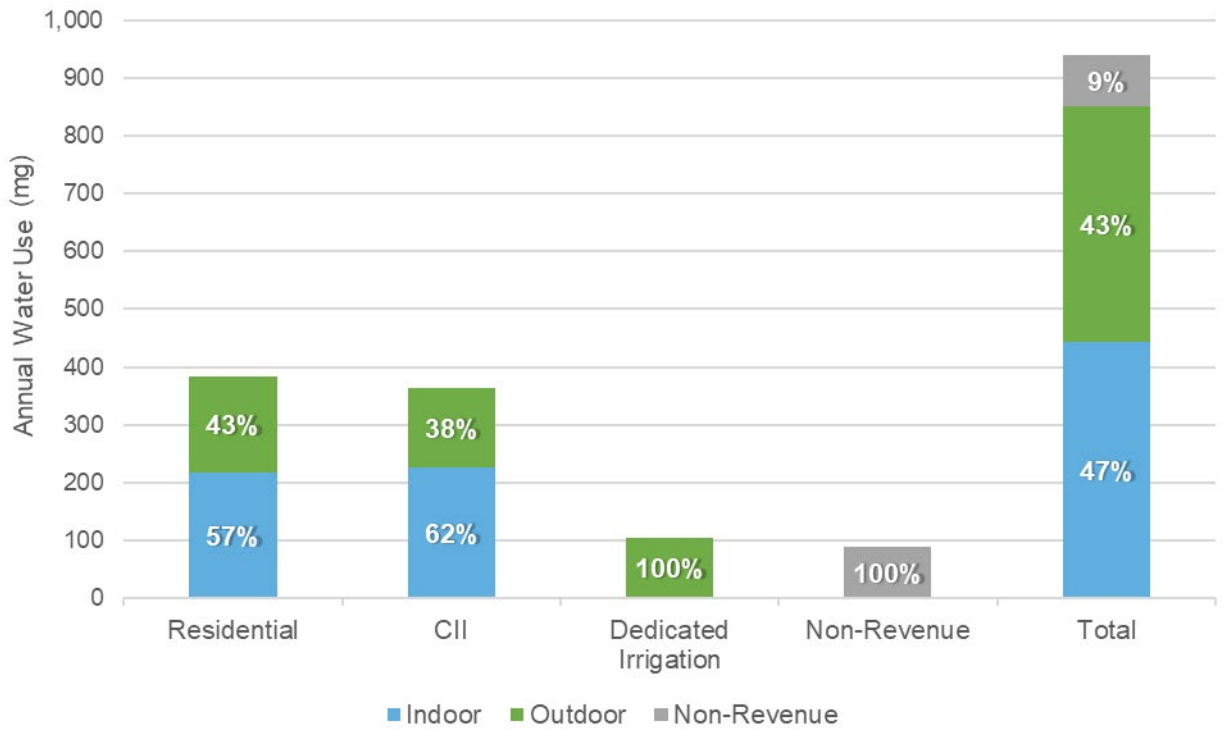

Figure 6-1 Baseline Year Annual Indoor vs. Outdoor Water Use

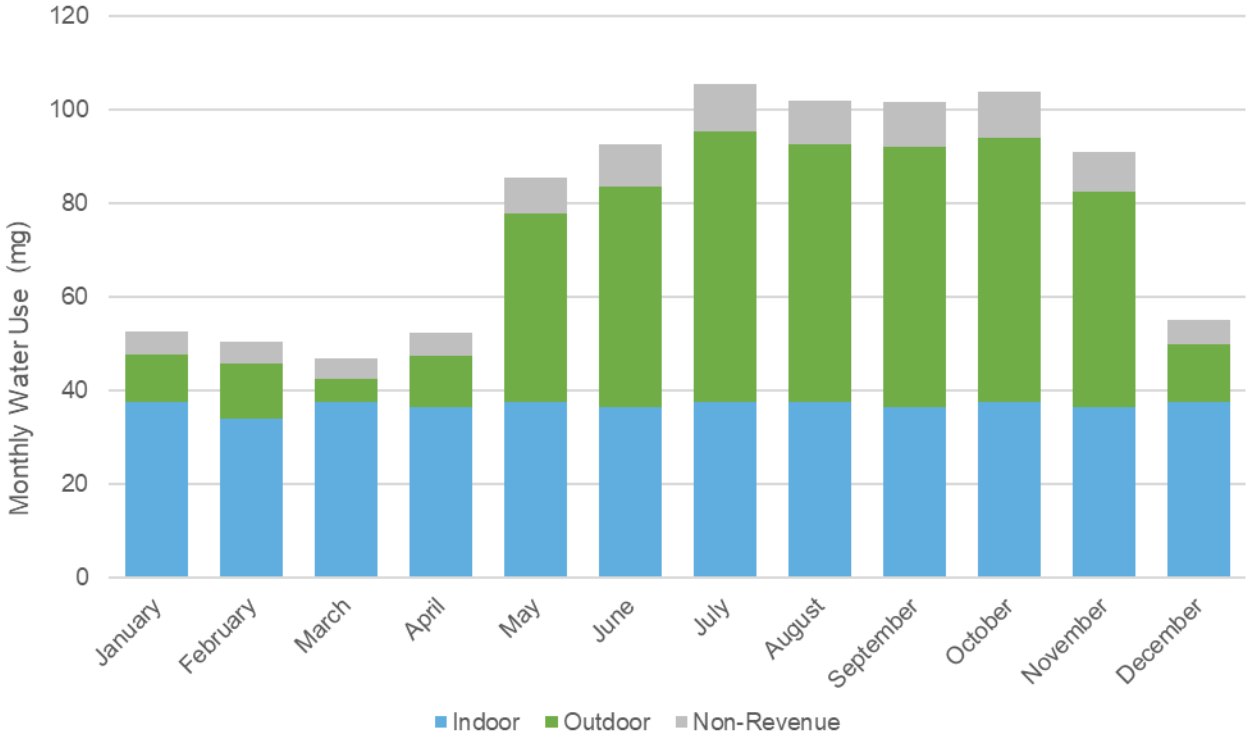

Figure 6-2 Baseline Monthly Indoor vs Outdoor Water Use

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).

The Menlo Park Municipal Code is current through Ordinance 1074, passed January 12, 2021.

Disclaimer: The city clerk's office has the official version of the Menlo Park Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited above.

City Website: https://www.menlopark.org/
City Telephone: (650) 330-6620

Code Publishing Company

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.

