HAYWARD


2025

# The City of Hayward
# DRAFT 2025 Urban Water Management Plan
## June 2, 2026

Prepared by:

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

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Source: City of Hayward (2026)

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AB | Assembly Bill |
| ABAG | Association of Bay Area Governments |
| ACWD | Alameda County Water District |
| AF | acre-feet |
| AMI | Advanced Metering Infrastructure |
| AWSP | Alternative Water Supply Planning Program |
| AWWA | American Water Works Association |
| BACWA | Bay Area Clean Water Agencies |
| BAIRWMP | Bay Area Integrated Regional Water Management Plan |
| BART | Bay Area Rapid Transit |
| BAWSCA | Bay Area Water Supply and Conservation Agency |
| BCDC | San Francisco Bay Conservation and Development Commission |
| BMPs | Best Management Practices |
| Caltrans | California Department of Transportation |
| CII | Commercial, Industrial, and Institutional |
| CIMIS | California Irrigation Management Information System |
| CNRA | California Natural Resources Agency |
| CPUC | California Public Utilities Commission |
| CSUEB | California State University, East Bay |
| CWC | California Water Code |
| Demand Study | 2025 BAWSCA Regional Water Demand and Conservation Projections Report |
| DDW | SWRCB Division of Drinking Water (DDW) |
| DMM | Demand Management Measures |
| DRA | Drought Risk Assessment |
| DWR | California Department of Water Resources |
| EBDA | East Bay Dischargers Authority |
| EBMUD | East Bay Municipal Utility District |
| ETo | Reference Evapotranspiration |
| FY | Fiscal Year |
| GPCD | gallons per capita per day |
| gpd | gallons per day |
| GSA | Groundwater Sustainability Agency |
| GSP | Groundwater Sustainability Plan |
| HHLSM | Hetch Hetchy and Local Simulation Model |
| IPCC | Intergovernmental Panel on Climate Change |
| ISG | Individual Supply Guarantee |
| kWh | Kilowatt-hours |
| Legislature | State of California Legislature |
| LOS | Level of Service |
| MCL | Maximum Contaminant Level |
| MG | million gallons |
| MGD | million gallons per day |
| NAICS | North American Industry Classification System |
| PDA | Priority Development Area |
| PAYS | Pay As You Save |
| Regulation | *"Making Conservation a California Way of Life"* Regulation |
| R-GPCD | residential gallons per capita per day |
| RCP | Representative Concentration Pathway |
| RCEC | Russell City Energy Center |
| RHNA | Regional Housing Needs Allocation |
| RUWMP | Regional Urban Water Management Plan |
| RWS | Regional Water System |
| RWSP | Recycled Water System Plan |
| SB | Senate Bill |
| SB X7-7 | Water Conservation Act of 2009 |
| SGMA | Sustainable Groundwater Management Act |
| SVWTP | Sunol Valley Water Treatment Plant |
| SWRCB | State Water Resources Control Board |
| USBR | United States Bureau of Reclamation |
| USEPA | United States Environmental Protection Agency |
| UWMP | Urban Water Management Plan |
| UWMP Act | Urban Water Management Planning Act of 1983 |
| WPCF | Water Pollution Control Facility |
| WRRF | Water Resource and Recovery Facility |
| WRWC | Western Recycled Water Coalition |
| WSAP | Water Shortage Allocation Plan |
| WSCP | Water Shortage Contingency Plan |
| WSIP | Water System Improvement Program |
| UWUO | Urban Water Use Objective |
| WWTP | Wastewater Treatment Plant |

# 1 INTRODUCTION AND LAY DESCRIPTION

This report presents the 2025 Urban Water Management Plan (UWMP) for the City of Hayward's service area. The UWMP has been prepared in accordance with the California Urban Water Management Planning Act and applicable California Water Code (CWC) requirements. It supports long-term water resource planning, evaluates current and future water supply reliability, and helps maintain supplier eligibility for certain state grants and loans.

Chapter 1 introduces the purpose and organization of the 2025 UWMP and summarizes the City's coordination with local and regional agencies.

## 1.1 Lay Background and Purpose

Urban Water Management Plans (UWMPs) are prepared every five years by urban water suppliers (Suppliers) and submitted to the California Department of Water Resources (DWR). The requirements for UWMPs are found in CWC Sections 10610-10656 and 10608. Every urban water supplier that either provides over 3,000 acre-feet of water annually or serves more than 3,000 urban connections is required to submit a UWMP.

UWMPs help Suppliers evaluate whether existing and planned supplies are sufficient to meet current and future demands under normal, dry-year, and extended drought conditions. Key components include a Drought Risk Assessment and a water shortage contingency strategy to reduce demand and manage supplies during shortages.

This UWMP is the legal and technical foundation for managing water supplies throughout California. Hayward's 2025 UWMP provides its customers, local communities, regional water suppliers, and the state with an understanding of past, existing, and future water conditions and management. The UWMP integrates local and regional land-use planning, regional water supply, infrastructure, demand management projects, and statewide issues such as climate change and regulatory revisions. For this 2025 UWMP, Hayward has gathered and synthesized water-related information from numerous sources into a plan with local, regional, and statewide practical utility.

The intent of the UWMP is to provide DWR and the public with information on present and future water sources and demands and to provide an assessment of Hayward's water resource needs. The UWMP provides Hayward with a reliable water management action plan that can be referred to as conditions change and management decisions arise. It also demonstrates the reliability of Hayward's water supplies and how that may affect Hayward's growth trajectory and the economy.

The UWMP also provides the opportunity to consider additional options for managing water assets to enhance Hayward's long-term water reliability and other management objectives. This information helps Hayward make sound management decisions regarding asset management and infrastructure planning and supports efforts to address long-term water management challenges associated with climate change, regulatory changes, and local water quality conditions.

Furthermore, this UWMP allows Hayward to reflect short-term and long-term land-use planning assumptions and goals, account for specific plan and infill development projects during the UWMP planning period, address

the dynamic nature of water supplies and demands through water-shortage contingency planning, and inform the state and Hayward's customers about its water management practices.

Lastly, changes in use patterns, such as those associated with the stay-at-home orders during the 2020 pandemic, and the 2021-2023 drought, can alter urban water use patterns and affect future water conservation accounting and analysis. Water data at the time of this report may reflect a temporary or long-term change in water use and could influence evaluation of near-term and long-term management considerations. Within this UWMP, Hayward describes these changes and the potential effects on water use as of 2025 as well as projected water demand.

### Urban Water Management Plan Organization

The UWMP is organized as follows:

**Chapter 1 –** Introduction and Overview (Lay Description). This chapter provides a discussion of the fundamentals of the UWMP and the newly required lay description.

**Chapter 2 –** Plan Preparation. This chapter provides information on the processes used for developing the UWMP, including efforts in coordination and outreach.

**Chapter 3 –** System Description. This chapter describes Hayward's water system, including maps of the service area, an explanation of the service area and climate, public water system details, and an overview of Hayward's organizational structure and history.

**Chapter 4 –** Customer Water Use. This chapter describes and quantifies the current and projected water use within Hayward's service area.

**Chapter 5 –** SB X7-7 Baselines, 2020 Targets, and 2025 Reporting. This chapter details Hayward's compliance with the 2020 per capita water conservation mandate, the 2020 per capita target value adopted in its 2015 UWMP, and Hayward's compliance value based on actual 2020 customer water use.

**Chapter 6 –** System Supplies. This chapter describes and quantifies Hayward's current and projected potable and non-potable water supplies. A description of each supply source and its quantified supply availability is also provided.

**Chapter 7 –** Water Service Reliability and Drought Risk Assessment. This chapter describes Hayward's water system reliability through a 20-year planning horizon for a normal year, single dry year, and five consecutive dry years. This chapter also includes the Drought Risk Assessment (DRA).

**Chapter 8 –** Water Shortage Contingency Planning. This chapter provides Hayward's structured plan for water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions during a catastrophic supply interruption.

**Chapter 9 –** Demand Management Measures. This chapter describes Hayward's efforts to promote conservation, reduce water supply demand, and implement several demand management measures.

**Chapter 10 –** Plan Adoption, Submittal, and Implementation. This chapter describes and documents the steps taken by Hayward to make its UWMP and Water Shortage Contingency Plan publicly available, as well as adoption and submission of the Plans in accordance with the CWC.

**Appendices –** Several appendices, as listed in the Table of Contents, are included to support information provided in the main chapters of this document.

## 1.2 UWMPs in Relation to Other Efforts

Water supply planning is most effective when integrated with other urban planning efforts. As such, Hayward has incorporated relevant data from the following sources:

- 2025 BAWSCA Regional Water Demand and Conservation Projections Report (Demand Study)

- SFPUC 2025 UWMP Supply Reliability Letter to BAWSCA
- Annual Water Loss Audit Reports for calendar years 2020-2024 (links provided in Table 4-4)
- Hayward 2040 General Plan (2014)
- Hayward Economic Development Element (2014)[1]
- Hayward Climate Action Plan (2024)
- City of Hayward Strategic Roadmap (2025)
- Water Distribution Master Plan (2014)
- Demand Management Measures (listed in Chapter 9)
- East Bay Plain Subbasin Groundwater Sustainability Plan (2022)

## 1.3 UWMPs and Grant or Loan Eligibility

As required for a Supplier to be eligible for any water grant or loan administered by DWR, the Supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the CWC. In addition, these requirements must be maintained by the Supplier throughout the term of any grant or loan administered by DWR. A UWMP may also be required to be eligible for other state funding, depending on the conditions that are specified in the funding guidelines.

In addition to other benefits, adoption of this 2025 UWMP ensures that Hayward remains eligible for state funding assistance. Hayward's 2020 UWMP was adopted and submitted to DWR in 2021.

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

In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment).[2] The intent was to establish water quality objectives with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. It remains unclear how or when the Bay-Delta Plan Amendment will be implemented. Hayward has based its water supply reliability analysis on information received from SFPUC that assumes implementation of the Bay-Delta Plan Amendment (see Section 7.1.3 for more information).

## 1.5 Urban Water Management Planning and the California Water Code

In 1983, the State of California Legislature (Legislature) enacted the Urban Water Management Planning Act (UWMP Act). The law requires an urban water supplier[3] to adopt a UWMP every five years, demonstrating water supply reliability in a normal, single dry, and multiple dry years. The original UWMP Act also required DWR to provide a report to the Legislature on the status of water supply planning in California.

Since the UWMP Act was passed, it has undergone significant expansion and revision since the previous UWMP Guidebook was prepared in 2020 (see following details). Prolonged droughts, groundwater overdraft, regulatory

[1] CA State Requirement for Local Development Plans: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65300

[2] SWRCB. (2018).*Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary*, p.17, fn. 14, accessed May 2026: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf)

[3] A "Supplier" is defined as an entity providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet annually.

revisions, and changing climatic conditions affect not only a supplier's water reliability determinations, but also the broader picture of statewide water reliability as overseen by DWR, the SWRCB, and the Legislature. Accordingly, the UWMP Act has grown to address changing conditions as it guides California's water resource management.

Minor changes have been made to the CWC since submission of the 2020 UWMPs ; primarily, several definition changes have been added. None of these changes affect the requirements for the 2025 UWMPs.

Updated guidance for the preparation of 2025 UWMPs include the following:

- **Suppliers with Multiple Public Water Systems (PWSs)** – Provides more consistent criteria for determining when a Supplier with multiple PWSs must submit a UWMP.
- **DWR Submittal Tables** – Improvements were made for accuracy and clearer identification between required and optional data.
- **Water Loss Standard Reporting** – There has been no change to the CWC regarding water loss standard reporting since the 2020 UWMPs were submitted. However, Suppliers are now required to report progress toward meeting the 2028 Water Loss Standard.
- **Direct Potable Reuse** – The SWRCB has adopted regulations for direct potable reuse since the 2020 UWMPs were submitted. Minor updates were added to the supply and demand tables to support clearer direct potable reuse reporting.
- **Lower-Income Housing Demands** – While projections for lower-income housing were required in the 2020 UWMPs, additional guidance has been provided for optional reporting of the method used to project water use for lower-income housing. This optional guidance incorporates Regional Housing Needs Allocation (RHNA) into projected land uses and water demands.
- **Groundwater Recharge and Water Storage Reporting** – In previous years, the guidance for reporting storage water did not differentiate between long-term (i.e., water placed into storage one year but extracted in a future year) and short-term storage (i.e., water placed into storage and extracted the same year). Clarification is provided to prevent short-term storage from being double counted.

Specifically, Hayward's 2025 UWMP must provide water supply planning for a 20-year planning period, in five-year increments, identify and quantify adequate water supplies for existing and future demands during normal, dry, and drought years, and ensure efficient use of urban water supplies. Hayward's 2025 UWMP addresses all CWC requirements for such a plan, as shown in the completed DWR UWMP checklist provided in Appendix A.

Hayward's 2025 UWMP:

- Assessed changes in natural hydrology, climate, and groundwater conditions
- Anticipates the implications of regional, state, and federal regulations
- Considers supply conditions and water use variability
- Identifies regional constraints on, or opportunities for, shared water resources
- Integrates local land-use changes, development, plans, and population growth
- Prepares for water shortages and unforeseen emergencies
- Anticipates infrastructure improvements
- Recognizes project funding needs and opportunities

Hayward's UWMP also addresses the following water planning fundamentals:

- Provides a detailed review of current and future water use, including assessing and verifying available baseline data and examining long-term planning documents such as the City's General Plans and Specific Plans.
- Analyzes potable and non-potable water supplies, including reviewing water rights and contracts, assessing water deliveries, identifying restrictions on water availability under certain regulatory and hydrological conditions, and evaluating opportunities or limitations described in documentation for each water supply source.
- Analyzes water supply reliability by integrating water use and water supply analyses to evaluate service reliability under normal conditions, a single dry year, and five consecutive dry years through at least 2050.
- Provides a realistic DRA by including integrated water supplies and projected water use in a hypothetical five-year drought condition.
- Develops an effective Water Shortage Contingency Plan (WSCP) that identifies opportunities to reduce demand and augment supplies under numerous and potentially unpredictable water shortage conditions.


# 2 PLAN PREPARATION

**Lay Description**

This chapter describes the basis of the development of the UWMP; the requirements for preparation; the processes used, including notification, coordination, and outreach efforts; the regional planning involved; and the type of year and units of measure used.

## 2.1 Plan Preparation

Coordination and outreach are integral in developing a useful UWMP reflective of synthesized existing and future water-related information and conditions gathered from a variety of entities and sources. Notification to all interested parties and stakeholders allows those entities to provide information on aspects of the UWMP and stay informed of the different water management considerations that may affect their own decisions. Coordination with city and county land use planning agencies provides information on regional planning, demographics, and expected future development for determining future water use, supply, and reliability. As the local land use authority within its boundaries, Hayward incorporated input from its Planning Division and Economic Development Division to ensure that projected water demands accurately reflect current and planned growth, particularly within the commercial, industrial, and institutional (CII) sectors.

As a small portion of the service area lies within unincorporated Alameda County, Hayward notified the county of its intent to update the UWMP so feedback could be incorporated as applicable. Development in this unincorporated area is not expected to significantly affect overall water demand.

Additional details on outreach activities are provided in Section 2.6 of this UWMP.

## 2.2 Basis for Plan Preparation

CWC Section 10617 defines an urban water supplier as "*a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems."*[4] In accordance with the CWC Section 10621, urban water suppliers are required to prepare a UWMP every five years.[5]

Based on the definition above, Hayward qualifies as an urban water supplier and has prepared this UWMP in compliance with the CWC, and the guidelines as outlined by DWR in its *Guidelines for Urban Water* Management

[4] California State Legislature. (1983). CWC Section 10617, amended 1996. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=WAT&sectionNum=10617.

[5] California State Legislature. (1983). CWC Section 10621.

http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=WAT&sectionNum=10621

Plan Guidebook 2025, posted as final on January 29, 2026 (DWR, 2026). This 2025 UWMP is the five-year update and supersedes the contents of the 2020 UWMP.

Public water systems are the distribution systems that provide drinking water for human consumption. All public water systems are given a unique Public Water System Identification Number (PWSID). These systems are regulated by the SWRCB Division of Drinking Water (DDW). The California Health and Safety Code 116275 defines a public water system as *"a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year."*[6] Based on this definition, Hayward's water system is considered a Public Water System, and therefore operates under a water supply permit issued by the DDW.

As indicated in Table 2-1, Hayward's water system served 38,349 municipal connections and 5,056 MG of water in 2025. The total number of connections reflects the total active potable and recycled water connections as of June 30, 2025.

**Table 2-1. Public Water Systems**

| Submittal Table 2-1 Retail: Public Water Systems | | | |
|---|---|---|---|
| Public Water System Number | Public Water System Name | Number of Municipal Connections 2025 | Volume of Water Supplied 2025 (MG) |
| CA0110006 | City of Hayward | 38,349 | 5,056 |
| | **Total** | 38,349 | 5,056 |

**Notes:** (1) The volume of water supplied in Fiscal Year 2025 (July 1, 2024–June 30, 2025) was sourced from SFPUC (4,984 MG) and recycled water produced by Hayward (46 MG). A total of 26 million gallons (MG) of potable water supplemented the recycled water system for non-potable irrigation use; and (2) The number of connections reflects the total active potable and recycled water connections as of June 30, 2025.

## 2.3 Regional Planning

Regional planning can deliver mutually beneficial solutions to all agencies involved by reducing costs for the individual agency, assessing water resources at the appropriate geographic scale, and allowing for solutions that cross jurisdictional boundaries. In support of regional UWMPs and regional water conservation targets, the UWMP portion of the Water Code provides mechanisms for participating in area-wide, regional, watershed, or basin-wide urban water management planning. Hayward participates in regional planning as an active member of BAWSCA, which was created in May 2003, to represent the interests of 26 member agencies in the counties of Alameda, Santa Clara, and San Mateo that purchase water on a wholesale basis from SFPUC (collectively the Wholesale Customers). BAWSCA staff and the Wholesale Customers cooperatively implement water conservation programs, communicate with SFPUC regarding all significant technical, financial, and policy matters related to the maintenance, operation and improvement of SFPUC's Regional Water System (RWS), and as appropriate, jointly pursue development of water supplies.

In addition to BAWSCA, Hayward actively participates in other regional water planning efforts. As the Groundwater Sustainability Agency for the portion of the East Bay Plain Groundwater Subbasin that underlies the city, Hayward collaborated with EBMUD to prepare a single Groundwater Sustainability Plan (GSP) for the

[6] California State Legislature. (1995). Health and Safety Code Section 116275. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=116275.

Basin. Hayward also takes part in the Bay Area Integrated Regional Water Management Plan (BAIRWMP), , Bay Area Clean Water Agencies (BACWA), WateReuse California, and other multi-agency efforts to increase and diversify water supplies.

## 2.4 Individual or Regional Plans

While Hayward supports and participates in regional water supply planning, it has opted to prepare an individual UWMP for its service area, which addresses all requirements of the CWC as provided in the UWMP Guidebook. Additionally, Hayward has notified and coordinated with the appropriate regional agencies and constituents. This 2025 UWMP, which is an individual UWMP (see Table 2-2), updates and replaces Hayward's 2020 UWMP.

**Table 2-2. Plan Identification Type**

| Submittal Table 2-2: Plan Identification | | |
|---|---|---|
| **Select One** | **Type of Plan** | |
| ☑ | **Individual UWMP** | |

### 2.4.1 Regional UWMP

Suppliers may choose to work with other agencies within a region, such as wholesaler(s), other retailers, or other regional agencies, to develop a Regional Urban Water Management Plan (RUWMP) instead of an individual one. A RUWMP reports on the combined regional service area and must still address all requirements of the Water Code Section. Hayward did not participate in a RUWMP; therefore, this section does not apply.

## 2.5 Fiscal or Calendar Year and Units of Measure

Hayward reports on a fiscal year basis rather than calendar year and therefore, has included the water use and planning data on a fiscal year basis - July 1, 2024, through June 30, 2025. In addition, Hayward utilizes million gallons (MG) throughout this UWMP as the unit of measurement when reporting water volume.

Table 2-3 provides agency identification information, type of year reporting, and units of measure used by Hayward to report water data and assessments.

**Table 2-3. Supplier Identification**

| Submittal Table 2-3: Supplier Identification | |
|---|---|
| Type of Supplier (select one or both) | |
| | Supplier is a wholesale supplier |
| ☑ | Supplier is a retail supplier |
| Fiscal or Calendar Year | |
| | UWMP Tables are in calendar years |
| ☑ | UWMP Tables are in fiscal years |
| If using fiscal years provide month and date that the fiscal year begins (mm/dd) | |
| 07/01 | |
| Units of measure used in UWMP | |
| Unit | MG |

## 2.6 Coordination and Outreach

This section describes Hayward's coordination and outreach efforts during the preparation of this 2025 UWMP.

### 2.6.1 Wholesale and Retail Coordination

When a water supplier relies on a wholesale agency for its water supply, both suppliers are required to provide each other with information regarding projected water supply and demand. Retail agencies that receive water from one or more wholesalers must provide their wholesaler(s) with projected water demand from that source in five-year increments for 20 years, or as far as possible based on available data.

During the preparation of this 2025 UWMP and WSCP, Hayward coordinated information regarding projected water supply with its water supplier, SFPUC, as listed in Table 2-4. Coordination with SFPUC was facilitated by BAWSCA to maintain consistency among its member agencies regarding information about SFPUC supplies. The text provided by BAWSCA and SFPUC is included throughout this UWMP and WSCP and is identified in gray-colored text. More information about coordination and notification efforts can be found in Chapter 10.

BAWSCA provides regional water reliability planning and conservation programming for the benefit of its 26 member agencies (collectively the "Wholesale Customers" or "BAWSCA Member Agencies") that purchase wholesale water supplies from the San Francisco Public Utilities Commission (SFPUC). Collectively, the Wholesale Customers deliver water to over 1.8 million residents and nearly 40,000 commercial, industrial and institutional accounts in Alameda, San Mateo and Santa Clara Counties.

BAWSCA also represents the collective interests of the Wholesale Customers on all significant technical, financial, and policy matters related to the operation and improvement of the SFPUC's Regional Water System (RWS).

BAWSCA's role in the development of the 2025 Urban Water Management Plan (UWMP) updates is to work with its Member Agencies and the SFPUC to seek consistency among UWMP documents.

**Table 2-4. Water Supplier Information Exchange**

| **Submittal Table 2-4 Retail: Water Supplier Information Exchange<br>Water Code Section 10631(h)** |
|---|
| The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631 (h). |
| Wholesale Water Supplier Name |
| San Francisco Public Utilities Commission |

### 2.6.2 Coordination with Other Agencies and the Community

On January 22, 2026, a notice of preparation and intent to update Hayward's UWMP was sent to the applicable agencies through email, more than 60 days in advance of the public hearing scheduled for June 16, 2026. A copy of the notice is in Appendix B and was sent to the following entities:

- The 25 other BAWSCA member agencies, which share a common wholesale water source
- Additional water districts surrounding Hayward
- East Bay Dischargers Authority (EBDA), a joint powers authority represented by five agencies that dispose treated wastewater through a common outfall to San Francisco Bay. Hayward owns and operates its own wastewater treatment facility and is a member of EBDA.
- EBMUD, which provides water to a small portion of Hayward and shares Groundwater Sustainability Agency (GSA) responsibilities for the East Bay Plain Groundwater Subbasin with Hayward.
- The Hayward Area Recreation and Park District (HARD), an independent special use district which provides park and recreation services to Hayward and surrounding communities
- Alameda County, as a small number of county residents outside of Hayward city limits are served by the Hayward Public Water System

Notification to the general public was published in *The Daily Review*, the local newspaper with the largest circulation in Hayward, for two successive weeks, as stated in DWR requirements (at least 14 days and 7 days in advance of the public hearing). Copies of the notice can be found in Appendix C of this UWMP. Notification was also posted at Hayward City Hall, in Hayward public libraries, on the cable television public access channel, and on the City of Hayward's website.

On June 16, 2026, Hayward convened a public hearing at its regular meeting to receive comments on the 2025 UWMP before adoption by its City Council and submittal to DWR. Prior to the hearing, copies of the Draft 2025 UWMP were available for public review and comment at Hayward City Hall, Hayward public libraries, and on the City of Hayward's website. Prior to and during the preparation of the Plan, Hayward encouraged active involvement of diverse social, cultural, and economic elements of its population within the service area through public noticing.

The Final 2025 UWMP was adopted on June XX, 2026, and was submitted to DWR, and to Hayward's wholesaler, SFPUC.

### Notice to Cities and Counties

CWC Section 10621(b) requires that agencies notify cities and counties that they serve water to that the 2025 UWMP is being updated and reviewed. The CWC specifies that this must be done at least 60 days prior to the public hearing. Hayward complied with this requirement. A full list of the cities and counties to which Hayward sent the 60-day notification, is reported in Table 10-1 in Chapter 10 of this UWMP.

# 3 SYSTEM DESCRIPTION

**Lay Description**

This chapter describes Hayward's water system, service area, climate, projected population, and other factors affecting water management planning. Potential uncertainties, such as the impacts of climate change, are discussed as well.

