HAYWARD

2025

The City of Hayward
DRAFT 2025 Water Shortage Contingency Plan
June 2, 2026

Prepared by: MADDAUS WATER MANAGEMENT INC.
Making a Difference in the World of Water

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LIST OF ABBREVIATIONS AND ACRONYMS

ACWD	Alameda County Water District
AMI	Advanced Metering Infrastructure
Annual Assessment	Annual Water Supply and Demand Assessment
BAWSCA	Bay Area Water Supply and Conservation Agency
CCR	Consumer Confidence Report
CII	Commercial, Industrial and Institutional
CIP	Capital Improvement Program
County	Alameda County
CWC	California Water Code
Demand Study	2025 BAWSCA Regional Water Demand and Conservation Projections Report
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utilities District
ERP	Water System Emergency Response Plan
gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
LHMP	Local Hazard Mitigation Plan
M	magnitude
MG	million gallons
MGD	million gallons per day
Project	Recycled Water Project Phase 1
RCEC	Russell City Energy Center
RRA	Risk and Resilience Assessment
RWS	Regional Water System
RWSP	Recycled Water System Plan
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SWRCB	State Water Resources Control Board
UWMP	Urban Water Management Plan
WARN	Water Agency Response Network
WRRF	Water Resource and Recovery Facility
WSCP	Water Shortage Contingency Plan

1 INTRODUCTION AND WSCP OVERVIEW

The City of Hayward's (Hayward or City) Water Shortage Contingency Plan (WSCP) is a planning document designed to prepare for and respond to water shortages. This WSCP complies with California Water Code (CWC) Section 10632, which requires every urban water supplier to prepare and adopt a WSCP as part of its Urban Water Management Plan (UWMP). This level of detailed planning and preparation is intended to help maintain reliable water supplies and reduce the impacts of supply interruptions.

The WSCP provides proactive mitigation measures to assist Hayward during periods of water shortages. A water shortage occurs when water supply availability is insufficient to meet the normal, expected customer water use for a given period. This may occur for several reasons, such as drought, climate change, or catastrophic events (e.g., earthquake). This WSCP is not intended to replace water distribution system operating rules or procedures, but rather to complement the Alameda County 2021 Local Hazard Mitigation Plan (LHMP) and Hayward's Water System Emergency Response Plan (ERP).

This WSCP incorporates prescriptive information and standardized action levels along with implementation strategies in the event of a supply interruption. This allows Hayward's governing body, its staff, and the public to easily identify and efficiently implement pre-determined steps to manage the shortage. A well-structured WSCP allows for efficient management of any shortage with predictability and accountability. This is accomplished through a real-time water supply availability assessment and well-defined actions aligned with different water shortage levels which, if necessary, may be modified to respond to actual conditions.

The WSCP also describes Hayward's procedures for conducting the Annual Water Supply and Demand Assessment (Annual Assessment), as required by CWC Section 10632.1. An Annual Assessment is to be submitted to the California Department of Water Resources (DWR) on or before July 1 of each year, or within 14 days of receiving final allocations from the State Water Project, whichever is later.

Information regarding Hayward's WSCP is included in its UWMP, which will be submitted to DWR upon adoption along with this WSCP. However, this WSCP is created and adopted separately from the UWMP and can be amended as needed without amending the UWMP. The California Water Code (CWC) does not prohibit an urban water supplier from taking additional actions not specified in its WSCP, if needed, without having to formally amend its WSCP or UWMP.

1.1 Water Shortage Contingency Plan Requirements and Organization

The WSCP provides steps and water shortage response actions to be taken in times of water shortage conditions. The WSCP includes prescriptive elements, such as the following:

- An analysis of water supply reliability
- The water shortage response actions for each of the six standard water shortage levels that correspond to water shortage percentages ranging from 10% to greater than 50%
- An estimate of the reduction amount needed to close any supply gap for each water shortage response action
- Protocols and procedures to communicate identified actions for any current or predicted water shortage conditions
- Procedures for an Annual Water Supply and Demand Assessment
- Monitoring and reporting requirements to determine customer compliance
- Procedures for reevaluating and improving the WSCP

This WSCP is organized into three main chapters as listed below, with Chapter 3 closely aligned with the California Water Code Section 16032 requirements.

This WSCP is organized into three main chapters as follows, with Chapter 3 closely aligned with the CWC Section 16032 requirements.

Chapter 1 – Introduction and WSCP Overview. This chapter provides an overview of the WSCP fundamentals.

Chapter 2 – Background. This chapter provides information on Hayward's water service area.

Chapter 3 – Water Shortage Contingency Response and Preparedness Planning. This chapter describes the procedures, policies, and response actions used to monitor water supply conditions and implement staged responses to water shortages.

Section 3.1 – Water Supply Reliability Analysis. This section provides a summary of the water supply analysis and water reliability findings from the 2025 UWMP.

Section 3.2 – Annual Water Supply and Demand Assessment Procedures. This section provides a description of procedures to conduct and approve the Annual Assessment.

Section 3.3 – Six Standard Water Shortage Levels. This section explains WSCP's six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50% shortages.

Section 3.4 – Shortage Response Actions. This section describes WSCP's shortage response actions that align with the defined shortage levels.

Section 3.5 – Communication Protocols. This section addresses communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.

Section 3.6 – Compliance and Enforcement. This section describes customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions.

Section 3.7 – Legal Authorities. This section describes the legal authorities that enable Hayward to implement and enforce its shortage response actions.

Section 3.8 – Financial Effects of the WSCP. This section provides a description of the financial effects of and responses to drought conditions.

Section 3.9 – Monitoring and Reporting. This section describes monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and meeting state reporting requirements**.**

Section 3.10 – WSCP Refinement Procedures. This section addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP.

Section 3.11 – Special Water Feature Distinction. This section defines water features that are artificially supplied with water.

Section 3.12 – Plan Adoption, Submittal, and Implementation. This section provides a record of the process Hayward followed to adopt and implement its WSCP.

Section 3.13 – Seismic Risk Assessment and Mitigation Plan. This section addresses the vulnerability of the systems to earthquakes and the Alameda County Local Hazard Mitigation Plan (Alameda County, 2021), approved by the Federal Emergency Management Agency (FEMA).

1.2 Integration with Other Planning Efforts

As a retail water supplier in Alameda County (County), Hayward has considered other key entities in the development of this WSCP, including its regional wholesale supplier, San Francisco Public Utilities Commission (SFPUC). This WSCP was developed with input from coordination efforts led by the Bay Area Water Supply and Conservation Agency (BAWSCA)[1] and City and County planning documents.

Some of the key planning and reporting documents used to develop this WSCP include:

- American Water Infrastructure Act 2025, 2025 Risk and Resilience Assessment (RRA),
- 2040 City of Hayward General Plan: Hazards Element
- County of Alameda 2021 Local Hazard Mitigation Plan
- City of Hayward 2025 Urban Water Management Plan
- 2025 BAWSCA Regional Water Demand and Conservation Projections Report (Demand Study)
- 2025 SFPUC Supply Reliability Letter (Appendix F)
- 2025 SFPUC UWMP
- 2025 SFPUC WSCP

[1] More information on the Bay Area Water Supply and Conservation Agency is available online: www.bawsca.org.

2 BACKGROUND INFORMATION

This chapter presents background information on Hayward's water service area.

2.1 General Description

Hayward occupies an area of about 64 square miles. It is located in Southern Alameda County on the east shore of the San Francisco Bay, 25 miles southeast of San Francisco, 14 miles south of Oakland, 26 miles north of San Jose, and 10 miles west of the valley communities surrounding Pleasanton. Hayward is surrounded by the unincorporated communities of San Lorenzo and Castro Valley in the north, Union City in the south, Pleasanton in the east and the San Francisco Bay to the west. Most of Hayward is generally flat, although elevation rises from approximately 100 to 1,500 feet above sea level east of Mission Boulevard.

Settlement in the Hayward area began in the early 1850s with the opening of a general store in what is now the downtown area. The City of Hayward was incorporated in 1876 and remained essentially a small agrarian town until the end of World War II. Since then, Hayward has undergone substantial changes. A major increase in population occurred in the 1950s and 1960s as a result of the post-war construction boom. A surge in industrial development during the 1960s and 1970s created employment opportunities and balanced, to some extent, the housing that was developed in earlier decades. Over the past several decades, Hayward has seen continued residential and industrial growth, mostly in the form of infill development and annexation of unincorporated areas. Hayward enjoys a large and diverse industrial sector, including food and beverage and high-technology manufacturing, along with a growing number of biotechnology firms, and "clean technology firms" including production, battery research, and development for electronic vehicles (EVs).

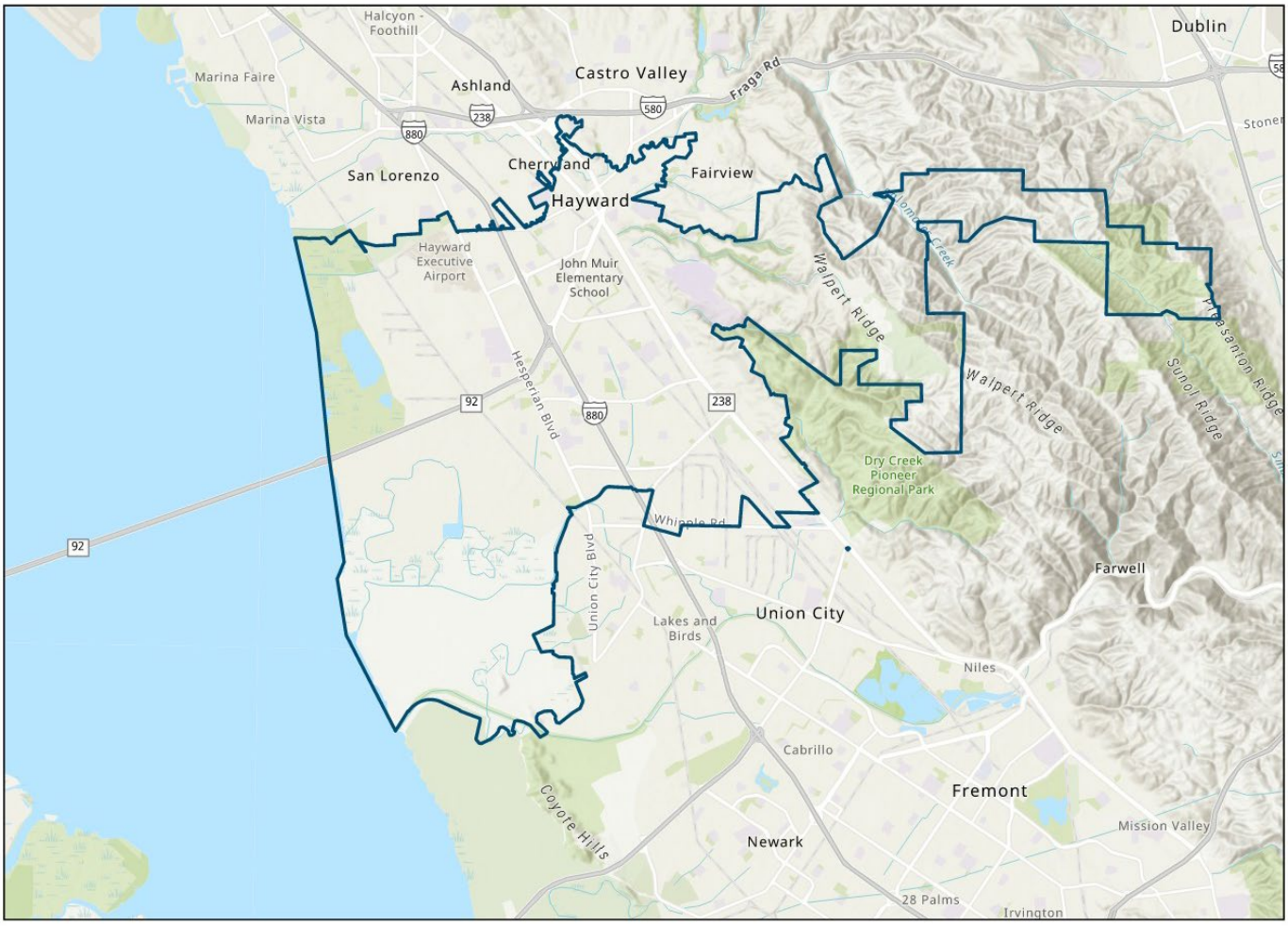
Groundwater wells were originally the primary source of Hayward's water supply. During the 1940s and 1950s, the groundwater well source was supplemented by water purchased from SFPUC's Hetch Hetchy Regional Water System (RWS). In 1962, Hayward entered into an agreement with SFPUC to purchase all Hayward water from SFPUC, prompting the construction of over 20 miles of aqueduct to deliver RWS water to customers. Hayward ceased using groundwater well water in 1963 and since then relies 100% on SFPUC deliveries to provide water service for residential, commercial/industrial, governmental, and fire suppression uses.

The City of Hayward is governed by a Council-Manager form of government. As a public water system owned and operated by Hayward, the City Council also directs matters related to the municipal water system. The City Council is comprised of six elected council members and a directly elected mayor.

Hayward Service Area

Figures 2-1 and 2-2 show an overview of Hayward's potable water service area. The City serves about 95% of Hayward residents and businesses, while a small northern area is served by East Bay Municipal Utility District. The service area shown represents Hayward's corporate boundaries as well as areas Hayward has agreed to serve that are outside of the city limits. Figure 2-2 provides further details regarding Hayward's water system and infrastructure.