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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

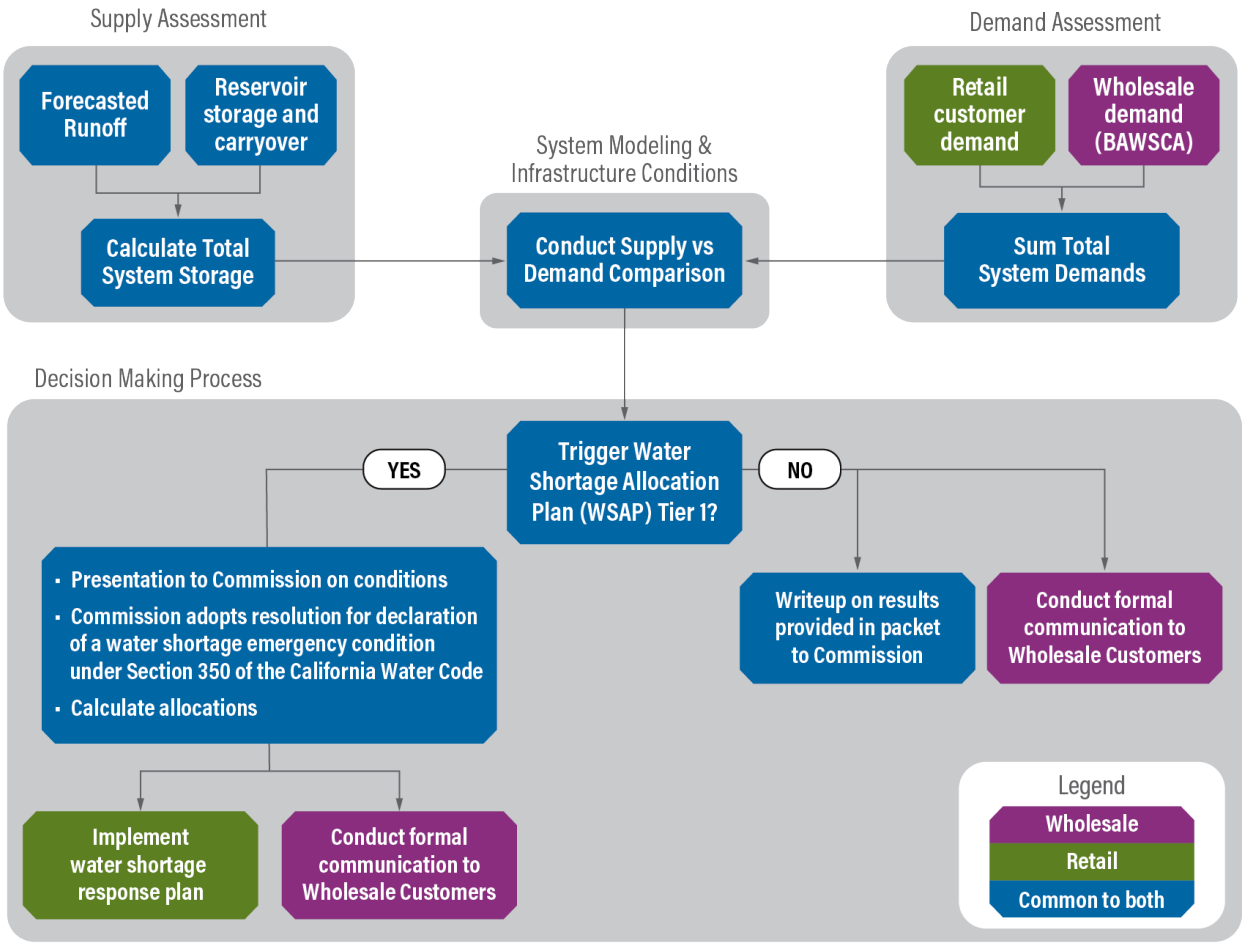
presentation on current water supply conditions and forecasts. The SFPUC issues a revised estimate of available water supply for the upcoming Supply Year on March 1 and uses the snow survey that occurs in the first week of April and an associated runoff forecast to refine an estimated total system storage 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.

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Drought Response Tool

1 - Home

Menlo Park Municipal Water

For questions about this tool or for additional information, contact:

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eki environment & water

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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	

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3 - Baseline Year (Average 2023-2025) Water Use Profile