## 3.1 General Description

The City of Hayward occupies an area of about 64 square miles, including about 18 square miles of submerged lands, and is located in the southern part of Alameda County along the eastern shore of the San Francisco Bay. The City lies roughly 25 miles southeast of San Francisco, 14 miles south of Oakland, 26 miles north of San Jose, and 10 miles west of the Tri-Valley communities surrounding Pleasanton. It is bordered by the unincorporated communities of San Lorenzo and Castro Valley to the north, Union City to the south, Pleasanton to the east, and the San Francisco Bay to the west. Much of Hayward is relatively flat, although elevation rises from approximately 100 to 1,500 feet above sea level east of Mission Boulevard in the Hayward Hills.

Settlement in the Hayward area began in the early 1850s, with the establishment of a general store in what is currently the downtown area. The City was incorporated in 1876 and remained a primarily agricultural community until after World War II. Significant population growth occurred during the 1950s and 1960s, driven by post-war development, followed by a surge in industrial expansion in the 1960s and 1970s that helped balance earlier residential growth. Over the past several decades, Hayward has continued to grow through infill development and annexation of unincorporated areas. Today, Hayward supports a broad economic base, including food and beverage production, advanced manufacturing, biotechnology, and emerging clean technology industries such as electric vehicle production and battery research.

The Hayward Public Water System, owned and operated by the City, serves more than 95% of the community, including most residential, commercial, and institutional users, as well as a small portion of unincorporated Alameda County. The system provides water to a diverse customer base, including major commercial and industrial users, educational institutions, and regional healthcare facilities. A limited area in northern Hayward is served by EBMUD.

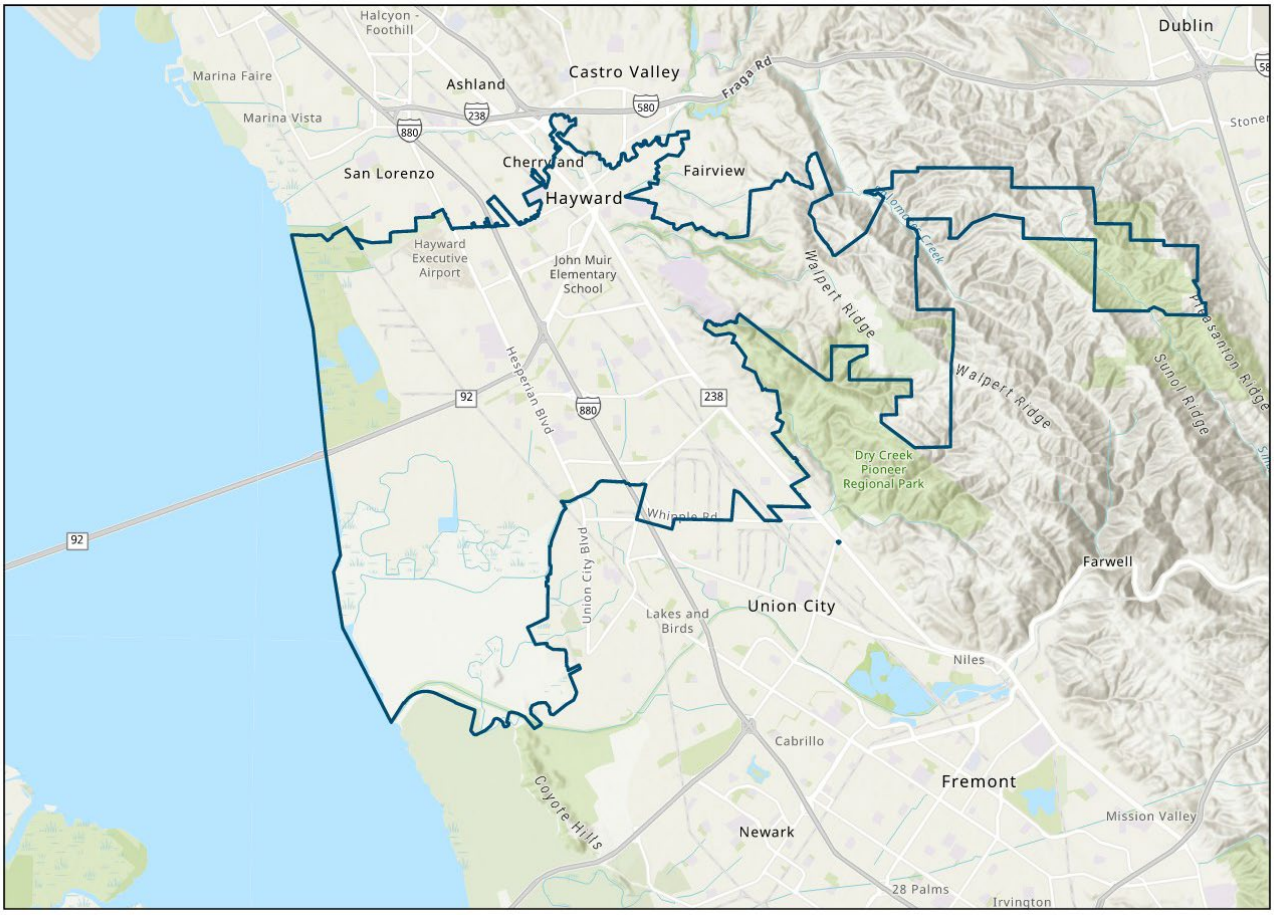
Historically, groundwater wells served as Hayward's primary water source. In 1962, Hayward entered into an agreement to rely exclusively on imported water from the SFPUC, leading to the construction of more than 20 miles of aqueduct infrastructure. Hayward discontinued supplying groundwater in 1963, though wells are still maintained for emergency purposes.

Hayward operates under a Council-Manager form of government. The City Council, consisting of six elected members and a directly elected Mayor, provides policy direction for all municipal services, including the publicly owned and operated water system.

## 3.2 Service Area Boundary

Hayward's service area encompasses approximately 64 square miles of varied topography. Figures 3-1 and 3-2 show an overview of Hayward's potable water service area. 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 3-1. Potable Water Service Area**

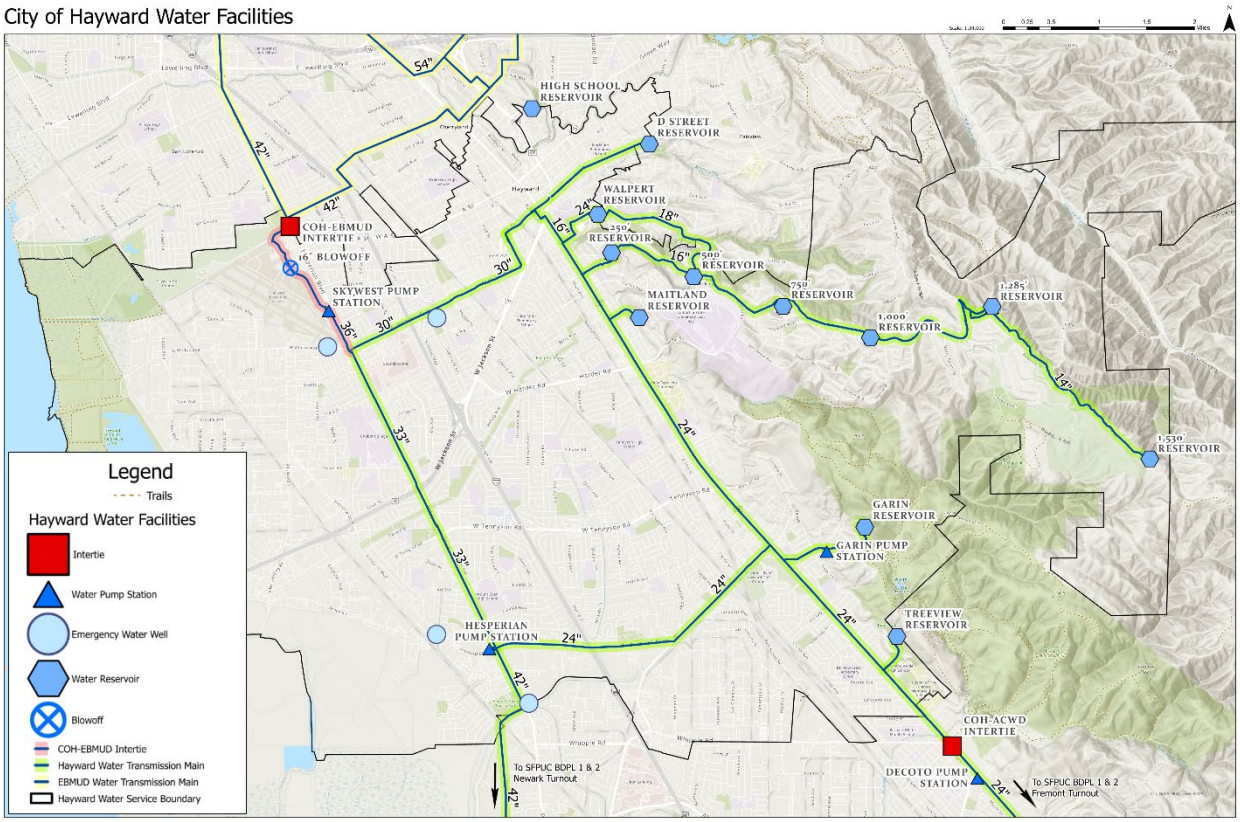



Source: City of Hayward (2026)

Hayward's distribution system includes an extensive network of pipelines, pump stations, and storage facilities, enabling reliable service across varied topography, including hillside areas. Four groundwater wells are maintained for emergency use only, and regional interties with EBMUD and ACWD provided additional reliability during emergencies or maintenance events.

Figure 3-2 provides further details regarding Hayward's water system and infrastructure. A map of Hayward's recycled water system is included in Section 6.4, Figure 6-5, titled Recycled Water Project Location Map and Distribution System. Since Hayward does not have a Raw Water Distribution System, the jurisdictional boundary mirrors the service area.

**Figure 3-2. Hayward Public Water System**




Source: City of Hayward (2026)

## 3.3 Service Area Climate

Hayward has a Mediterranean coastal climate with mild, dry summers and cool winters. Most of the precipitation is received during the winter months with very occasional summer rain showers. Banks of fog often move inland during summer nights from the Pacific Ocean and evaporate during the day. The total water consumed in Hayward is moderately influenced by precipitation and temperature.

Figure 3-3 illustrates the average reference evapotranspiration (ETo), rainfall, and temperature data. ETo is the loss of water to the atmosphere by the combined processes of evaporation (from soil and plant surfaces), and transpiration (from plant tissues) of real-world water use for specific vegetation. It serves as an indicator of how much water is needed to support healthy growth for crops, plants, and trees. This data provides a consistent baseline used to estimate ETo for different plant types and landscapes by applying appropriate plant coefficients. The ETo data shown is based on calendar year 2025. Rainfall and temperature data is based on a 10-year average from 2015 to 2025 to illustrate typical conditions. Climate data such as ETo is used to model outdoor water use and establish requirements for Urban Water Use Objectives (UWUOs).

**Figure 3-3. Climate Data**

| Climate Data | | | | |
|---|---|---|---|---|
| **Month** | Standard Monthly Average Eto (inches)[1] | Average Rainfall (inches)[2] | Average Min. Temperature (Fahrenheit)[2] | Average Max. Temperature (Fahrenheit)[2] |
| **January** | 1.70 | 3.01 | 44.72 | 60.34 |
| **February** | 1.73 | 2.37 | 44.89 | 63.15 |
| **March** | 3.24 | 2.34 | 47.48 | 64.43 |
| **April** | 4.25 | 0.93 | 50.03 | 67.30 |
| **May** | 5.94 | 0.28 | 53.41 | 70.16 |
| **June** | 6.22 | 0.02 | 56.25 | 74.27 |
| **July** | 6.24 | 0.00 | 58.18 | 75.41 |
| **August** | 5.93 | 0.01 | 59.85 | 77.14 |
| **September** | 4.24 | 0.04 | 58.96 | 77.95 |
| **October** | 2.86 | 0.88 | 54.57 | 75.06 |
| **November** | 1.62 | 1.59 | 47.56 | 65.66 |
| **December** | 1.17 | 3.57 | 44.25 | 59.71 |
| **Annual** | **45.14** | **15.06** | **51.68** | **69.22** |

Climate Data Sources:

1. California Irrigation Management Information System (CIMIS), State of California Department of Water Resources, CIMIS Data, January 1, 2025 - December 31, 2025, taken at Union City Station #171.

2. 10-Year Monthly Climate Summary for National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI), station based at Hayward Air Terminal, CA, 2015 to 2025. Station number: GHCND:USW00093228. Data accessed through Climate Data Online (CDO), https://www.ncei.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USW00093228/detail.

Changes in precipitation, temperature, and atmospheric carbon dioxide affect ETo and net irrigation water requirements. Global climate models have been used to project future climate change and impact on crop water demands. The 2025 BAWSCA Regional Water Demand and Conservation Projections Report (Demand Study) also modeled future water demand using high and low Representative Concentration Pathway (RCP) scenarios to better understand the impact of climate variability. Additionally, climate change variation in precipitation timing and amounts could result in greater or lesser irrigation requirements to meet ETo demands.

### 3.3.1 Climate Change Impacts on Water Demands, Supplies, and Reliability

According to the National Academy of Sciences, climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer).[7] Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun
- Natural processes within the climate system (e.g., changes in ocean circulation)

[7] National Academies of Sciences: https://www.nationalacademies.org/topics/climate

- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification, etc.)

Climate change has the potential to directly impact Hayward's surface water supply and to indirectly impact groundwater supplies. The City is committed to adapting to these challenges in a manner that protects water resources for maximum benefit while continuing to maintain a reliable, affordable, high-quality water supply.

Several potential impacts have been identified by the scientific community, including reduced winter snowpack, more variable and extreme weather conditions, shorter winters, and increased evaporative demand. Additionally, climate change could affect water quality through increased flooding and erosion, greater concentrations of contaminants (if any) in the water supply, and warmer water, which could lead to increased growth of algae and other aquatic plants. Rising sea level and increased flooding are also potential effects of climate change.

**Water Resources Planning for Climate Change Additional Resources**

Much work has been done at the state and regional levels to evaluate the effects and impacts of climate change, and to develop strategies to support effective statewide, regional, and local water management.

The following resources provide supplementary information on water resources planning for climate change:

- California Adaptation Planning Guide. California Governor's Office of Emergency Services Final Report, June 2020. (CalOES, 2020). Available at: https://www.caloes.ca.gov/wp-content/uploads/Hazard-Mitigation/Documents/CA-Adaptation-Planning-Guide-FINAL-June-2020-Accessible.pdf

- California Climate Adaptation Strategy (2024). California Natural Resources Agency (CNRA) Report, 2024. (CNRA, 2024). Available at: https://www.climateresilience.ca.gov/

- California Climate Adaption Planning Guide. California Natural Resources Agency. (CNRA, 2012). Available at: https://resources.ca.gov/CNRALegacyFiles/docs/climate/01APG_Planning_for_Adaptive_Communities.pdf

- California Water Plan 2028. California Department of Water Resources, February 2026. (DWR, 2026). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2028/CWP-2028-Fact-Sheet.pdf

- Climate Action Plan Phase 1: Greenhouse Gas Emissions Reduction Plan Update 2023. California Department of Water Resources Final Report, January 2024. (DWR, 2023). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan/Files/Exhibit-C-CAP-Phase-1-Update-2023.pdf

- Climate Change and Integrated Regional Water Management in California: A Preliminary Assessment of Regional Perspectives. Department of Environmental Science, Policy and Management, University of California at Berkeley, June 2012. (UCB, 2012). Available at: https://watershedscoalition.org/wp-content/uploads/2022/07/IRWM_CCReport_Final_June2012_EConrad_UCBerkeley.pdf

- Climate Change Characterization and Analysis in California Water Resources Planning Studies. California Department of Water Resources Final Report, December 2010. (DWR, 2010). Available at: https://cawaterlibrary.net/document/climate-change-characterization-and-analysis-in-california-water-resources-planning-studies-2/

- Climate Change Handbook for Regional Water Planning. Prepared for U.S. Environmental Protection Agency and California Department of Water Resources by CDM, November 2011. (CDM, 2011). Available at: https://cawaterlibrary.net/wp-content/uploads/2017/06/Climate_Change_Handbook_Regional_Water_Planning.pdf

- Climate change and future water availability in the United States. U.S. Geological Survey Professional Paper 1894 E, January 2025. (USGS, 2025). Available at: https://pubs.usgs.gov/pp/1894/e/pp1894E.pdf

- Intergovernmental Panel on Climate Change Sixth Assessment Report: Impacts, Adaptation and Vulnerability. Chapter 4: Water. Available at: https://www.ipcc.ch/report/ar6/wg2/

- Managing An Uncertain Future: Climate Change Adaptation Strategies for California's Water. California Department of Water Resources Report, October 2008. (DWR, 2008). Available at: https://digitalcommons.csumb.edu/hornbeck_usa_3_d/63/

- Perspectives and Guidance for Climate Change Analysis. California Department of Water Resources Climate Change Technical Advisory Group. (DWR, 2015). Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Climate-Change-Program/Climate-Program-Activities/Files/Reports/Perspectives-Guidance-Climate-Change-Analysis.pdf

- San Francisco Bay Area Summary Report, California's Fourth Climate Change Assessment. (Ackerly et al., 2018). Available at: https://www.climateassessment.ca.gov/

- State Water Project Adaptation Strategy. California Department of Water Resources Final Report, August 19, 2025. (DWR, 2025). Available at: https://mavensnotebook.com/wp-content/uploads/2025/08/SWP-AdaptationStrategy_Final.pdf

- Statewide Summary Report, California's Fourth Climate Change Assessment (California Energy Commission, 2018). Available at: https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf?utm_medium=email&utm_source=govdelivery

- West-Wide Climate Risk Assessments: Irrigation Demand and Reservoir Evaporation Projections, Technical Memorandum No. 86-68210-2014-01, U.S. Bureau of Reclamation, 2015. (USBR, 2015). Available at: https://www.usbr.gov/watersmart/baseline/docs/irrigationdemand/irrigationdemands.pdf

## 3.4 Service Area Population, Demographics, and Socioeconomics

The CWC requires suppliers to report on their current and projected service area populations in their UWMP. The CWC does not require a specific methodology for projecting future populations, but it does require that the estimates of future population be based on data from state, regional, or local service agency population projections.

### 3.4.1 Service Area Population

Table 3-1 presents Hayward's estimated population growth in five-year increments through 2045. While the actual population growth may or may not reach these estimates, the estimates reflect anticipated changes due to California's Regional Housing Needs Allocation (RHNA), the amount of developable land available within the city limits, residential and commercial development applications under review (or approved and not constructed yet), and availability and affordability of older housing stock that will be rehabilitated, including installing

drought tolerant landscaping where no landscaping currently exists. It is critical that water demand projections encompass the total anticipated usage to plan for sufficient supplies and reliable infrastructure.

Future projections of population were developed based on the Association of Bay Area Governments' (ABAG's) and Metropolitan Transportation Commission's (MTC's) Plan Bay Area 2050 dataset.[8] The Plan Bay Area 2050 dataset reflects a modeled projection of demographic data with three datapoints for years 2015, 2035, and 2050. Projected population from 2030 and 2050 is based on the Demand Study model along with inputs provided by Hayward, such as persons per household for single and multi-family and projected number of housing units that are included in the 2040 General Plan. The Demand Study uses the rate of change from Plan Bay Area 2050 applied to historical demographic data developed in conjunction with Hayward's input.

The 2025 population estimate for Hayward is 162,954. It is anticipated that Hayward's overall service area population will increase, particularly with the rise of high-density multi-family housing developments over the next several years. By 2045, the total population within Hayward's service area is expected to be 215,644, which represents a 1.3% annual growth rate compared to 2025.

Hayward's residential per capita water use is consistently one of the lowest among SFPUC's Wholesale Customers and in the state. The community's tradition of exemplary water stewardship will continue during years of both normal supplies and drought. Even with increased growth, Hayward expects to maintain per capita use rates that reflect the City's commitment.

**Table 3-1. Retail Population – Current and Projected**

| Submittal Table 3-1 Retail: Population - Current and Projected - Water Code Section 10631(a) | | | | | |
|---|---|---|---|---|---|
| **Population Served** | 2025 | 2030 | 2035 | 2040 | 2045 |
| | 162,954 | 193,603 | 200,657 | 208,000 | 215,644 |
| **Notes:** (1) 2025 population based on 2020 U.S. Census and consistent with 2025 Urban Water Use Objectives (UWUO) reporting; and (2) Population projections based on Demand Study which used ABAG's/MTC's Plan Bay Area 2050 Traffic Analysis Zone (TAZ) dataset. | | | | | |

### 3.4.2 Other Social, Economic, and Demographic Factors

It is recommended that Suppliers describe social, economic, and demographic factors of their service area since recent trends or shifts in these factors can affect water management and planning. The water demand projections presented in the 2025 UWMP are based, in part, on population and business trends developed by ABAG, combined with Hayward's development forecasts, and the 2040 General Plan policies and strategies. A full discussion of specific demographic and development issues affecting water use is in Chapter 4 of this UWMP. The following paragraphs briefly summarize demographic and economic trends in Hayward.

Hayward's residential population is among the most culturally and economically diverse in the state. The following are some of the key economic and housing factors that may affect water use:

- Median household income is $113,318[9]
- Per capita income is $45,923[10]
- Percentage of population at or below the poverty level is 9.6%[10]

[8] Plan Bay Area 2050+: https://abag.ca.gov/our-work/land-use/plan-bay-area-2050

[9] U.S. Census Bureau, City of Hayward: https://www.census.gov/quickfacts/fact/table/haywardcitycalifornia/PST045224

[10] U.S. Census Bureau, City of Hayward: https://www.census.gov/quickfacts/fact/table/haywardcitycalifornia/PST045224

- Unemployment rate (as of December 2025) is 4.4%[11]
- Median home value is just over $854,400[10]
- Approximately 58% of housing units are owner-occupied[10]
- About 70% of housing units were constructed prior to 1980[12]
- Median rent is $2,391/month[10]

Over the next 20 years, development of new housing, intensification of existing residential areas, and construction of larger homes will result in increased residential water demand. Most of the residential growth is expected to occur in Priority Development Areas (PDAs) for which specific, form-based, or area plans have been adopted. Water use will also be impacted by development of Route 238 right-of-way properties, a 350-acre noncontiguous area previously purchased by the state to accommodate construction of a Route 238 bypass. Although the bypass project is no longer planned by the state, Hayward prepared the Route 238 Bypass Land Use Study[13] to identify residential development potential for these properties.

Residential water use will also be impacted by rehabilitation of older homes, which are being purchased and remodeled. This will include installing water-efficient landscaping where little or no irrigated landscaping currently exists. Use of native and low-water use plants and installation of water-efficient irrigation systems will be encouraged.

Hayward's post-secondary educational institutions are sources of significant non-residential populations, as many of the students commute to the campuses to attend classes while residing in other cities. These student populations are not incorporated into Hayward's population projections; however, water use related to increased enrollment and construction of additional facilities is included in the demand projections.

Institutional water use is impacted by three higher education campuses located in Hayward, all of which continue to implement long-range master plans to increase enrollment and develop their academic programs and facilities. California State University, East Bay (CSUEB) has long had its main campus in Hayward and intends to add substantially more student and faculty housing facilities. Chabot College, a regional community college, also projects that its enrollment will increase. Life Chiropractic College West, a smaller college than the two public institutions, is growing and plans to nearly triple its student population.[14] Life West is planning to relocate to the CSUEB campus in mid-2027.

Regarding industrial and commercial water use, the Demand Study estimates a nearly 2.2% per year increase in the number of jobs in Hayward between 2025 and 2045 (based on the East Bay Works Economic & Workforce Analysis), with a significant portion of the new employment occurring in the advanced manufacturing, health, and transportation/warehousing fields. Hayward is currently home to nearly 10,000 businesses of varying sizes. Hayward's Economic Development policies, specified in the 2040 General Plan and Strategic Roadmap, include several policies to diversify the economic base and support entrepreneurship and innovation.

[11] Bureau of Labor Statistics – Oakland-Fremont-Hayward, Accessed February 2026. https://www.bls.gov/eag/eag.ca_oakland_md.htm

[12] General Plan Housing Element – Housing Resources**.** City of Hayward. https://www.hayward-ca.gov/your-government/documents/general-plan/housing-element/housing-resources

[13] Route 238 Bypass Land Use Study: https://ceqanet.lci.ca.gov/Project/2008072066

[14] CSUEB, East Bay Community Newsletter: https://thepioneeronline.com/49811/campus/life-chiropractic-college-west-to-relocate-to-cal-state-east-bay/

## 3.5 Land Uses within Service Area

The primary land uses in the developed portions of Hayward are residential, industrial, and commercial. Hayward also has a significant amount of open space, including parks and Baylands.

Because the Hayward Water System is owned and operated by the City, coordination with Hayward's Planning Department is ongoing and proactive. Utilities staff regularly participate in meetings with developers and provide input related to water supply and distribution issues and requirements, and planning documents, such as the 2040 General Plan and Downtown Specific Plan. Planning staff provide information regarding current and future land use and development and redevelopment potential within the water service area. This close coordination helps ensure that future growth and redevelopment within the service area are supported by reliable and sustainable water infrastructure planning.