Figure 2-1. Potable Water Service Area

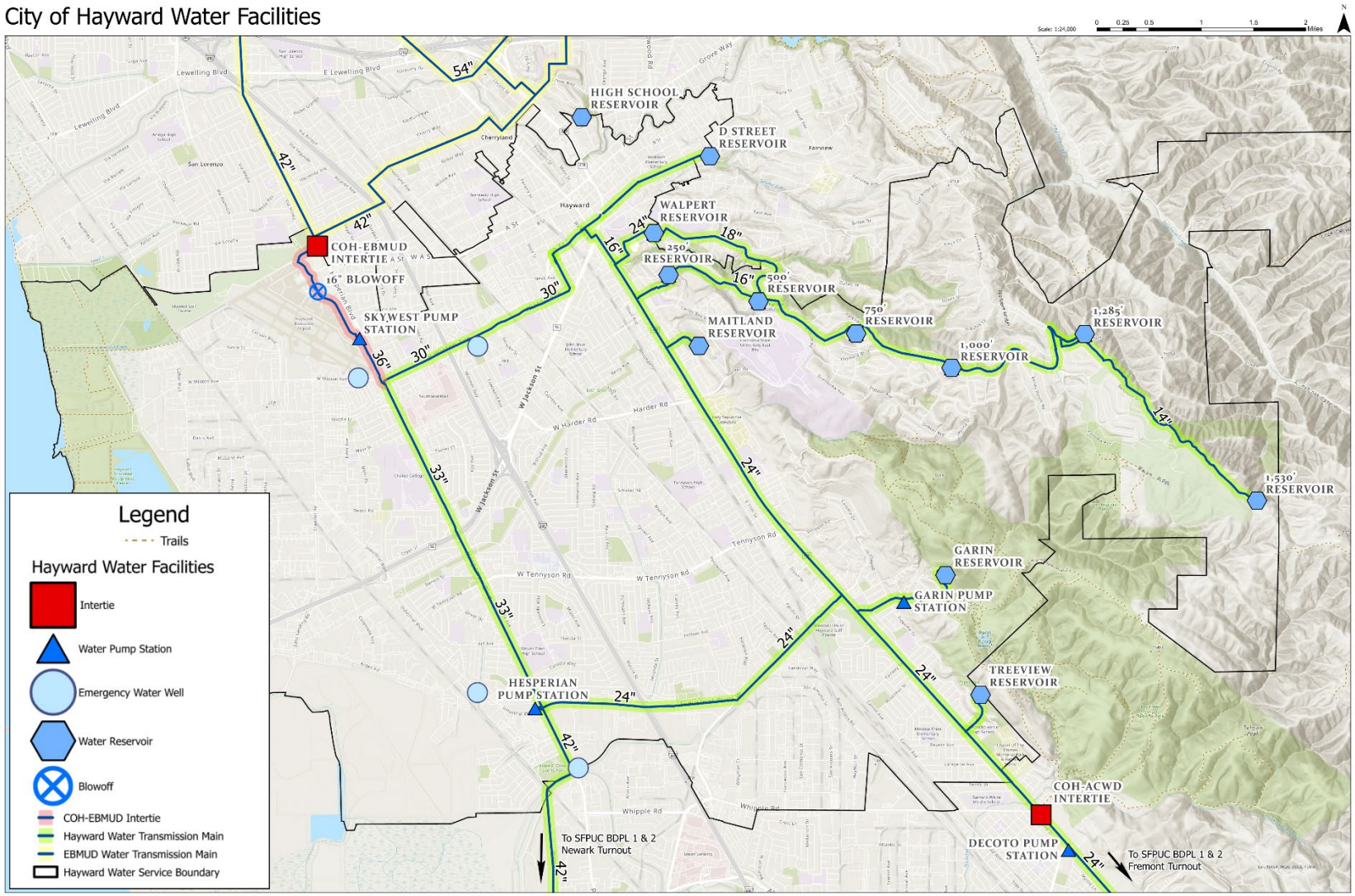


Source: Hayward (2026)

The City-owned water system serves more than 95% of Hayward residents and businesses, while a small northern area is served by East Bay Municipal Utility District (EBMUD). The system supports water users through a large network of pipelines, pump stations, and storage facilities. Hayward meets its daily water demand through imported SFPUC supplies under normal conditions. Hayward also produces recycled water for limited non-potable uses, such as irrigation and industrial applications.

The City also maintains four emergency groundwater wells and interconnections with EBMUD and Alameda County Water District (ACWD) which provide additional supply reliability during emergencies or maintenance events.

Figure 2-2. Public Water System



2.2 Relationship to Wholesalers

Since 1963 Hayward's sole source of potable water has been purchased from the SFPUC. On April 28, 2009, a Water Supply Agreement between the City and County of San Francisco and wholesale customers in Alameda, San Matero, and Santa Clara Counties was approved by the SFPUC. The agreement was amended and restated in 2018, 2021, and 2025.

2.3 Relationship with Wholesaler Water Shortage Planning

The WSCP is designed to be consistent with the water shortage contingency planning strategies of Hayward's wholesale water provider, SFPUC. As such, Hayward will consider the following SFPUC document when planning for water shortage:

SFPUC Water Shortage Contingency Plan[2] – This WSCP outlines SFPUC's plan for responding to a water shortage condition. This includes demand reduction actions that may affect Hayward's supply during a shortage. In addition, the SFPUC WSCP includes procedures that will be used by SFPUC to conduct an Annual Assessment, which will provide a description and quantification of each source of SFPUC's water supply compared to water demands for the current year and one subsequent dry year.

[2] SFPUC. Draft 2025 WSCP. https://www.sfpuc.gov/about-us/policies-plans/urban-water-management-plan

3 WATER SHORTAGE CONTINGENCY RESPONSE AND PREPAREDNESS PLANNING

Hayward's WSCP is a detailed guide of how Hayward intends to respond to a water shortage period. The WSCP anticipates a water supply shortage and provides pre-planned guidance, mitigation and management measures. Based on details of demand reduction and supply augmentation measures that are structured to match varying degrees of shortage, the WSCP ensures that relevant stakeholders understand what to expect during a water shortage situation.

3.1 Water Supply Reliability Analysis

Per CWC Section 10632 (a)(1), the WSCP shall provide an analysis of water supply reliability conducted pursuant to CWC Section 10635, and the key issues that may create a shortage condition when evaluating Hayward's water asset portfolio.

Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides Hayward with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage. In the 2025 UWMP, Hayward conducted a Water Reliability Assessment to compare the total water supply available with long-term projected water use over the next 25 years, in five-year increments (for a normal water year, a single dry water year, and a drought lasting five consecutive water years). Hayward also conducted a Drought Risk Assessment (DRA) to evaluate Hayward's supply risks under a drought period that lasts five consecutive water years beginning 2025. The dry year periods considered as part of the supply reliability analysis are consistent with the UWMP Guidebook 2025 methodology, as well as the SFPUC 2025 UWMP Supply Reliability Letter (SFPUC Letter), dated March 11, 2026, provided to BAWSCA, and the 2025 BAWSCA Regional Water Demand and Conservation Projections Report (Demand Study) supply projections.

The Demand Study provided updated water demand forecasts and conservation assessments to support Hayward's long-term planning. It used a hybrid modeling approach that combines econometric analysis with end-use conservation tracking, allowing it to distinguish between demand driven by external factors (like population, climate, and economic conditions) and reductions achieved through conservation policies and programs.

SFPUC Supply Reliability

Emerging regulatory requirements may influence future water supply planning and the characterization of available resources. In particular, the 2018 amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta Plan Amendment) introduce potential changes to instream flow requirements and environmental protections that could affect water availability within the Tuolumne River watershed, the primary source of supply for the SFPUC Regional Water System. The 2018 adoption of the Bay-Delta Plan Amendment may significantly impact the supply available from the RWS. The SFPUC recognizes that the Bay-Delta Plan Amendment has been adopted and that, given that it is now state law, the SFPUC must plan for a future in which it is fully implemented. The SFPUC also acknowledges that the plan is not self-implementing and therefore does not automatically go into effect. Similarly, there is active litigation at the appellate level regarding the Bay-Delta Plan Amendment. The SFPUC is also pursuing a voluntary agreement, known as the Healthy Rivers and Landscapes Program (HRL). The HRL is currently undergoing evaluation by the SWRCB. In fall of 2025, the SWRCB released a Scientific Basis Report evaluating the biological benefits of the Tuolumne River component of the HRL. The next step is for SWRCB to finalize this report including scientific peer review. At the same time, the SWRCB is undergoing CEQA evaluation of the Tuolumne HRL. No timeline has been provided for when the HRL will be considered for adoption by the SWRCB.

If implemented, the Bay-Delta Plan Amendment would require releasing about 30-50% of natural river flows to support ecosystems, which could lead to water shortages and rationing in dry years, though normal-year demand would still be met. Because of these uncertainties, the RWS supply reliability assessment evaluated two scenarios: one where the Bay-Delta Plan Amendment is implemented (assumed to start around 2030) and one reflecting current conditions. The two future supply scenarios use hydrologic models with and without the Bay-Delta Plan Amendment. Scenario 1, with the Bay-Delta Plan, includes water cutbacks of over 30% in year 2030 (from normal year total wholesale agency supply of 184 million gallons per day [MGD]), starting with the first year of a multi-year drought if the Bay-Delta Plan Amendment cutbacks are applied to SFPUC's water supply; and up to 48% by year 5 of a drought by year 2050. Scenario 2, without the Bay-Delta Plan Amendment, assumes minimal water supply reductions (from normal year total wholesale agency supply of 184 MGD), if the Bay-Delta Plan Amendment cutbacks are **not** applied to SFPUC's water supply.

Using the two SFPUC assumptions, BAWSCA developed water shortage allocations for each of their member water agencies. The drought allocation calculations use actual historic and forecasted water demands through 2050. For the 2025 UWMP, BAWSCA developed a method to allocate SFPUC's wholesale available supply during dry years. BAWSCA's method results in an equal percent reduction shared across all wholesale customers. This allocation method is intended to serve the purposes of the 2025 UWMP supply reliability analysis. It does not imply an agreement by BAWSCA member agencies as to the allocation methodology. BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional multiple equity factors if SFPUC is not able to deliver its contractual supply volume.

The City of Hayward is the 24th Wholesale Customer that shares in SFPUC's "Supply Assurance" of 184 MGD to the Wholesale Customers, but it does not have an ISG due to the terms of its 1962 individual water supply contract with SFPUC that did not contain a fixed allocation of water. The City of Hayward's unspecified water supply allocation is included in the Supply Assurance as the difference between 184 MGD and the sum of the other 23 permanent Wholesale Customers' ISGs (22.1 MGD). If Hayward's water purchases from the RWS exceed 22.1 MGD over a period of three consecutive fiscal years (an event that has not occurred to date and is not projected to occur before 2050), the 23 Wholesale Customers with ISGs would be required to reduce their individual ISGs to accommodate the demands of Hayward.

Additional Reliability Constraints

In addition to regulatory changes, the amount of water available from SFPUC's RWS is constrained by climate, hydrology, facilities, and the institutional parameters that allocate the water supply from the Tuolumne River. Climate change may affect the snow-pack storage and water availability in the future.

Constraints on the SFPUC supplies were discussed in more detail in Section 7.1.3. of the 2025 UWMP. The main long-term constraints on supply reliability are due to climate change and regulatory changes. Key factors impacting water supply from SFPUC include the following:

- Changes in precipitation patterns, such as time, intensity and duration of snowfall or rain
- Changes in water quality as a result of changes in precipitation patterns and storage

The constraints noted below will potentially affect SFPUC's Hetch Hetchy watershed and management of the RWS water supply and its distribution:

- Fewer months of continuous below freezing (-32F) temperatures in the Sierra Nevada, resulting in less precipitation as snow and shorter duration for snowpack storage
- Warmer temperatures leading to melt of the snowpack storage
- Inadequate storage capacity to store the snowmelt water source
- Regulatory changes affecting SFPUC water supplies, such as implementation of the Bay-Delta Plan Amendment that could reduce supply water for the SFPUC RWS by almost 50% in drought years

Drought Risk Assessment

In the DRA, Hayward includes its supply reliability using the SFPUC scenario with the Bay-Delta Plan Amendment. SFPUC projects that in multiple dry years, with the Bay-Delta Plan Amendment, the wholesale volume available will range from 69% of normal in the first year, to 58% in the second through fifth years. SFPUC's projections for available supplies for wholesale agencies translate to significant cutback allocations for all BAWSCA agencies.

Hayward will experience water supply shortfalls for multiple (five) dry years with implementation of the Bay-Delta Plan Amendment with percent cutbacks in 2027-2030 of up to 10%. In a multiple dry year scenario for future years, cutbacks between 30% and 50% will be needed. These anticipated shortfalls will invoke Hayward's WSCP in a multi-year drought scenario.