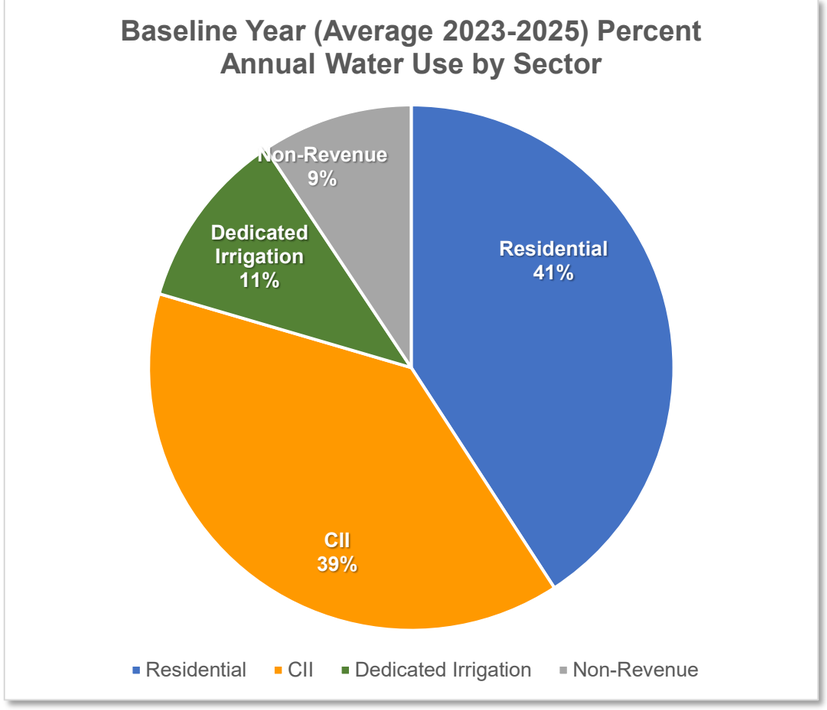
Menlo Park Municipal Water

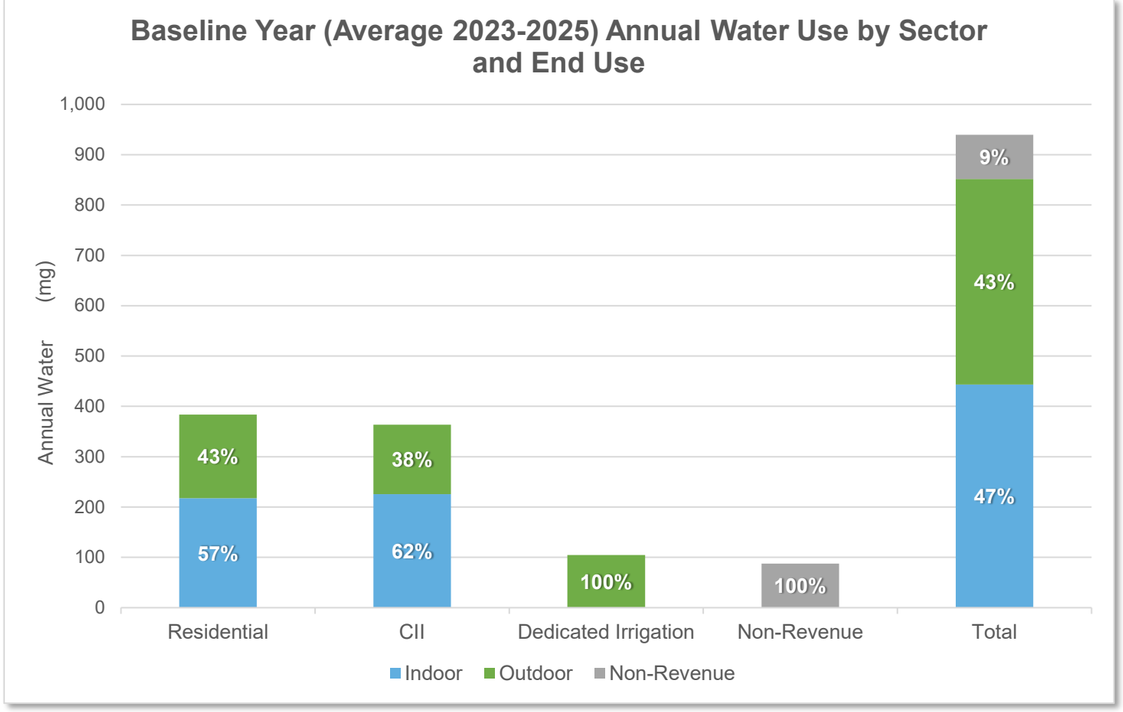
Baseline Year (Average 2023-2025) Annual Water Use Summary

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%	





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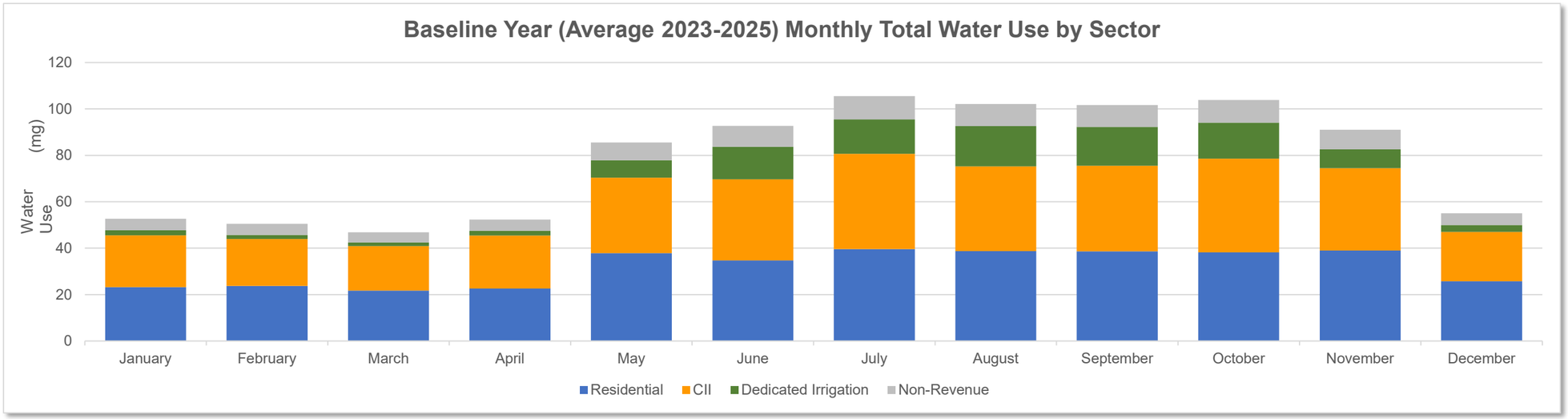
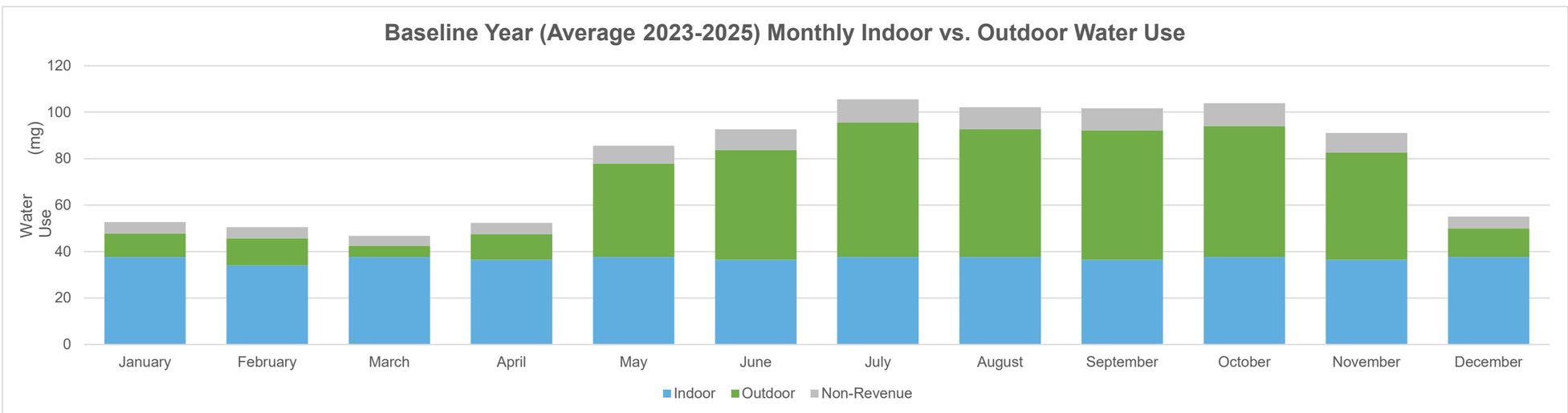
3 - Baseline Year (Average 2023-2025) Water Use Profile