# 4 CUSTOMER WATER USE

**Lay Description**

The California Water Code (CWC) requires a description and quantification of water uses in the service area, including recycled water, if used or may be used in the future. This chapter describes and quantifies Hayward's historical, current (2025), and future water use projections through 2050, based on available records. Future water use is based on Hayward's past and existing water use (as of 2025), along with anticipated growth, new regulations, changing climate conditions, and trends in customer water use behavior. A thorough analysis examined each water use sector and aggregated the results into a comprehensive projection of customer water use. Table 4-1 and Table 4-2 present Hayward's actual total 2025 water consumption and projected water demand through 2050 by water use sector.

## 4.1 Non-Potable Versus Potable Water Use

In 2021, Hayward completed construction of its Phase 1 Recycled Water Project to provide disinfected tertiary-recycled water for non-potable irrigation use. In March 2022, Hayward began recycled water deliveries to more than 30 customers, within an approximately two-mile radius of the Hayward Water Resource and Recovery Facility (WRRF). About 72 MG per fiscal year is delivered from this project for landscape irrigation at several parks and schools, as well as various institutional, industrial, and commercial properties.

Hayward also delivers secondary-treated wastewater from the WRRF to the Russell City Energy Center (RCEC), located adjacent to the WRRF. The RCEC further treats the wastewater to tertiary and uses it as cooling water in its energy production process. Hayward has opted not to include this use as recycled water in this UWMP.

A full discussion of recycled water and its potential for use in the Hayward service area is included in Chapter 6.

## 4.2 Past, Current, and Projected Water Use by Sector

This section identifies water use, based on available records, for the 10 water use sectors identified in Water Code Section 10631(d), and describes the methodology used to calculate water uses and their projections.

The Demand Study was used to prepare the projections incorporated in this UWMP, including long-term demands through 2050 based on expected service area growth for both population and employment. Demand forecasts were developed to account for passive (i.e., from codes/standards) and active conservation programs. The Demand Study also evaluated conservation measures for potential future regional implementation.

For Hayward's demand analysis, historical billing and consumption data for the years 1980 to 2020 were provided, as well as updated data for the years 2020-2025. Additional data, including historical water rates, water shortage history, and conservation program information were also provided for further context. This data was used to determine past, current, and projected water use for each water use type, in five-year increments through 2050. As shown in Table 4-1, water use in Hayward totaled 5,056 MG (4,984 MG of potable water and 72 MG of non-potable water) in Fiscal Year 2024 - 2025.

### 4.2.1 Water Use Sectors Listed in the Water Code

The following water use sectors are listed in the Water Code, with additional sectors or subdivisions included as needed to reflect Hayward's unique conditions.

**Single Family Residential**

This is defined as a single family dwelling unit or a lot with a free-standing building containing one dwelling unit that may include a detached secondary dwelling.

**Multi-Family Residential**

This is defined as multiple dwelling units contained within one building or several buildings within one complex. Hayward's multi-family category includes any building with two or more dwelling units, including mobile homes.

**Commercial**

This is defined as a water user that provides or distributes a product or service. Commercial businesses in the Hayward service area include a typical mix of office-type services, specialty and big box retail stores, auto dealerships, dining establishments, hotels and motels, and a regional shopping center. Churches and non-profit organizations are also included in this sector.

**Industrial**

This is defined as a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System (NAICS) code sectors 31 to 33[15] or an entity that is a water user primarily engaged in research and development. Hayward has a diverse industrial sector, including food and beverage manufacturing, high-technology research and manufacturing, biotechnical research and development, and a wide range of other businesses.

**Institutional/Governmental**

This is defined as a water user dedicated to public service, such as, higher-education institutions, schools, courts, and government facilities. Hayward is home to two regional public post-secondary educational institutions, CSUEB and Chabot Community College, as well as the private institution, Life Chiropractic College West.

**Landscape**

This is defined as water connections supplying water solely for landscape irrigation. Such landscapes may be associated with multi-family, commercial, industrial, or institutional/governmental sites, but are considered a separate water use sector if the connection is solely for landscape irrigation and has a dedicated irrigation meter.

**Other Uses**

These uses include temporary hydrant meters and fire service lines.

**Sales to Other Agencies**

These are defined as water sales made to other agencies. Hayward does not currently sell water to other agencies; therefore, this section is not applicable.

**Groundwater Recharge**

This is defined as the managed and intentional replenishment of natural groundwater supplies using man-made conveyances such as infiltration basins or injection wells. Hayward does not currently perform groundwater recharge; therefore, this section is not applicable.

**Saline Water Intrusion Barrier**

[15] Census Definition of Industrial: https://www.census.gov/naics/.

This is defined as the injection of water into a freshwater aquifer to prevent the intrusion of saltwater. Hayward does not have a saline water intrusion barrier; therefore, this section is not applicable.

**Agricultural**

This is defined as water used for commercial agricultural irrigation. Hayward does not have any agricultural irrigation; therefore, this section is not applicable.

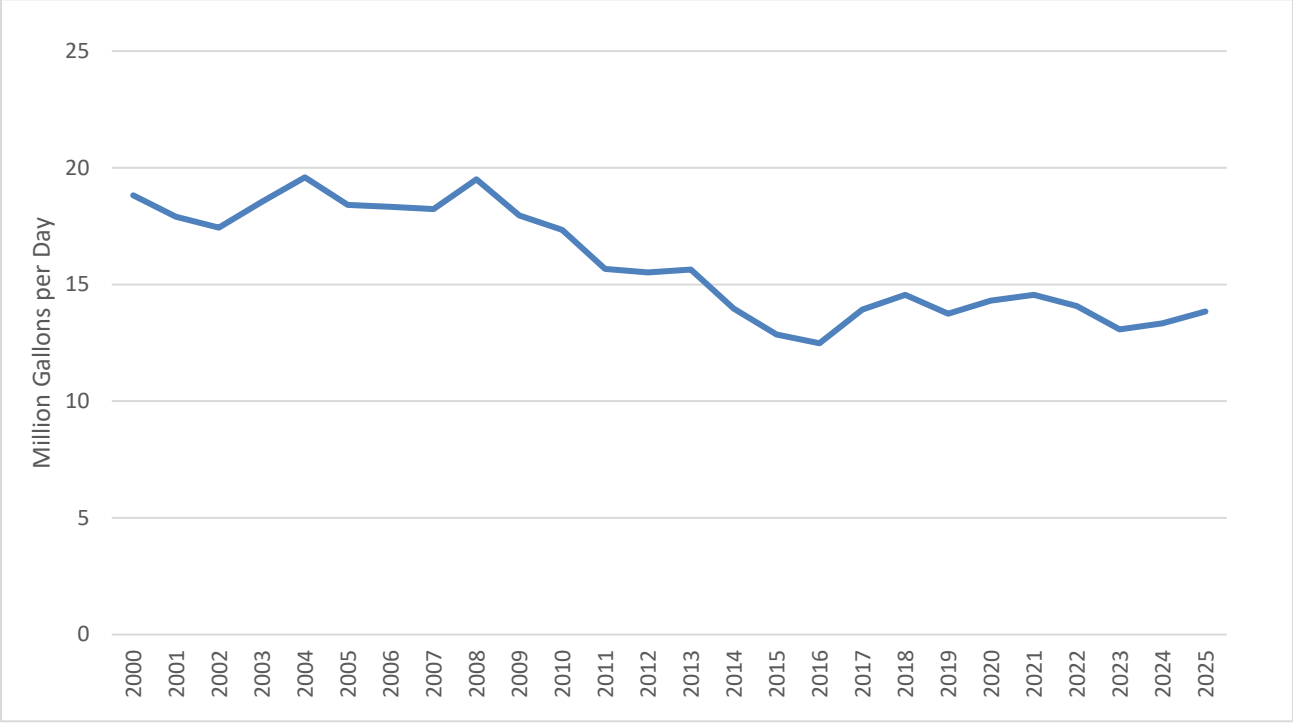
### 4.2.2 Water Use Sectors in Addition to Those Listed in Water Code

**Water exchanges, surface water augmentation, water transfers and wetlands or wildlife habitat** management are water use sectors not specifically listed in, nor required by, the CWC. Hayward does not participate in or conduct any of these water uses.

### 4.2.3 Past Water Use

Hayward's historical water use totals are based on previous billing and consumption data as described earlier. Figure 4-1 shows Hayward's historical water demand in MG, in a mostly downward trending pattern.

**Figure 4-1. City of Hayward Historical Water Demand in Million Gallons per Day**




Source: City of Hayward (2026)

### 4.2.4 Current Water Use

This section presents current water use developed through analysis of meter data, billing records, and other information including monthly Conservation and Drought reports recently submitted to the SWRCB. Current gross water use totals, including recycled water, and the total consumption distribution by customer sector are reflected in Table 4-1.

**Table 4-1. Demands for Potable and Non-Potable Water – Actual**

| Submittal Table 4-1 Retail: 2025 Actual Total Uses for Potable and Non-Potable Water<br>Water Code Section 10631(d)(1) | | | | |
|---|---|---|---|---|
| Use Type | Description | 2025 Actual Water Use | | |
| | | **Potable or Non-Potable** | **Volume** (MG) | **Total Consumption Distribution by Sector** |
| Single Family | 1 dwelling unit | Potable | 1,776 | 35.13% |
| Multi-Family | 2-5+ dwelling units and/or mobile homes | Potable | 1,035 | 20.47% |
| Commercial | | Potable | 370 | 7.32% |
| Industrial | | Potable | 589 | 11.65% |
| Institutional/Governmental | | Potable | 219 | 4.33% |
| Landscape | Dedicated irrigation meters only | Potable | 615 | 12.17% |
| Distribution System Water Loss | Non-Revenue Water | Potable | 342 | 6.77% |
| Other (optional) | Hydrant Meter and Fireline | Potable | 37 | 0.74% |
| Landscape | Potable supplemental use for non-potable CII landscape customers | Non-Potable | 26 | 0.51% |
| Landscape | Recycled water use for CII landscape customers | Non-Potable | 46 | 0.91% |
| | | Subtotal Potable | 4,984 | 98.58% |
| | | Subtotal Non-Potable | 72 | 1.42% |
| | | **Total** | 5,056 | 100% |
| **Notes:** (1) The totals for each category were sourced from billing customer category and align with the SFPUC billing period; (2) Non-Revenue Water is calculated as the difference between total customer category use and potable production; and (3) In Fiscal Year (FY) 2024-2025, 26 MG of potable water supplemented the recycled water system for non-potable landscape irrigation use. Therefore, this volume is tracked as non-potable. | | | | |

### 4.2.5 Projected Water Use

This section presents water use for each sector in five-year increments through 2050, as summarized in Table 4-2, based on the Demand Study projections.

BAWSCA's goal for the Demand Study was to develop transparent, defensible, and uniform demand and conservation savings projections for each Wholesale Customer using a common methodology to support both regional and individual agency planning efforts and compliance with the new statewide water efficiency targets required by Assembly Bill (AB) 1668 and Senate Bill (SB) 606.

Through the Demand Study process, BAWSCA and the Wholesale Customers: (1) quantified the total average-year water demand for each Wholesale Customer through 2050; (2) quantified passive and active conservation water savings potential for each individual Wholesale Customer through 2050; and (3) identified conservation programs with high water savings potential and/or Wholesale Customer interest. Implementation of these conservation measures, along with passive conservation, is anticipated to yield an additional 16 MGD of water savings by 2050. Based on the revised water demand projections, the identified water conservation savings, increased development and use of other local supplies by the Wholesale Customers, and other actions, the

collective purchases of the Wholesale Customers from SFPUC are projected to stay below 184 MGD through 2050.

As part of the Demand Study, each Wholesale Customer was provided with a demand model that can be used to support ongoing demand and conservation planning efforts, including the 2025 UWMP preparation.

The water demand projections summarized in this section incorporate anticipated development factors within Hayward, affecting both residential and non-residential sectors. In general, Hayward is experiencing a significant amount of development in all sectors. The following paragraphs provide an overview of the factors considered in preparing this 2025 UWMP.

Demand projections used climate change scenarios, including passive savings associated with plumbing codes and natural fixture replacement and active conservation savings from ongoing water conservation programs. The Demand Study's baseline scenario (and therefore this UWMP's projection) holds system water loss at a constant share of total consumption in the future, consistent with service area 2024 American Water Works Association (AWWA) water loss reporting. As total demand grows or declines, the volumetric system water loss moves proportionally, but the percentage remains constant.

The potable water demand projections are derived from the Demand Study, which estimated 2050 total water demand to be 7,420 MG. Of the total demand, 7,229 MG are anticipated to be potable and 191 MG to be non-potable (Table 4-2).

In 2023, Hayward adopted the updated Housing Element, a component of its General Plan, based on the RHNA allocation for the planning period of 2023-2031. RHNA's planning period is repeated in eight-year cycles and is in Year 3 of the 6$^{th}$ cycle.

Pursuant to CWC Section 10631(d), Hayward provided SFPUC with potable water use projections as shown in Table 4-2, which summarizes estimated demand for potable water through 2050 by use type.

**Table 4-2. Demands for Potable and Non-Potable Water – Projected**

| Submittal Table 4-2 Retail: Total Uses of Potable, and Non-Potable Water - Projected<br>Water Code Section 10631(d)(1) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Use Type** | **Description** | **Projected Water Use** | | | | | |
| | | **Potable or Non-Potable** | **2030** (MG) | **2035** (MG) | **2040** (MG) | **2045** (MG) | **2050** (MG) |
| Single Family | 1 dwelling unit | Potable | 1600 | 1574 | 1561 | 1549 | 1546 |
| Multi-Family | 2-5+ dwelling units and/or mobile homes | Potable | 976 | 981 | 1002 | 1021 | 1046 |
| Commercial | Includes commercial, industrial, and institutional | Potable | 1910 | 2206 | 2553 | 2958 | 3430 |
| Landscape | Irrigation | Potable | 570 | 606 | 651 | 696 | 743 |
| Landscape | Landscape irrigation (Commercial, Industrial, Institutional) | Non-Potable | 68 | 78 | 105 | 141 | 191 |
| Other (optional) | Other | Potable | 26 | 26 | 26 | 26 | 26 |
| Distribution System Water Loss | Non-Revenue Water | Potable | 315 | 340 | 369 | 402 | 439 |
| | | Subtotal Potable | 5,398 | 5,734 | 6,162 | 6,651 | 7,229 |
| | | Subtotal Non-Potable | 68 | 78 | 105 | 141 | 191 |
| | | **Total** | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |

**Notes:** (1) Source for water use projections including Non-Revenue Water is the Demand Study; (2) Projected water use includes active and passive savings; (3) Single Family Residential demand with conservation decreases over the planning period because the baseline growth is modest and conservation savings over time exceed the demand growth; (4) The Demand Study assumptions account for projected growth in the CII sector, incorporating an average annual increase of 0.3 MGD to reflect future water use; and (5) All of Hayward's residential customers, regardless of income level, are metered, thus, the demands of residential customers with lower incomes are part of the single and multi-family water uses shown in Table 4-1 and Table 4-2.

**Residential**

Hayward's current housing stock, totaling about 52,000 dwelling units, is a mix of single family detached, condominium, multi-family, and mobile home units. About 50% of the total housing units are single family detached, condominiums, and duplex to four plex units, with the remainder being multi-family and mobile home units. Hayward is continuing to add housing units through development of vacant parcels and redevelopment of low-density properties. In 2023, Hayward adopted the 6$^{th}$ Cycle Housing Element to plan for adequate housing to meet future needs and address its obligations under RHNA's 2023-2031 planning period. Among the stated goals of the Housing Element are conservation and improvement of existing housing stock and development of a variety of new housing types to meet diverse needs and economic constraints. The Housing Element is a required "element" or chapter in the City's General Plan.

According to the most recent ABAG projections (ABAG Projections 2040*)*,[16] about 6,200 households will be added in Hayward through 2040, a 13% increase from 2020. While Hayward anticipates single family detached housing will continue to be constructed, an increasing number of projects are incorporating higher density condominiums, townhomes, and apartment dwelling units. Hayward City Council supports the Sustainable Communities Strategy, a regional blueprint for transportation, housing, and land use focused on reduced driving and greenhouse gas emissions. This strategy anticipates the majority of residential development to be in four Priority Development Areas (PDAs):

- Cannery Area – 752 units
- Downtown – 3,223 units
- South Hayward Bay Area Rapid Transit (BART) Corridor and Neighborhood – 3,871 units
- Mission Corridor – 1,839 units

Some of this has been constructed or is under development. For example, the Cannery Area is built out with a mix of townhomes, apartments, and detached single family homes. Significant building activity is also occurring in the South Hayward BART Corridor and Neighborhood and Mission Corridor. While it is not yet known whether these PDAs will achieve their full sustainable development potential, the dwelling unit counts are still relevant and have been incorporated into Hayward's water demand projections. According to the City's Housing Element, most of the anticipated housing development during the 2023-2031 cycle will be accommodated within these PDAs while a smaller number of housing units will be constructed through infill development and intensification of underutilized properties throughout the City.[17]

Additional potential exists in the former Route 238 right-of-way, which consists of about 350 acres of state-owned vacant or underutilized parcels (Parcel Groups 1-10) that were acquired by the California Department of Transportation (Caltrans) over 45 years ago as right-of-way for the planned Route 238 Bypass. Caltrans no longer plans to construct this project and intends to sell the properties for future development. In 2016, Hayward entered into a Purchase and Sale Agreement (Agreement) with Caltrans to manage the disposition and development of the remaining Caltrans-owned property.[18] This ensures thoughtful planning and assemblage for the development of the parcel groups rather than auctioning off individual parcels. The Agreement divides the properties into 10 parcel groups, which must be disposed of by 2032. To date, five parcel groups have sold (1, 2, 3, 7 & 10) and two are in exclusive negotiations (5 and 8).

- *Parcel Group 1 & 10*: Developer Taylor Morrison completed construction on the SoHay project, which includes 472 residential units, 20,000 square feet of commercial space, and connected open space/park areas.
- *Parcel Group 2*: Development by Homes Built for America, the SoMi project involves development of 189 condominium and townhome units, 10,800 square feet of ground floor commercial space, and a variety of open spaces. The development is currently under construction.
- *Parcel Group 3*: Development by Eden Housing and The Pacific Companies of 176 affordable housing units, two manager units, and an approximately 36,000 square foot educational building. The development is currently under construction.
- *Parcel Group 4*: The City has had on-going discussions with the Hayward Area Regional Parks District and East Bay Regional Park Districts regarding this open space parcel as it is continuous with some of

[16] ABAG Population Statistics: https://abag.ca.gov/our-work/land-use/forecasts-projections

[17] Hayward 6th Cycle Housing Element, Housing Resources. https://www.hayward-ca.gov/your-government/documents/general-plan/housing-element/housing-resources

[18] California State Route 238 Corridor Lands. https://www.hayward-ca.gov/238

their land. There is no current planned development or finalized agreement for the development of this site.

- *Parcel Group 5*: On April 19, 2022, the Council approved the Disposition and Development Agreement, Zone Change, Tentative Map to develop the site with 74 single family homes and 18 deed-restricted Accessory Dwelling Units. The project is not yet under construction.
- Parcel Group 6: There are currently no active entitlement applications to develop this 29-acre site. More information can be found here: https://www.hayward-ca.gov/your-government/documents/general-plan/housing-element/housing-resources
- *Parcel Group 7*: A portion of this site fronting Mission Blvd was sold and developed with an approximately 50,500 square foot Subaru dealership, which has completed construction and is operational. The City still owns the rear, or eastern, part of the site and has intentions for residential development, however there is no current agreement in place.
- *Parcel Group 8*: On May 24, 2022, the City of Hayward approved an application to construct 96 supportive housing units for very-low- and low-income households, including approximately 3,800 square feet of ground floor commercial space on the southeastern corner of Grove Way and Foothill Boulevard. The project is not yet under construction.
- *Parcel Group 9*: This site was rezoned from high density residential to general commercial to allow for flexibility in potential future uses of the site. There are currently no applications to develop the site.

In addition to the construction of new housing units, the existing housing stock is undergoing significant rehabilitation. Nearly 33% of Hayward's housing stock (about 17,470 units) was constructed prior to 1960.[19] Some of these homes, which are more affordable than new and existing homes in other Bay Area communities, are being renovated and upgraded over time, including the installation of water efficient landscaping where currently it is minimal or non-existent. Hayward encourages renovation efforts with funding programs to clean up, upgrade, and landscape common areas within neighborhoods and to assist homeowners in rehabilitating private properties.

All of these factors were accounted for in the residential demand projections, with consideration of new development of both single family and multi-family units, persons per household, and upgrades to existing properties.

**Commercial and Institutional**

Commercial businesses include a typical mix of office-type services, specialty and big box retail stores, auto dealerships, dining establishments, and a regional shopping center. Hayward's economic development goals include diversification of the economic base, support of entrepreneurship and innovation, and expansion of employment opportunities. Hayward is implementing strategies to attract and retain restaurants and retail stores that will serve Hayward residents and encourage them to conduct business locally.

Hayward continues to encourage business activity in the downtown area to provide a venue for cultural events and remain a center of social, political, and civic functions. The retail space that was built as part of a 12-screen theater is nearing full capacity with food-related and other complementary uses; additional redevelopment efforts are underway throughout the area.

In addition to downtown, other areas specifically identified for commercial and mixed-use development include:

- South Hayward BART Area

[19] Housing element portion of 2040 General Plan: https://www.hayward-ca.gov/your-government/documents/general-plan/housing-element/housing-resources

- Mission/Foothill Corridor
- Downtown
- Hesperian Blvd Corridor, including Southland Mall

Hayward's two regional public post-secondary educational institutions, CSUEB and Chabot Community College, each have student populations of about 13,000. CSUEB has a Master Plan[20] that envisions a student population of 18,000 full-time student equivalents (25,000 individual students), an increase of about 40%. Additional student housing is expected to increase the number of on-campus beds from 1,200 to 5,000 at buildout in 2030. CSUEB's Master Plan projects possible additional water demand of 528,000 gallons per day (gpd), although enhanced water conservation efforts may reduce actual future demand. For the first time since the COVID-19 pandemic, CSUEB experienced an enrollment increase in the Fall 2025 semester. Growth is being driven by a rise in California residents and state-side students. Chabot Community College is also implementing its 2018 Facilities Master Plan[21] to guide campus development, including additional teaching space. The Facilities Master Plan estimates that 15,000 students will be enrolled at Chabot by 2032, a 17% increase from current enrollment.

Life Chiropractic College West, a private institution, is a college of chiropractic studies located in Hayward's industrial corridor. Life Chiropractic has a current enrollment of about 600 students, and its Strategic Plan[22] for 2019-2025 (extended to 2027) envisions continued growth in enrollment. Life Chiropractic plans to relocate its facilities to the CSUEB Campus by mid-2027.

**Industrial**

Hayward has a large and diverse industrial sector, including food and beverage manufacturing, advanced research and manufacturing, biotechnical research and development, data centers, cannabis cultivation, and a wide range of other businesses. Hayward's central Bay Area location, availability of land zoned for industrial use, and reasonable land and lease costs have attracted a large number and variety of businesses. There is also significant potential for underutilized properties now occupied by warehouses to be converted to research and development or manufacturing facilities. Job growth in Hayward is expected to be about 3.8% annually between 2025 and 2050 (based on the Demand Study and East Bay Works Economic & Workforce Analysis[23]).

The Economic Development Element of Hayward's 2040 General Plan includes strategies to encourage and support economic growth and diversification, including advanced and specialized manufacturing, clean and green technology, and knowledge and innovation-based technology. Many of the businesses located in Hayward have significant process water use. Because it is not possible to anticipate precise future industrial water use, Hayward has included 300,000 gpd above normal expected additional industrial water use to accommodate new industries. This increase in industrial use is incorporated in previous and projected demands, and evident in the projected industrial water use from actual 2025 industrial water use (presented in Table 4-1) and projected year 2030 industrial use (shown in Table 4-2).

## Codes and Other Considerations Used in Projections

Water savings from codes, standards, ordinances, and land use planning, also known as *passive savings*, generally decrease water use for new and future customers compared to existing customers. However, some ordinances and standards may also apply to existing customers, such as plumbing code changes resulting in

[20] CSUEB, Hayward Campus Master Plan: https://www.csueastbay.edu/facilities-design/master-plan/index.html

[21] Chabot College Facilities Master Plan: https://www.chabotcollege.edu/governance/facilities-infrastructure-technology-committee/projects/facilities-master-plan.php

[22] Life Chiropractic College, Strategic Plan 2019–2025 (extended to 2027): https://lifewest.edu/about/strategic-plan

[23] East Bay Works, Economic & Workforce Analysis (Program Years 2025–2028). https://www.eastbayworks.com/wp-content/uploads/2025/03/EBW-Economic-WorkforceAnalysis-PY25-28.pdf

lower water use related to fixture and appliance replacements. Suppliers are required to state the extent to which passive savings are considered in their water use projections, as noted in Table 4-3.

The water demand projections in Table 4-2 are based on analysis of historic metering data and projected growth in population, jobs, and development presented in the Demand Study. The projections include reductions due to "plumbing code" upgrades and reflect on-going change-outs of existing plumbing fixtures to more water efficient devices, as well as the implementation of active conservation measures by Hayward.