3.2 Annual Water Supply and Demand Assessment Procedures

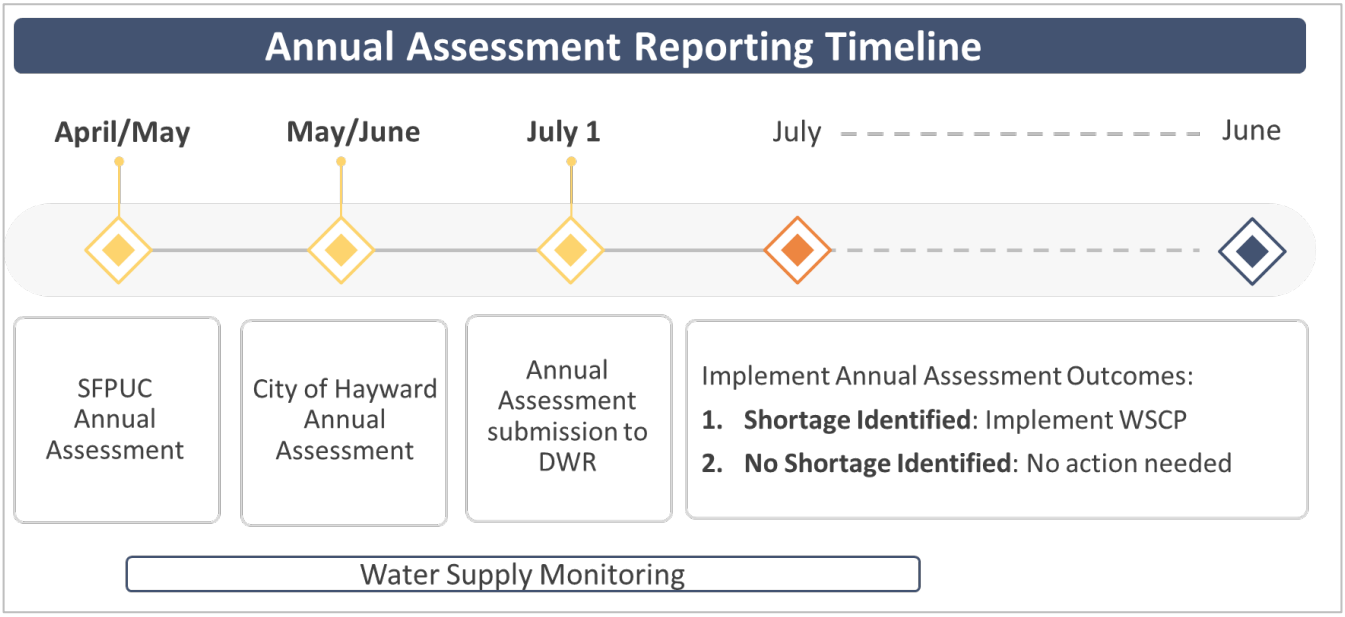
Per CWC Section 10632.1, Hayward conducts an Annual Water Supply and Demand Assessment (Annual Assessment) pursuant to subdivision (a) of Section 10632. This Annual Assessment is submitted to DWR by July 1st of each year. Hayward will submit its 2025 Annual Assessment with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with Hayward's WSCP by July 1, 2026.

This section documents the decision-making process required for formal approval of Hayward's Annual Assessment determination of water supply reliability and key data inputs and methodologies used to evaluate the water system reliability for the coming year, while considering that the year to follow would be dry.

Decision-Making Process

The Annual Assessments are predicated on the outcome of the SFPUC Annual Assessment. SFPUC updates BAWSCA on February 1st and March 1st and provides the final annual supply availability by April 15th. Figure 3-1 contains a sample timeline for Hayward's Annual Assessment report.

Figure 3-1. Annual Assessment Reporting Timeline



As required by CWC Section 10632(a)(2), the procedures Hayward will follow to conduct and formally approve its Annual Assessment for water demand and supply include staff and City Council actions as follows:

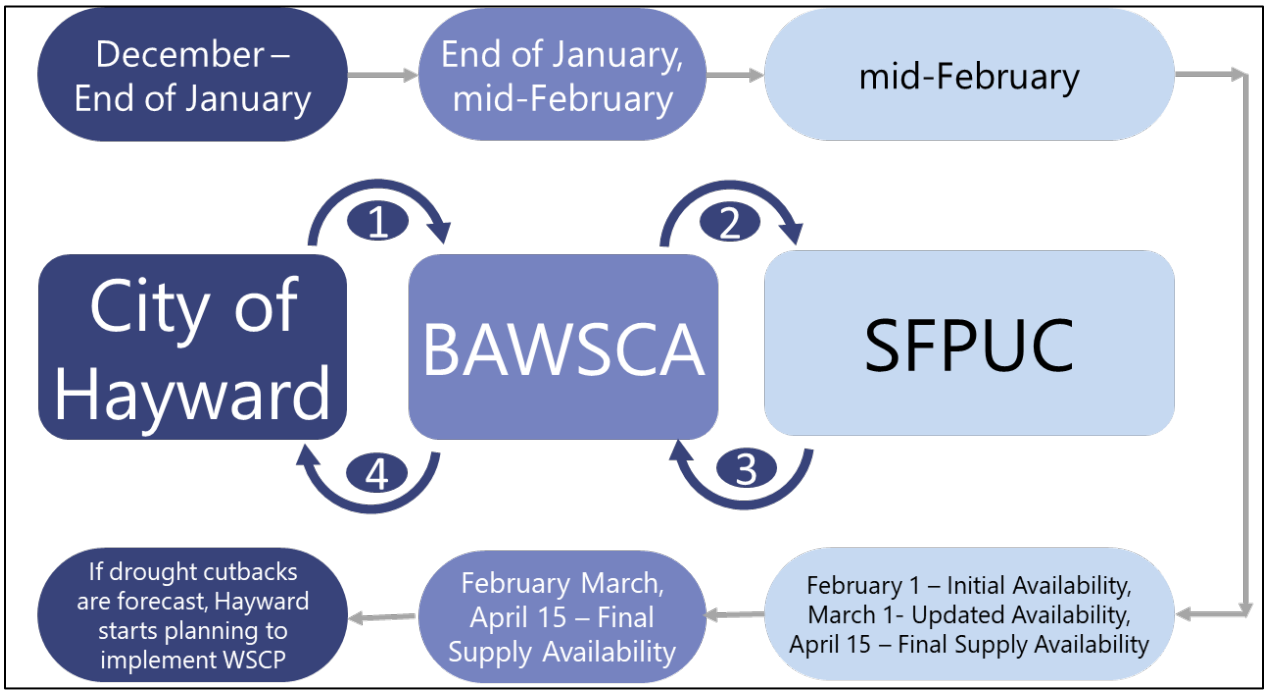
- Review and analysis of monthly and annual (prior year) service area water consumption by sector

- Comparison and analysis of monthly and annual Hayward consumption to SFPUC production data
- Review and analysis of actual consumption compared to forecast (i.e., Least Cost Planning Decision Support System [DSS] Model forecast) and, if changes are apparent, review of potential impacts on water use patterns
- Review and analysis of final SFPUC supply availability, issued annually on April 15, annual supply projections (SFPUC's hydrological and water availability forecast), and available related information
- New regulatory requirements that could potentially impact water supply
- Other related data and information, including an analysis of water system reliability for the coming year with the presumption that the year would be dry

If Hayward's water supply availability is normal without expected shortages, the Director of Public Works, or designee, will approve the Annual Assessment. If shortage conditions are expected, Hayward will present the Annual Assessment to the City Council and implement the WSCP. Following discussion, and follow-up actions from staff (if any), the WSCP will be implemented, and specific actions and necessary steps will be taken, such as communication with customers and implementation of shortage levels.

Hayward's routine Annual Assessment and approval process includes interactions with BAWSCA and SFPUC. Figure 3-2 illustrates the annual demand and supply steps in the communication and decision-making process between Hayward, BAWSCA, and SFPUC.

Figure 3-2. Annual Assessment Communication Steps



Data and Methodologies

The following sections document the key data inputs and methodologies that are used to evaluate the water system reliability for the coming year, while considering that the year to follow would be dry.

Evaluation Criteria

In Section 7.2.2 of the 2025 UWMP, Hayward assessed its water service to its customers during normal, single dry, and multiple dry water years. The Annual Water Supply and Demand Assessment (Annual Assessment)

compares the total water supply sources available to Hayward with the long-term total projected water use over the next 20 years in five-years, increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. This assessment was based on Hayward's service area, water sources, water supply reliability, and water use as described in CWC Section 10631. It also includes available data from state, regional, or local population: land use development; and climate change projections within Hayward's service area.

Hayward will continue to monitor emerging supply and demand conditions and regulatory developments related to imported water from SFPUC and take appropriate actions consistent with the flexibility and adaptiveness inherent to the WSCP.

In addition, Hayward is in a region that has significant risk for seismic activity. Earthquake risk is further detailed in Section 3.13, the Seismic Risk Assessment and Mitigation Plan.

Water Supply

The Annual Assessment will provide a quantification and description of Hayward's service area water supply portfolio. The City of Hayward's water supply portfolio is described and quantified in the following sections, including purchased or imported supplies, groundwater, and recycled water.

Purchased or Imported Water

Hayward's sole source of potable water since 1963 has been purchased water from the City and County of San Francisco's RWS, operated by SFPUC. Hayward purchases water from the SFPUC RWS in accordance with the 2009 Water Supply Agreement[3] between the City and County of San Francisco and Wholesale customers in Alameda, San Mateo, and Santa Clara Counties, approved by SFPUC on April 28, 2009. Per the 2009 Water Supply Agreement, San Francisco has a perpetual commitment (Supply Assurance) to deliver 184 MGD to the 24 permanent Wholesale customers (including Hayward), collectively.

Groundwater

Local groundwater production wells were originally used to supply Hayward with water. However, in 1962, Hayward entered into an agreement with SFPUC to purchase its entire water supply from the SFPUC RWS, and Hayward ceased supplying groundwater in 1963. Groundwater is now only used as an emergency supply by Hayward. With the passage of the Sustainable Groundwater Management Act (SGMA) in 2014, and through Hayward's formation of a Groundwater Sustainability Agency (GSA) in 2017 to manage the portion of the East Bay Plain Subbasin which underlies the city,[4] Hayward evaluates sustainable groundwater management actions as part of the Groundwater Sustainability Plan (GSP) approved by DWR in 2023.

Recycled Water

Hayward completed Phase 1 of its Recycled Water Project (Project) to deliver tertiary-treated wastewater to more than 30 customers within an approximately two-mile radius of the Water Resource and Recovery Facility (WRRF) in 2021. The Project included construction of a one million gallon (MG) storage tank and new pump station (completed in November 2019), approximately 8.5 miles of new distribution pipeline and customer laterals and connections (completed in spring of 2019), and a new 0.5 MGD membrane treatment plant constructed at the Hayward Water Resource and Recovery Facility (WRRF), completed in early 2021. Recycled water deliveries began in March 2022.

Hayward also delivers secondary treated wastewater to the Russell City Energy Center (RCEC). The wastewater is further treated by RCEC and used for cooling towers in energy production. In 2025, deliveries to RCEC averaged 1.06 MGD. Hayward has opted not to include RCEC Power Plant cooling uses as recycled water since the City

[3] Water Supply Agreement (WSA):
https://www.sec.gov/Archives/edgar/data/1035201/000095012309060011/f53985exv10w3.htm

[4] City of Hayward. (2015). City Council Resolution 17-014.
https://www.hayward-ca.gov/sites/default/files/GSA%20Formation%20Resolution.pdf

provided secondary treated effluent to RCEC. The treated effluent does not offset Hayward's potable water demand and must be further treated by RCEC to disinfected tertiary standards for industrial uses.

Hayward anticipates delivering an estimated 72 MG of recycled water per year, an annualized average of about 200,000 gallons per day, to 32 customers for irrigation. All planned uses of recycled water are direct beneficial uses in accordance with California Water Code §13050(f). Hayward is currently developing a Recycled Water System Plan (RWSP) to evaluate expanding the use of recycled water to serve additional users; however, potential use has not yet been quantified. The Recycled Water System Plan document is anticipated to be completed in summer 2026.

Unconstrained Customer Demand

The WSCP and Annual Assessment define unconstrained demand as expected water use prior to any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is differentiated from observed demand as observed demand may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered constraints on demands.

The Demand Study approach coupled econometric modeling of sectoral water consumption with detailed end-use conservation accounting. This hybrid framework enables separation of structural drivers—such as demographic growth, economic trends and climate impacts to projected long-term demand through 2050. Demand forecasts were developed for each agency to account for conservation from passive (i.e., from codes/standards) and active conservation programs. Based on this analysis, water demands were projected after accounting for the effects of the existing plumbing code and future active conservation savings.

Planned Water Use for Current Year Considering Dry Subsequent Year

CWC Section 10632(a)(2)(B)(ii) requires the Annual Assessment to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year." The Annual Assessment will include two separate estimates of Hayward's annual water supply and unconstrained demand using: 1) current year conditions and 2) assumed dry year conditions. Hayward will determine the hydrologic conditions of normal and dry years according to the following methodology:

- **Normal Year** – This condition represents the water supplies a Supplier considers available during normal/average water supplies from SFPUC for BAWSCA agencies where 100% of normal supply is available. This could be a single year or average range of years that most closely represents the average water supply available to the Supplier. In the 2025 UWMP Guidebook and this WSCP, the terms "average" and "normal" are used interchangeably when addressing the water year type. Haywards's normal year and dry year data are reported in Chapter 7 of the 2025 UWMP.
- **Single Dry Year** – The single dry year represents the year with the lowest water supply available from SFPUC to Hayward. With Bay-Delta Plan Amendment for each of the base years from SFPUC for Hayward, the available water supply in a single dry year is 64% of normal supply.
- **Multiple Dry Years** – The multiple dry year period is the period that represents the lowest average water supply availability to an agency, generally considered to be the lowest average runoff for a consecutive multiple year period (five years or more) for a watershed since 1903. DWR has interpreted "multiple dry years" to mean five dry years for the 2025 UWMP.

Infrastructure Considerations

The Annual Assessment will include consideration of any infrastructure issues that may pertain to near-term water supply reliability, including repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity.