Menlo Park Municipal Water





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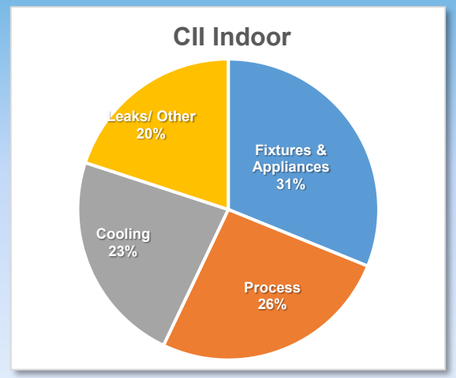
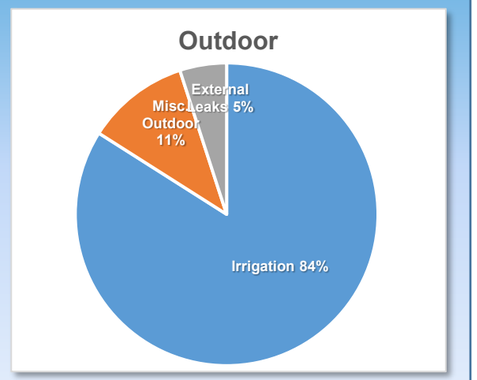
4 - Drought Response Actions - Stage 1

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





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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	--

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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%	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 1

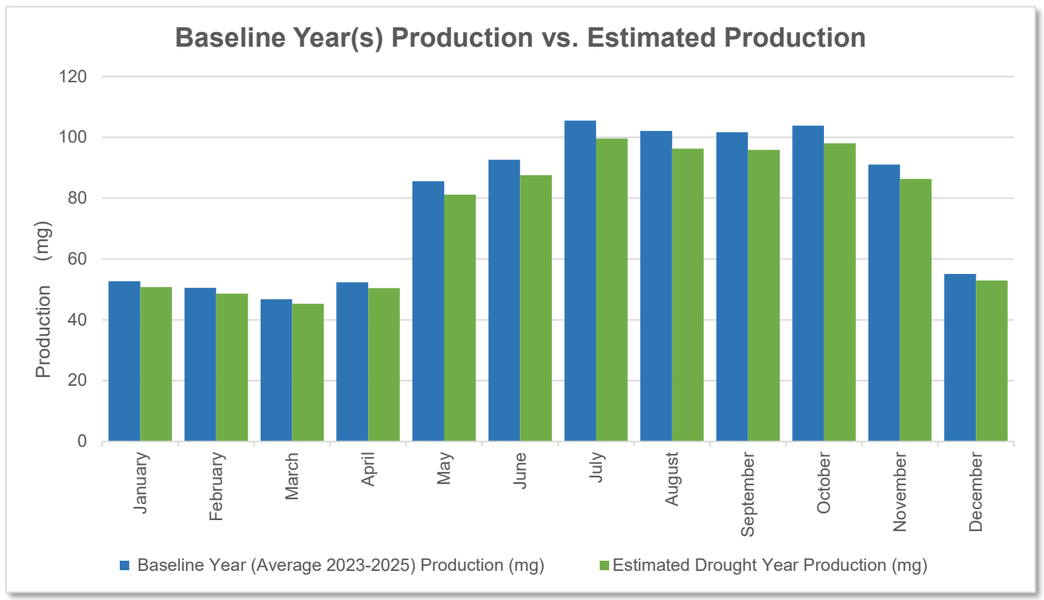
Menlo Park Municipal Water

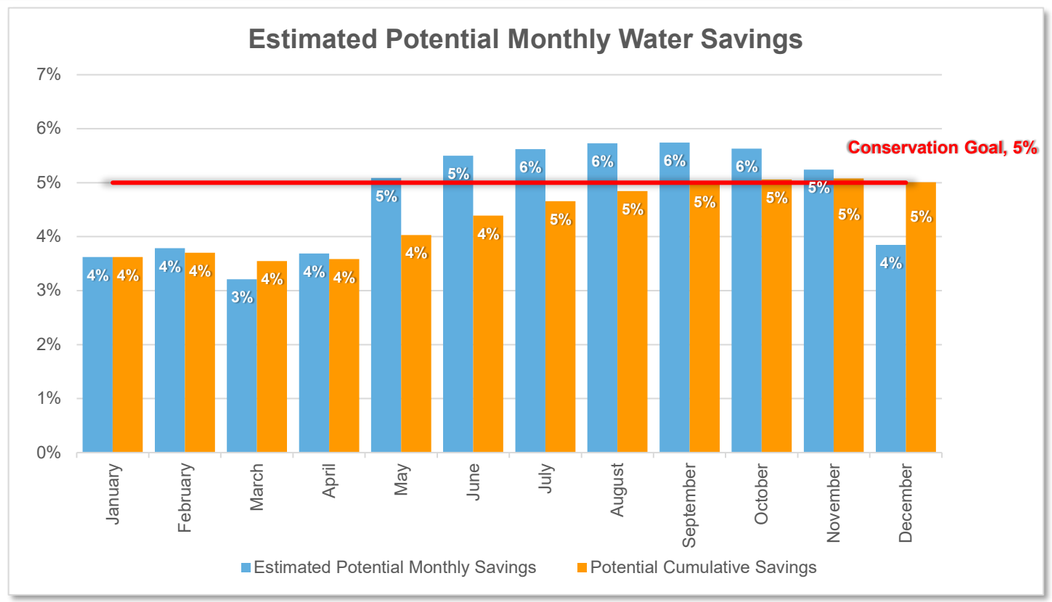
Estimated Monthly Water Use and Savings Summary

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%	





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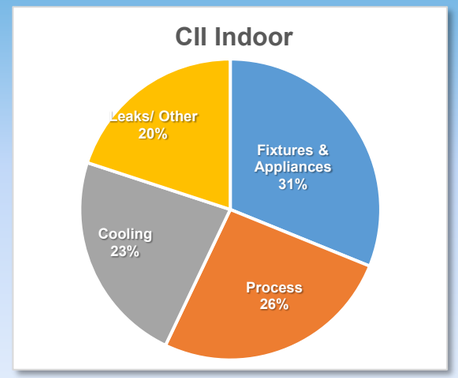
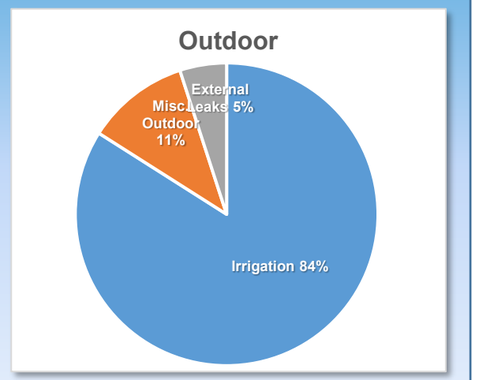
4 - Drought Response Actions - Stage 2

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





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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	--

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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%	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 2