Retail Suppliers are required to include any estimated passive savings expected in their water-use projections pursuant to Water Code Section 10631(d)(4)(A) and future water projections needed for lower income residential (i.e., those with income below 80% of area median income, adjusted for family size) water use pursuant to CWC Section 10631.1. This section documents Hayward's best effort to do so. However, it should be noted that Hayward does not use this estimate for planning purposes.

Projected water use by lower income households is estimated by multiplying the projected housing need for the City by the average household size and assumed per capita water use. The most recent source of data for low-income housing units for Hayward is the 2023-2031 Housing Element, adopted on January 24, 2023.

**Table 4-3. Inclusion in Water Use Projections**

| **Submittal Table 4-3 Retail: Inclusion in Water Use Projections<br>Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)** | |
|---|---|
| **Are Future Water Savings Included in Projections?** | Yes |
| If "Yes" to above, **state the section or page number**, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. | Section 4.2.5 |
| **Are lower Income Residential Demands included in Projections?** | Yes |
| **Notes:** (1) Projected water use by lower income households is estimated by multiplying the projected housing need for Hayward by the average household size and assumed per capita water use; (2) The most recent source of data for low-income housing units for Hayward is the 2023-2031 Housing Element, adopted on January 24, 2023; and (3) Water usage for lower income housing units is included in the overall water demand projections. | |

## 4.3 Distribution System Water Loss

Distribution system water losses (also known as "real losses") are the physical potable water losses from the pressurized water distribution system and the storage facilities up to the point of delivery to the customer's system (e.g., up to the residential water meter) calculated using AWWA's Method (Title 23 California Code of Regulations [CCR] Section 638.1 et seq.). This is the sum of the AWWA Method real losses and apparent losses.

These losses are categorized as:

- Apparent losses – Due to meter inaccuracies, data errors and theft. The water is consumed but is not properly measured and accounted for.
- Real losses – Due to system leaks and breaks.
- Non-revenue water – Due to unbilled authorized uses such as fire suppression and hydrant flushing.

In the 2025 UWMP, distribution system water loss for each of the five years preceding the plan update must be reported (CWC Section 10631(d)(3)) in accordance with the rules adopted pursuant to CWC Section 10608.34.

Hayward has a longstanding and active commitment to monitoring and addressing distribution system water losses. Historically, non-revenue water has been a relatively small percentage in relation to total water deliveries, typically between 6% and 9% of total water system input. However, this percentage increased beyond an acceptable level in 2010, prompting Hayward to take action.

To better understand the nature of non-revenue water, Hayward completed its first detailed Water Audit and Component Analysis of Real and Apparent Losses in 2011 using the AWWA method. This method uses known factors, such as system input volume, authorized consumption, and revenue water, to determine water losses.

The 2011 Audit indicated real losses of about 14% based on 2009 data. Although this was an estimate because information needed for more precise calculations was not available, the percentage was significant enough to initiate immediate and aggressive action. A comprehensive leak detection and repair effort was implemented to locate leaks in the distribution system, including all service connections. Also, since some of the loss potentially resulted from high-system pressure in certain locations, a pressure management program was put in place. Through these efforts and other measures, real losses have been reduced significantly.

Annual Water Loss Audit reports are completed by Hayward on a calendar year basis and submitted to DWR. Table 4-4 shows report submittal information with links provided for the last five years (2020-2024).

**Table 4-4 (DWR Submittal Table 4-5). Water Loss Audit Reporting**

| Submittal Table 4-5 Retail: Water Loss Audit Reporting - Water Code Section 10631(d)(3)(A) | | | |
|---|---|---|---|
| **Public Water System ID # Reported in Table 2-1 R** | Reporting Period | Submitted to DWR Water Loss Audit Program | Link to the WUEdata submittals of their Water Loss Audit Reports |
| CA0110006 | **2020** | Yes | https://wuedata.water.ca.gov/public/awwa_uploads/4167600333/Hayward%20City%20of%20-%20CY2020%20Validated%20Water%20Audit.xls |
| | **2021** | Yes | https://wuedata.water.ca.gov/public/awwa_uploads/1966626822/Hayward%20CY2021%20Validated%20Water%20Loss%20Audit%20%28v5%29.xls |
| | **2022** | Yes | https://wuedata.water.ca.gov/public/awwa_uploads/4810437858/Hayward%20Water%20Loss%20Audit%20-%20v6.0%20-%20Validated%20%281%29.xlsx |
| | **2023** | Yes | https://wuedata.water.ca.gov/public/awwa_uploads/2121946036/CY23%20Water%20Loss%20Audit%20-%20Validated.xlsx |
| | **2024** | Yes | https://wuedata.water.ca.gov/public/awwa_uploads/7658643424/01%5FCity%20of%20Hayward%2020250903%20%2D%20Validated%20CY24%20Water%20Loss%20Audit.xlsx |
| **Notes:** Hayward utilizes the AWWA Water Auditing Software to complete the annual Non-Revenue Water Loss Audit Report to DWR. Links for each of the audit reports submittals are included for the latest planning period. | | | |

In Table 4-5, Hayward demonstrates achievement of the Water Loss Performance Standard. Information associated with the applicable standards is summarized below, along with relevant information for converting between the performance standard and water loss volumes to determine progress toward meeting the 2028 water loss standard. Submittal of this table and relevant data does not constitute compliance with the Water Loss Control Regulation, which is governed by the SWRCB. These results indicate that Hayward is currently performing within both the real and apparent water loss standards established for 2028.

**Table 4-5 (DWR Submittal Table 4-6). Progress Towards 2028 Water Loss Standard**

| Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard - Water Code Section 10631(d)(3)(C) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Real Water Loss | | | | | Apparent Water Loss | | | | |
| | | State Water Board Standard | | Most Recent AWWA Water Loss Audit | | | State Water Board Standard | | Most Recent AWWA Water Loss Audit | | |
| Public Water System ID # | Water Board Water Loss Standard | 2028 Real Water Loss Standard per Unit per day | Units for Real Water Loss | Number of Units (Connections or Miles) | Volume of Total Real Loss (MG) | Real Water Loss Per Unit per Day | 2028 Apparent Water Loss Standard per Unit per Day | Units for Apparent Water Loss | Number of Connections | Volume of Total Apparent Loss (MG) | Apparent Water Loss Per Unit per Day |
| CA0110006 | Yes | 22.5 | Gallons per Service Connection per Day (GPSCD) | 38,085 | 290.226 | 20.9 | 4.8 | Gallons per Service Connection per Day (GPSCD) | 38,085 | 45.873 | 3.3 |
| **Notes:** (1) The Calendar Year 2024 Water Auditing Software Report and Water Board's Calculated Water Loss Standards Table were used to complete this table; and (2) The total number of connections include active and inactive connections. | | | | | | | | | | | |

## 4.4 Climate Change Considerations

The types of climate change impacts considered in the water use projections include water demands and temperature variations. These impacts, as well as scientific information used, are described in the next section.

Hotter and drier weather may lead to an increased demand in landscape irrigation. The Demand Study model reflects the historical relationship of Hayward's water demand with weather and then incorporates modeled weather under future climate change conditions into the Demand Study demand projections. Therefore, the demand projections presented in Section 4.2 include considerations of climate change. A description of the weather and climate change data incorporated into Hayward's demand model is provided in Section 5.4 of the Demand Study (BAWSCA, 2025).

### 4.4.1 Water Demand Impacts and Analysis

Climate change is expected to increase variability in precipitation patterns across the Bay Area, resulting in more frequent swings between very wet and very dry years. This variability will influence water demand, with higher demand during dry periods and lower demand during wetter years. In addition, the region is likely to experience more intense winter storms, which may increase the risk of flooding and infrastructure impacts. Rising temperatures are also projected to contribute to longer and more severe droughts, posing challenges for water supply reliability.

To better understand these potential impacts, climate projection data were incorporated into regional demand planning efforts. Downscaled climate data from the Cal-Adapt Local Climate Change Snapshot tool,[24] based on CMIP5 models, were used to evaluate projected changes in temperature and precipitation for Alameda, San Mateo, and Santa Clara Counties. These projections, including scenarios based on Representative Concentration Pathway (RCP) 4.5 and 8.5, were analyzed for the period 2025 through 2050 and included as potential inputs to the demand model. Table 4-6 summarizes the estimated increases in temperature between 2025 and 2050.

**Table 4-6. Average Annual Maximum Temperature Increases in 2050 (Relative to 2025)***

| County | RCP 4.5 | RCP 8.5 |
|---|---|---|
| **Alameda** | 1.20 °F | 2.03 °F |
| **Santa Clara** | 1.25 °F | 2.05 °F |
| **San Mateo** | 1.06 °F | 1.77 °F |

* Derived from Cal-Adapt CMIP5 RCP 4.5 and RCP 8.5.

Findings from California's Fourth Climate Change Assessment indicate that the Bay Area's historical temperature increased by approximately 1.7 degrees Fahrenheit between 1950 and 2005 (Ackerly et al., 2018). Annual mean maximum temperatures are projected to increase by about 1-2 degrees Fahrenheit during the early 21st century (2006–2039), followed by an additional increase of approximately 3.3 degrees Fahrenheit during the mid-century period (2040–2069). Under a high-emissions scenario, this mid-century increase could reach up to 4.4 degrees Fahrenheit. For planning purposes, these projections were translated into average annual temperature increases and combined to reflect expected conditions over the 2025–2050 planning horizon.

The Demand Study incorporates these climate change assumptions to capture the effects of temperature and precipitation variability on water use, particularly outdoor and seasonal demand. Multiple climate scenarios were developed using Global Climate Models and RCPs to represent a range of potential future conditions. These scenarios were selected to bracket plausible extremes as well as moderate outcomes, ensuring that planning

[24] CMIP5 Local Climate Change Snapshot Tool. https://cmip5.cal-adapt.org/tools/local-climate-change-snapshot

efforts consider both the risks of more intense drought conditions and the possibility of less severe climate impacts.

For the purposes of the 2025 UWMP, climate-adjusted demand projections are applied through 2050. This approach supports a robust evaluation of future water needs under changing climate conditions and helps ensure that Hayward's water supply planning remains resilient in the face of uncertainty.

### 4.4.2 Sea Level Rise

According to the San Francisco Bay Conservation and Development Commission (BCDC), historical records show that sea level in San Francisco Bay has risen 18-20 cm (7 inches) over the past 150 years.[25] The *State of California Sea-level Rise Guidance,*[26] updated in 2024, recommends using three risk projections until 2050 for projects in the San Francisco area with a lifespan to 2050, under a high-emissions scenario (RCP 8.5):

- Low risk aversion projection: 1.1 feet
- Medium-high risk aversion projection: 1.9 feet
- Extreme risk aversion projection: 2.7 feet

For highly vulnerable or critical assets that have a lifespan beyond 2050 and would result in significant consequences if damaged, the extreme risk aversion projection is recommended to be included in planning analyses. The range of low, medium-high, and extreme risk aversion projections should be evaluated across the range of high and low emissions scenarios (RCP 8.5 and RCP 2.6, respectively). For example, for a project with a lifespan to 2100, the recommended range of projections is as follows:

- Low risk aversion projection: 2.4 - 3.4 feet
- Medium-high risk aversion projection: 5.7- 6.9 feet
- Extreme risk aversion projection: 10.2 feet

SFPUC is aware that the effects of climate change require regular assessments and updates to reflect improvements in climate science, atmospheric/ocean modeling, and human response to the threat of greenhouse gas emissions. Both SFPUC and BAWSCA participated in the 2013 update of the Bay Area Integrated Regional Water Management Plan (BAIRWMP),[27] which included an assessment of the potential climate change vulnerabilities of the region's water resources and identified climate change adaptation strategies. Also, the threat to local water system infrastructure due to climate change is being studied under Hayward's overall Risk and Resiliency Assessment currently in development.[28] A discussion of the potential impacts of climate change on water supply is in Section 6.1.3.

Looking ahead, SFPUC, Hayward's potable water supplier, periodically updates their Climate Action Plan to identify various climate scenarios that could impact the SFPUC Regional Water System (RWS). SFPUC's Climate Action Plan addresses climate change adoption measures to ensure a continued supply of high-quality water for the BAWSCA member agencies. In addition, SFPUC continues to study the effect of climate change on the RWS. A detailed discussion about drought and potential impacts and mitigations to long-term climate change by the SFPUC are discussed in Chapter 6.

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[25] San Francisco BCDC: https://www.bcdc.ca.gov/local-sea-level-rise-plans/

[26] California Natural Resources Agency and California Ocean Protection Council. (2024). State of California Sea-Level Rise Guidance, 2024 Update. opc.ca.gov/wp-content/uploads/2024/05/California-Sea-Level-Rise-Guidance-2024-508.pdf

[27] **S**an Francisco Bay Area Integrated Regional Water Management Plan (2013 Update)**:** https://bayareairwmp.org/wp-content/uploads/2017/05/san-francisco-bay-area-irwmp-final_september-2013a.pdf

[28] U.S. EPA. (2024). Risk and Resilience Assessments and Emergency Response Plans. https://www.epa.gov/system/files/documents/2024-07/awia-sdwa1433-factsheet.pdf


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

**Lay Description**

The Water Conservation Act of 2009, also known as Senate Bill (SB) X7-7, mandated a 20% reduction in urban per capita water use across California by 2020. To achieve this goal, SB X7-7 required each Supplier to establish an urban water-use target, contributing to the state's collective efforts. The California Legislature stated that the combined reductions from all Supplier's would fulfill the statewide legislative mandate.

To be eligible for water-related state grants and loans, Suppliers are required to comply with SB X7-7 individually or as a region in collaboration with other Suppliers or demonstrate they have a plan or have secured funding for compliance.

The goal of this chapter is to allow the Supplier to report on its progress toward meeting its urban water-use targets in its UWMP, pursuant to CWC Section 10608.40. Suppliers that did not meet their 2020 target in 2020 are required to compare their 2025 water use to the 2020 target.

**GPCD Terminology**

When determining water use in a UWMP, two terms are often used interchangeably:

- **Daily Per Capita Water Use** – The amount of water used per person per day. In the UWMP calculations, this is total water use within a service area divided by population and measured in gallons.
- **Gallons Per Capita Per Day (GPCD)** – This is the daily per capita water use as measured in gallons. Therefore, the term commonly used when referring to daily per capita water use is "gallons per capita per day" or GPCD.

It is important to distinguish GPCD (as used in UWMPs) from the Residential GPCD (R-GPCD) that is used in some reporting to the SWRCB. GPCD is the total water use from all sectors within a service area (residential, commercial, institutional, and any others) minus allowable exclusions (as defined in SB X7-7), then divided by the population. R-GPCD is only a part of the GPCD, the estimated residential water use in a service area divided by population.

## 5.1 Reporting Requirements

Hayward met its 2020 SB X7-7 Target in a timely manner as verified in Table 5-1. Chapter 9 contains a discussion of programs implemented to support the achievement of Hayward's per capita water reduction goals.

**Table 5-1. SB X7-7 2020 Target Progress**

| Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress - Water Code Section 10608.40 | | | | |
|---|---|---|---|---|
| Was Supplier part of a merger or consolidation since 2020? | Regional Alliance Target or Individual Target? | 2020 Target | Actual 2020 GPCD | Did Supplier Achieve Targeted Reduction for 2020? |
| No | Individual Target | 124 | 87 | Yes |
| **Notes:** Targeted reduction for 2020 information was provided in the 2020 UWMP. | | | | |

## 5.2 Nexus to State Water Board Urban Water-Use Objectives

In July 2024, California enacted the "*Making Conservation a California Way of Life*" Regulation (implementing SB 606 and AB 1668) to support long-term water conservation and drought resilience. The Regulation established annual Urban Water Use Objectives (UWUO) for water suppliers and introduced Performance Measures for commercial, industrial, and institutional (CII) water users.

The UWUO is a water-budget-based framework tailored to each supplier. It consists of the following components:

1. Residential indoor water use standard
2. Residential outdoor water budget
3. CII landscape outdoor water use standard (for landscapes with dedicated irrigation meters)
4. Water loss standard
5. Variance
6. Potable reuse bonus

Beginning in 2027, suppliers must annually assess whether the sum of their regulated water uses (i.e., residential indoor and outdoor, dedicated irrigation meter use, and water loss) is at or below their UWUO. The state standards for residential indoor and outdoor water use and for CII outdoor use will become increasingly stringent over time, potentially requiring additional conservation efforts to achieve compliance.

Urban retail water suppliers must report annually to the state on their water use relative to their UWUOs. Because compliance with the UWUO requirements falls under the authority of the State Water Resources Control Board (SWRCB), UWUO compliance projections are not required as part of an UWMP per the 2025 UWMP Guidebook. Therefore, UWUO projections are not included herein.


# 6 SYSTEM SUPPLIES

**Lay Description**

This chapter characterizes Hayward's system supplies, including purchased or imported water, groundwater, surface water, wastewater, recycled water, and future water projects. Each source is described in terms of its capacity, operational role, constraints, and contribution to meeting current and projected water demands.

In addition, this section incorporates an assessment of climate change conducted by Hayward's wholesale water provider and information about the potential impacts of changing climate conditions on the availability, reliability, and quality of these water sources. The assessment considers how shifts in temperature, precipitation patterns, and hydrologic conditions may affect both imported and local supplies. The "Total Utility Approach" energy-related data is also reported in this chapter to account for water-related energy use across its system.

To maintain consistency with the UWMPs prepared by SFPUC and the other BAWSCA member agencies, much of the language in the following sections describing the SFPUC wholesale water supply and its vulnerabilities is common language provided by BAWSCA (EKI, 2026) in coordination with SFPUC.

Information in this chapter provides a foundation for understanding system vulnerabilities and other considerations that may influence future water supply planning. This foundation, coupled with the characterization of available resources, supports the City's long-term efforts to ensure a resilient and reliable water supply.

## 6.1 Water Supply Analysis Overview

The water supply analysis focuses on evaluating each water supply component as a distinct asset, with an emphasis on understanding its capacity, operational constraints, vulnerabilities, and long-term reliability. By developing a detailed and accurate characterization of these supplies, the City is better equipped to manage its water resources, identify potential risks, and plan for a range of hydrologic conditions. This level of analysis supports informed decision-making, strengthens the assessment of overall supply reliability, and provides a critical foundation for Hayward to perform its Drought Risk Assessment (DRA) and prepare and implement its Water Shortage Contingency Plan (WSCP).

This section identifies and quantifies, to the extent practicable, existing and planned sources of water available to Hayward in five-year increments over a 25-year period.

### 6.1.1 Imported Water Supply Reliability Considerations

SFPUC relies heavily on reservoir storage and Sierra Nevada snowpack to manage seasonal variability and maintain the reliability of its RWS. As Hayward depends entirely on imported water from this system, the availability of supply is influenced by a combination of climatic, hydrologic, infrastructure, and institutional factors. The primary source, the Tuolumne River watershed, is governed by regulatory requirements, environmental conditions, and water allocation agreements that affect how water is stored, managed, and delivered. In addition, physical constraints such as conveyance capacity and infrastructure performance further influence the volume of water available to Wholesale Customers, including Hayward.

In managing its water supply portfolio, Hayward recognizes that these factors introduce uncertainty and variability into supply availability. Accordingly, the City evaluates a broad range of considerations when assessing current and future water supplies, including climate conditions, regulatory requirements, projected population and economic growth, and local operational factors. These considerations are critical for understanding system vulnerabilities and are integral in assessing water supply reliability under a range of conditions, including normal years, single dry years, and extended multi-year droughts. This comprehensive approach supports the City's DRA and long-term water supply planning efforts, helping ensure a resilient and reliable water system.

### 6.1.2 Hydrological Conditions and Climate Change

Climate change introduces additional uncertainty and risk to both the Tuolumne River watershed and local Bay Area water systems. Anticipated impacts include reductions in average Sierra Nevada snowpack due to rising temperatures, leading to higher snowlines, diminished snow accumulation at lower elevations, and earlier snowmelt runoff. Precipitation patterns are also expected to shift, with changes in timing, intensity, and variability, and a greater proportion of precipitation falling as rain rather than snow. These changes may reduce the natural storage benefits of snowpack and increase the complexity of reservoir operations.

Changes in watershed vegetation and an increased frequency and severity of wildfires can also degrade water quality and affect supply reliability. Increased evaporation rates could further strain water supplies by reducing reservoir storage and increasing irrigation demand. Additionally, shifts in urban water demand patterns are expected because of changing climate conditions. By accounting for these uncertainties in its water supply analysis, Hayward is better positioned to evaluate risks, enhance system resilience, and ensure a reliable water supply under a wide range of future conditions.

### 6.1.3 SFPUC Climate Change Vulnerability Assessment

SFPUC considers the assessment of climate change impacts to be an ongoing and evolving effort, requiring regular updates as climate science, modeling capabilities, and observed data continue to improve. Since initiating formal climate research in 2009, SFPUC has progressively refined its understanding of how changing atmospheric and hydrologic conditions may affect the Regional Water System (RWS).

SFPUC partnered with the Water Research Foundation to develop a Long-Term Vulnerability Assessment (LTVA) of the RWS. Conducted by the University of Massachusetts Amherst Hydrosystems Research Group, with input from the National Center for Atmospheric Research and other experts, the LTVA evaluates how climate change and other external factors may affect the system's performance over a 50-year planning horizon (2020–2070). The study applies a vulnerability-based planning approach, analyzing a wide range of potential future scenarios, including variations in temperature, precipitation, demand, regulatory requirements, and water quality to identify system risks and inform flexible, adaptive management strategies. The LTVA was completed in 2021 and amended in 2024 to reflect the latest data and methodologies. The LTVA indicates that while climate change is an important factor, it is not the sole driver of system vulnerability. Rather, its effects often compound other stressors, such as increased demand and regulatory changes.

The key findings of the LTVA are:

- Climate change exacerbates impacts from other external drivers of change and is not the single most important driver of vulnerability for the RWS.
- The RWS at a baseline demand of 227 MGD is resilient to changes in climate and other external drivers.
- The RWS water supply performance declines with reductions in mean precipitation but is mostly insensitive to increases in temperature.

- The RWS is more vulnerable to changes in demand and instream flow requirements than changes in mean annual temperature and precipitation.
- The RWS is vulnerable to changes to mean climate when demand or regulatory in-stream flow requirements increase.

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

- According to climate projections and expert elicitations, there is a central tendency of warming of +2°C and +4°C by 2040 and 2070 (Representative Concentration Pathway [RCP] 8.5), respectively, with no clear direction of change in mean annual precipitation over the planning horizon.
- In the upcountry region, by 2040, most projections and elicitations of warming estimate between +1°C and +4°C, and precipitation changes range between -5% and +5%, compared to historical baseline; by 2070, estimates of warming range between +3°C and +6°C, and precipitation changes range between -15% and +15% (RCP8.5).
- Changes in hydrology due to climate change affect the RWS's ability to meet water supply targets. At 227 MGD baseline demand, the RWS can sustain up to +4°C and -5% precipitation change before failing to meet targets for delivery reliability, frequency of 20% rationing, storage reliability, and duration of rationing.
- Precipitation change is an important driver for the RWS performance. A decrease by 10% or more will cause the RWS water supply targets to be missed. The climate projections and expert elicitations show that such a change in precipitation is possible by 2040, although unlikely. The likelihood of this change increases toward 2070.
- The RWS shows minor sensitivity to temperature change for the metrics evaluated in this study. Most metrics stay above target under warming conditions. However, warming conditions often magnify the loss in system performance if precipitation or demand change.
- Demand change appears to be a major driver of future RWS performance. An increase in demand by 15% (265 MGD) will lead to failure to meet rationing frequency targets under current climate conditions. At 265 MGD demand, the rationing frequency targets would be met if there is an increase in precipitation of 10%. If demand increases by 30%, the rationing target cannot be met even when precipitation increases by 40%, which is believed plausible but unlikely over the planning horizon.
- The RWS is particularly vulnerable to the state-amended new instream flow requirements below Don Pedro Dam, which represents a huge reduction in water available. Under all demand and climate scenarios the system reliability, defined as frequency of years without rationing, remains below 5%.
- The RWS is also vulnerable to the draft Tuolumne Voluntary Agreement's instream flow requirements below Don Pedro Dam, which represent a large reduction in water available, although significantly less than for the state-amended new instream flow releases. The implementation of the draft Tuolumne Voluntary Agreement under current climate and demand conditions would reduce the system reliability to 75%, which corresponds to the effects of a reduction in average rainfall by 20% under the current Federal Energy Regulatory Commission agreement.

Overall, the LTVA highlights the importance of integrated, adaptive planning that accounts for multiple sources of uncertainty. By evaluating a wide range of plausible future conditions, SFPUC is better positioned to identify vulnerabilities and implement strategies that enhance the resilience and reliability of the RWS in the face of climate change and other evolving challenges.

### 6.1.4 Regulatory Conditions

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 implications of these regulatory changes for SFPUC's supply reliability, and thus Hayward's supply reliability, are discussed in Section 7.1. If Hayward moves forward with any plans to develop supply projects, emerging regulatory conditions will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

### 6.1.5 Future Supply Development

At this time, Hayward does not have plans to develop new potable water supply sources and will continue to rely on imported water from SFPUC. However, the City recognizes that evolving regulatory conditions may affect long-term supply reliability and regional water management strategies. Should Hayward pursue future potable supply development, these regulatory factors will be carefully evaluated, and potential impacts on water supply reliability will be incorporated into subsequent UWMP updates.