Other Factors

For the Annual Assessment, any known issues related to water quality would be considered for their potential effects on water supply reliability. According to the Alameda County 2021 Local Hazard Mitigation Plan (LHMP), the natural disaster with the greatest potential impact on Alameda County is an earthquake. Alameda County sits in one of the most historically seismically active regions in the United States. The County has been subjected to numerous seismic events, originating both on faults within the County and in other parts of the region. Six major Bay Area earthquakes have occurred since 1800 that have affected Alameda County, and at least two of the faults that produced them run through or into the county. Although there are seven major regional faults that will have a significant impact on Alameda County and the entire western portion of the County is highly susceptible to earthquake damage, an earthquake on the Hayward Fault is currently estimated to be the most likely and has the potential to cause the most damage for Alameda County.

For the San Francisco Region, the likelihood of a magnitude (M) 6.7 or greater earthquake over the next 30 years (starting from 2015) is 72%. Below are 30-year probabilities for the three major Northern California faults[5]:

- San Andreas Fault (northern): M 6.7 or greater, 6.4% chance
- Hayward Fault: M 6.7 or greater, 14.3% chance
- Calaveras Fault: M 6.7 or greater, 7.4% chance

3.3 Six Standard Water Shortage Levels

Per CWC Section 10632 (a)(3)(A), Hayward must include the six standard water shortage levels that represent shortages from the normal reliability as determined in the Annual Assessment. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. This is an outgrowth of the severe statewide drought of 2014-2017, and the widely recognized public communication and state policy uncertainty associated with the many different local definitions of water shortage Levels.

The six standard water shortage levels that are presented in Table 3-1 (DWR Submittal Table 8-1) correspond to progressively increasing estimated shortage conditions (up to 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage compared to the normal reliability condition). They align with the response actions Hayward would implement to meet the severity of the impending shortages. These six levels, with increasing water use reduction targets and water demand reduction actions, are intended to have water use restrictions that are additive. For example, when successive levels of shortage are declared, the restrictions for Level 1 remain in place and Level 2 limitations are added; restrictions for Level 1 and 2 remain in place and Level 3 actions are added; and so on. The table below provides context and a general overview of the progressive water shortage levels. A comprehensive list of actions as provided for each level is presented in Table 3-3 (DWR Submittal Table 8-3) in Section 3.4.

[5] Alameda County Local Hazard Mitigation Plan: https://gsa.acgov.org/our-work/initiatives/local-hazard-mitigation-plan

Table 3-1. Water Shortage Contingency Plan Levels (DWR Submittal Table 8-1)

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels - Water Code Section10632(a)(3)(B)				
☑	Check the box if the Supplier uses the Standard six levels of water shortage.			
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**Percent Shortage Range**	**Shortage Response Actions (*Narrative description*)**
0	0%	0	0% (Normal)	A Level 0 Water Supply Shortage – Condition exists when Hayward notifies its water users that no supply reductions are anticipated in this year. Hayward proceeds with planned water efficiency best practices to support customer demand reduction in line with state-mandated requirements and local Hayward goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in Hayward's Water Shortage Response Ordinance.
1	Up to 10%	1	Up to 10%	A Level 1 Water Supply Shortage – Condition exists when Hayward notifies its water users that, due to drought or other supply reductions, a customer demand reduction of up to 10% is necessary to make more efficient use of water and respond to existing water conditions. Hayward shall implement the mandatory Level 1 conservation measures identified in this ordinance. The type of event that may prompt Hayward to declare a Level 1 Water Supply Shortage may include, among other factors, finding that its wholesale water provider calls for extraordinary water conservation.
2	Up to 20%	2	Up to 20%	A Level 2 Water Supply Shortage – Condition exists when Hayward notifies its water users that, due to drought or other supply reductions, a customer demand reduction of up to 20% is necessary to make more efficient use of water and respond to existing water conditions. Upon declaration of a Level 2 Water Supply Shortage condition, Hayward shall implement the mandatory Level 2 conservation measures identified in this ordinance.
3	Up to 30%	3	Up to 30%	A Level 3 Water Supply Shortage – Condition exists when Hayward declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 30% customer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. Hayward must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels - Water Code Section10632(a)(3)(B)				
☑	Check the box if the Supplier uses the Standard six levels of water shortage.			
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**Percent Shortage Range**	**Shortage Response Actions (*Narrative description*)**
4	Up to 40%	4	Up to 40%	A Level 4 Water Supply Shortage – Condition exists when Hayward declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 40% customer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. Hayward must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
5	Up to 50%	5	Up to 50%	A Level 5 Water Supply Shortage – Condition exists when Hayward declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 50% or more customer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. Hayward must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
6	>50%	6	>50%	A Level 6 Water Supply Shortage – Condition exists when Hayward declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that greater than 50% or more customer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. Hayward must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.

3.4 Shortage Response Actions

Hayward has defined specific shortage response actions in Table 3-2 and Table 3-3. This approach aligns with California Water Code Section 10632 (a)(4) that requires the WSCP to specify shortage response actions that align with the defined shortage levels. These shortage response actions were developed considering Hayward's system infrastructure and operations changes, supply augmentation responses, customer classes and water use-specific demand reduction initiatives, and increasingly stringent water use prohibitions.

Supply Augmentation

The supply augmentation actions are described in Table 3-2 (DWR Submittal Table 8-2). They represent short-term management objectives triggered by the WSCP and do not overlap with the long-term new water supply development or supply reliability enhancement projects. Hayward relies on SFPUC's reliability portfolio of water supply programs including existing water transfers, storage, and exchange agreements to supplement gaps in Hayward's supply/demand balance.

Catastrophic Supply Interruption

Catastrophic supply interruptions refer to occurrences of water supply interruptions due to an event such as an earthquake, regional power outage or other incidents in which water supplies are limited in a sudden and severe way. Hayward has taken significant steps to plan for supplemental potable water supplies in the event of such an occurrence, with a diversity of options for meeting emergency demand.

Emergency Interties

Hayward has emergency water intertie agreements with two neighboring agencies, one of which, East Bay Municipal Utilities District (EBMUD), is fully independent of the SFPUC RWS. The other agency, Alameda County Water District (ACWD) receives about 70% of its supply from sources other than SFPUC. In addition to the interties with other agencies, Hayward has several locations where adjacent fire hydrants have been constructed which can be connected with portable hoses to provide water for firefighting or during emergencies.

A Regional Water System Intertie, owned jointly by SFPUC and EBMUD, is located in and operated by Hayward. The purpose of the intertie is to transfer water between SFPUC and EBMUD via Hayward's distribution system during emergency conditions. Up to 30 MGD of water can be delivered in either direction. During operation of the Regional Water System Intertie, Hayward would be supplied with sufficient water first, then the remaining water would be delivered to either SFPUC or EBMUD.

Emergency Groundwater Wells

Hayward maintains four emergency groundwater wells with a combined theoretical short-term pumping capacity of about 7,400 gallons per minute (gpm) or nearly 10.65 MGD. If SFPUC transmission lines are not able to meet Hayward's demands for a limited time, due to a short-term emergency, these wells could be temporarily activated. There is an emergency power generator located at each well site. However, Hayward does not plan to utilize the groundwater wells for supply augmentation.

Table 3-2. Supply Augmentation and Other Actions (DWR Submittal Table 8-2)

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions - Water Code Section 10632(a)(4)(A),(C) and (E)				
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap?		Additional Explanation or Reference
		Volume or Percentage	Shortage Gap Reduction (MG)	
5	Other Purchases	Percentage	0%-50%	Emergency Interties with EBMUD, ACWD, and the Regional Emergency Intertie. Potential yield will depend on agency's ability to deliver water.
5	Other Actions (describe)	Volume	159	Hayward's emergency water supply system includes 4 emergency groundwater supply wells that collectively have 10.6 MGD potential yield (for no more than 5 consecutive days, or 15 days total per year).
Notes: (1) Volume listed is the theoretical amount that could be obtained through emergency interties. Actual volumes will depend on the agency's ability to deliver water; and (2) Emergency wells are permitted for short-term (five consecutive days) use only, and no more than 15 days a year.				

Demand Reduction

Demand reduction measures that would be implemented to address shortage levels are described in Table 3-3 (DWR Submittal Table 8-3). This table indicates which actions align with specific defined shortage levels and estimates the extent to which that action would reduce the gap between supply and demand. The estimates of demand reduction are presented as a range of savings to demonstrate an anticipated response from Hayward's chosen suite of actions. The demand reductions are expected to deliver the outcomes necessary to meet the requirements of a given shortage level that will receive ongoing monitoring. When successive levels of shortage are declared, the actions for Level 1 remain in place and Level 2 limitations are added; restrictions for Level 1 and 2 remain in place and Level 3 actions are added; and so on. This table identifies the enforcement action, if any, associated with each demand reduction measure. At the direction of the Hayward City Council, the City of Hayward may add or substitute measures that would result in water reductions equivalent to or greater than the defined levels. Irrigation with recycled water would be allowed if the shortage response actions are implemented.

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

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
0	Other water feature or swimming pool restriction	Percentage	0	All decorative water features must re-circulate water or users must secure a waiver from Hayward.	Yes
0	Other	Percentage	0	Washing or hosing down vehicles is prohibited except by use of a handheld container, hose with an automatic shut off device, or at a commercial car wash.	Yes
0	Other - Prohibit use of potable water for washing hard surfaces	Percentage	0	Washing hard or paved surfaces is prohibited except to alleviate safety or sanitary hazards using a handheld container, hose with an automatic shut off device, or a low-volume high pressure cleaning machine that recycles used water.	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
0	Landscape - Restrict or prohibit runoff from landscape irrigation	Percentage	0	Watering vegetated areas in a manner that causes excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter, or ditch is prohibited.	Yes
0	Landscape - Other landscape restriction or prohibition	Percentage	0	Irrigating ornamental turf on public street medians is prohibited.	Yes
0	Landscape - Other landscape restriction or prohibition	Percentage	0	No landscape watering shall occur within 48 hours after measurable precipitation.	Yes
0	Landscape - Other landscape restriction or prohibition	Percentage	0	Any new planting should include drought tolerant plants.	Yes
0	Landscape - Other landscape restriction or prohibition	Percentage	0	No landscape watering with potable water on Non Functional Turf at CII and HOA sites.	Yes
0	CII - Restaurants may only serve water upon request	Percentage	0	CII - Restaurants may only serve water upon request.	Yes
0	CII - Lodging establishment must offer opt out of linen service	Percentage	0	CII - Lodging establishment must offer opt-out of linen service.	Yes
0	CII - Other CII restriction or prohibition	Percentage	0	No single pass cooling systems may be installed in new or remodeled buildings.	Yes
0	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Percentage	0	All new commercial car wash and laundry facilities must re-circulate the wash water or obtain a waiver from Hayward.	Yes
0	Other - Require automatic shut of hoses	Percentage	0	Use a shutoff nozzle on hoses.	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
0	Other	Percentage	0	Unauthorized use of hydrants is prohibited. Authorization for use must be obtained from Hayward.	Yes
1	Expand Public Information Campaign	Percentage	0-1%	Community Outreach and Messaging (Expand Public Information Campaign).	No
1	Expand Public Information Campaign	Percentage	0-1%	Encourage customers to wash only full loads when washing dishes or clothes.	No
1	Expand Public Information Campaign	Percentage	0-1%	Encourage customers to use pool covers to minimize evaporation.	No
1	Provide Rebates for Turf Replacement	Percentage	5-15%	Provide rebates for turf replacement.	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	0-5%	Fix leaks or faulty sprinklers promptly/within 5 days.	Yes
1	Landscape - Limit landscape irrigation to specific times	Percentage	0-5%	Watering or irrigation of vegetated areas is prohibited between 9 a.m. and 6 p.m. except by use of a handheld device, hose equipped with an automatic shutoff device, or for adjusting or repairing an irrigation system for short periods of time.	Yes
1	CII - Other CII restriction or prohibition	Percentage	0-1%	Commercial, industrial, institutional equipment must be properly maintained and in full working order.	Yes
1	Other	Percentage	5-10%	Other Prohibited Uses: Hayward may implement other prohibited water uses	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
				as determined, after notice to customers.	
2	Landscape - Prohibit certain types of landscape irrigation	Percentage	0-1%	All non-essential water use for commercial and industrial use should cease.	Yes
2	Provide Rebates on Plumbing Fixtures and Devices	Percentage	0-1%	Provide rebates on plumbing fixtures and devices	Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	0-1%	Fix leaks or faulty sprinklers within 4 day(s)	Yes
2	Landscape - Limit landscape irrigation to specific days	Percentage	5-10%	Irrigation shall be limited to 3 days per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	Percentage	0-1%	Filling or refilling ornamental lakes and ponds is prohibited. Ornamental lakes and ponds that sustain aquatic life of significant value and were actively managed prior to the storage declaration are exempt.	Yes
2	Decrease Line Flushing	Percentage	0-1%	Decrease line flushing	Yes
2	Pools and Spas - Require covers for pools and spas	Percentage	0-1%	Pools and Spas - Require covers for pools and spas	Yes
2	Other	Percentage	5-10%	Other Prohibited Uses: Hayward may implement other prohibited water uses	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
				as determined, after notice to customers.	
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	0-1%	Fix leaks or faulty sprinklers within 3 day(s)	Yes
3	Other water feature or swimming pool restriction	Percentage	0-1%	Decorative water features that use potable water must be drained and kept dry.	Yes
3	Other - Prohibit use of potable water for construction and dust control	Percentage	0-1%	Require a construction water use plan be submitted to the water supplier that addresses how impacts to existing water users will be mitigated (such as dust control).	Yes
3	Landscape - Limit landscape irrigation to specific days	Percentage	5-15%	Irrigation shall be limited to 2 days per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
3	Other	Percentage	5-10%	Other Prohibited Uses: Hayward may implement other prohibited water uses as determined, after notice to customers.	Yes
4	Other water feature or swimming pool restriction	Percentage	0-1%	Existing pools shall not be emptied and refilled using potable water unless required for public health and safety purposes.	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
4	Other water feature or swimming pool restriction	Percentage	0-1%	No new permits for pools will be issued.	Yes
4	Landscape - Limit landscape irrigation to specific days	Percentage	5-15%	Irrigation shall be limited to 1 day per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
5	Other	Percentage	5-10%	Hayward may reduce water allocations in all categories to meet the available water supply	Yes
5	Landscape - Prohibit certain types of landscape irrigation	Percentage	0-1%	Watering of parks, school grounds, and recreation fields is prohibited, except for rare plant or animal species	Yes
5	Other	Percentage	5-10%	Other Prohibited Uses: Hayward may implement other prohibited water uses as determined, after notice to customers.	Yes
5	Moratorium or Net Zero Demand Increase on New Connections	Percentage	0-2%	Moratorium or net zero demand on new connections	Yes
6	Landscape - Prohibit all landscape irrigation	Percentage	0-5%	Hayward may shut off all non-essential water services. All irrigation is prohibited.	Yes
6	CII - Other CII restriction or prohibition	Percentage	5-15%	Water for commercial, manufacturing, or processing purposes shall be reduced in volume by up to 50% or exceeded if	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions - Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels?				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only**
		Volume or Percentage	Shortage Gap Reduction (MG)		
				necessary for public health and safety purposes.	
6	Other	Percentage	0-15%	Water use for public health and safety purposes only. Customer rationing may be implemented.	Yes

Operational Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. Hayward will consider its operational procedures when it completes its Annual Assessment to identify changes that can be implemented to address water shortage on a short-term basis, such as reduced amounts of water maintained in storage. All changes would be carefully evaluated to ensure sufficient supply and pressure to meet health and safety requirements, including fire suppression.