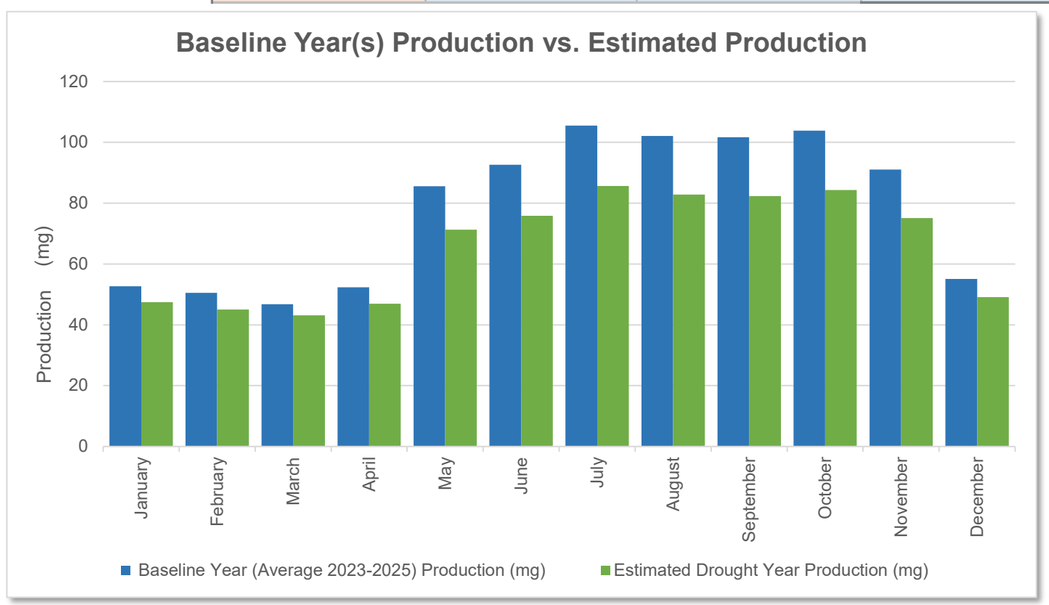
Menlo Park Municipal Water

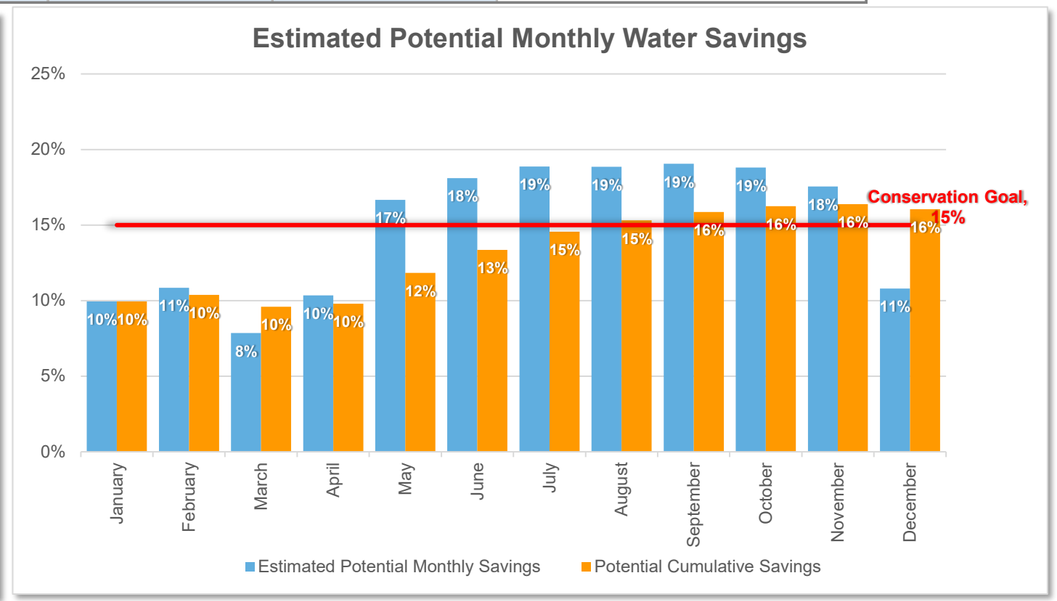
Estimated Monthly Water Use and Savings Summary

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%	





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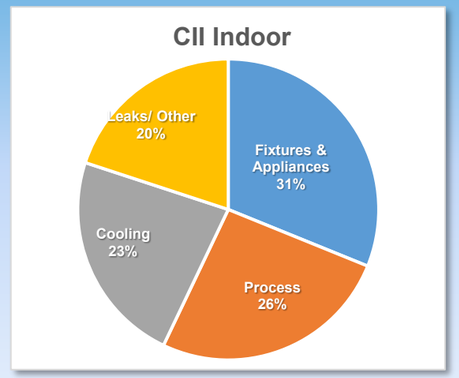
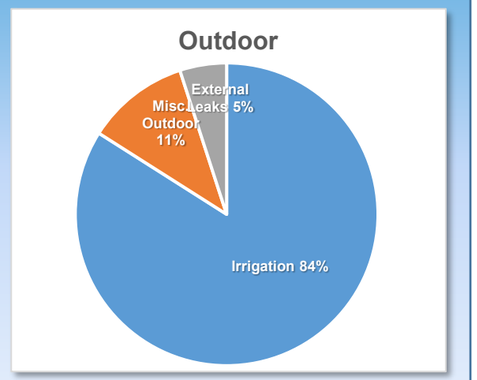
4 - Drought Response Actions - Stage 3

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





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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	--

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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%	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 3