### 6.1.6 Other Locally Applicable Factors

Other locally applicable criteria may affect characterization and availability of an identified water supply (e.g., changes in regional water transfer rules may alter the availability of a water supply that had historically been readily available). Reliability of the RWS supply is further discussed in Chapter 7. If Hayward moves forward with any plans to develop supply projects, locally applicable criteria will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

Additionally, the Sustainable Groundwater Management Act (SGMA) introduces another regulatory framework that may affect future water resource considerations. Under SGMA, Groundwater Sustainability Agencies (GSAs) are authorized to implement projects and management actions to achieve basin sustainability, including establishing groundwater pumping allocations, restricting the development of new wells, and imposing fees based on extraction volumes.

Although Hayward does not rely on groundwater as a primary supply source and has no plans to expand its use beyond emergency purposes, the City will continue to evaluate how SGMA-related actions and other regulatory developments may influence future supply availability. Any such changes will be incorporated into future UWMP updates and water supply planning efforts.

## 6.2 Water Supply Characterization

The following sections describe and quantify Hayward's existing water supply portfolio, including imported water, groundwater resources, and recycled water.

### 6.2.1 Purchased or Imported Surface Water

Hayward purchases water from the SFPUC RWS in accordance with the 2009 Water Supply Agreement (WSA)[29] that was amended and restated in 2018, 2021, and 2025 between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties, initially approved by the SFPUC's Commission on April 28, 2009. As stated in the 2009 Water Supply Agreement, San Francisco has a perpetual commitment (Supply Assurance) to deliver 184 MGD to the 26 permanent Wholesale Customers (collectively referred to as the Wholesale Customers). As further explained below, the Supply Assurance is shared among 24

[29] Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties: https://www.sec.gov/Archives/edgar/data/1035201/000095012309060011/f53985exv10w3.htm

of the 26 Wholesale Customers (excluding the cities of San Jose and Santa Clara, which are classified as temporary, interruptible customers).

### 6.2.2 Wholesale Water Contractual Obligations

Under the terms of a 25-year contract known as the WSA between the City and the County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County, SFPUC sells water to 26 Wholesale Customers. SFPUC has associated individual water sales contracts with each Wholesale Customer, as well. Collectively, the Wholesale Customers receive over two-thirds of the RWS's annual deliveries, with the remaining approximately one-third provided to SFPUC's retail customers located inside and outside of San Francisco (collectively referred to as the Retail Customers). Of the 26 Wholesale Customers, 10 rely on SFPUC for 100% of their total supply. The remaining 16 Wholesale Customers rely on SFPUC for a significant portion of their water supply needs but also use other local and imported supplies to meet their retail water customers' demands, including, but not limited to, local groundwater and surface water, recycled water, and, in some cases, purchases from the Santa Clara Valley Water District and the State Water Project.

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

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

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

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

### 6.2.3 SFPUC RWS Description

Over 2.7 million people and thousands of businesses in the San Francisco Bay Area rely on water supplied by SFPUC, a department of the City and County of San Francisco, to meet their daily water needs. The San Francisco-owned and operated RWS, which serves both retail and wholesale customers, supplies high-quality drinking water from the Tuolumne River watershed and from the local Alameda and Peninsula watersheds. The RWS draws an average of 85% of its supply from the Tuolumne River watershed, collected in Hetch Hetchy Reservoir in Yosemite National Park. 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 these water sources varies from year to year depending on the water year hydrology and operational circumstances.

### 6.2.4 RWS Distribution

The RWS, shown in Figure 6-1, consists of more than 280 miles of pipelines, 60 miles of tunnels, 11 reservoirs, five pump stations, two water filtration plants, and two treatment facilities for pH adjustment and/or disinfection. It includes the Hetch Hetchy Water and Power Project and the Bay Area water system facilities. The Hetch Hetchy Water and Power Project is generally composed of the reservoirs, hydroelectric generation and transmission facilities, and water transmission facilities from the Hetch Hetchy Valley west to the Alameda East Portal of the Coast Range Tunnel in Sunol Valley. Water system components of the Hetch Hetchy Water and Power Project are also referred to as the Hetch Hetchy System. The local Bay Area water system is comprised of two parts—the Alameda System and the Peninsula System—generally consisting of the facilities west of the Alameda East Portal of the Coast Range Tunnel, including the 63,000-acre Alameda and Peninsula watersheds, storage reservoirs, two water filtration plants, and the distribution system that delivers water to both retail and wholesale customers. The Hetch Hetchy, Alameda, and Peninsula Systems are described in more detail below.

- **Hetch Hetchy System:** In the Hetch Hetchy System, water is diverted from the Tuolumne River watershed into the Hetch Hetchy Reservoir and is then transported in a series of tunnels and aqueducts from the Sierra Nevada to the San Joaquin Pipelines that cross the San Joaquin Valley to the Coast Range Tunnel, which connects to the Alameda System at the Alameda East Portal. Hetch Hetchy System water is disinfected at the Tesla Treatment Facility.
- **Alameda System:** The Alameda System includes two reservoirs, San Antonio Reservoir and Calaveras Reservoir, which collect water from the San Antonio Creek, Upper Alameda Creek, and Arroyo Hondo watersheds in Alameda County. San Antonio Reservoir also receives water from the Hetch Hetchy System. Conveyance facilities in the Alameda System connect the Hetch Hetchy System and Alameda System to the Peninsula System. The Bay Division Pipelines cross the South Bay to the Peninsula System delivering water to customers along the pipeline route. The Sunol Valley Water Treatment Plant (SVWTP) filters and disinfects water supplied from the San Antonio and Calaveras Reservoirs. The Sunol Valley Chloramination Facility treats Hetch Hetchy supplies with aqueous ammonia to form chloramines and with sodium hydroxide to adjust pH, then blends that into the Alameda Siphons for delivery to Bay Area customers via the Irvington Tunnels.
- **Peninsula System**: The Peninsula System includes conveyance facilities connecting the Bay Division Pipelines to the distribution system in San Francisco and to other customers on the Peninsula. Two reservoirs, Crystal Springs Reservoir and San Andreas Reservoir, collect runoff from the San Mateo Creek watershed. Crystal Springs Reservoir also receives water from the Hetch Hetchy System. A third reservoir, Pilarcitos Reservoir, collects runoff from the Pilarcitos Creek watershed and directly serves one of SFPUC's Wholesale Customers, the Coastside County Water District (which includes the City of Half Moon Bay), along with delivering water to Crystal Springs and San Andreas Reservoirs. The Harry Tracy Water Treatment Plant filters and disinfects water supplied from Crystal Springs Reservoir and San Andreas Reservoir before it is delivered to customers on the Peninsula and in San Francisco.

**Figure 6-1. SFPUC's Regional Water System and Main Facilities**


Source: SFPUC, Draft 2025 UWMP

### 6.2.5 Water Treatment

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

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

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

### 6.2.6 Water Storage

Most of the water delivered by the SFPUC is supplied by runoff from the upper Tuolumne River watershed on the western slope of the central Sierra Nevada. Three major reservoirs collect runoff from the Tuolumne River watershed: Hetch Hetchy, Cherry (also known as Lake Lloyd), and Lake Eleanor. The storage capacity of these three reservoirs is included in Figure 6-2. A "water bank" in Don Pedro Reservoir is also integrated into RWS operations. Don Pedro Reservoir, which is jointly owned and operated by Modesto Irrigation District and Turlock Irrigation District (collectively known as "the Districts"), is located on the Tuolumne River downstream of the Hetch Hetchy System.

The Districts have senior water rights compared to those held by the City and County of San Francisco for the Tuolumne River water diversions and are provided the first increment of flow in the Upper Tuolumne River watershed according to the apportionment set forth in the Raker Act of 1913 (38 Stat. 242).30 The water bank at Don Pedro Reservoir provides a credit and debit system, which allows the City and County to divert water upstream while meeting obligations to the Districts. Through this agreement, SFPUC may pre-deliver the Districts' Raker Act and contractual allocations and credit the water bank so that at other times SFPUC may retain water upstream that would otherwise be allocated to the Districts while the Districts debit the water bank.

San Francisco generates hydroelectric power through the Hetch Hetchy Water and Power Project as a by-product of water delivery and water supply management. Water released from Hetch Hetchy Reservoir is used for hydroelectric generation and provides instream flows when released downstream. Normally, only Hetch Hetchy Reservoir water supplies are exported to the Bay Area,

[30] United States Congress, Raker Act of 1913 (38 Stat. 242): https://hetchhetchy.org/wp-content/uploads/2023/09/Exhibit-1-The-Raker-Act.pdf

while releases from Lake Eleanor and Cherry Reservoir are used to provide instream flows, satisfy the Districts' Raker Act allocations, and produce hydroelectric power. The Hetch Hetchy Water and Power Project includes four hydroelectric powerhouses along the Tuolumne River—Holm, Kirkwood, Moccasin, and Moccasin Low Head—that have a collective generating capacity of nearly 400 megawatts.

In the Bay Area, SFPUC utilizes the local Peninsula and Alameda watersheds. Crystal Springs, San Andreas, and Pilarcitos Reservoirs, located in San Mateo County, capture local runoff in the Peninsula watershed, and Calaveras and San Antonio Reservoirs, located in Alameda County, capture local runoff in the Alameda watershed. In addition to capturing local runoff, San Andreas, San Antonio, and Crystal Springs Reservoirs provide storage for water conveyed to the Bay Area from the Hetch Hetchy System. These five local reservoirs are an important water supply source in the event there is an interruption to Hetch Hetchy System deliveries. The storage capacity of each of these Bay Area reservoirs is included in Figure 6-2.

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

**Figure 6-2. SFPUC's Regional Water System Storage Capacity**

| RWS Reservoir | Storage Capacity in Acre-Feet (AF)[a] | Storage Capacity in Billions of Gallons (BG) |
|---|---|---|
| Up-Country[a] | | |
| Hetch Hetchy | 360,360 | 117.4 |
| Cherry[c] | 273,345 | 89.1 |
| Lake Eleanor | 27,100 | 8.8 |
| Water Bank[d] | 570,000 | 185.7 |
| **Subtotal Upcountry** | **1,230,805** | **401.1[e]** |
| Local | | |
| Calaveras (Alameda) | 96,670 | 31.5 |
| San Antonio (Alameda) | 53,266 | 17.4 |
| Crystal Springs (Peninsula)[f] | 68,953 | 22.5 |
| San Andreas (Peninsula)[g] | 18,675 | 6.1 |
| Pilarcitos (Peninsula)[h] | 3,125 | 1.0 |
| **Subtotal Local** | **240,689** | **78.4[i]** |
| **Total RWS Storage[j]** | **1,471,494** | **479.5** |

a Storage values are rounded to whole numbers for larger reservoirs.
b Three other regulating reservoirs are also part of the RWS: Early Intake, Priest, and Moccasin Reservoirs.
c Storage capacity shown includes flashboards, which are structures placed in a spillway to increase the capacity of a reservoir.
d The SFPUC may draw against a credit of up to 740,000 AF in storage in a water bank account in Don Pedro Reservoir; 170,000 AF of this water bank storage is only available under certain circumstances and for a limited time. For this reason, the SFPUC considers 570,000 AF in contributing to total storage for planning purposes.
e Rows above do not sum to total due to rounding.
f Crystal Springs Reservoir has a maximum storage capacity of 22.5 BG (at 294.6 feet). Based on permit conditions, the reservoir is currently operated at 286.6 feet (8 feet below capacity).
g San Andreas Reservoir has a maximum storage capacity of 6.1 BG (at 451.8 feet). Since August 2020, in response to safety concerns about the seismic stability of the dam and a directive from the Division of Safety of Dams, the SFPUC has held the maximum water level at approximately 447.8 feet (4 feet below capacity).
h Pilarcitos Reservoir has a maximum storage capacity of 1.0 BG (at 696.5 feet). Since April 2025, in response to safety concerns about the seismic stability o the dam and a directive from the Division of Safety of Dams, the SFPUC has held the maximum water level at approximately 681.5 feet (15 feet below capacity).
i Rows above do not sum to total due to rounding.
j For planning purposes, the total RWS storage is 1,471,494 AF. This includes 63,700 AF in dead storage (i.e., the volume in a reservoir below the lowest controllable level).

Source: SFPUC Draft 2025 UWMP

### 6.2.7 Future SFPUC Water Supply Decisions

In the 2009 WSA, the SFPUC committed to making two key decisions regarding future water supply conditions by the end of 2018, contingent upon completion of any required environmental review under the California Environmental Quality Act (CEQA). These decisions included whether to:

- Grant the cities of San Jose and Santa Clara permanent customer status within the RWS, based on the availability of sufficient long-term supplies.
- Increase the existing Supply Assurance limit of 184 MGD to accommodate future demand from Wholesale Customers.

Prior to the 2018 deadline, SFPUC determined that it was prudent to defer these decisions due to several uncertainties, including variability in future water supply availability, evolving growth patterns across the Bay Area, and significantly lower than anticipated water demand. Updated projections at the time indicated that total Wholesale Customer demand, including San Jose and Santa Clara, which are not subject to the 184 MGD Supply Assurance, would reach approximately 173.9 MGD by 2040, remaining below the existing supply threshold. In response, SFPUC and its Wholesale Customers amended the WSA in 2018 to defer these decisions until the end of 2028. This extension allows for continued evaluation of long-term supply and demand conditions, refinement of demand forecasts, assessment of potential supply options, and completion of any necessary CEQA review.

Current projections continue to indicate that total Wholesale Customer demand, including that of San Jose and Santa Clara, will remain below the 184 MGD Supply Assurance through at least 2050.

SFPUC's ongoing planning efforts related to these decisions are being carried out as part of its Alternative Water Supply Program.

### 6.2.8 Groundwater and Basin Description

Local groundwater production wells were originally used as the primary source of Hayward's water supply. However, in 1962, Hayward entered into an agreement with SFPUC to purchase potable water supply for Hayward's needs from the SFPUC RWS and ceased to pump groundwater in 1963.[31] Groundwater is now only used as an emergency supply by Hayward.

As shown in Figure 6-3, Hayward overlies portions of two groundwater basins, the southern portion of the East Bay Plain Subbasin and the northern portion of the Niles Cone Subbasin. Hayward currently has three emergency wells located in the East Bay Plain Subbasin and one emergency well in the Niles Cone Subbasin. Hayward coordinated with the Alameda County Water District (ACWD) to establish the boundary limits between the two basins as documented in the respective Groundwater Sustainability Plans (GSPs: City of Hayward, 2022; Alameda County Water District, 2016).

As described in detail in the next section, with the passage of the SGMA in 2014, and through Hayward's formation of a GSA in 2017,[32] Hayward has assumed active management of the underlying East Bay Plain Subbasin with EBMUD and evaluates sustainable use and management of the Subbasin. This information is included in the GSP for the Subbasin that was initially adopted in 2022. GSPs are required to be updated at least every five years; the East Bay Plain Subbasin GSP update is under development and will be submitted in 2027.

[31] Luhdorff & Scalmanini Consulting Engineers. (2020). Technical Memorandum 4.1, dated June 2020.

[32] City of Hayward. (2017). City Council Resolution 17-014: https://www.hayward-ca.gov/sites/default/files/GSA%20Formation%20Resolution.pdf

**Figure 6-3. Groundwater Basins Underlying the City of Hayward**


Source: City of Hayward (2026)

## East Bay Plain Subbasin

The East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin (DWR Basin No. 2-009.04) is not adjudicated and, in its recent evaluation of California groundwater basins, DWR determined that the Basin is not in a condition of critical overdraft.[33]

The East Bay Plain Subbasin covers an area of approximately 71,315 acres. DWR defines the lateral basin boundaries as follows, *"…a northwest trending alluvial plain bounded on the north by San Pablo Bay, on the east*

[33] DWR. (2020). *Sustainable Groundwater Management Act 2019 Basin Prioritization*. https://water.ca.gov/programs/groundwater-management/basin-prioritization

*by the contact with Franciscan Basement rock, on the south by the Niles Cone Groundwater Basin. The East Bay Plain Basin extends beneath San Francisco Bay to the west*."[34] The Basin's extent was revised by DWR as part of the 2016 Basin Boundary Modification process wherein the southern boundary of the Basin was redefined to follow an interpretation of the ACWD jurisdictional boundary for purposes of groundwater management.[35]

The East Bay Plain Subbasin is designated as a medium priority basin under DWR's 2019 Phase 2 Basin Prioritization.[36] Under this prioritization process, basins are ranked on eight components, and if a basin is assigned more than 14 total points, it is defined as "medium priority." The main factors driving this designation in the East Bay Plain Subbasin included population density (5 out of 5 possible points), population growth (1 out of 5 possible points), total number of wells (5 out of 5 possible points), public supply well density (1 out of 5 possible points), groundwater reliance (1 out of 5 possible points), and documented impacts including sea water intrusion, subsidence, and water quality impacts (4 out of 5 possible points).[37] As further discussed below, as a medium priority basin, it is subject to the requirements of SGMA.

Hayward coordinated with EBMUD on development of the East Bay Plain Subbasin GSP which establishes a framework for sustainable groundwater management. EBMUD and Hayward, the exclusive GSAs for their respective service areas, jointly prepared the GSP in compliance with California Code of Regulations Title 23, Section 354. The GSP characterizes groundwater conditions, defines a sustainability goal and sustainable yield, and identifies projects and management actions to ensure sustainable management through 2042 and beyond while avoiding the six undesirable results under the SGMA.

The GSP was adopted on January 312022, and is available on Hayward's website: https://www.hayward-ca.gov/your-government/departments/utilities/sustainable-groundwater-management

### Niles Cone Subbasin

The Niles Cone Subbasin of the Santa Clara Valley Groundwater Basin (DWR Basin No. 2-009.01) is not adjudicated and, in its recent evaluation of California groundwater basins, DWR determined that the basin is not in a condition of critical overdraft. The Niles Cone Subbasin is designated as a medium priority basin under DWR's 2019 Phase 2 Basin Prioritization.[38]

The Niles Cone Subbasin is designated as a medium priority basin under DWR's 2019 Phase 2 Basin Prioritization. The main factors driving this designation included population density (4 out of 5 possible points), population growth (2 out of 5 possible points), total number of wells (2 out of 5 possible points), public supply well density (3 out of 5 possible points), groundwater reliance (2 out of 5 possible points), and documented impacts including sea water intrusion, subsidence, and water quality impacts (3 out of 5 possible points), and habitat impacts (2

[34] DWR. (2004). *California's Groundwater,* Bulletin 118, East Bay Plain Subbasin. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_009_04_East-BayPlainSubbasin.pdf

[35] DWR SGMA Portal – Basin Boundary Modification Request System: https://sgma.water.ca.gov/basinmod/modrequest/preview/54 (https://sgma.water.ca.gov/basinmod/modrequest/comments/54)

[36] DWR. (2020). *Sustainable Groundwater Management Act 2019 Basin Prioritization.* https://water.ca.gov/programs/groundwater-management/basin-prioritization

[37] https://gis.water.ca.gov/app/bp-dashboard/final/

[38] DWR. (2020). *Sustainable Groundwater Management Act 2019 Basin Prioritization*. https://water.ca.gov/programs/groundwater-management/basin-prioritization

out of 2 possible).[39] As further discussed below, as a medium priority basin, the Niles Cone Subbasin is subject to the requirements of SGMA.

Additional details on the Niles Cone Subbasin are given in the Alternative GSP that was developed by ACWD and submitted to DWR in 2016 and is incorporated into this UWMP by reference. The Alternative GSP is currently being updated.

- The current Alternative GSP is available on the DWR and ACWD SGMA websites:
    - https://sgma.water.ca.gov/portal/alternative/print/4
    - https://www.acwd.org/566/Sustainable-Groundwater-Management-Act
- ACWD's Alternative Update and first five-year periodic evaluation of the Alternative were submitted to DWR on December 29, 2021, and approved by DWR on June 27, 2024. The Updated Alternative GSP for the Niles Cone Subbasin is available on the DWR and ACWD SGMA websites:
    - https://sgma.water.ca.gov/portal/alternative/periodiceval/preview/4
    - https://www.acwd.org/566/Sustainable-Groundwater-Management-Act

### 6.2.9 SGMA Groundwater Management

In 2014, the California State Legislature enacted SGMA with subsequent amendments in 2015. SGMA requires the formation of GSAs and the development and implementation of GSPs for groundwater basins that are designated by DWR as medium or high priority. As medium priority (non-critically over drafted and non-adjudicated basins), the basins underlying Hayward are subject to the requirements of SGMA, including the requirement to be covered by one or more GSAs and to prepare and submit to DWR one or more GSPs by January 31, 2022.

#### East Bay Plain Subbasin GSAs

Pursuant to these SGMA requirements, two GSAs were formed in the East Bay Plain Subbasin – the EBMUD GSA on August 9, 2016 (EBMUD Board Resolution 34099-16), and the Hayward GSA on February 7, 2017 (City of Hayward Resolution 17-014). The Hayward GSA boundaries coincide with the portion of Hayward's service area that overlies the basin (see Figure 6-3). The EBMUD GSA covers the remaining portion of the basin. The EBMUD GSA and the Hayward GSA collaboratively worked together to develop a single GSP for the East Bay Plain Subbasin. The GSP was adopted, and published on January 26, 2022, and approved by DWR on July 27, 2023. EBMUD and Hayward are currently working together to complete the required five-year Periodic Evaluation of the adopted GSP. The Periodic Evaluation and Amendment of the GSP is anticipated to be complete and submitted to DWR by the statutory deadline of January 31, 2027.

#### Niles Cone Subbasin GSA

Under SGMA, ACWD was designated as an "exclusive local agency" for purposes of groundwater management.[40] On November 10, 2016, ACWD's Board of Directors adopted Resolution No. 16-069 deciding to become the exclusive GSA for the Niles Cone Subbasin. On December 8, 2016, ACWD's Board of Directors adopted Resolution No. 16-075 authorizing staff to submit an Alternative to a GSP for Niles Cone Subbasin 2-09.01. ACWD's

[39] DWR's 2019 Phase 2 Basin Prioritization used the basin's total possible ranking points assigned to each of the eight components to determine the priority. A basin is defined as Medium Priority if it has more than 14 total ranking points. https://gis.water.ca.gov/app/bp-dashboard/final/

[40] CWC 10723 (C)(1).

Alternative submittal includes an explanation of how the Alternative is functionally equivalent to elements of a GSP and achieves the objectives of SGMA.

On July 17, 2019, DWR approved ACWD's Alternative for the Niles Cone Groundwater Basin (Niles Cone Subbasin 2-09.01 or Niles Cone). DWR's approval was accompanied by a Statement of Findings Regarding the Approval of the Niles Cone Subbasin Alternative which includes seven recommended actions for ACWD to incorporate in the alternative update which was submitted on December 29, 2021. DWR approved the Alternative Update on June 27, 2024.

#### Coordination with Groundwater Sustainability Agencies

Hayward coordinated with the EBMUD GSA on the development of the East Bay Plain Subbasin GSP. As part of this collaboration EBMUD and Hayward, identified sustainable management criteria and management actions through 2042 and beyond.

Hayward also is actively involved as a key stakeholder in SGMA implementation in the Niles Cone Subbasin, including reviewing and commenting on SGMA-related efforts in the basin.

### 6.2.10 Groundwater Wells for Emergency Disruptions

Five emergency groundwater supply wells were installed between the late 1980s and mid-1990s for use in the event of surface water supply disruptions such as natural disasters. The wells have not yet been used for this purpose, but each well is pumped for a few hours every month to maintain equipment in good working order. In 2025, the permit status for one of the wells was changed from standby to inactive. Thus, Hayward's emergency water supply system includes four standby emergency groundwater supply wells that collectively have a potential yield of 10.6 MGD.[41]

### 6.2.11 Past Five Years' Groundwater Pumping

Table 6-1 shows that Hayward has not pumped groundwater over the past five years, Therefore, groundwater was not included in the City's municipal water supply total.

**Table 6-1. Groundwater Volume Pumped**

| Submittal Table 6-1 Retail: Groundwater Volume Pumped - Water Code Section 10631(4) and 10631(4)(c) | |
|---|---|
| ☑ | Check the box if the Supplier does not pump groundwater. Proceed to the next table. |

### 6.2.12 Stormwater

Hayward does not currently use, nor does it plan to use, diverted stormwater as part of its water supply portfolio. Small amounts of rainwater may be collected by retail customers for landscape use as a water conservation measure, as discussed in Section 9.2. However, large-scale stormwater capture and reuse is not currently planned.

## 6.3 Wastewater Collection, Treatment, and Disposal

This section discusses wastewater in Hayward, including collection, treatment, and disposal.

### 6.3.1 Wastewater Collected Within Service Area

Hayward owns and operates a municipal wastewater collection system and treatment plant which, like Hayward's Water Distribution System, are managed by the City's Department of Public Works & Utilities. The system collects wastewater from almost all the residential, commercial, and industrial users within the

[41] Luhdorff & Scalmanini Consulting Engineers. (2020). Technical Memorandum 4.1 dated June 2020.

incorporated city limits. Hayward also provides wastewater services to a small number of properties in unincorporated areas of Alameda County.