Additional Mandatory Restrictions

California Water Code Section 10632(a)(4)(D) calls for "additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions" to be included among the WSCP's shortage response actions. Hayward has identified additional mandatory restrictions in City of Hayward Municipal Code Chapter 11-2.47 – Prohibition of Wasteful Water Practices (Appendix A). Hayward reserves the right to add additional measures as needed to achieve water supply reductions.

County Emergency Response Plan and Local Hazard Mitigation Plans

A catastrophic water shortage would be addressed according to the appropriate water shortage level and response actions. It is likely that a catastrophic shortage would immediately trigger Shortage Level 6 Response actions have been put in place to mitigate a catastrophic shortage. In addition, there are several plans that address catastrophic failures and align with the WSCP, including the City of Hayward General Plan: Hazards Element[6] and Alameda County 2021 Local Hazard Mitigation Plan.

Hayward Emergency Response Plan

Hayward developed and maintains a comprehensive Water System ERP to incorporate all aspects of emergency planning into one document. The ERP utilizes the Standardized Emergency Management System to identify roles and responsibilities during an emergency and includes instructions for communicating with SFPUC and other key

[6] City of Hayward General Plan: Hazards Element. https://www.hayward-ca.gov/your-government/documents/general-plan/hazards-element

agencies. The ERP also describes methods for communicating with customers, including the following actions that could be taken in the event of catastrophic interruption in water supplies:

- Notify customers of the need to limit water consumption. Notification could be through media contact, social media, website updates, written notices posted in public places or hand delivered, and use of an emergency notification telephone system.
- Contact high water usage businesses and other businesses through use of the "sensitive water users" list that Hayward maintains.

Hayward is a member of the Water Agency Response Network (WARN), a mutual aid agreement with water agencies throughout the state of California. WARN supports and promotes statewide emergency preparedness, disaster response, and mutual assistance for water agencies.

Hayward will also refer to its current American Water Infrastructure Act RRA and ERP in the event of a catastrophic supply interruption. The ERP contains sensitive infrastructure information and is therefore not included as an appendix or available for public review.

SFPUC Preparation for Catastrophic Supply Interruption

The SFPUC maintains various planning documents which 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. This includes Emergency Preparedness Plans, Emergency Drinking Water Planning, and Power Outage Preparedness and Response. Should a catastrophic interruption occur, Hayward will coordinate with SFPUC for the possible proclamation of a local emergency and emergency mitigation actions.

Shortage Response Action Effectiveness

For each specific Shortage Response Action identified, the WSCP also estimates the extent to which that action will reduce the gap between supplies and demands identified in Table 3-3 (DWR Submittal Table 8-3). To the extent feasible, Hayward has estimated percentage savings for the chosen suite of shortage response actions, which can be anticipated to deliver the expected outcomes necessary to meet the requirements of a given shortage level.

3.5 Communication Protocols

Per the Water Code Section 10632 (a)(5), Hayward has established communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments regarding any current or predicted shortages as determined by the Annual Assessment described pursuant to Section 10632.1, any shortage response actions triggered or anticipated to be triggered by the Annual Assessment described pursuant to Section 10632.1, and any other relevant communications.

Timely and effective communication is a key element of the WSCP implementation. In the context of water shortage response, the purpose may be an immediate emergency water shortage situation, as may result from an earthquake, or a longer-term emergency shortage condition, such as a drought. In an immediate emergency, Hayward will activate the communication protocol detailed in the ERP. In a longer-term emergency water shortage situation, Hayward will implement the communication protocols described below.

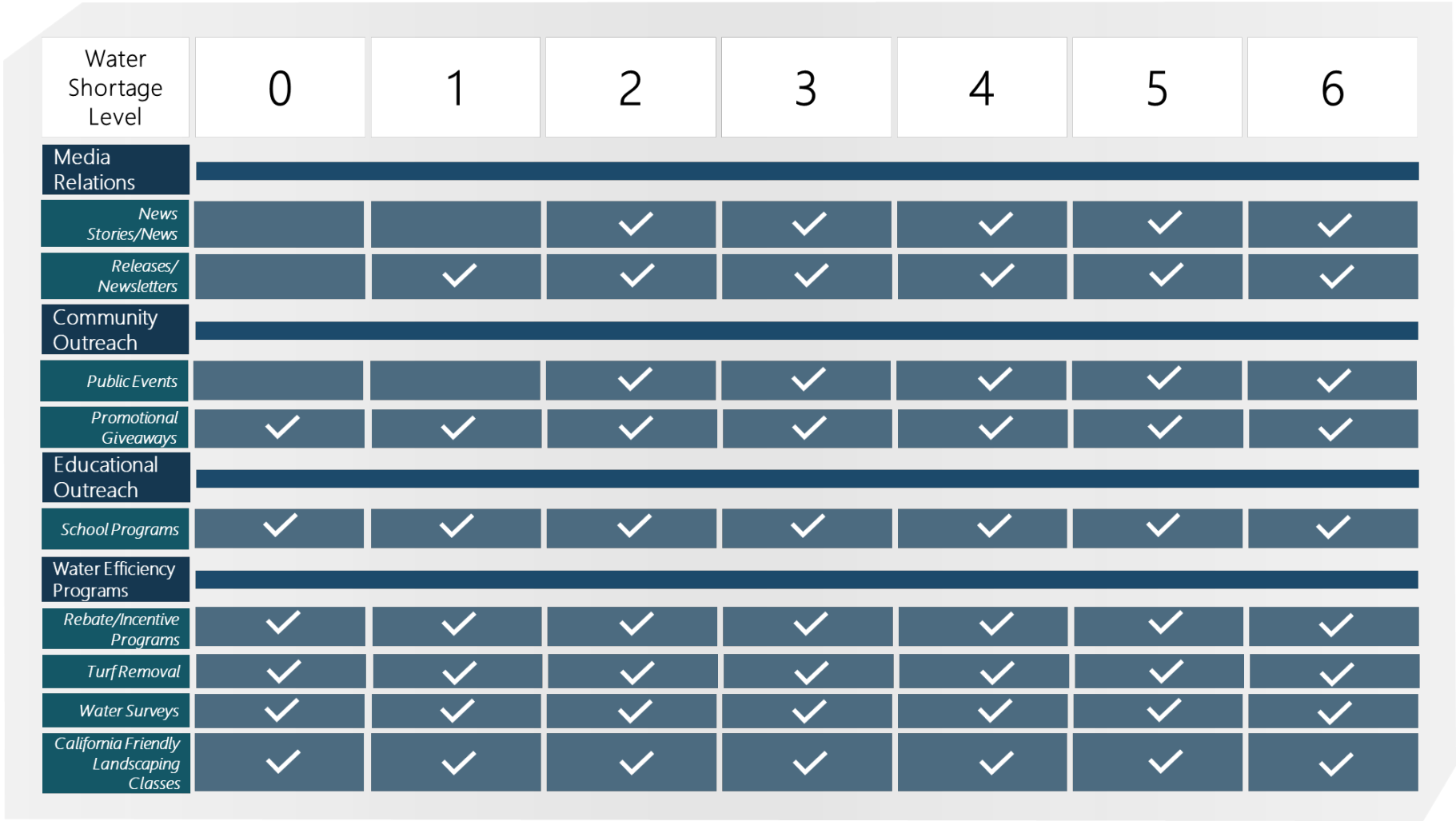
Communication protocols for longer-term water shortage conditions are focused on communicating the water shortage contingency planning actions derived from the results of the Annual Assessment, and it would likely be triggered based upon the decision-making process in Section 3.2. Prior to a water shortage level declaration, Hayward will perform outreach to inform customers of water shortage levels and definitions, targeted water savings for each drought stage, guidelines that customers are to follow during each stage, and sources of current information on Hayward's supply and demand response status. The type and degree of communication will vary with each shortage level. Predefined communication objectives and tools will ensure Hayward's ability to

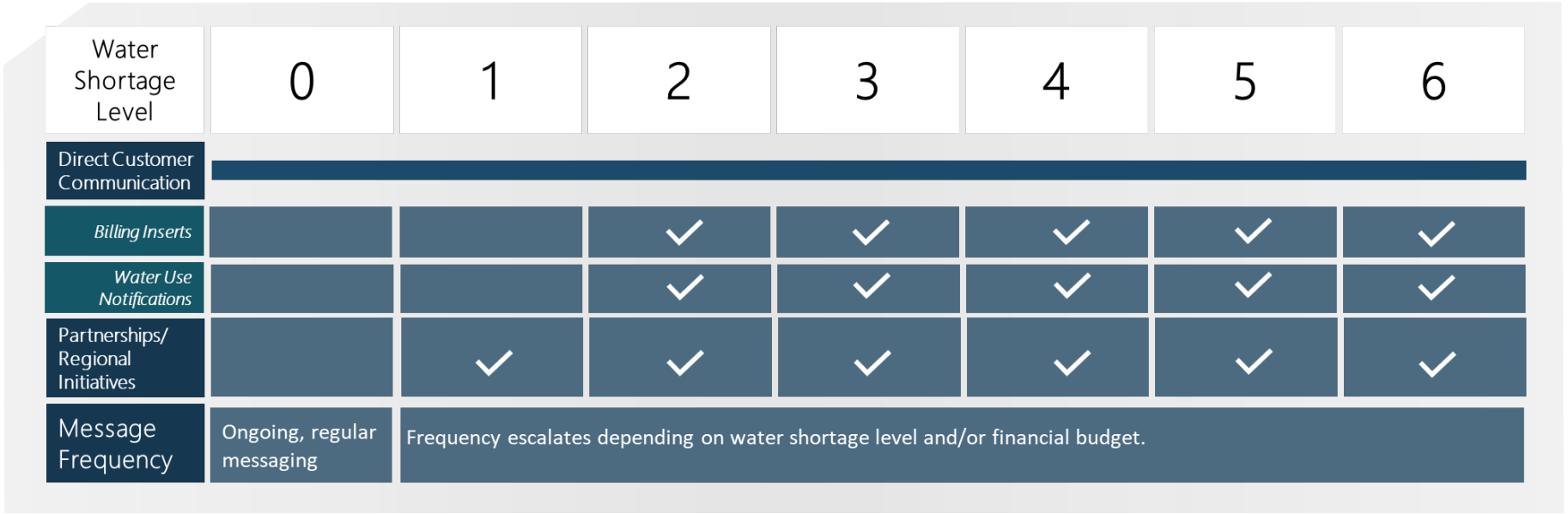
message necessary events and information to ensure compliance with shortage response actions. These communication procedures are summarized in Figure 3-3 and Appendix B.

Hayward's Public Information Office will lead public information and outreach efforts. Hayward will share information and provide guidance to its customers as well as monitor the customer response toward voluntary and mandatory customer response guidelines. Hayward's customer outreach is required to successfully achieve targeted water savings during each shortage level.

Figure 3-3. Communication Procedures

Water Shortage Level	0	1	2	3	4	5	6
Goal	Create an awareness of water shortage level status and encourage water efficiency from all citizens.						
Objective	Permanent Water Waste Prohibitions, Water Awareness	Compliance with response actions, 10% reduction in water use	Compliance with response actions, 20% reduction in water use	Compliance with response actions, 30% reduction in water use	Compliance with response actions, 40% reduction in water use	Compliance with response actions, 50% reduction in water use	Compliance with response actions, Essential Water Use only
Outreach Strategies	1) City Website 2) Written and Print Media 3) Social Media 4) Community Outreach 5) Educational Outreach 6) Direct communication with high water users 7) Communication with commercial/industrial water users 8) City Water Efficiency Programs 9) Water Use Communications 10) Partnerships/Regional Initiatives						
City Website	✓	✓	✓	✓	✓	✓	✓
Social Media							
Facebook		✓	✓	✓	✓	✓	✓
Instagram		✓	✓	✓	✓	✓	✓
Twitter		✓	✓	✓	✓	✓	✓
Digital and Print Media							
Flyers/Signage/ Brochures			✓	✓	✓	✓	✓
Consumer Confidence Reports (CCRs)		✓	✓	✓	✓	✓	✓


Water Shortage Level
0
1
2
3
4
5
6
Media Relations
News Stories/News
Releases/ Newsletters
Community Outreach
Public Events
Promotional Giveaways
Educational Outreach
School Programs
Water Efficiency Programs
Rebate/Incentive Programs
Turf Removal
Water Surveys
California Friendly Landscaping Classes


Water Shortage Level
0
1
2
3
4
5
6
Direct Customer Communication
Billing Inserts
Water Use Notifications
Partnerships/ Regional Initiatives
Message Frequency
Ongoing, regular messaging
Frequency escalates depending on water shortage level and/or financial budget.