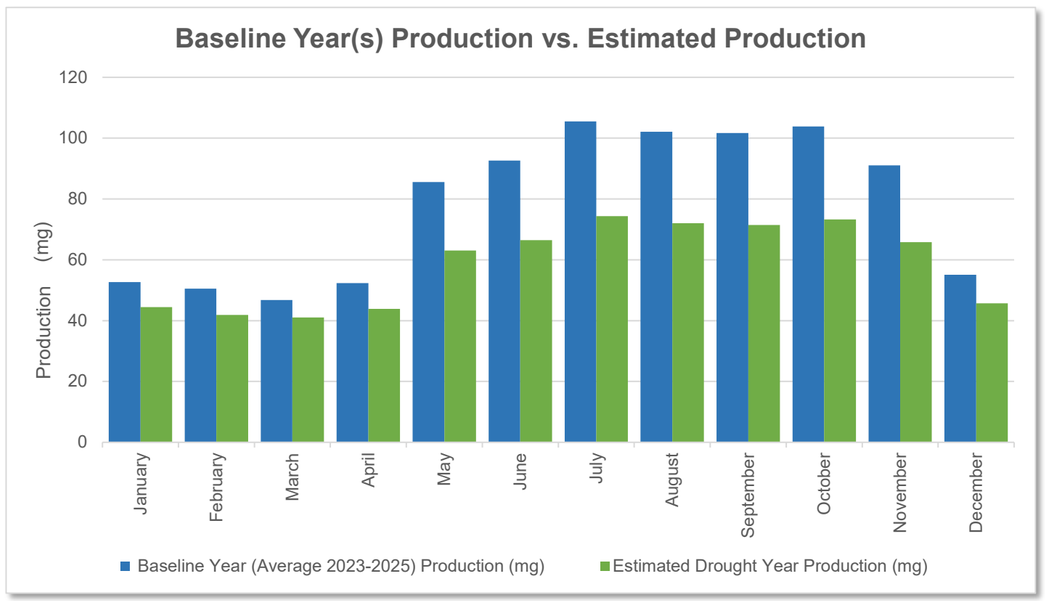
Menlo Park Municipal Water

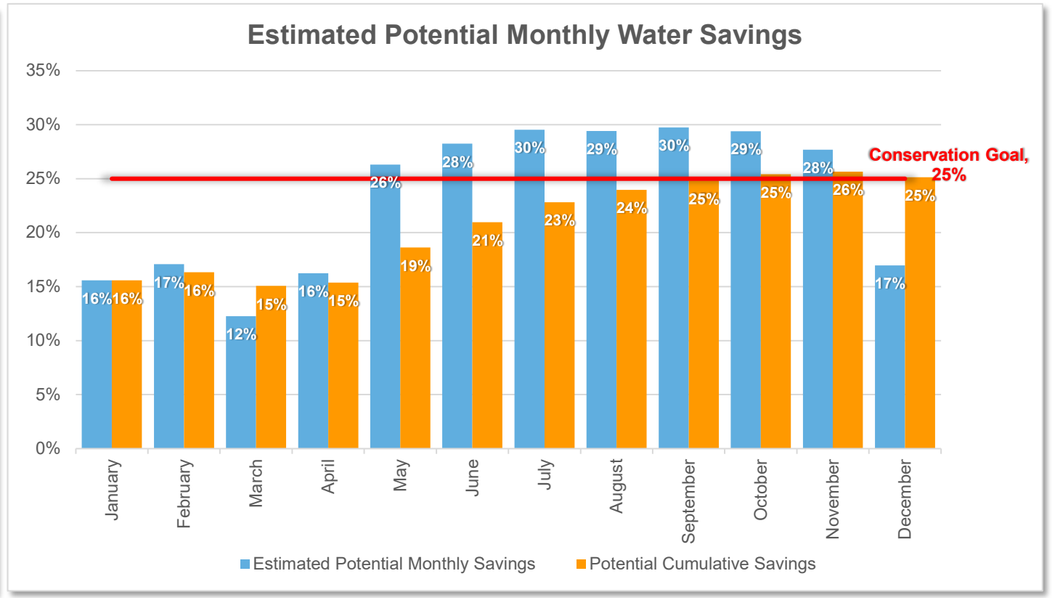
Estimated Monthly Water Use and Savings Summary

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%	





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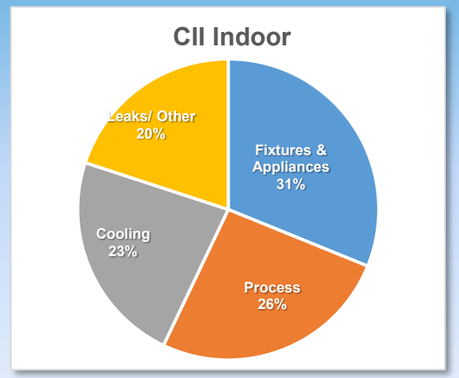
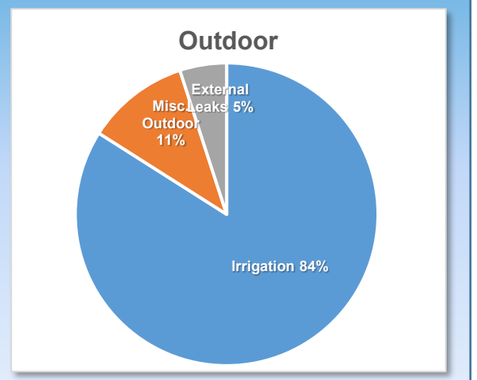
4 - Drought Response Actions - Stage 4

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





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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	--

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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%	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 4