The wastewater collection system is comprised of about 322 miles of gravity sewer mains, nine sewage lift stations, and four miles of force mains. Hayward maintains a comprehensive maintenance and replacement program to minimize the potential for sanitary sewer overflows and ensure that sufficient collection capacity is available to meet demand.

Hayward is a founding member of the East Bay Dischargers Authority (EBDA), a joint powers agency that disposes of treated wastewater through a deepwater outfall to the San Francisco Bay.

Table 6-2 summarizes wastewater collection within Hayward's wastewater service area.

**Table 6-2. Wastewater Collected Within Service Area in 2025**

| **Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2025<br>Water Code Section 10633(a)** | | | | |
|---|---|---|---|---|
| ☐ | Check the box if there is no wastewater collection system. | | | |
| 100% | Percentage of 2025 service area served by wastewater collection system | | | |
| 100% | Percentage of 2025 service area population served by wastewater collection system | | | |
| **Wastewater Collection** | | | **Recipient of Collected Wastewater** | |
| Name of Wastewater Collection Agency | Wastewater Volume Metered or Estimated? | Volume of Wastewater Collected from UWMP Service Area 2025<br>(MG) | Name of Wastewater Treatment Plant (WWTP) and Place ID Number | Is WWTP Located Within UWMP Area? |
| City of Hayward | Metered | 4,023 | Hayward Water Resource and Recovery Facility (WRRF), Place ID 229882 | Yes |
| **Total Wastewater Received from UWMP Service Area in 2025:** | | 4,023 | | |
| **Notes:** The volume of wastewater included is representative of Fiscal Year 2024-2025 data, reported in the 2024 and 2025 Volumetric Annual Reports and reported to the East Bay Dischargers Authority (EBDA). The City of Hayward formally changed the name of the WPCF (Hayward Water Pollution Control Facility) to the WRRF (Water Resource Recovery Facility) in December of 2023. | | | | |

As shown in Table 6-2, the Hayward Water Resource and Recovery Facility (WRRF), received 4,023 MG of wastewater from the UWMP service area and treated a total of 3,920 MG, shown in Table 6-3. Volumes are based on values reported to EBDA as they were included in the 2024 and 2025 Volumetric Annual Reports. Also, in FY 2024-2025, an additional 26 MG of potable water was supplemented into the recycled water system and used for non-potable landscape irrigation use. This 26 MG volume is NOT included in Table 6-3's total volume. Hayward's WRRF was formally known as the Water Pollution Control Facility.[42] The City formally changed the facility's name in December 2023.

[42] City of Hayward. (2023). Legislation Detail – File #6439979: https://portal.laserfiche.com/Portal/DocView.aspx?id=488686&repo=r-b6d2994c

## Table 6-3. Wastewater Treatment and Outcomes Within Service Area in 2025

| Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area in 2025 - Water Code Section 10633(a) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | Check the box if no wastewater is treated or disposed of within the UWMP service area. | | | | | | | | | | | | | |
| Wastewater Treatment Plant Name and Place ID Number | Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? | 2025 Volume of Wastewater Received from UWMP Service Area | Total 2025 Volume of Water Treated | 2025 Outcomes of Treated Wastewater | | | | | | | | | | |
| | | | | **Water Recycled Within UWMP Service Area** (enter data as applicable) | | **Water Recycled Outside of UWMP Service Area** (enter data as applicable) | | **Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable) | | **Required Discharge for Instream Flow** (enter data as applicable) | | **Delivered to Another Entity for Additional Treatment** (enter data as applicable) | | |
| | | (MG) | (MG) | Treatment Level | Vol. (MG) | Treatment Level | Vol. (MG) | Treatment Level | Vol. (MG) | Treatment Level | Vol. (MG) | Treatment Level | Vol. (MG) | Name of other entity |
| Hayward WRRFPCF, Place ID 229882 | No | 4,023 | 3,920 | Tertiary | 46 | | - | Secondary, Undisinfected | 3,428 | | - | Secondary, Undisinfected | 388 | Russell City Energy Center (RCEC) |
| Hayward WRRFPCF, Place ID 229882 | No | - | - | | | | - | Secondary, Disinfected - 23 | 58 | | - | | - | |
| **Total** | | 4,023 | 3,920 | | 46 | 0 | | | 3,486 | | 0 | | 388 | |

**Notes:** (1) Volumes are representative of the FY 2025 data reported to EBDA, included in the 2024 and 2025 Volumetric Annual Reports; and (2) In FY2024-2025, an additional 26 MG of potable water was supplemented into the recycled water system and used for non-potable landscape irrigation use. This 26 MG volume is NOT included in this table's total volume.

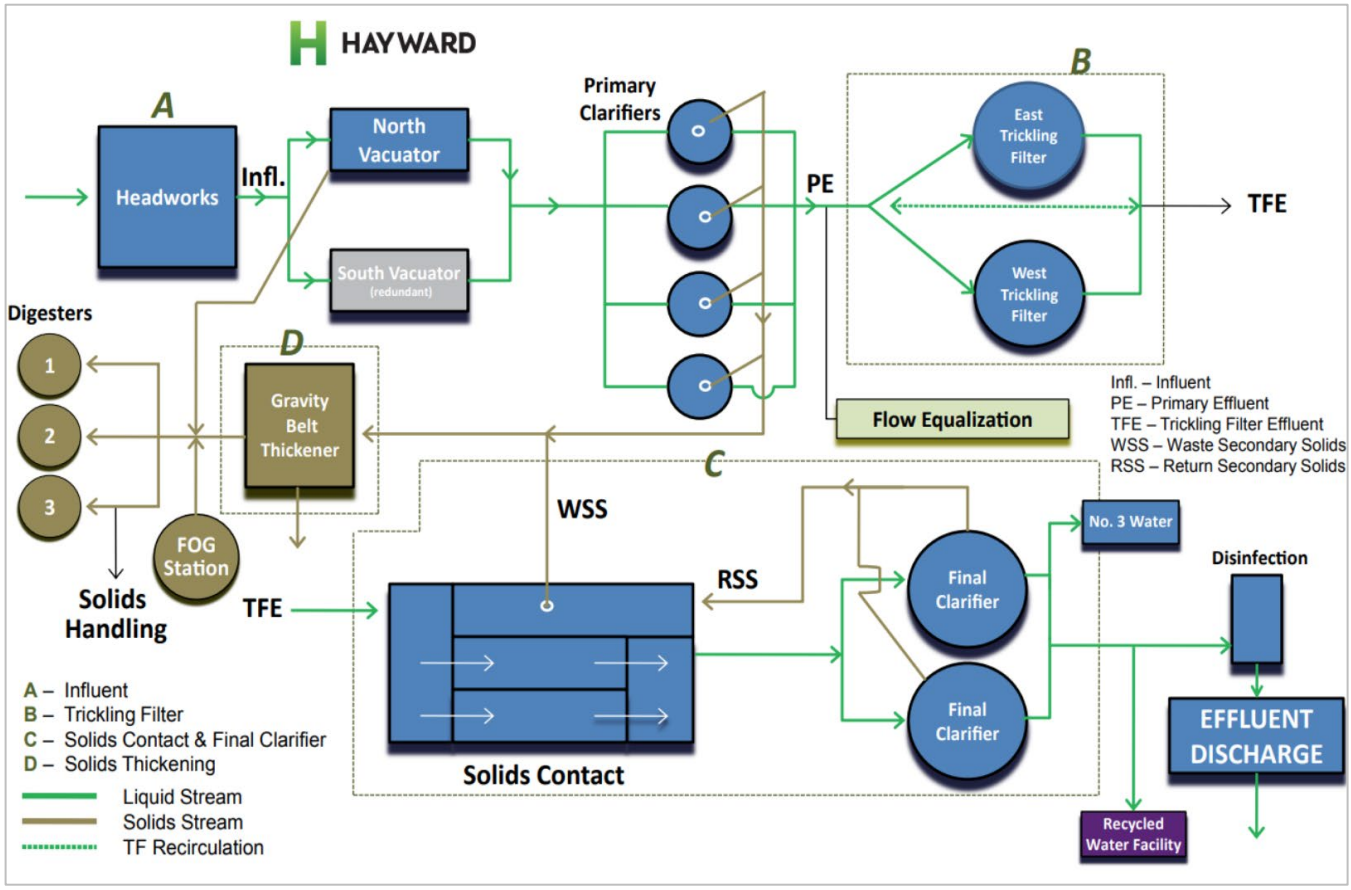
### 6.3.2 Wastewater Treatment and Discharge Within Service Area

Wastewater collected within Hayward's service area is conveyed to the city-owned Water Resource and Recovery Facility (WRRF).[43] The WRRF is permitted to provide primary through tertiary-treatment for up to 18.5 MGD of wastewater. Currently, all the wastewater is treated to a secondary level utilizing:

- Primary clarification
- High-rate trickling filters
- Solids contact aeration basin
- Secondary clarification

Figure 6-4 depicts the current wastewater treatment process units used at Hayward's WRRF.

**Figure 6-4. Hayward WRRF Unit Process Flow Schematic**




Source: City of Hayward (2026)

The majority of treated wastewater is disinfected with sodium hypochlorite and conveyed to EBDA for final dichlorination and discharge via EBDA's common outfall to the San Francisco Bay. A portion of the secondary-treated effluent is delivered to Calpine Corporation's Russell City Energy Center (RCEC). The RCEC treats the wastewater to a Title 22 disinfected-tertiary level for use as process water for cooling. Secondary-treated effluent is also sent to Hayward's Recycled Water Treatment Facility (RWTF) for treatment to a Title 22 disinfected-tertiary level, which is distributed for landscape irrigation.

[43] City of Hayward. (2023). Legislation Detail – File #6439979. https://hayward.legistar.com/LegislationDetail.aspx?ID=6439979

## 6.4 Recycled Water System Description

Hayward began deliveries of tertiary-treated recycled water to more than 30 irrigation customers in March 2022 as part of its Recycled Water Phase 1 Project. The project included the addition of a 0.5 MGD membrane treatment plant, 1 MG recycled water storage tank, a recycled water pump station, and approximately 8.5 miles of distribution pipelines. The membrane facility, pump station, and storage tank are collectively referred to as Hayward's RWTF located at the WRRF. A map of the Recycled Water Project Phase 1 distribution system is shown in Figure 6-5.

The RCEC, located adjacent to Hayward's WRRF, is a 600-megawatt natural gas-fired combined cycle energy generation facility. The RCEC initiated operations in August 2013. The RCEC's permit to operate, issued by the California Energy Commission, requires the facility to use recycled water for cooling. Hayward and RCEC entered into an agreement, whereby Hayward delivers secondary-treated wastewater, which is further treated by the RCEC to tertiary level in accordance with Title 22 requirements. RCEC's recycled water use is a direct beneficial use as defined in the California Code of Regulations.

In Fiscal Year 2025, Hayward delivered 388 MG to the RCEC, an average of 1.06 MGD. During the peak months (July through December), deliveries averaged about 1.42 MGD. The RCEC operates on demand, which can be impacted by factors such as weather conditions and how many other plants are operating at the time.

Hayward has opted not to include future deliveries to RCEC in its projected recycled water use totals in the 2025 UWMP and future updates. The secondary-treated wastewater delivered must be further treated to Title 22 tertiary standards by RCEC for use as cooling water in energy production. Additionally, these deliveries do not offset Hayward's potable water demand, as the California Energy Commission's approval of the Application for Certification of this facility includes a requirement to use recycled water.

**Figure 6-5. Recycled Water Project Location Map and Distribution System**


Source: City of Hayward (2026)

### 6.4.1 Current, Potential, and Projected Recycled Water Uses

Current and planned uses of recycled water within Hayward are described below, including existing applications and anticipated future expansions. This discussion highlights how recycled water is being utilized to offset potable water demand for non-potable purposes, such as landscape irrigation and industrial uses, and outlines opportunities to increase its use as part of the City's long-term water supply and sustainability strategy.

## Current Uses of Recycled Water

As discussed in Section 6.4, the Phase 1 Recycled Water Project established the foundation for the Hayward's recycled water program. Key infrastructure improvements included construction of a 1-million-gallon storage tank and pump station (completed in November 2019), approximately 8.5 miles of distribution pipelines along with customer connections (completed in the spring of 2019), and a 0.5 MGD membrane treatment facility at the WRRF (completed in 2021). Following completion of these facilities, recycled water deliveries began in March 2022.

Hayward anticipates delivering approximately 72 MG of recycled water annually, equivalent to an average of about 200,000 gpd. Recycled water is used primarily for landscape irrigation within approved service areas, consistent with regulatory requirements. All recycled water applications represent direct beneficial uses as defined under CWC §13050(f), contributing to reduced reliance on potable water supplies.

In addition to these uses, Hayward delivers secondary-treated wastewater to RCEC, where it undergoes additional treatment and is used for industrial cooling purposes. While this supply continues to represent an important non-potable use of treated wastewater, it is not classified as recycled water use within the City's accounting framework.

## Planned Uses of Recycled Water

Hayward is actively evaluating opportunities to expand its recycled water program to serve additional customers in the coming years. As part of this effort, Hayward is developing a Recycled Water System Plan (RWSP) to assess system capacity, identify potential service areas, and prioritize infrastructure improvements needed to support future expansion. Although specific projects and customer connections have not yet been fully defined, preliminary planning estimates indicate that future phases of the program could add up to approximately 500,000 gpd of additional recycled water use.

Table 6-4 summarizes both current and anticipated direct beneficial uses of recycled water within Hayward's service area. These uses are expected to continue focusing on non-potable, such as landscape irrigation and potential industrial uses, which help offset demand on the Hayward's potable water supply and support long-term water sustainability goals.

**Table 6-4. Recycled Water Direct Beneficial Uses Within Service Area**

| Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area - Water Code Section 10633 (c)€ | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ☐ | Check box if recycled water is not used and is not planned for use within the service area of the supplier. | | | | | | | | |
| Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL): | | | City of Hayward | | | | | | |
| Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL): | | | City of Hayward | | | | | | |
| Supplemental Water Added in 2025 (volume) Include units (OPTIONAL): | | | 26 MG | | | | | | |
| Source of 2025 Supplemental Water (OPTIONAL): | | | City of Hayward | | | | | | |
| Use Type | Potable or Non-Potable (after treatment if treated) | Additional Information | 2025 (MG) | 2030 (MG) | 2035 (MG) | 2040 (MG) | 2045 (MG) | 2050 (MG) | **Potential Recycled Water Use** Volume |
| Landscape irrigation (except golf courses) | Non-Potable | Disinfected Tertiary | 46 | 68 | 78 | 105 | 141 | 191 | 492 |
| Landscape irrigation (except golf courses) | Non-Potable | Potable water was supplemented into the recycled water system. | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | **Total** | 72 | 68 | 78 | 105 | 141 | 191 | 492 |

**Notes:** (1) 2025 Actual Use volume represents the Hayward billed consumption data for Fiscal Year 2024-2025; (2) 26 MG of potable water was supplemented into the recycled water system and was used for non-potable landscape irrigation use. This volume is tracked as non-potable.; and (3) Landscape irrigation is for commercial, industrial and institutional landscapes.

The City's 2020 UWMP included projections for recycled water use in 2025 and beyond. Table 6-5 provides a comparison between those projections and actual 2025 usage, as reported in Table 6-4. The 2020 UWMP projected that recycled water use would reach approximately 73 MG annually by 2025, primarily for landscape irrigation, based on the assumption that the Phase 1 Recycled Water Project would be operational by 2021. While construction was completed in 2021, recycled water deliveries to customers began in 2022, resulting in a slight shift in implementation timing.

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

| **Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual - Water Code Section 10633 (e)** | | |
|---|---|---|
| ☐ | Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. | |
| **Use Type** | 2020 Projection for 2025 (MG) | 2025 Actual Use (MG) |
| Landscape irrigation (except golf courses) | 73 | 72 |
| Industrial use | 0 | 0 |
| **Total** | 73 | 72 |
| **Notes:** (1) 2025 Actual Use volume represents the Hayward billed consumption data for Fiscal Year 2024-2025**;** (2) 26 MG of potable water was supplemented into the recycled water system and was used for non-potable landscape irrigation use. This volume is tracked as non-potable; and (3) Landscape irrigation is for commercial, industrial and institutional landscapes. | | |

Current recycled water applications primarily serve commercial, industrial, and institutional landscapes; future expansion is expected to build upon these existing use types.

### 6.4.2 Regional Coordination for Recycled Water

Hayward participates in regional efforts to expand recycled water use through education, policy development, funding initiatives, and outreach. City staff are active in several regional organizations, including the Western Recycled Water Coalition (WRWC), Bay Area Clean Water Agencies (BACWA), the Bay Area Integrated Regional Water Management Plan (BAIRWMP), and WateReuse California.

The WRWC is a partnership of cities, water agencies, and wastewater agencies that collaborate to secure funding and advance locally managed recycled water projects. BACWA, through its Recycled Water Committee, promotes water recycling to enhance environmental protection, improve water supply reliability, and support economic sustainability in the Bay Area. The BAIRWMP is a multi-county effort to coordinate regional water resource planning and improve water supply reliability. WateReuse California engages with state and local policymakers to advance legislation and regulatory frameworks that support the implementation of potable and non-potable water reuse. Participation in these organizations supports Hayward's efforts to expand recycled water use and align with regional water management objectives.

### 6.4.3 Actions to Encourage and Optimize Future Recycled Water Use

Hayward promotes recycled water use through a combination of regulatory, financial, and outreach strategies designed to increase demand and support long-term program expansion:

- **Public Outreach:** The City conducts outreach to increase awareness of recycled water availability and its benefits, targeting potential customers within the service area.

- **Mandatory Use Ordinance:** The City has adopted an ordinance requiring the use of recycled water for approved non-potable applications within the designated recycled water service area, when technically feasible.
- **Financial Incentives:** Hayward has established a recycled water rate structure that is approximately 25 percent lower than potable irrigation rates. This pricing approach, combined with supply reliability, is intended to encourage customer participation and offset potable water demand.

**Table 6-6. Methods to Encourage Future Recycled Water Use**

| **Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use<br>Water Code Section 10633 (f)** | | | |
|---|---|---|---|
| Name of Action | Description | Planned Implementation Year | Expected Increase in Recycled Water Use<br>(MG) |
| Recycled Water System Plan (RWSP) | Complete the RWSP which will include potential project alternatives to expand recycled water use. Estimates for the expected increase in use will be determined once the plan has been completed. | 2026 | 0 |
| Expansion of the Recycled Water System and addition of new customers | Based on the BAWSCA Demand Study and completion of the RWSP, it is anticipated that expansion of the system and the addition of new customers will increase the Hayward overall recycled water use. | 2050 | 191 |
| | | **Total** | 191 |
| | | **Unit Conversion to AF** | 586.16 |
| **Notes:** (1) The expected increase in recycled water use is estimated based on the current Demand Study and the RWSP; and (2) Actual use increase will be dependent on the future implementation projects. This will be revisited in the 2030 UWMP. | | | |

### 6.4.4 Constraints on Recycled Water Expansion

While Hayward is pursuing expansion of recycled water use through the development of a Recycled Water System Plan (RWSP), several factors may constrain implementation:

- **Distribution and Storage:** Recycled water demand is largely seasonal, with peak use occurring during summer irrigation periods. The City must evaluate storage and distribution capacity to ensure the system can reliably meet both peak and off-peak demands.
- **Water Quality Requirements:** Certain industrial applications, such as cooling towers and boiler systems, require specific water quality characteristics. Concerns regarding constituents such as total dissolved solids and alkalinity, as well as potential impacts on landscape irrigation, may limit customer acceptance. Ongoing monitoring and treatment processes are necessary to ensure compliance with applicable standards.
- **Cost:** Capital costs associated with treatment, storage, and distribution infrastructure, as well as customer retrofit costs, may present barriers to expansion. The City will continue to pursue grant funding and evaluate potential financial assistance programs, while maintaining competitive recycled water rates to encourage use.

### 6.4.5 Assessment of Potential Uses and Future Planning

Hayward continues to evaluate opportunities to expand recycled water use to serve additional municipal and industrial demands. In March 2025, Hayward completed a feasibility study assessing the potential development of advanced treatment facilities to produce recycled water suitable for industrial applications, including cooling water for data centers. The City is currently developing a RWSP, which will evaluate existing system performance, identify infrastructure improvements, and assess alternatives for system expansion. The RWSP will provide a framework for increasing recycled water use and is anticipated to be completed in summer 2026.

## 6.5 Other Alternatives

This section discusses additional alternative supply sources. Desalinated water opportunities, water exchanges and water transfers are not currently participated in by Hayward. Hayward does not anticipate opportunities for development of desalinated water supplies within the planning horizon of this UWMP. Hayward does not currently include water exchanges in its water supply portfolio, nor does it plan to in the future. Hayward does not currently utilize water transfers as a temporary or long-term water supply to meet normal demand, nor does it plan to in the future.

### 6.5.1 Emergency Interties

The City of Hayward has established emergency interconnections with neighboring water agencies, including EBMUD and ACWD, to enhance system reliability and emergency preparedness. These interties provide the capability to transfer water on a short-term basis in the event of supply disruptions, such as those caused by earthquakes, infrastructure failures, or other unforeseen emergencies. The interties are designed to support continuity of service and provide operational flexibility during critical conditions. Additional information regarding the capacity, operation, and use of these interties is provided in Chapter 7.

### 6.5.2 Supply From Storage

Urban water suppliers that withdraw water from surface or groundwater storage for use during the reporting year are required to report such withdrawals as “supply from storage” in UWMP Tables 6-8 and 6-9. This reporting category typically applies to agencies that actively manage stored water supplies to meet demand. The City of Hayward does not utilize stored surface water or groundwater as part of its regular water supply portfolio; therefore, this section is not applicable.

### 6.5.3 Other Projects and Future Water Supply Projects

At this time, Hayward does not have additional water supply projects planned that would result in a quantifiable increase in potable water supply. The City continues to rely on its existing supply portfolio, which is primarily composed of imported water from SFPUC.

However, Hayward has implemented Phase 1 of its Recycled Water Project, which provides an alternative, non-potable water supply for irrigation uses. This project has the current capacity to deliver approximately 73 MG of recycled water annually to existing customers, thereby offsetting potable water demand. While recycled water does not increase the total potable supply, it plays an important role in enhancing overall water supply reliability and sustainability by reducing reliance on imported water. Future phases of recycled water expansion are under evaluation and may further contribute to demand reduction and system resiliency.

**Table 6-7. Expected Future Water Supply Projects or Programs**

| Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs - Water Code Section 10631 (f) | |
|---|---|
| ☑ | Check box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table. |

## 6.6 Summary of Water Supply Sources

Table 6-8 summarizes Hayward's water supply sources and corresponding volumes for 2025. Reported volumes are based on billed consumption data for both potable and non-potable water uses, consistent with UWMP reporting requirements. In 2025, Hayward's potable water supply consisted entirely of imported water purchased from SFPUC, totaling approximately 4,984 MG. This supply represents the City's primary source of drinking water and continues to meet all potable demand within the service area under normal operating conditions.

Non-potable water supplies totaled approximately 72 MG in 2025 and were comprised primarily of recycled water deliveries. Of this amount, 46 MG represents recycled water produced and delivered through Hayward's recycled water system based on billed consumption during Fiscal Year 2024–2025. An additional 26 MG of potable water was introduced into the recycled water system to supplement supply and was used for non-potable landscape irrigation purposes. Although this supplemental volume originates as potable water, it is accounted for as non-potable use because it was delivered through the recycled water system and used exclusively for approved non-potable applications.

Overall, total water supplied in 2025 was approximately 5,056 MG, including 4,984 MG of potable water and 72 MG of non-potable water. These data reflect Hayward's continued reliance on imported potable supplies, while also demonstrating the growing contribution of recycled water in offsetting potable demand and supporting water supply sustainability.

**Table 6-8. Water Supplies – 2025 Actual**

| **Submittal Table 6-8 Retail: Water Supplies — 2025 Actual - Water Code Section 10631 (b)** | | | |
|---|---|---|---|
| **Water Supply** | | **2025** | |
| Water supply categories | Additional Description | **Water Type** (after treatment if treated) | **Actual Volume** (MG) |
| Purchased or Imported Water | From SFPUC Billed Consumption | Potable | 4,984 |
| Recycled Water | From FY 2024-2025 Recycled Water Billed Consumption | Non-Potable | 46 |
| Purchased or Imported Water | Supplemental Potable Water added to the Recycled Water System for Irrigation Use | Non-Potable | 26 |
| | | Subtotal Potable | 4,984 |
| | | Subtotal Non-Potable | 72 |
| | | **Total** | 5,056 |
| **Notes:** (1) Volume supplied data for Potable (SFPUC) and Non-Potable (Recycled Water) is based on billed consumption data; and (2) 26 MG of potable water was supplemented into the recycled water system and was used as non-potable landscape irrigation use. This volume is tracked as non-potable. | | | |

Table 6-9 summarizes Hayward's projected water supplies by source through 2050. The projected volumes represent "reasonably available" supplies and are based on demand projections provided by the City to BAWSCA and SFPUC. These projections reflect anticipated potable and non-potable water needs, as described in Chapter 4.