3.6 Compliance and Enforcement

Per CWC 10632 (a)(6), Hayward has defined customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions in the City of Hayward Municipal Code Chapter 11-2.47 – Prohibition of Wasteful Water Practices (Appendix A).

Enforcement of the WSCP ranges from written communications and warnings to administrative fines and restriction of water service, depending on the severity of the drought and the nature of the water waste. Hayward has provided the community with tools to easily report water waste through a dedicated telephone line and email address, in addition to Hayward's on-line communication tool known as Access Hayward. In most cases, formal notification from Hayward to the property owner is sufficient to achieve compliance. If violations continue, Hayward may use door hangers to advise customers of the violation and potential consequences of non-compliance. Hayward has the authority to issue administrative fines for ongoing violations and excessive water waste, as well as the ability to restrict or terminate water service if necessary.

In the event of a severe or extended water shortage, it is likely that excess use penalties would be implemented. During the most recent period of mandatory rationing (in the early 1990s, customers were given water allocations and excess use charges were implemented, set on a "graduated" basis. For example, excess water use up to 10% over the allotment may be billed at a higher rate per unit, and an additional higher tier may be imposed for excess water use from 10% to 20% over the allotment, and so on. It is expected that some variation of this structure will be adopted in the event of future mandatory rationing, as approved by the City Council and based on the excess use charges imposed by Hayward's wholesale water supplier, SFPUC.

3.7 Legal Authorities

Per CWC 10632 (a)(7)(A), Hayward has provided a description of the legal authorities that empower it to implement and enforce its shortage response in the City of Hayward Municipal Code Chapter 11-2.47 – Prohibition of Wasteful Water Practices (Appendix A).

Per CWC 10632 (a)(7)(B), Hayward shall declare a water shortage emergency condition to prevail within the area served by Hayward whenever it finds and determines that the ordinary demands and requirements of water customers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

Per CWC (a)(7)(C), Hayward shall coordinate with Alameda County within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558).[7] Table 3-4 identifies the contacts for all cities or counties for which Hayward provides service. Along with developed coordination protocols, Hayward can facilitate compliance with this section of the Water Code in the event of a local emergency.

Table 3-4. Agency Contacts and Coordination Protocols

Contact	Agency	Coordination Protocols
Alameda County Administrator, or designee	County of Alameda	Hayward will initiate and maintain communication with the County to coordinate compliance with WSCP actions through email, in-person meetings, written communication and other available methods.

[7] California State Legislature. (1970). Government Code Section 8558. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=8558

3.8 Financial Effects of the WSCP

Per CWC Section 10632(a)(8), suppliers must include a description of the overall anticipated financial effects of the Supplier of implementing the WSCP. This description must include potential reductions in revenue and increased expenses associated with implementation of the shortage response actions. This should be coupled with an identification of the anticipated mitigation actions needed to address these financial impacts.

Hayward's rate structure is based on a cost-of-service method where the beneficiaries of the service pay for the cost of providing service and where one customer class does not unduly subsidize another. Water rates are reviewed regularly to ensure adequate revenues are generated to meet operating and capital expenses, and a key factor in establishing appropriate rates is anticipated consumption.

The Water Shortage Actions designed to address a range of water shortage conditions have the potential to impact Hayward's revenues and expenditures. To assess these potential impacts, Hayward calculated the revenue impacts resulting from each shortage stage percent reduction in sales as compared to an estimate of a normal year baseline. Other factors considered included water losses, pricing structure, and avoided costs.

In addition to reduced revenues, Hayward anticipates expending additional funds during a water shortage to implement an effective water use reduction program and water rationing. Additional costs may include:

- Additional water conservation program costs for increased rebates and incentives
- Additional customer service staff to support rationing and water conservation programs
- Advertising and public education materials
- Computer programming modifications to implement excess water use fees
- Computer programming needed to determine appropriate customer allocations

Drought Rate Structures and Surcharges

Revenue and expenditure impacts would be mitigated in part by lower costs for purchasing water. However, in the event of long-term or severe water shortage, it is anticipated that Hayward would develop a rate structure, including excess use charges, to address the revenue impacts.

Use of Financial Reserves

In the short-term, Hayward also would rely on the short-term use of reserves to offset the impact of water use reductions and additional water shortage-related costs. Water system financial resources are prudently managed to maintain sufficient reserves for such purposes.

Other Measures

Hayward would seek other means of mitigating the impact of water use reductions. Short-term cost efficiencies may be implemented. Also, some types of maintenance may be deferred if such deferment would not compromise water quality or reliability.

3.9 Monitoring and Reporting

Per CWC 10632(a)(9), Hayward is required to provide a description of the monitoring and reporting requirements and procedures that have been implemented to ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements. This data will be used to measure the effectiveness of any water shortage contingency level that may be implemented.

Monitoring and reporting key water use metrics is fundamental to water supply planning and management. Monitoring is also essential in times of water shortage to ensure that the response actions are achieving their intended water use reduction purposes and to evaluate if improvements or new actions need to be considered (see Section 3.10). Monitoring for customer compliance tracking is also useful in enforcement actions. With the

implementation of Advanced Metering Infrastructure (AMI), Hayward -has access to additional data by customer, time-of-day usage, areas of Hayward, and other metrics to help determine the effectiveness of customer outreach and guide additional needed educational and enforcement actions.

Under normal water supply conditions, potable water production figures are recorded daily. Monthly Drought and Conservation reports are prepared, monitored, and submitted to the SWRCB. This data also is used to measure the effectiveness of any water shortage contingency level that may be implemented. Also, Hayward participates in monthly BAWSCA meetings to receive updates on water supply conditions and coordinate regional messaging and water reduction strategies.

3.10 WSCP Refinement Procedures

Per CWC 10632 (a)(10),[8] Hayward must describe reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the WSCP to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

Hayward's WSCP is prepared and implemented as an adaptive management plan. Hayward will use the monitoring and reporting process defined in Section 3.9 to refine the WSCP. If certain procedural refinements or new actions are identified, Hayward will evaluate their effectiveness, incorporate them into the WSCP and implement them quickly at the appropriate water shortage level.

The WSCP will be periodically re-evaluated to ensure its shortage risk tolerance is adequate and the shortage response actions are effective and up to date based on lessons learned. The WSCP may be revised during the next UWMP cycle to incorporate new information, such as actions that are no longer applicable or effective. If revisions to the WSCP are warranted before the UWMP is updated, the WSCP will be updated outside of the UWMP cycle, subject to City Council consideration and approval. While preparing the Annual Assessment each year, Hayward staff will routinely consider the functionality of the overall WSCP and will prepare recommendations for the City Council if changes are warranted.

3.11 Special Water Feature Distinction

Per CWC 10632 (b), Hayward has defined water features as those artificially supplied with water, including ponds, lakes, waterfalls, and fountains, and are separate from swimming pools and spas, as per subdivision (a) of Section 115921 of the Health and Safety Code.[9]

3.12 Plan Adoption, Submittal, and Availability

Per CWC Section 10632 (a)(c), Hayward provided notice of the availability of the draft 2025 UWMP and draft 2025 WSCP and notice of the public hearing to consider adoption of the WSCP. The public review drafts of the 2025 UWMP and 2025 WSCP were posted prominently on Hayward's website[10] prior to the public hearing on June 16, 2026. Copies of the 2025 UMWP and WSCP were made available for public review at the City Clerk's Office and the Department of Public Works & Utilities, as well as the Hayward public libraries. Public hearing notifications were published in *The Daily Review* on May 29, 2026, and June 5, 2026. A copy of the Notice of Public Hearing is included in Appendix C.

[8] California Water Code §10632: https://law.justia.com/codes/california/code-wat/division-6/part-2-6/chapter-3/article-2/section-10632/

[9] California Health & Safety Code §115921. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=115921

[10] City of Hayward Website: www.hayward-ca.gov

The City Council conducted a public hearing for the draft 2025 UWMP and draft 2025 WSCP at its regular meeting on June XX, 2026, after which the Council considered and adopted the 2025 UWMP and the 2025 WSCP. See Appendix D for the adoption resolution approving the WSCP.

By July 1, 2026, Hayward's adopted 2025 UWMP and 2025 WSCP were filed with DWR, the California State Library, and Alameda County. Hayward will make the WSCP available for public review on its website no later than 30 days after filing with DWR. Based on DWR's review of the WSCP, Hayward will make amendments in its adopted WSCP as required and directed by DWR. If Hayward revises its WSCP after the UWMP is approved by DWR, then an electronic copy of the revised WSCP will be submitted to DWR within 30 days of its adoption.

3.13 Seismic Risk Assessment and Mitigation Plan

Per the Water Code Section 10632.5, suppliers are required to assess seismic risk to water supplies as part of their WSCP.

City of Hayward Seismic Assessment and Mitigation Efforts

Subsequent to the Loma Prieta seismic event in 1989, Hayward initiated a significant effort to assess and mitigate seismic vulnerabilities in the water distribution system and to increase reliable emergency backup water supplies. Emergency supplies were discussed in the Supply Augmentation section earlier in this WSCP and include interties with neighboring agencies and four emergency groundwater wells. Hayward also operates a regional emergency intertie, owned jointly by SFPUC and EBMUD, which can deliver emergency supplies between the two agencies, through Hayward, and from which Hayward may receive water supply on a short-term emergency basis.

In 1995, Hayward engaged Dames and Moore to prepare seismic performance requirements for the water system facilities, site specific geologic and seismic hazard evaluations, and seismic evaluations of all structures. The results of this study were incorporated into Hayward's Capital Improvement Program (CIP). G&E Engineering conducted a seismic vulnerability assessment in 2003, which led to practical recommendations for retrofits and updated seismic design criteria. Also in 2003, Hayward prepared a pipeline assessment at 46 fault crossings to assess fault rupture hazards. As a result of this analysis, vulnerable pipelines were replaced with welded steel pipes, valving and piping were added for bypass or isolation, and fire hydrants were installed on both sides of the fault line to allow for potable-rated water hoses.

Hayward continues to assess seismic vulnerabilities within the water distribution system and includes projects as needed into the CIP to ensure reliability and redundancy in the event of an earthquake.

Alameda County Local Hazard Mitigation Plan

Hayward is located in the jurisdiction of Alameda County, which developed the 2021 Alameda County Local Hazard Mitigation Plan.[11] The LHMP is organized into eight sections; Sections 4-6 address earthquakes and are described below for reference:

- **Section 4: Hazard Identification and Risk Assessment** – A hazards analysis includes identifying, screening, and profiling each hazard. The hazards analysis encompasses natural, human-caused, and technological hazards. A risk assessment predicts the extent of exposure that may result from a hazardous event of a given intensity in a given area. The analysis provides quantitative data that may be used to identify and prioritize potential mitigation measures by allowing communities to focus attention on areas with the greatest risk of damage.
- **Section 5: Mitigation Strategy** – A mitigation strategy includes the identification of mitigation goals and actions that will reduce the risks of each hazard and vulnerability to the local population and built environment for each local participant.

[11] Alameda County Local Hazard Mitigation Plan: https://gsa.acgov.org/our-work/initiatives/local-hazard-mitigation-plan

- **Section 6: Plan Review, Evaluation and Implementation** – The updated 2021 LHMP plan review, evaluation and implementation process also prioritizes hazards of immediate concerns, including climate change, drought, earthquakes, floods, public safety power shutoffs, and wildfires. Because Alameda County is susceptible to a wide range of hazards, some which are not considered of immediate concern, the 2021 LHMP prioritization process also considered these hazards with a new medium priority rating (LHMP, 2021).

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APPENDIX A – CITY OF HAYWARD MUNICIPAL CODE CHAPTER 11-2.47 PROHIBITION OF WASTEFUL WATER PRACTICES

Below is the weblink to the current City of Hayward Municipal Code Chapter 11-2.47 Prohibition of Wasteful Water Practices (last accessed on April 30, 2026):

https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH11PUUT_ART2HAMUWASY_S11-2.47PRWAWAPR

No person shall use water obtained from the Hayward Water System for wasteful practices as herein defined.

a. *Wasteful Practices Defined.* The following uses of water are hereby determined to be wasteful, except as further provided herein:

1.Excessive use, loss or escape of water due to broken or defective plumbing, sprinkler, watering, or irrigation systems, for any period of time after such use of water should have reasonably been discovered and corrected, and in no event more than seventy-two (72) hours after the customer has received written notice from the City.

2.Use of water that results in flooding or runoff in gutters or streets.

3. Use of water for irrigation of any lawn, landscaping or other vegetated area in a manner that causes or allows excessive water flow, overspray or runoff onto adjacent property, non-irrigated areas, private and public walkways roadways, parking lots, or structures.

4. Application of water to outdoor landscapes during and within forty-eight (48) hours after measurable rainfall.

5. Application of water to driveways and sidewalks.

6. Use of water through a hose for washing buildings, structures, mobile homes, patios, parking lots, tennis courts, or other hard-surface areas, unless the hose is equipped with a positive shut-off nozzle.