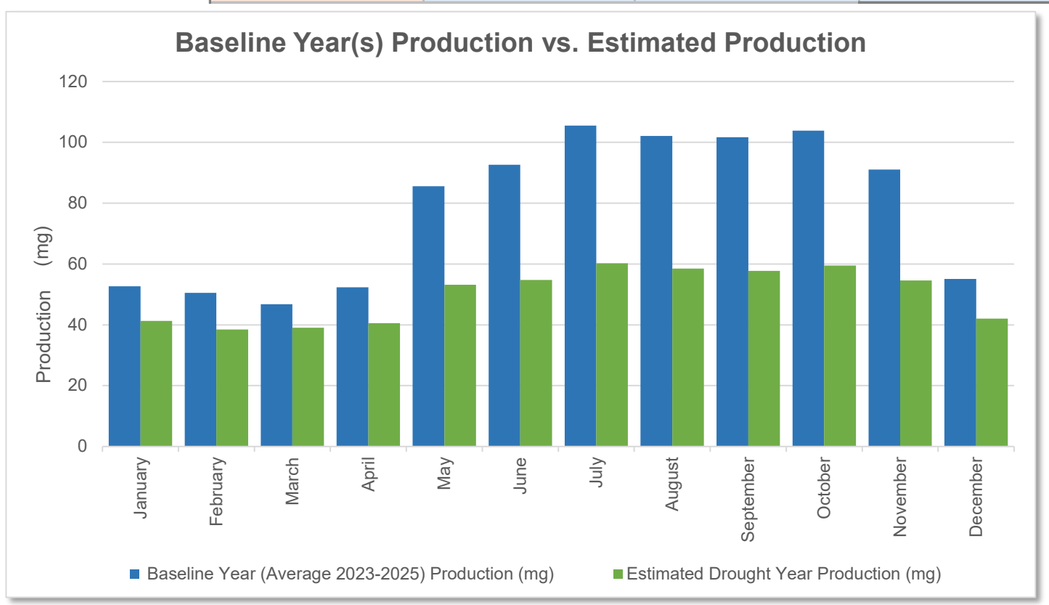
Menlo Park Municipal Water

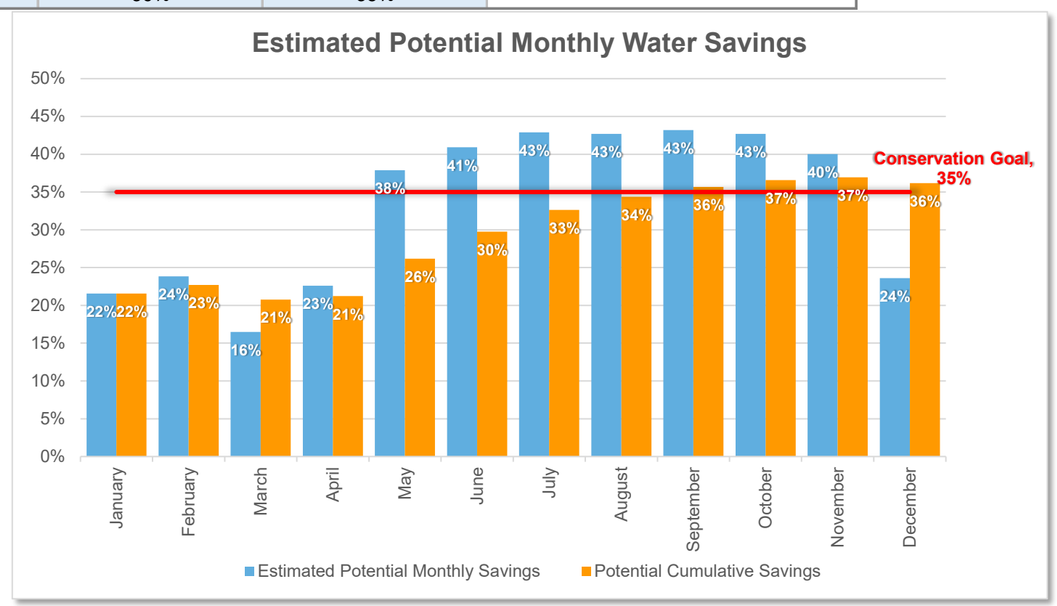
Estimated Monthly Water Use and Savings Summary

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%	





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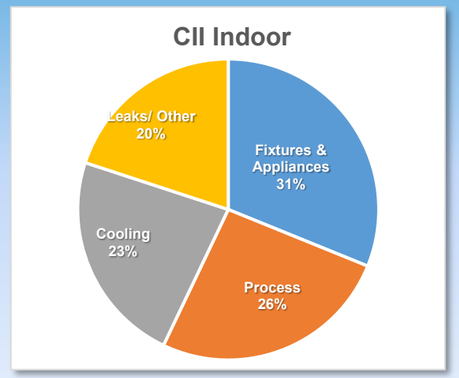
Drought Response Tool

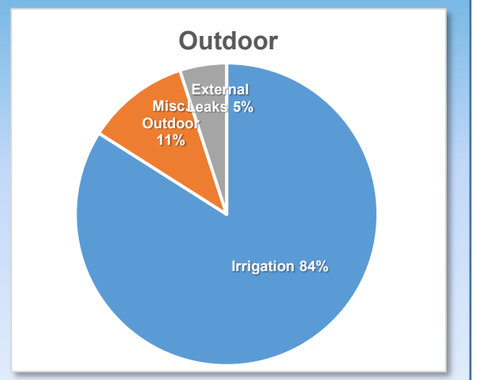
4 - Drought Response Actions - Stage 5

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





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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	--

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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%**	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 5

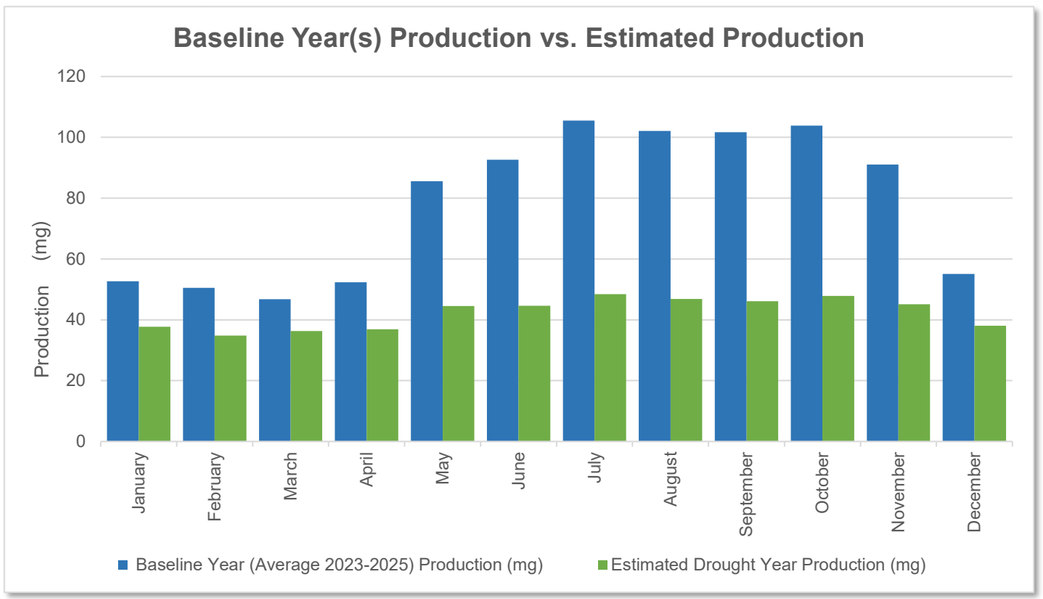
Menlo Park Municipal Water

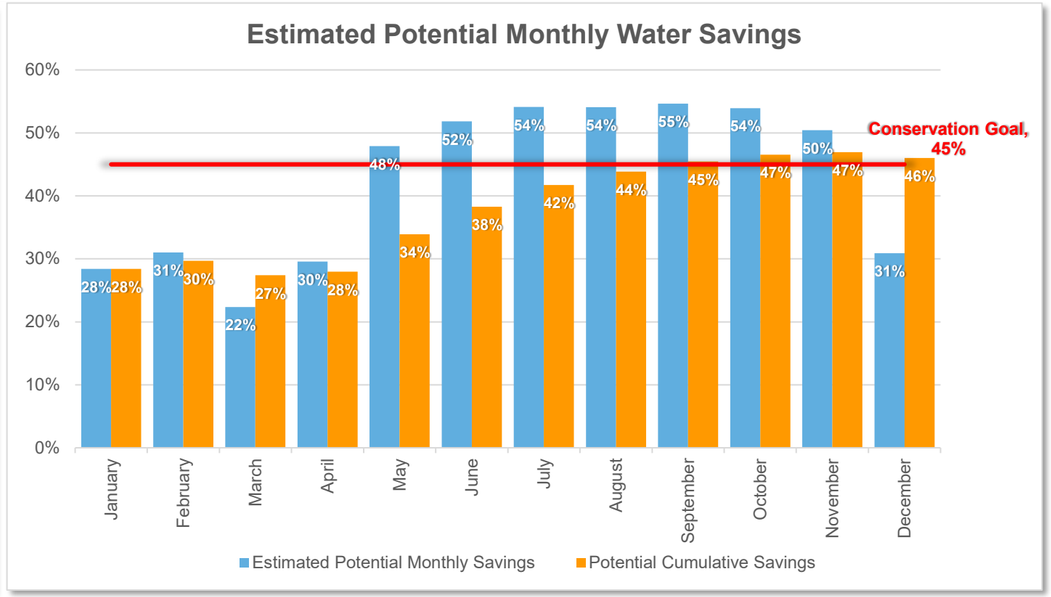
Estimated Monthly Water Use and Savings Summary