Potable water supplies are projected to be met entirely through imported water from SFPUC. Potable demand is expected to increase steadily over the planning period, from approximately 5,397 million MG in 2030 to 7,229 MG by 2050. This growth is driven by projected increases in population, employment, and overall water demand within the service area.

Non-potable supplies, consisting of recycled water, are also projected to increase over time as Hayward expands its recycled water program. Recycled water use is estimated to grow from approximately 68 MG in 2030 to 191 MG by 2050. This increase reflects planned system expansion and continued efforts to offset potable water demand through non-potable applications such as landscape irrigation and potential future industrial uses. Total water supply is projected to increase from approximately 5,465 MG in 2030 to 7,420 MG in 2050.

While Hayward will continue to rely primarily on imported potable water supplies, the growing contribution of recycled water is expected to play an increasingly important role in meeting future demand and enhancing overall supply reliability.

**Table 6-9. Water Supplies – Projected**

| Submittal Table 6-9 Retail: Water Supplies — Projected - Water Code Section 10631 (b) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Water Supply | Additional Detail on Water Supply | Water Type (after treatment if treated) | Projected Water Supply (Report to the Extent Practicable) | | | | |
| | | | 2030 | 2035 | 2040 | 2045 | 2050 |
| | | | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume |
| | | | (MG) | (MG) | (MG) | (MG) | (MG) |
| Purchased or Imported Water | SFPUC | Potable | 5,397 | 5,734 | 6,162 | 6,651 | 7,229 |
| Recycled Water | | Non-Potable | 68 | 78 | 105 | 141 | 191 |
| Subtotal Potable | | | 5,398 | 5,734 | 6,162 | 6,651 | 7,229 |
| Subtotal Non-Potable | | | 68 | 78 | 105 | 141 | 191 |
| **Total** | | | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| **Notes:** (1) Reasonably available volumes based on information provided to BAWSCA and SFPUC by Hayward indicating the City's projected potable and non-potable demands; and (2) Projected use reported in Table 4-2. | | | | | | | |

## 6.7 Energy Use

Water energy intensity represents the total amount of energy required to extract, convey, treat, and distribute water within a system, expressed per unit of water delivered. It is a key sustainability metric that reflects the efficiency of water operations and the associated energy demands (Wilkinson, 2000). In accordance with the DWR 2025 UWMP Guidebook, Hayward uses the "Total Utility Approach" to quantify and report water-related energy use across its system.

FY 2025 was selected as the reporting period, consistent with CWC Section 10631.2(a). Energy consumption data were derived from utility billing records for that period. Total energy use associated with Hayward's water system in FY 2025 was approximately 3,520,711 kilowatt-hours (kWh). This energy use is primarily associated with pumping and distributing imported potable water throughout the City's service area, reflecting the system's reliance on pressurized conveyance and elevation changes.

Based on the Total Utility Approach, Hayward's water system energy intensity is estimated at approximately 706.4 kWh per million gallons (kWh/MG). This value provides an important benchmark for evaluating operational efficiency and identifying opportunities to reduce energy use, greenhouse gas emissions, and overall lifecycle costs associated with water service delivery.

In addition to potable water operations, Hayward evaluated energy use associated with wastewater collection and treatment. Energy consumption for wastewater collection was calculated using utility billing data for sewer lift stations and pump stations. Wastewater treatment energy use was based on metered data from the WRRF.

A significant portion of the energy required for wastewater treatment is offset through onsite renewable and low-carbon energy generation via a cogeneration facility and solar power.

These investments support Hayward's broader sustainability goals by reducing reliance on grid electricity, lowering greenhouse gas emissions and improving overall energy resilience within water and wastewater operations.

# 7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

**Lay Description**

This chapter evaluates the reliability of Hayward's water supplies and identifies potential constraints that could affect supply availability under a range of hydrologic conditions, including normal water years, single dry years, and multiple dry-year periods. In addition to the long-term reliability analysis, a comprehensive Water Supply Reliability Assessment (WSRA) and a Drought Risk Assessment (DRA) are presented.

The analysis incorporates recent guidance and methodologies provided by DWR to better characterize supply shortages, demand reduction needs, and the effectiveness of shortage response actions under extended drought conditions. Hayward relied on the supply reliability estimates provided by SFPUC for its RWS supplies, as well as the drought allocation methodology provided by SFPUC in coordination with BAWSCA. These inputs were used to estimate available RWS supplies in dry year types through 2050.

This chapter also describes Hayward's water supply portfolio, including its reliance on wholesale supplies, and evaluates how those supplies perform during hydrologic shortage conditions. This information is used for the development of water shortage contingency planning, demand management strategies, and long-term resource planning efforts described in Chapter 8 and Chapter 9.

To maintain consistency with the UWMPs prepared by SFPUC and other BAWSCA member agencies, portions of the language describing the SFPUC wholesale water supply, system operations, and hydrologic assumptions are standardized and were developed collaboratively by BAWSCA, SFPUC, and the member agencies, including Hayward.

## 7.1 Reliability of Water Supply Sources

The reliability of water supplied through the SFPUC RWS varies across hydrologic year types and is influenced by precipitation, snowpack conditions, system storage, and operational constraints. Hydrological modelling indicates that supply availability is expected to be highest in normal and wet years and reduced during single dry and multiple dry-year periods.

Based on information provided by SFPUC and BAWSCA, Hayward anticipates that available supplies will be sufficient to meet projected demands during normal-year conditions. However, supply shortfalls are projected under dry-year scenarios, particularly during extended drought periods when system-wide shortages may trigger allocation reductions from the RWS. To prepare for potential supply shortages, Hayward has developed water shortage response actions under varying shortage levels (see Chapter 8).

There are inherent uncertainties associated with the assumptions used to estimate dry-year supply availability, including future hydrologic variability, regulatory requirements, infrastructure performance, and water management strategies implemented by SFPUC. As these uncertainties are resolved and additional data become available, Hayward expects to refine and update its WSRA in future UWMP cycles.

As described in Chapter 6, Hayward plans to meet specific non-potable demands, including landscape irrigation and potential future industrial uses, with recycled water. The City considers recycled water to be a reliable and sustainable supply source that is available in all hydrologic year types at volumes sufficient to meet projected demands. Hayward's recycled water supply is primarily dependent on local wastewater flows that are less sensitive to climate change driven variability. Additional information regarding current and projected potable and recycled water demands is provided in Chapter 4 and Chapter 6.

Reliability of the RWS (SFPUC Common Language)

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

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

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

### 7.1.1 Source Water Quality

As discussed in Chapter 6, 100% of Hayward's potable water is supplied by the SFPUC RWS that comes primarily from snowmelt in the Sierra Nevada mountains. Additional SFPUC water comes from rainfall collecting in East Bay and Peninsula reservoirs. SFPUC supplies very high-quality water with low total dissolved solid (TDS) concentrations from these protected sources.

*Water Quality of RWS Supplies [Water Code Section 10634]*

Surface water supplies available to the RWS include the Tuolumne River and local Bay Area reservoirs. Most of the water supply originates in the upper Tuolumne River watershed high in the Sierra Nevada, where the watershed is protected from development and pollution. Water from Hetch Hetchy Reservoir is conveyed to the Bay Area through a system of pipes and tunnels and requires only primary disinfection, ultraviolet light disinfection at the Tesla Treatment Facility, and pH adjustment for corrosion control.

The USEPA and SWRCB Division of Drinking Water have approved the use of this drinking water source without filtration. In contrast, water from the SFPUC's local watersheds requires filtration to meet drinking water quality standards. The SFPUC blends filtered and treated local water with water from Hetch Hetchy Reservoir, and most customers receive this blended supply. The SFPUC continuously monitors and tests both raw and treated water to ensure that water delivered to customers meets or exceeds federal and state drinking water and public health requirements. The SFPUC expects to continue relying on these high-quality water sources and does not anticipate future degradation of water quality.

Each spring, the SFPUC publishes an annual water quality report (Consumer Confidence Report), available at www.sfpuc.gov/waterqualityreport.

SFPUC's Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the RWS to ensure SFPUC's water meets or exceeds federal and state drinking water standards. In 2024, the Water Quality Division conducted nearly 100,000 drinking water tests[44] in sources and transmission systems. The SFPUC also has online instruments providing continuous water quality monitoring at numerous locations.

### 7.1.2 City of Hayward Water Quality

Hayward does not anticipate that water quality issues will adversely affect its customers. Drinking water quality is routinely monitored, and the City maintains the operational flexibility necessary to adjust within its distribution system to ensure compliance with all applicable federal and state drinking water standards. Nevertheless, impaired water quality has the potential to affect water supply reliability by increasing operational complexity of water treatment process or limiting the usability of available supplies.

Hayward maintains a rigorous water quality procedure and has continually met, and will continue to meet, all state and federal water quality regulations. All drinking water standards are set by the USEPA under the authorization of the Federal Safe Drinking Water Act of 1974. In California, the SWRCB Division of Drinking Water can either adopt the USEPA standards or set more stringent standards, which are then codified in Title 22 of the California Code of Regulations.

There are two general types of drinking water standards:

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

Hayward routinely monitors the water supplied to its customers to ensure it meets these drinking water standards. Testing results are reported to the SWRCB Division of Drinking Water. This information is summarized

[44] SFPUC Annual Water Quality Report (2024).

annually in Water Quality Reports (also known as "Consumer Confidence Reports"), which are provided to customers by mail and made available on Hayward's Water Quality web page.[45]

Given Hayward's and SFPUC's proactive monitoring and management, water quality is not expected to impact the reliability of Hayward's available supplies within the 2025 UWMP planning horizon (i.e., through 2050).

### 7.1.3 Constraints on SFCPUC Supplies

*Constraints on Supplies [Water Code Sections 10634(b)(1), 10635(b)(2)]*

The SFPUC has identified potential constraints on its water supplies. The list below summarizes the legal, environmental, water quality, climatic, and other factors potentially resulting in inconsistent supply.

RWS: There may be shortfalls of RWS supplies in dry years as a result of several factors, including required instream flow releases (further discussed in the "Bay-Delta Plan Amendment Updates" section below) as well as impacts of climate change on hydrology in Section 6.1.2).

#### Bay-Delta Plan Adoption

The 2018 adoption of the Bay-Delta Plan Amendment may significantly impact the supply available from the RWS. The SFPUC recognizes that the Bay-Delta Plan Amendment has been adopted and that, given that it is now state law, the SFPUC must plan for a future in which it is fully implemented. The SFPUC also acknowledges that the plan is not self-implementing and therefore does not automatically go into effect. Similarly, there is active litigation at the appellate level regarding the Bay-Delta Plan Amendment. The SFPUC is also pursuing a voluntary agreement, known as the Healthy Rivers and Landscapes Program (HRL). The HRL is currently undergoing evaluation at the SWRCB. In fall of 2025, the SWRCB released a Scientific Basis Report evaluating the biological benefits of the Tuolumne River component of the HRL. The next step is for SWRCB to finalize this report including scientific peer review. At the same time, the SWRCB is undergoing CEQA evaluation of the Tuolumne HRL. No timeline has been provided for when the HRL will be considered for adoption by the SWRCB.

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

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

- During the last two drought periods, 2013-2016 and 2021-2023, the SWRCB implemented curtailments through emergency regulations and curtailment orders that attempted to limit diversions from Central Valley watersheds including the Tuolumne River at certain times. Due to the uncertain legality of the SWRCB's curtailment actions as well as the uncertainties regarding any potential future curtailment actions against San Francisco, the SFPUC's RWS supply reliability analyses do not assume curtailments are in effect.
- Through a 1966 agreement with the 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

[45] https://www.hayward-ca.gov/services/city-services/water-quality

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 SWRCB. San Francisco's potential responsibility for FERC-ordered flows may further depend on San Francisco's ability to enter into a new or extended agreement with the 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.

- 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.

### Bay-Delta Plan Amendment Update

In December 2018, the SWRCB adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives for the San Francisco Bay-Delta watershed. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the San Francisco Bay-Delta. The Bay-Delta Plan Amendment requires the release of 30-50% of the "unimpaired flow"[46] on the three tributaries from February through June in every year type. In SFPUC modeling of the new flow standard, it is assumed that the required release is 40% of unimpaired flow.

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

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

- Over a dozen lawsuits have been filed in both state and federal courts challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including a legal challenge filed by the federal government at the request of the U.S. Department of Interior, Bureau of Reclamation. This litigation is currently at the appellate level.

- The Bay-Delta Plan Amendment is not self-implementing and does not automatically allocate responsibility for meeting its new flow requirements to San Francisco or any other water rights holders. Rather, the Bay-Delta Plan Amendment merely provides a regulatory framework for implementing water quality objectives, which must be accomplished by other

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

regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, may be implemented through the water quality certification process set forth in section 401 of the Clean Water Act as part of the Federal Energy Regulatory Commission's licensing proceedings for the Don Pedro and La Grange hydroelectric projects. It is currently unclear when the license amendment process is expected to be completed. This process and the other regulatory and/or adjudicatory proceedings may face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the RWS).

In recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River," and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." On March 26, 2019, the SFPUC adopted Resolution No. 19-0057 to support the SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration.[47] On November 10, 2022, the SFPUC along with the Modesto and Turlock Irrigation Districts signed a Memorandum of Understanding (MOU) Advancing the Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan and Other Actions. Voluntary Agreements are now referred to as the Agreements to Support Healthy Rivers and Landscapes and negotiations remain ongoing.

## 7.2 Water Supply Reliability Through 2050

The following sections describe the Hayward's expected water supply reliability under normal-year, single dry-year, and multiple dry-year conditions, evaluated in five-year increments through 2050. The Demand Study supports this analysis by providing projected water demand scenarios and corresponding supply allocations, based on the methodology described in Section 7.1.

This section is supported by the SFPUC comprehensive reliability assessment of its RWS conducted as part of its 2025 UWMP. The assessment results for potable supply projections and associated reliability assumptions were provided by SFPUC in its March 11, 2026, correspondence to BAWSCA, titled "Basis for SFPUC's Water Supply Reliability Modeling," (SFPUC Letter) which is included in Appendix D of this UWMP.

As described in that documentation, for the purposes of the 2025 UWMP reliability analysis, wholesale customer drought allocations assume an equal percentage reduction across all agencies when average RWS shortages exceed 20%. Allocation reductions under scenarios that include implementation of the Bay-Delta Plan Amendment are based on the San Francisco Regional Water System Supply Reliability for 2025 Urban Water Management Plans letter dated March 11, 2026, also included in Appendix D of this UWMP.

Using this framework, the percentage of available supplies presented in Table 7-1 is applied to Hayward's projected potable water demands shown in Table 4-2 for each corresponding base year to estimate available dry-year RWS supplies, as summarized in Tables 7-3 and 7-4.

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

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

| OPTIONAL Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment) | |
|---|---|
| ☑ | Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** Appendix D of the UWMP |
| **Notes:** (1) SFPUC supplies 100% of Hayward's potable water and has assessed the reliability of its RWS for the 2025 UWMP; and (2) Hayward's potable supply volumes and the reliability assessment information were obtained from SFPUC's March 11, 2026 letter provided to BAWSCA, "Basis for SFPUC's Water Supply Reliability Modeling" included in the WSCP appendices. | |

**SFPUC Dry Year Allocations**

The WSA between SFPUC and the Wholesale Customers informs both Tier 1 and Tier 2 dry year allocations described as follows.

### Tier One Drought Allocations

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

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

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

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

Under the Tier 1 Shortage Plan, as amended in 2018, if the Retail Customers' Tier 1 Allocation results in the Retail Customers receiving a "positive allocation" (i.e., a supply of additional water rather than a required reduction in water use), then the excess percentage for Retail is re-allocated

to the Wholesale Customers' Tier 1 Allocation. The Retail Customers are also required to conserve a minimum of 5% for any level of reduction in system-wide water use. The additional water conserved by Retail Customers up to the minimum 5% level is deemed as remaining in RWS storage for inclusion in the calculation of projected available water in future successive dry years.

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

**Tier Two Drought Allocations**

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

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

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

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

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

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

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

### 7.2.1 WSRA Year – Type Service Reliability

This section describes WRSA year-types and the associated effects on water supplies based on Hayward regional conditions as well as characteristics of water supplies during the year-types required for the WSRA.

The SFPUC used its Hetch Hetchy and Local Simulation Model (HHLSM) to perform the water supply analyses for the supply reliability assessment and the drought risk assessment within the 2025 UWMP. HHLSM combines a historical record of hydrology from 1920 through 2025 with a current representation of RWS infrastructure and operations. The simulated operations include decisions on water supply rationing during droughts. The use of those results is described below.

A key input for the HHLSM model is the anticipated level of demand on the RWS. Supply modeling results presented in the 2025 UWMP reflect an input of projected demands on the RWS consisting of (1) projected Retail Customer demands on the RWS (total Retail Customer demands minus local groundwater and recycled water supplies), and (2) projected Wholesale Customer purchases. The SFPUC has estimated total RWS demands for 2030 through 2050 and used these estimates in HHLSM simulations of RWS water supply reliability. The SFPUC has a Level of Service objective of meeting an average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years consistent with the WSA, under which the SFPUC has a contractual obligation to supply up to 184 MGD to Wholesale Customers. Therefore, the SFPUC has also conducted modeling that assumes Wholesale Customer demand is 184 MGD to facilitate planning that supports meeting this Level of Service objective and contractual obligation.

### 7.2.2 Service Reliability – Supply and Demand Comparison

The dry year periods presented are consistent with the UWMP Guidebook 2025 methodology, as well as the SFPUC Letter and the Demand Study supply projection.

Per the UWMP Guidebook 2025, the WSRA includes three unique year types:

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

#### Water Service Reliability – Normal Year

Table 7-2 presents projected water supply and demand totals for normal-year conditions. The supply and demand values shown are consistent with those reported in Table 6-9 and Table 4-2, respectively. As indicated, Hayward is expected to have sufficient water supplies under normal hydrologic conditions to meet projected demands through 2050.

Under normal-year conditions, the RWS can deliver up to 265 MGD. For the purposes of this UWMP, however, normal-year RWS supply is defined as the volume required to meet full system demands in a non-drought year.

The supply and use totals presented in Table 7-2 include both potable and recycled water. Non-potable supply totals reflect projected recycled water production, which is assumed to fully meet recycled water demands. The SFPUC supply volumes are based on confirmed demand projections provided by Hayward to BAWSCA and SFPUC for planning purposes.

**Table 7-2. Normal Year Supply and Use Comparison**

| Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison - Water Code Section 10635 (a) | | | | | |
|---|---|---|---|---|---|
| | **2030** | **2035** | **2040** | **2045** | **2050** |
| | (MG) | (MG) | (MG) | (MG) | (MG) |
| Supply totals<br>(autofill from Submittal Table 6-9 R) | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| Use totals<br>(autofill from Submittal Table 4-2 R) | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| Surplus/(shortfall) | 0 | 0 | 0 | 0 | 0 |
| **Notes:** (1) Supply and use totals include both potable water and recycled water. Non-potable supply totals based on projected recycled supplies meeting recycled water demands; and (2) SFPUC volume based on confirmed demands provided to BAWSCA and SFPUC by the City of Hayward. | | | | | |

## Water Service Reliability – Single-Dry Year

The reliability of deliveries from the RWS is expected to vary significantly across different hydrologic year types. As described above and detailed in Appendix D, Hayward relies on SFPUC provided supply reliability estimates, along with the drought allocation analysis developed by SFPUC in coordination with BAWSCA, to estimate available RWS supplies under dry-year conditions through 2050.

Table 7-3 presents projected supply and demand totals for a single dry-year scenario. The values shown include both potable and recycled water supplies and demands. For planning purposes, single dry-year water use is assumed to be equivalent to the normal-year demand levels presented in Table 4-2 for both potable and non-potable uses.

These projections incorporate SFPUC's assumed implementation of the 2018 amendments to the Bay-Delta Plan Amendment, consistent with assumptions used by SFPUC and several other BAWSCA member agencies. Any identified supply shortfalls are anticipated to be addressed through a combination of water shortage contingency supply augmentation actions and demand reduction measures, as presented in Tables 8-2 and 8-3.

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

| Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison - Water Code Section 10635(a) | | | | | |
|---|---|---|---|---|---|
| | 2030 | 2035 | 2040 | 2045 | 2050 |
| | (MG) | (MG) | (MG) | (MG) | (MG) |
| Supply totals | 3,776 | 3,907 | 4,085 | 4,325 | 4,625 |
| Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| Surplus/(shortfall) | (1,690) | (1,904) | (2,181) | (2,467) | (2,795) |

**Notes:** (1) Supply and use include both potable water and recycled water; (2) Single dry year use expected to align with Table 4-2 projected normal year water use, for potable and non-potable; (3) Non-potable supply totals based on projected recycled supplies meeting recycled water demands; (4) SFPUC volume based on confirmed demands provided to BAWSCA and SFPUC by the City of Hayward. Potable supply total volumes provided by SFPUC in its March 12, 2026 documentation of the "Basis for SFPUC's Water Supply Reliability Modeling" and file 2025 UWMP Wholesale Customer Dry Year Allocations_FINAL.xls. SFPUC projected supplies by year and water year type **with** implementation of the 2018 amendments to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan Amendment). Using this supply scenario is consistent with what SFPUC and several other BAWSCA member agencies are assuming; and (5) Shortfalls will be addressed with a combination of WSCP supply augmentation benefits and use reduction savings benefits as presented in Tables 8-2 and 8-3.

## Water Service Reliability – Five-Consecutive Dry Years

Based on the supply reliability estimates, Table 7-4 presents Hayward's projected supply and demand totals under multiple dry-year conditions extending over a five-year consecutive drought period.

For planning purposes, these projections reflect SFPUC's assumed implementation of the Bay-Delta Plan Amendment, as well as updated wholesale allocation methodologies described in Appendix D. Supply estimates are based on the SFPUC Letter dated March 11th, 2026 (Appendix D).

The analysis applies determined reliability factors and allocation percentages to Hayward's projected demands to estimate available RWS supplies under extended drought conditions through 2050. Demand assumptions remain consistent with the normal-year projections presented in Table 4-2 and are applied uniformly across potable and non-potable uses, with recycled water assumed to fully meet non-potable demands where available.

This multi-year dry-period scenario represents a more severe and prolonged stress condition than the single dry-year analysis and is intended to evaluate system performance and planning resilience under extended hydrologic shortages. Any resulting supply deficits are addressed through implementation of water shortage contingency actions, including supply augmentation and demand reduction measures, as detailed in Chapter 8 and summarized in Tables 8-2 and 8-3.

**Table 7-4. Multiple Dry Years Supply and Use Comparison**

| Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison - Water Code Section 10635(a) | | | | | | |
|---|---|---|---|---|---|---|
| | | 2030 | 2035 | 2040 | 2045 | 2050 |
| | | (MG) | (MG) | (MG) | (MG) | (MG) |
| First year | Supply totals | 3,776 | 3,907 | 4,085 | 4,325 | 4,625 |
| | Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| | Surplus/(shortfall) | (1,690) | (1,904) | (2,181) | (2,467) | (2,795) |
| Second year | Supply totals | 3,180 | 3,341 | 3,478 | 3,667 | 3,907 |
| | Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| | Surplus/(shortfall) | (2,285) | (2,471) | (2,789) | (3,125) | (3,513) |
| Third year | Supply totals | 3,180 | 3,341 | 3,478 | 3,667 | 3,907 |
| | Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| | Surplus/(shortfall) | (2,285) | (2,471) | (2,789) | (3,125) | (3,513) |
| Fourth year | Supply totals | 3,180 | 3,341 | 3,478 | 3,667 | 3,907 |
| | Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| | Surplus/(shortfall) | (2,285) | (2,471) | (2,789) | (3,125) | (3,513) |
| Fifth year | Supply totals | 3,180 | 3,341 | 3,478 | 3,667 | 3,907 |
| | Use totals | 5,465 | 5,812 | 6,266 | 6,792 | 7,420 |
| | Surplus/(shortfall) | (2,285) | (2,471) | (2,789) | (3,125) | (3,513) |

**Notes:** (1) Supply and use include both potable water and recycled water; (2) Multiple dry year use expected to align with Table 4-2 projected normal year water use, for potable and non-potable; (3) Non-potable supply totals based on projected recycled supplies meeting recycled water demands; (4) Potable supplies in projected multiple dry years provided by SFPUC in its March 12, 2026 documentation of the "Basis for SFPUC's Water Supply Reliability Modeling" and file 2025 UWMP Wholesale Customer Dry Year Allocations_FINAL.xls. SFPUC projected supplies by year and water year type **with** implementation of the 2018 amendments to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan Amendment). Using this supply scenario is consistent with what SFPUC and several other BAWSCA member agencies are assuming; and (5) Shortfalls will be addressed with a combination of WSCP supply augmentation benefits and use reduction savings benefits as presented in Tables 8-2 and 8-3.

### 7.2.3 Water Supply Reliability Management Actions and Regional Coordination

Hayward implements a combination of demand management measures, supply planning tools, and regional coordination efforts to support long-term water supply reliability, consistent with the best management practices described in Chapter 9. In addition, Hayward continues to update its WSCP, which identifies a structured set of actions to reduce water demand and manage supply conditions during shortage events.