7. The washing of all vehicles through a hose, including but not limited to automobiles, motorcycles, recreational vehicles, trucks, transit vehicles, trailers, boats, trains and airplanes, unless the hose is equipped with a positive shut-off nozzle.

8. Use of water for irrigation of ornamental turf on public street medians.

9. The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars or other public places where food or drink are served and/or purchased.

10. Use of water in a fountain or other decorative water feature except where the water is part of a recirculating system.

11. The irrigation of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development, and the City's Water Efficient Landscape Ordinance.

b. *Other Wasteful Water Use Prohibitions.* The following devices shall not be installed in new applicable facilities unless the City specifically approves a waiver:

1. Single-pass cooling systems in new buildings.

2. Non-recirculating water systems in new commercial car washes.

3.Non-recirculating water systems in new industrial laundries.

c. *Water Conservation in Hotels and Motels.* Operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

d. *Application.* The provisions of this ordinance apply to any person in the use of potable water provided by the Hayward Water System, except for uses of water necessary to protect public health or safety or for essential government services such as police and fire service and water system maintenance services.

e. *Enforcement.* The Director of Utilities and Environmental Services is authorized to enforce all provisions of this section. The provisions of this ordinance may be enforced by one (1) or more of the following measures:

1. Correction Notice. When the City becomes aware of a violation of the provisions of this ordinance, a correction notice shall be delivered to the property and to the customer of record (if mailing address is different) for the property. Said notice shall: 1) describe the date, approximate time, address or description of the location of the violation; 2) describe the violation and the subsection violated; 3) order that the violation be corrected and abated immediately, or within a specified time as the Director of Utilities and Environmental Services determines is reasonable; and 4) explain the consequences of failure to correct the violation, including a monetary fine.

2. Administrative Citation. In addition to other remedies available to the City, violations of this section may be subject to an administrative citation. The amount of the fine shall be set forth by Resolution of the City Council. Citations shall be issued and administered in accordance with Chapter 1, Article 7 of the Hayward Municipal Code. Administrative citations may be issued to the property owner, customer of record for the property, or to any other person causing wasteful use of water as described in this section.

3.Installation of Flow Restricting Measures. The City may, after one (1) written notice, install a flow-restricting device on the service line of any customer violating any of the provisions of this section.

4. Reduction or Discontinuance of Water Service. Water waste consisting of continued water consumption in violation of the provisions of this section may result in the reduction or discontinuance of water service by the City. The City may reduce or discontinue water service after two (2) correction notices, as described in Section 11-2-47.e.1., have been delivered to the property and to the customer of record (if mailing address is different) and if the corrective actions required are not taken within the time frame specified.

5. Injunctive Relief. Costs incurred by the City for the reduction or discontinuance of water service and for the resumption of water service will be the responsibility of the customer. Water service shall not be resumed until the Director of Utilities and Environmental Services is satisfied that the violation has been fully corrected.

f. *Penalties.* Violation of this ordinance shall not constitute a crime and may be enforced only through civil measures as stated herein.

(Amended by Ordinance 17-07, adopted June 6, 2017)

APPENDIX B – HAYWARD COMMUNICATION PROCEDURES

For Hayward, Public communication is an ongoing activity where the purpose, audience, message, tools, and channels may change at any given moment. In the context of water shortage response, the purpose may be an immediate water shortage situation, such as may result from an earthquake or a longer-term condition like drought. In an immediate water shortage emergency, Hayward will activate the communication protocol detailed in the City of Hayward American Water Infrastructure Act RRA and ERP. In a longer-term water shortage situation, Hayward will implement the procedures identified in this Communication Plan.

Timely and effective communication is a key element of implementing the WSCP. Per CWC Section 10632 (a)(5), Hayward has established communication protocols and procedures to inform stakeholders regarding any current or predicted shortages as determined by the Annual Assessment described pursuant to Section 10632.1, any shortage response actions triggered or anticipated to be triggered by the Annual Assessment described pursuant to Section 10632.1, and any other relevant communications.

B.1 Emergency Response Plan Communication

The ERP defines the actions to be taken by Hayward staff to reduce the loss of water and wastewater infrastructure, to respond effectively to a disaster, and to coordinate recovery operations in the aftermath of any emergency involving extensive damage to local and regional water and wastewater utilities. The ERP includes activation notification protocols that will be used to contact partner agencies to inform them of the situation, activation status of the ERP, known damage or impacts, or resource needs. The ERP is a standalone document that is reviewed annually and updated every five years. Refer to the ERP for full details.

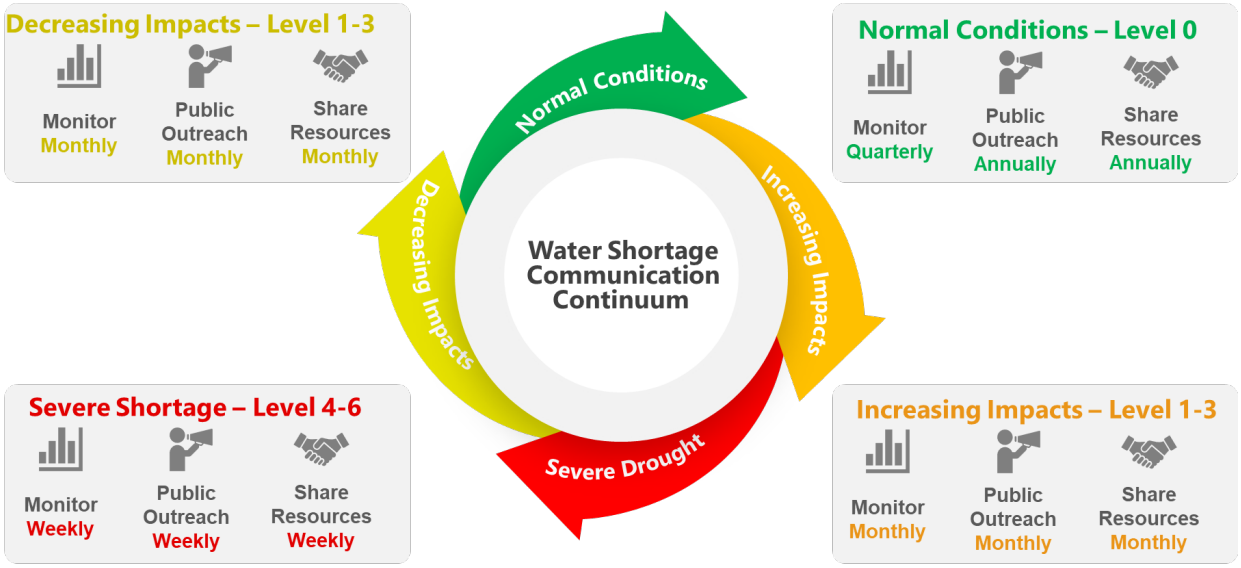
B.2 Hayward Water Shortage Communication Plan

The Water Shortage Communication Plan serves as the baseline understanding for how Hayward will provide information and value to its various stakeholders, partners, and employees during normal conditions where water efficiency is an everyday goal for water supply reliability. In times of water shortage, this Water Shortage Communication Plan can be enhanced or adjusted as needed. Hayward's Water Division works to elevate public awareness and participation in water efficiency so, in the event of a water shortage the community is aware of the importance of response actions and can identify as an active participant in Hayward's goals. The Communications Plan is designed to provide transparent, reliable, and accurate information to the public and collaborating agencies. It does this by identifying goals and objectives for each shortage level and outlining the appropriate communication interface tools and implementation schedule for effective communication to assist customers with curtailing their water use.

Goals and Objectives

The goal of Hayward's Water Shortage Communication Plan is to create a local awareness of water shortage conditions and to encourage water efficiency from all citizens. The Water Shortage Communication Plan objectives further refine the focus of the program goal to achieve a desired outcome at the shortage level. As a water shortage condition escalates, the objectives of the Communication Plan also escalate to ensure progress toward water supply reliability. The defined objectives for each water shortage level will determine the information that is communicated at each level.

Figure B-1. Water Shortage Communication Continuum

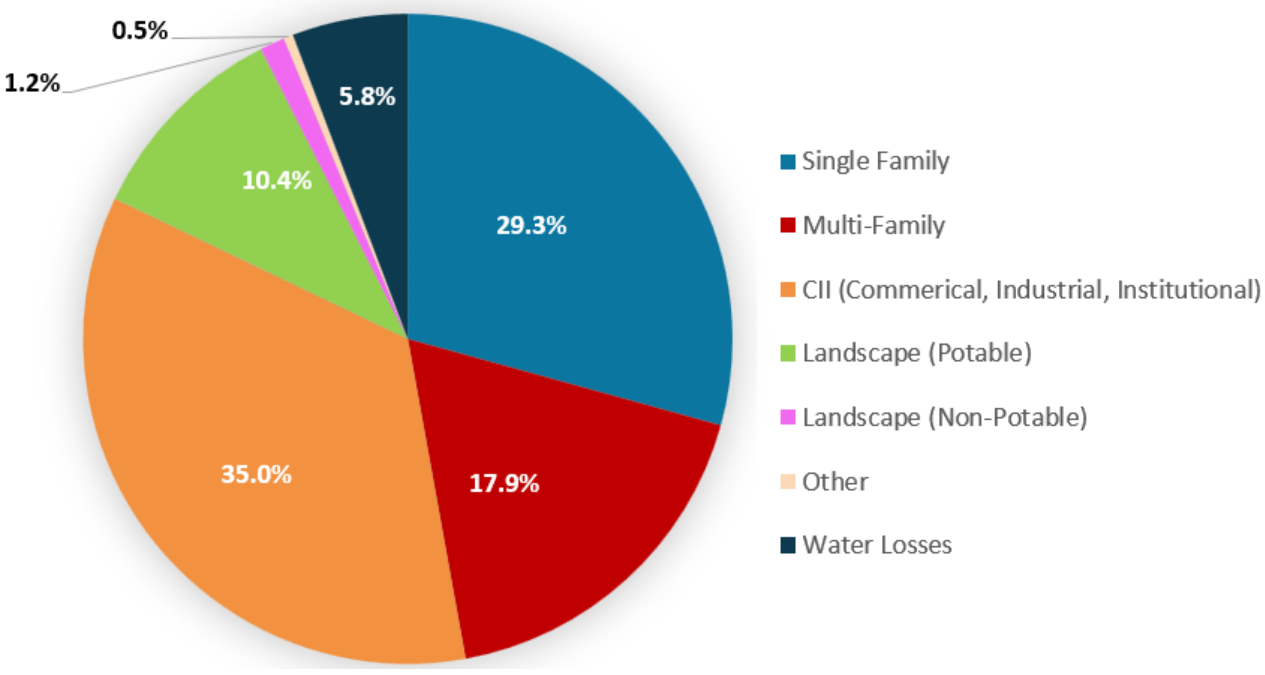


Target Audiences

Hayward reviewed its water demand and customer class profile to develop a communication plan to be the most effective with its unique customer profile and water demands. Based on the 2030 projections, Hayward's Single Family water use is expected to account for 29.3% of the total water demand. Commercial, Institutional, and Industrial (CII) water use combined are projected to account for 35.0% of total demand. Multi-Family and Landscape use are projected to account for 17.9% and 11.6% of total demand, respectively.

By understanding the local customer and water use profile, Hayward can implement a Water Shortage Communication Plan that leverages the appropriate communications tools to reach the target audience most effectively during a water shortage.

Figure B-2. 2030 Projected Water Use by Customer Class



Hayward has further refined its customer categories to identify the following target audiences for communication:

- Hayward staff
- Homeowners and renters
- Business owners
- Local Industries
- Property owners and managers
- School district administrators and teachers
- Elected officials and staff
- Environmental/public interest groups
- General public
- Local media
- Homeowners' associations
- Golf courses

Communications Interfaces and Tools

During normal water shortage conditions, Hayward will utilize a comprehensive set of communication interface tools to engage water customers, including the following:

- Water bill communications
- Website information on the City of Hayward homepage
- Social media outreach
- Media coverage (print and electronic)
- Publications and handouts
- Water Bill Pay Portal communication
- Presence at local events
- Mayor/Manager Public Service Announcements
- Direct mailings to homes and businesses
- School education programs

Communication Tactics and Implementation Schedule

Hayward understands its responsibility to be transparent, accountable, have a positive impact on the community, and provide actionable guidance in times of water shortage. Carefully developed and executed communication tactics and implementation schedules will establish trust and credibility for all stakeholders by clearly communicating expectations and responsibilities. Below is a description of the Water Shortage Communication Plan tactics. These tactics will be implemented according to the schedule and objectives defined in Section 3.5, Figure 3-3.

This Water Shortage Communication Plan is designed to have a standard set of tactics systematically aligned to the current water shortage level. For example, information that may be educational during Shortage Level 0 will shift to specific status information and shortage level response action requirements, as defined in Section 3.4

and Table 3-2 (DWR Submittal Table 8-2), as water shortage levels increase from 1 to 6. In Shortage Level 0, communication will include a general overview of water efficiency and water shortage levels so, in the event of a water shortage, the understanding and response requirements are familiar. As the water shortage levels increase, messaging will align with specific shortage level response requirements and objectives.

Website

- Hayward website: Provide water efficiency information and resources on the City of Hayward website including water shortage level status.
- Water Shortage Indicator: develop a permanent image on the web page that identifies water shortage level status. Image will be updated promptly when status level changes and will link to additional shortage level information.

Social Media

- Facebook/Nextdoor/Instagram: Post water efficiency information and shortage level status on Hayward's Facebook page. This may include unique Hayward content or reposting of regional messages and images.
- Twitter: Tweet water efficiency information and water shortage level status on Hayward's account. This may include unique Hayward content or reposting of regional messages and images.