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%	





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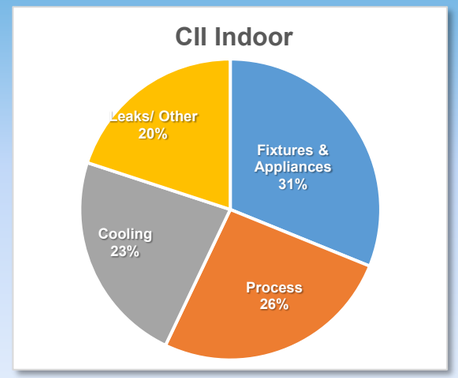
Drought Response Tool

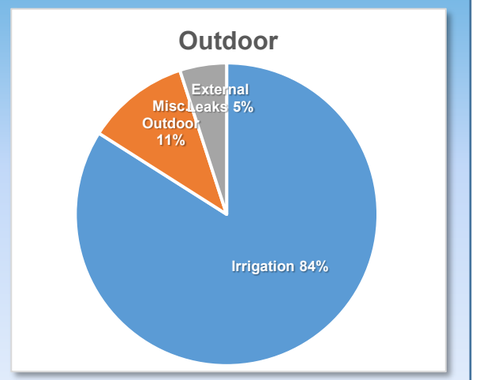
4 - Drought Response Actions - Stage 6

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





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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	--

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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%	--	--

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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%	--	--

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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	☐			--	--

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5 - Estimated Water Savings - Stage 6

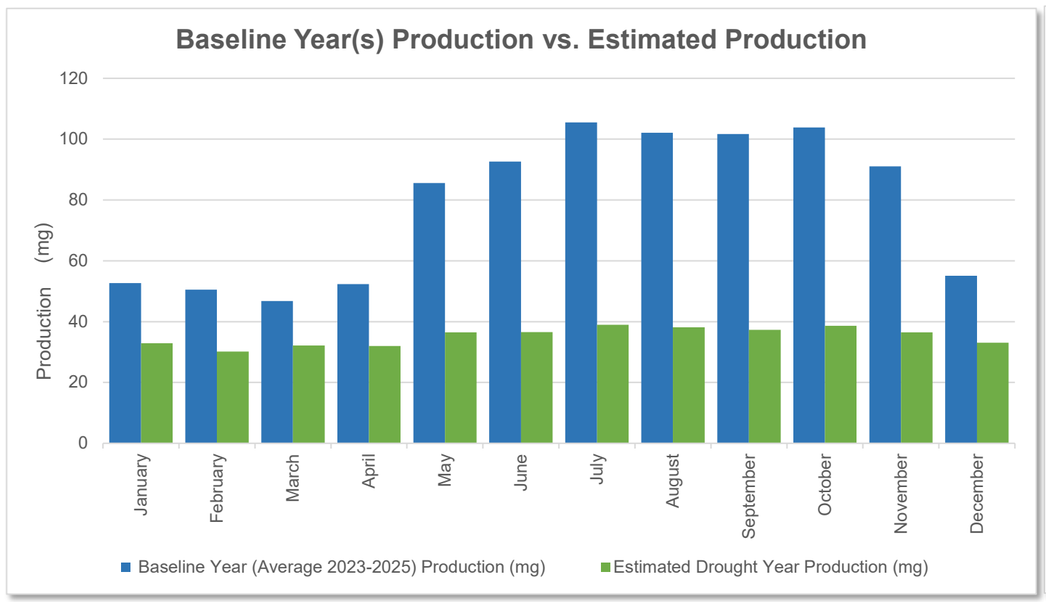
Menlo Park Municipal Water

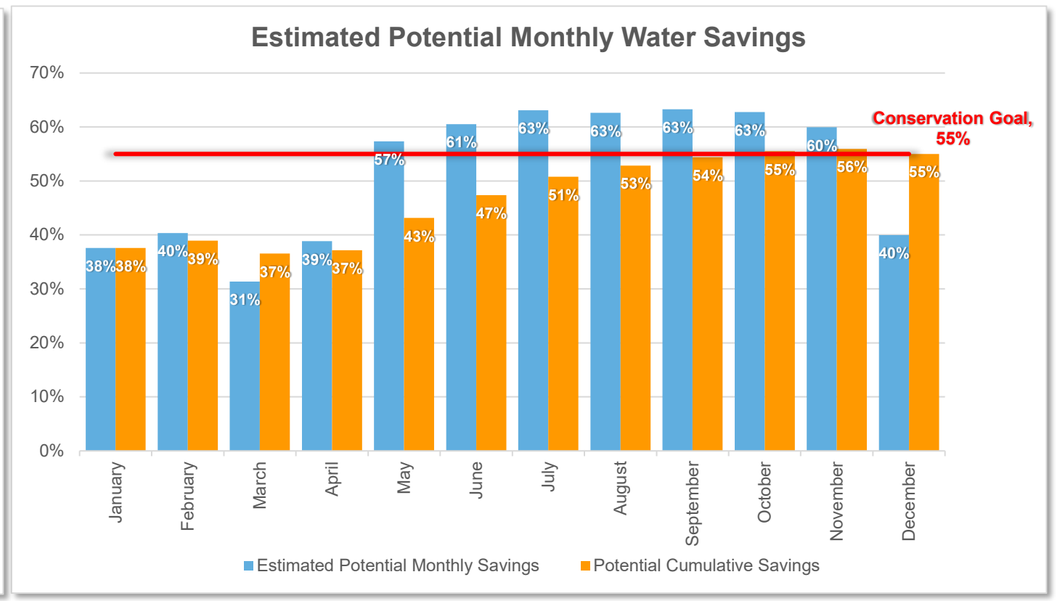
Estimated Monthly Water Use and Savings Summary

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%	





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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.