Digital and Print Media

- Flyers/Signage/Brochures: Create and provide informational materials on water efficiency actions, local/regional water resource awareness, and water shortage level status.
- Consumer Confidence Reports (CCRs): Provide a conservation reminder in CCRs along with conservation tips.

Media Relations

- News stories/News Releases/Newsletters: Provide news releases with information regarding water shortage level and expected trends.
- Briefing Papers/Talking Points: Provide briefing papers to local media outlets such as newspapers, magazines, and other publications. This also may include social media posts and infographics.

Community Outreach

- Public Events: Promote water efficiency and water awareness at local events such as parades, festivals, farmers market, and community organizations.
- Promotional Giveaways: Provide promotional water efficiency devices or messaging materials (i.e., hats, stickers, mugs, etc.) promoting water efficiency and response.

Educational Outreach

- School Programs: Provide water resource and efficiency presentations for local schools, including information and response to water shortage levels.
- Residential Water Efficiency Educational Classes: Provide educational classes to community on topics such as finding and fixing leaks, irrigation program scheduling, waterwise vegetation, etc.
- Non-residential Water Efficiency Training Classes/Programs: Provide training programs to local irrigation and cooling tower service technicians on water efficient practices and water shortage level requirements.

City of Hayward Water Efficiency Programs

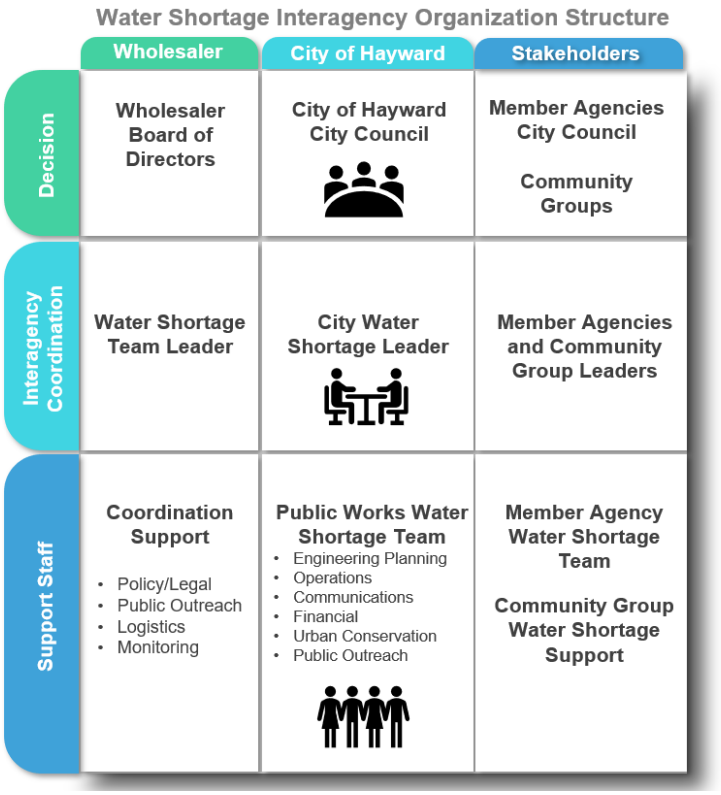
- Rebate/Incentive Programs: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.
- Turf Removal: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.
- Water Surveys – Commercial: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.
- Water Surveys – Residential: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase. Hayward staff may participate in limited residential surveys to assist with efficiency, identifying and correcting leaks, and providing communication to the customer.

Direct Customer Communication

- Billing Inserts: Include billing inserts in water utility bills including water shortage level status and response actions.
- Water Use Notifications: Include a comparison of actual water use and information regarding penalties.
- Neighborhood Canvasing: Hayward staff and/or representatives will canvas neighborhoods to educate residents of water shortage status and response action requirements.

Partnerships/Regional Initiatives

- DWR: Utilize state messaging programs, messages, and resources.
- SFPUC/BAWSCA: Utilize regional messaging programs, messages, and resources to communicate with local water users.
- Coordinate messaging with other member agencies and public partnerships.



Monitor, Evaluate, and Amend

The effectiveness of Hayward's Communication Plan depends on a large variety of factors including technological advancements or changes, the rise and fall of audience engagement, current news or media concentration, political changes in leadership and focus, and the weather. The Communication Plan will be evaluated for effectiveness and updated accordingly based on available metrics and stakeholder feedback.

APPENDIX C – NOTICE OF PUBLIC HEARING

Salvador Navarro

Subject: RE: City of Hayward – Notice of Public Hearing for the 2025 Urban Water Management Plan and Water Shortage Contingency Plan

From: Salvador Navarro <Salvador.Navarro@hayward-ca.gov>
Sent: Wednesday, May 27, 2026 10:14 AM
To: (email list removed due to space and privacy)
Subject: City of Hayward – Notice of Public Hearing for the 2025 Urban Water Management Plan and Water Shortage Contingency Plan

The Hayward City Council will hold a public hearing at its regular meeting on June 16, 2026, at 7:00 pm to consider adoption of the 2025 Urban Water Management and the associated Water Shortage Contingency Plan. These documents are updated every five years in accordance with the Urban Water Management Planning Act, and describe Hayward's anticipated water demand, water conservation strategies, water supply reliability, and response to water supply shortages, including actions that would be implemented in the event of a supply deficiency or interruption. The 2025 UWMP also assesses the City's compliance with its 2020 water use target as required by Senate Bill X7-7.

The meeting will be held at City Hall Council Chambers at 777 B Street, Second Floor, Hayward, CA 94541. The meeting is also available via Zoom webinar. Additional details will be provided on the agenda at https://hayward.legistar.com/Calendar.aspx.

Copies of the documents will be available for public review on June 2nd, 2026 at https://www.hayward-ca.gov/documents/urban-water-management-plan.

Written comments may be directed to:
Alex Ameri, Director of Public Works
City of Hayward
777 B Street, Hayward, CA 94541
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Thank you,
Salvador Navarro, PE (He/Him/His) | Assistant Civil Engineer
Public Works & Utilities – Utilities Division |
777 B Street, Hayward, CA 94541
(510) 583-4771 | Salvador.Navarro@Hayward-ca.gov

APPENDIX D – JUNE XX, 2026 PUBLIC ADOPTION RESOLUTION

Documentation pending. It will be included in the Final Draft of this 2025 WSCP.

APPENDIX E – (EXTRACT) BAWSCA TECHNICAL MEMORANDUM 2: DEMAND, SUPPLY, AND RELIABILITY TECHNICAL ASSESSMENT (EKI C30119.01), FEBRUARY 13, 2026

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.

Demand Assessment [Water Code Section 10632(A)(2)(B)(I)]

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 Community Services District, 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.

Supply Assessment [Water Code Sections 10632(A)(2)(B)(II) and 10632(A)(2)(B)(V)]

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 ever 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 San Francisco 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 condition. 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.

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 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 8-1] shows the availability of RWS supplies for the SFPUC's retail Customers and wholesale customers in normal years. [Table 8-2] 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 8-1] Regional Water System Supply Availability in Normal Years (mgd)

RWS Supply Allocation	Projected				
	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
Notes:					

(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 Community Services District (GCSD) as a wholesale customer in its UWMP, but the SFPUC otherwise considers GCSD a Retail Customer and includes GCSD'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 it 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 8-2] Regional Water System Supply Utilized in Normal Years (mgd)

RWS Supply Allocation	Projected				
	2030	2035	2040	2045	2050
Retail Customers (a)(b)	62.7	61.2	61.9	64.0	66.7
Wholesale Customers (c)(d)	133.92	136.32	140.53	144.12	148.36
Total RWS Supplies	196.62	197.52	202.43	208.12	215.1

Notes:

(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 may be used in normal years.

(b) The SFPUC reports Groveland Community Services District (GCSD) as a wholesale customer in its UWMP, but the SFPUC otherwise considers GCSD a Retail Customer and includes GCSD'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 it 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).

Infrastructure Considerations [Water Code Section 10632(A)(2)(B)(III)]

On an ongoing basis, three groups with 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.

System Modeling [Water Code Section 10632(A)(2)(B)(IV)]

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.

Decision-Making Process [Water Code Section 10632(A)(2)(A)]

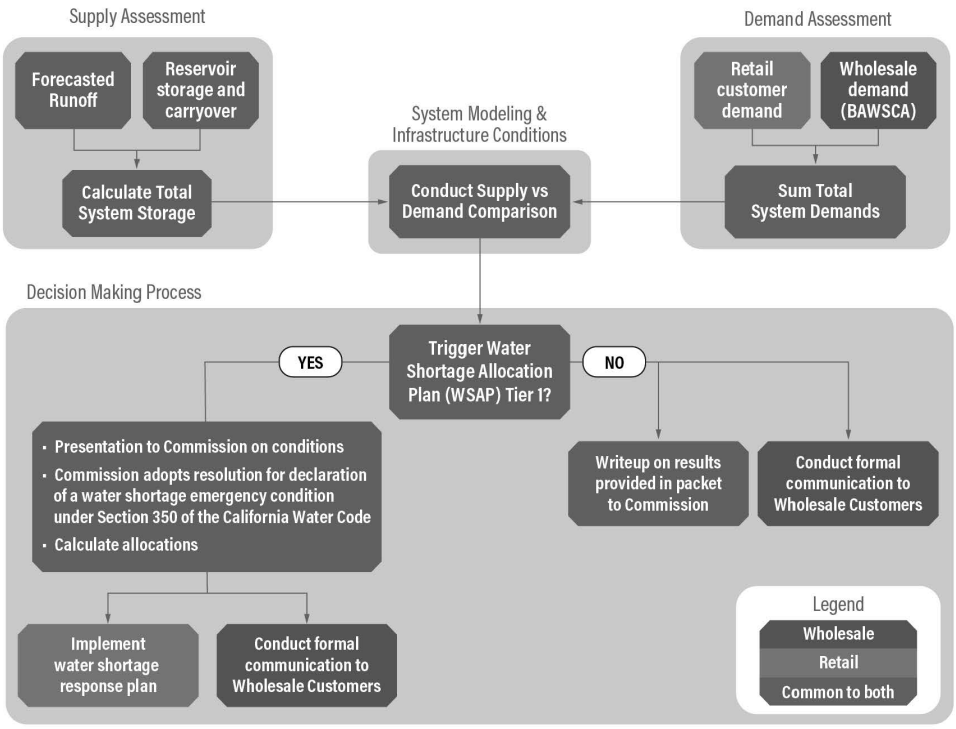
Regardless of the expectation of shortage conditions, as part of the normal course of business, the SFPUC provides a water supply condition update to its executive team every two weeks throughout the year. Pursuant to the Water Shortage Allocation Plan (WSAP), also known as the Tier 1 Shortage Plan, that is incorporated in the WSA and described further previously, 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. 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 8-1] 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 the next section.

[Figure 8-1] **Water Supply and Demand Assessment Process**



DWR Section 8.4.5 Emergency Response Plan

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: (1) Emergency Preparedness Plans, (2) Emergency Drinking Water Planning, and (3) Power Outage Preparedness and Response. The Seismic Risk Assessment and Mitigation Plan section that follows this section 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).

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 and County of San Francisco's Emergency Response Plan, which was prepared by the Department of Emergency Management and most recently updated in 2017. Specifically, the purpose

of the SFPUC EOP is to describe the SFPUC's emergency management organization, roles and responsibilities, and emergency policies and procedures. 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.

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, and emergency policies and procedures. The SFPUC EOP functions as a front end for the SFPUC's enterprise EOPs, covering emergency response at the department level; while each 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

Emergency Drinking Water Planning

The SFPUC has implemented several projects to increase its capability to provide emergency drinking water during an emergency. These projects include:

- Completion of many WSIP projects and other capital upgrades to improve security, detection, and communication (see the Seismic Risk Assessment and Mitigation Plan section);
- Development of public information and educational materials for residents and businesses;
- 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 and County of San Francisco 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 the 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.

Power Outage Preparedness and Response

The SFPUC's water transmission system is primarily gravity fed from Hetch Hetchy Reservoir to San Francisco. Within San Francisco's 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 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 HTWTP 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 an emergency water supply connection with Valley Water, known as the Valley Water 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.

DWR Section 8.4.6 Seismic Risk Assessment and Mitigation Plan

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.

The Levels of Service (LOS) Goals and Objectives for seismic reliability 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:

An intertie that may transfer up to 30 mgd between the SFPUC and East Bay Municipal Utilities District (EBMUD) systems, allowing EBMUD to serve the City of Hayward (an SFPUC Wholesale Customer) and/or supply the SFPUC directly (and vice versa);

An intertie that may transfer up to 40 mgd between the SFPUC and Valley Water systems; and,

An intertie between the SFPUC the South Bay Aqueduct that the SFPUC used in 1991-1992 and may upgrade to enable the SFPUC 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 and County of San Francisco also have a Hazards and Climate Resilience Plan[1] which was last updated in July 2025. 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

[1] The 2025 Hazards and Climate Resilience Plan may be accessed at https://www.onesanfrancisco.org/hazards-and-climate-resilience-plan

hazards and climate change impacts, local risks, and community priorities. Examples of hazards analyzed in the plan include dam or reservoir failure, flooding, drought, and wildfire.

APPENDIX F – 2025 SFPUC REGIONAL WATER SYSTEM SUPPLY RELIABILITY LETTER

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

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

March 11, 2026

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

Dear Ms. McPherson,

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sincerely,

Steven R. Ritchie

Steven R. Ritchie
Assistant General Manager, Water Enterprise

Table 2: WSIP Project Assumptions for RWS Supply Modeling

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Supply Projections for Consecutive Five Dry Year Sequences

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

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

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

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

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

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

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