At the regional level, Hayward actively participates in planning and coordination efforts led by the SFPUC and BAWSCA to optimize use of existing supplies and evaluate opportunities for developing additional water resources. As part of this collaboration, Hayward supports BAWSCA in the development of its Long-Term Reliable Water Supply Strategy 2050 (Strategy 2050), a comprehensive regional assessment of member agencies' future water supply needs.

Strategy 2050 is intended to identify regional water supply and demand management gaps and establish a coordinated framework to improve long-term reliability and resilience across the BAWSCA service area. Key objectives of the strategy include:

- Providing a comprehensive assessment of regional supply and demand management needs and available options
- Establishing a framework for collectively maintaining and enhancing water supply reliability and resilience

- Supporting engagement on emerging regulations that affect water supply and demand management
- Expanding regional collaboration to address shared water supply challenges
- Identifying funding needs and strategies to support water supply reliability investments
- Promoting access to affordable and sustainable water supply and demand management solutions for all customers

Strategy 2050 is evaluating approximately 70 potential projects and actions (P&As), including both infrastructure and non-infrastructure measures. These include stormwater capture projects, onsite reuse technical assistance programs, groundwater banking partnerships, new and replacement groundwater wells, and intertie development and optimization projects, among others. The strategy evaluates these options under a range of future hydrologic, regulatory, and demand scenarios to assess their contribution to regional water supply reliability and to prioritize implementation actions. The Strategy 2050 planning effort is anticipated to be completed by 2027. Following completion, the focus will transition to implementation of prioritized actions, ongoing monitoring and reporting of progress, and integration of findings into BAWSCA's annual Work Plan.

### SFPUC WSIP Projects

Through its WSIP, the SFPUC has undertaken several water supply projects designed to enhance system reliability to meet dry-year demands. Those projects include the following:

- **Calaveras Dam Replacement Project.** Calaveras Dam is in the East Bay near a seismically active fault zone, and following the Loma Prieta earthquake in 1989, it was determined to be seismically vulnerable. To address the dam's vulnerability, the SFPUC constructed a new dam of equal height downstream of the existing dam. This project was completed in 2022. Calaveras Reservoir was completely refilled in 2023 and is now operating at full capacity.
- **Alameda Creek Recapture Project.** The Alameda Creek Recapture Project includes new facilities in and around an existing quarry pit in Sunol Valley to recover the loss of water supply associated with instream flow release and bypass requirements related to the Calaveras Dam Replacement Project. The project is anticipated to be completed in 2032.
- **Lower Crystal Springs Dam Improvements.** The Lower Crystal Springs Dam Improvements Project was completed in May 2012. The related joint San Mateo County/SFPUC Bridge Replacement Project to replace the bridge across the Lower Crystal Springs Dam was completed in January 2019.
- **Regional Groundwater Storage and Recovery Project.** The Regional Groundwater Storage and Recovery (RGSR) Project is a strategic partnership between the SFPUC and three Wholesale Customers in San Mateo County: the California Water Service Company (serving South San Francisco and Colma), the City of Daly City, and the City of San Bruno. The project sustainably manages groundwater and surface water resources to provide the RWS with additional supplies during times of drought. During years of normal or heavy rainfall, the SFPUC provides additional surface water from the RWS to the three agencies in northern San Mateo County, allowing them to reduce the amount of groundwater that they pump from the southern Westside Groundwater Basin. Over time, the reduced pumping allows the aquifer to naturally recharge and result in increased groundwater storage of up to 61,000 acre-feet of new water supply available during dry years. As of December 2025, the SFPUC had accumulated approximately 14 billion gallons of groundwater storage credits (about 43,093 acre-feet) through the project.
- The RGSR project has two phases. Phase 1, which included building thirteen production wells and treatment facilities, is complete. Phase 2 design began in early 2020 and covers rehabilitating and reinstalling pumps, installing two new variable frequency drivers, and conducting start-up testing and well disinfection. Pumps at the Hickey, Southwood Drive, and Mission well were rehabilitated, packed, and stored due to staff shortages, operational

challenges, and elevated ammonia levels at the Southwood Drive well; they may be reinstalled later. Construction on Phase 2B began in 2024 and would transport groundwater from SFPUC South San Francisco Main Well to California Water Service Company Treatment Station in South San Francisco. The project will make improvements at the existing well site which includes mechanical, electrical, structural, and corrosion protection upgrades. The SFPUC also prepared a conceptual engineering report and initiated design work for additional treatment to address the high ammonia levels at the South Spruce Lane Well and Treatment Facility. Minor amounts of groundwater pumping from RGSR wells have occurred during start-up testing and monthly maintenance.

- **Regional Groundwater Treatment Improvements Project.** The SFPUC approved this new project in the 10-Year Water Enterprise Capital Improvement Program for FY 2021-2030. The project includes treatment facilities for several of the RGSR project wells to address groundwater quality issues that have emerged since the wells were constructed.
- **Water Transfers.** During the planning and implementation of the WSIP, the SFPUC pursued a long-term agreement to transfer 2 MGD from Modesto irrigation District to the SFPUC in drought years. Negotiations with Modesto Irrigation District ended in 2012 when an agreement could not be reached. The dry-year transfer project is now being included as part of the new SFPUC Alternative Water Supply Program and is described in further detail below.

### SFPUC Alternative Water Supply Program

In 2019, the SFPUC established the Alternative Water Supply (AWS) Program to identify and plan water supply and storage projects and actions that increase the dry-year reliability of the RWS. Based on the 2045 planning horizon that the SFPUC applied in its February 2024 AWS Plan, the SFPUC anticipates a water supply gap will occur in future dry years. The AWS Program aims to help fill the gap through local and regional capital projects. The February 2024 AWS Plan identified six regional projects that might partially address the future water supply gap and the priorities for this planning effort. Since the development of that plan, three projects have been deferred (Daly City Recycled Water Expansion, Alameda County Water District-Union Sanitary District Purified Water, and Calaveras Reservoir Expansion) and one project has been canceled (Los Vaqueros Reservoir Expansion). The AWS Program is continuing to pursue the following two projects:

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

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

Outside of the AWS Program, the following additional regional projects are included in the Agreements to Support Healthy Rivers and Landscapes discussed in the Bay-Delta Plan Amendment section above. Progress on these water supply options will be guided by scientific monitoring and collaborative decision making.

- **Groundwater Banking.** Groundwater banking projects in the Modesto Irrigation District and Turlock Irrigation District service areas could provide the SFPUC with some additional water supply to meet instream flow releases in dry years, reducing water supply impacts on the RWS. A feasibility study of this option is included in the Agreements to Support Healthy Rivers and Landscapes.
- **Inter-Basin Collaborations.** Inter-Basin Collaborations could include establishing a partnership between interests on the Tuolumne River (such as the SFPUC) and those on the Stanislaus River, which would allow responsibility for streamflow to be assigned variably based on the annual hydrology. The Tuolumne system tends to spill more excess flow in wetter years than the Stanislaus system, and this excess flow could be shaped and credited to meet Stanislaus system requirements, while New Melones Reservoir in the Stanislaus system is refilling. Then the stored water could be partially used to provide required streamflow to meet Stanislaus and Tuolumne requirements in future dry years.
- **Dry-Year Transfers.** The SFPUC initiated discussions with irrigation districts under WSIP to secure a dry-year transfer (see WSIP Dry-Year Water Supply Projects section above). While no transfer was secured, the SFPUC continues to engage in discussions with irrigation districts to explore potential transfer opportunities.

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

## 7.3 Drought Risk Assessment

In addition to the long-term WSRA presented in the preceding sections, the Drought Risk Assessment (DRA) evaluates the City water supply risks under a severe drought scenario lasting five consecutive years following the completion of this assessment (i.e., 2026 through 2030). The DRA provides a near-term planning perspective that informs the demand management measures, water shortage response actions, and supply augmentation programs described in Chapters 8 and 9. Suppliers may conduct an interim update or updates to this DRA within the five-year cycle of its UWMP update (i.e., before the 2030 UWMP).

Consistent with CWC 10635(b), the DRA evaluates the reliability of supplies under extended drought conditions and supports proactive planning for shortages. Hayward may update this assessment within the five-year UWMP cycle, prior to the 2030 UWMP, if new information becomes available that substantially affects supply or demand assumptions.

### 7.3.1 DRA Methodology

As a first step to the DRA, Hayward estimated unconstrained water demand for the next five years. Unconstrained water demand is the expected water use in the absence of drought water use

restrictions. The characteristic five-year water demand is from the 2025 Demand Study, a uniform demand and conservation savings projection for each Member Agency developed by BAWSCA and further described in DWR Section 4.2.5.

### 7.3.2 Source-specific Reliability Assessment

The available water supplies assumed in the DRA are based upon the same methodology and assumptions used for the long-term water service reliability assessment, provided in DWR Section 7.2, and relies on information provided by SFPUC and BAWSCA.

The data and methods used to determine the RWS supply for the DRA dry-year sequence are the same as those described in the "SFPUC Supply Modeled RWS Dry Year Supply Availability" section. The SFPUC used the HHLSM with the design drought sequence to perform the water supply analyses and simulate the water supply shortage conditions over the five-year drought period.

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

### 7.3.3 Total Water Supply and Use Comparison

DWR Table 7-5 provides a comparison of Hayward's water supply and demand for an assumed five-year drought period from 2026 through 2030 for the scenario without implementation of the Bay-Delta Plan Amendment since the start date of implementation is unknown. Under this scenario, Hayward's supplies are not expected to meet demands in the event of a five-year drought starting in 2026.

To address these potential shortages, Hayward has developed a WSCP that outlines a comprehensive set of response actions for a range of shortage levels. The WSCP includes both demand reduction measures and supply augmentation strategies designed to maintain essential water service and protect public health and safety during drought and other supply disruption events. Hayward intends to implement these measures, as needed, to mitigate projected supply deficits.

Given the current uncertainty discussed in Section 7.1 and Section 7.2, Hayward could revise its DRA prior to the 2030 UWMP update if significant new information becomes available. CWC §10635(b) permits urban water suppliers to conduct an interim update or updates to their DRA within the five-year cycle of its UWMP update.

By the 2030 UWMP update, Hayward anticipates receiving additional information from SFPUC regarding its AWS Program, including estimated supply contributions from proposed projects, as well as refined estimates of potential impacts associated with the Bay-Delta Plan Amendment.

Hayward also expects to further evaluate local supply opportunities, including emergency use of the groundwater basin and potential expansion of recycled water systems. In addition, ongoing discussions among wholesale customers may result in revisions to the Tier Two drought allocation methodology, which could affect Hayward's share of available supplies during drought conditions.

Due to these evolving factors, Hayward recommends that users of the 2025 UWMP contact City staff to obtain the most current information regarding the DRA for use in planning and decision-making efforts.

**Table 7-5. Five-Year Drought Risk Assessment**

| Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment - Water Code Section 10635(b)(3) | | |
|---|---|---|
| **2026** | | **Total** |
| Total Water Use | (MG) | 5,015 |
| Total Supplies | (MG) | 5,015 |
| Surplus/Shortfall w/o WSCP Action | | 0 |
| **2027** | | **Total** |
| Total Water Use | (MG) | 5,140 |
| Total Supplies | (MG) | 5,055 |
| Surplus/Shortfall w/o WSCP Action | | (85) |
| **2028** | | **Total** |
| Total Water Use | (MG) | 5,267 |
| Total Supplies | (MG) | 5,056 |
| Surplus/Shortfall w/o WSCP Action | | (211) |
| **2029** | | **Total** |
| Total Water Use | (MG) | 5,373 |
| Total Supplies | (MG) | 5,056 |
| Surplus/Shortfall w/o WSCP Action | | (317) |
| **2030** | | **Total** |
| Total Water Use | (MG) | 5,465 |
| Total Supplies | (MG) | 5,056 |
| Surplus/Shortfall w/o WSCP Action | | (409) |

**Notes:** (1) Supply and use totals include both potable water and recycled water; (2) Multiple dry year use expected to align with BAWSCA Demand Study projected normal year water use, for potable and non-potable from 2026 through 2030; (3) Non-potable supply totals based on projected recycled supplies meeting recycled water demands; (4) Potable supplies in projected multiple dry years provided by SFPUC in its March 12, 2026 documentation of the "Basis for SFPUC's Water Supply Reliability Modeling" and file 2025 UWMP Wholesale Customer Dry Year Allocations_FINAL.xls. SFPUC projected supplies by year and water year type **with** implementation of the 2018 Bay-Delta Plan Amendment. Using this supply scenario is consistent with what SFPUC and several other BAWSCA member agencies are assuming; and (5) Shortfalls will be addressed with a combination of WSCP supply augmentation benefits and use reduction savings benefits as presented in Tables 8-2 and 8-3.

# 8 WATER SHORTAGE CONTINGENCY PLANNING

**Lay Description**

The California Water Code Section 10632 requires every Urban Water Supplier that serves more than 3,000 acre-feet per year or has more than 3,000 connections to prepare and adopt a standalone Water Shortage Contingency Plan as part of its UWMP. The WSCP is required to allow Suppliers to plan for a greater than 50% supply shortage and is due to be updated every five years.

Water shortage contingency planning is a strategic planning process in which the City of Hayward engages to prepare for and respond to water shortages, which occur when available water supply is insufficient to meet normal expected customer water use. A shortage may occur due to a number of reasons, such as water supply quality changes, climate change, drought, and catastrophic events (e.g., earthquake). Hayward's WSCP provides real-time water supply availability assessment and structured steps designed to respond to actual conditions. This level of detailed planning and preparation will help maintain reliable supplies and reduce the impacts of supply interruptions. This WSCP is due to be updated, based on new requirements, every five years and will be adopted as a current update for submission to DWR by July 1, 2026.

## 8.1 Overview of the WSCP

The WSCP provides proactive mitigation measures to assist Hayward during periods of water shortages. The WSCP contains documented processes and procedures, which are given legal authority through the Water Shortage Contingency Response Ordinance (Water Code Section 10632). This allows Hayward's governing body, its staff, and the public to easily identify and efficiently implement pre-determined steps to mitigate a water shortage to the level appropriate for the degree of anticipated shortfall.

Figure 8.1 illustrates the interdependent relationship between the three procedural documents related to planning for and responding to water shortages.

**Figure 8-1. Water Shortage Contingency Plan Flow of Information**


Hayward's WSCP includes steps to assess if a water shortage is occurring and the level of shortage actions needed to achieve the best response as appropriate to the conditions.

The WSCP contains the following prescriptive elements:

- An analysis of water supply reliability
- The drought shortage 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 the supply gap for each measure
- 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

## 8.2 Summary of Water Shortage Response Strategy and Required DWR Tables

This WSCP is organized into three main chapters as listed below, with Chapter 3 aligned with the California Water Code Section 16032 requirements. In addition to the WSCP, Section 6.2 of this UWMP has further details on Hayward's water supply systems.

**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 the 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 the 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).

## 8.3 Water Shortage Contingency Levels and Measures

The WSCP is based on adequate details of supply augmentation and demand reduction measures structured to match varying degrees of shortage to inform relevant stakeholders of what to expect during a water shortage. Hayward has adopted water shortage levels consistent with the requirements identified in CWC Section 10632 (a)(3)(B), shown in Table 8-1 here and in the WSCP. Recycled water irrigation customers are not subject to the landscape irrigation prohibitions.

**Table 8-1. Water Shortage Contingency Plan Levels**

| Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels – Water Code Section 10632(a)(3)(B) | | | | |
|---|---|---|---|---|
| ☑ | Check the box if the Supplier uses the Standard six levels of water shortage. | | | |
| **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 goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in Hayward 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 |

| Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels – Water Code Section 10632(a)(3)(B) | | | | |
|---|---|---|---|---|
| ☑ | Check the box if the Supplier uses the Standard six levels of water shortage. | | | |
| **Standard Shortage Levels** | **Percent Shortage Range** | **Suppliers Shortage Levels** | **Percent Shortage Range** | **Shortage Response Actions (*Narrative description*)** |
| | | | | grounds provided in California Water Code section 350. |
| 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. |

### 8.3.1 Supply Augmentation Measures

The supply augmentation actions that align with certain shortage levels are described in Table 8-2 and in the WSCP. These augmentations 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.

**Table 8-2. Supply Augmentation Measures**

| 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? | | | |
| 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 total per year. | | | | |

### 8.3.2 Demand Reduction Measures

The demand reduction actions that align with each shortage level are described in Table 8-3. This table also estimates the extent to which that action will reduce the gap between supply and demand to demonstrate that the chosen suite of shortage response actions can be expected to deliver the necessary requirements of a given shortage level. Irrigation with recycled water would be allowed if the shortage response actions are implemented.

**Table 8-3. Demand Reduction Actions**

| 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | 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 |
| 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 Homeowners Association sites. | 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | Volume or Percentage | Shortage Gap Reduction (MG) | | |
| 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 |
| 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 |

| 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | Volume or Percentage | Shortage Gap Reduction (MG) | | |
| 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 as determined, after notice to customers. | Yes |
| 2 | Landscape - Prohibit certain types of landscape irrigation | Percentage | 0-1% | All non-essential potable 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 |

| 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | Volume or Percentage | Shortage Gap Reduction (MG) | | |
| 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 as determined, after notice to customers. | Yes |
| 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 |

| 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | Volume or Percentage | Shortage Gap Reduction (MG) | | |
| 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 |
| 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 |

| 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? (yes/no) | | | | |
| Shortage Level | Demand Reduction Actions | How much will this reduce shortage gap? | | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
| | | Volume or Percentage | Shortage Gap Reduction (MG) | | |
| 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 necessary for public health and safety purposes. | Yes |
| 6 | Other | Percentage | 0-15% | Water use for public health and safety purposes only. Customer rationing may be implemented. | Yes |

# 9 DEMAND MANAGEMENT MEASURES

**Lay Description**

This chapter describes the water conservation programs that the City of Hayward has implemented, is currently implementing, and plans to implement in coordination with regional efforts. Demand Management Measures (DMMs) are specific actions undertaken by water suppliers to promote efficient water use and reduce overall demand. On the state level, these shifted from meeting Best Management Practices (BMPs) to per capita water reduction targets set by the Water Conservation Action of 2009 (SB X7-7), and more recently to water efficiency targets mandated by Assembly Bill (AB) 1668 and Senate Bill (SB) 606. Urban suppliers will need to meet these new mandates starting in 2027.

These measures play a critical role in sustaining California's water resources and supporting long-term supply reliability. As population growth increases water demand, and as factors such as climate change introduce additional uncertainty to water supply availability, the importance of DMMs continues to grow. By implementing a comprehensive portfolio of DMMs, Hayward is better positioned to respond to changing supply conditions, reduce peak and overall water demands, and enhance system resilience. These efforts also support compliance with state requirements and contribute to achieving regional and statewide water conservation objectives.

## 9.1 Regional Water Conservation – BAWSCA Conservation Programs

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

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

BAWSCA's Core Conservation Programs include organizing classes focused on sustainable and water-efficient landscape design, assistance related to Advanced Metering Infrastructure (AMI), and other associated programs that work to promote smart water use and practices. BAWSCA's Subscription Programs include numerous rebate programs, educational programs that can be offered to area schools, technical assistance to Member Agencies in evaluating water loss, and programs that use data analytics to provide customized water-saving recommendations to customers. In total, BAWSCA offers 24 programs to its Member Agencies and that number continues to grow over time.

Each Fiscal Year, BAWSCA prepares an Annual Water Conservation Report that documents several conservation program metrics exemplifying the benefits of the Regional Water Conservation Program to all 26 BAWSCA Member Agencies. Additionally, the report highlights how all 26 Member Agencies participate in one or more of the Subscription Programs offered by BAWSCA, such as rebates, water loss management and large landscape audits. The Demand Study indicates that

through a combination of active and passive conservation, 16.14 MGD will be conserved by BAWSCA's Member Agencies by 2050.

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

## 9.2 Demand Management Measures for Retail Suppliers

This section describes Hayward's planned efforts in implementing various conservation measures to meet its water use targets and its future plans for achieving its water use objectives.

### 9.2.1 Water Waste Prevention Ordinance

Hayward City Council first adopted the Prohibition of Wasteful Water Practices Ordinance in 1993 that explicitly listed wasteful water practices and activities that are prohibited. The Ordinance was updated and amended in 2017 to incorporate prohibition of additional water wasting activities, and is included in the Hayward Municipal Code, Section 11-2.47[48] Increasingly restrictive enforcement mechanisms are included in the Ordinance.

In general, the Ordinance always prohibits the use of potable water for non-essential purposes, including:

- Defective or broken plumbing
- Flooding or runoff into gutters and streets
- Irrigation that results in excessive water flow, overspray, or runoff onto sidewalks, driveways, etc.
- Washing of buildings, sidewalks, driveways and the like, with a hose unless it is equipped with a positive shut-off nozzle
- Washing of vehicles with a hose unless it is equipped with a positive shut-off nozzle
- Water fountains and other decorative water features unless the water is recirculated

While no changes to the Ordinance are anticipated in the near term, Hayward will consider revisions as needed to ensure that the document remains current.

### 9.2.2 Metering

The City of Hayward Water System is fully metered. Meters are read a minimum of six times annually for billing purposes, and all water sales are based on metered consumption.

In 2018, Hayward implemented an AMI system, including replacing its approximately 36,000 water meters with new AMI-compatible units. This new technology allows for comprehensive customer engagement, including the ability to monitor daily and hourly water use and receive notices of continuous water usage. The AMI system also provides Hayward with extensive data regarding customer use that will inform water conservation programs and help Hayward target its resources more effectively. Residents and businesses can also access their water use information through the customer portal and set up leak alert notifications to achieve measurable water savings in a timely manner.

[48] City of Hayward. Municipal Code §11-2.47 (Water Waste Prohibition). https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH11PUUT_ART2HAMUWASY_S11-2.47PRWAWAPR

### 9.2.3 Conservation Pricing

Conservation pricing provides economic incentives to use water efficiently and maximize revenue from volumetric rates, in relation to the direct costs of providing service.

Hayward implemented conservation pricing in the early 1990s, through a structure by which the volumetric rate increases as the quantity of water used increases. The tier rate structure always remains in place and is not dependent on a water shortage for implementation. While the tier structure itself has been modified occasionally since it was first implemented, the basic premise has remained constant:

- Customers pay for water in direct proportion to the cost of delivering that water, and one group of customers does not subsidize the cost of service to another group
- Rates are calculated in accordance with accepted principles and based on the actual cost of service for each usage tier
- The current rate structure incorporates three tiers for residential customers and two tiers for non-residential accounts

In addition to tiered usage rates, Hayward encourages water conservation by maintaining a low fixed service fee. This fee is used to recover costs that do not vary with the amount of water used, such as meter reading, billing, customer service, and long-term debt service. The California Water Efficiency Partnership (CalWEP) considers conservation pricing to be effective if the revenue from fixed fees represents no more than 30% of the water utility's total revenue. In FY 2025, Hayward's total revenue from fixed service fees comprised about 19% of the total Water Fund revenue.

Information regarding penalties, charges, and other enforcements for excessive use during water shortages and impacts of water shortages on revenues and expenditures are in Hayward's 2025 WSCP.

Hayward's current water usage rates and service fees are found in Appendix E. Rates are typically adjusted annually after a rigorous examination of service costs and anticipated water deliveries and in accordance with applicable laws that govern water pricing, including provisions of Proposition 218. Hayward implements all required public notices, and the City Council conducts a public hearing before adopting water rates.

### 9.2.4 Public Education and Outreach

Hayward conducts an extensive and varied public education and outreach program to inform and encourage customers regarding water use efficiency. Program components include the following:

**Marketing Materials**

- Materials to promote rebates and no-cost replacement fixtures, such as website announcements and brochures
- Billing inserts created for a variety of topics, including education opportunities and rebate offers

**Water Efficient Landscape Classes**

- Ten in-person classes offered in a typical year
- Diverse range of topics, including gardening with succulents, creating a native pollinator garden, rain gardens and rain barrels, drip irrigation, lawn replacement, and spring and winter edible gardening

**Water Bill Information**

- Gallons per day usage
- Comparison of water use with prior year
- Usage for preceding 12 billing periods in easy-to-read chart format

**School Education**

- In-class curriculum consisting of lesson plans, teaching aids, student workbooks and activities, and a water-wise kit for each student (home water use survey, water saving showerhead, faucet aerators, and leak detection aids)
- Assembly programs tailored to specific grade levels

**Information Booths**

- Participation in city events that attract many residents and businesses, such as summer street fairs, Earth Day events, and other relevant activities
- Water conservation information is available to customers at city sites with high-customer traffic, such as the Development Services and Revenue Office

**Website and Social Media**

- Comprehensive website with up-to-date information about water conservation, tips and tools for reducing water use, rebate incentives, and media updates
- Hayward water conservation is active on social media sites, including Instagram, Nextdoor, and Facebook.

**Water Waste Reporting**

- Online reporting portal and dedicated email address created for reporting water waste incidents
- Timely actions taken to notify property owners and ensure corrective actions

### 9.2.5 Programs to Assess and Manage Distribution System Real Loss

Hayward maintains an aggressive program to monitor and address distribution system losses. Section 4.3 includes a discussion and quantification of real system losses, current and projected. This section documents Hayward's actions to locate and correct distribution system leaks and prevent future losses.

In 2011, Hayward completed a detailed Water Audit and Component Analysis of Real and Apparent Losses, utilizing the AWWA methodology. As a result, a comprehensive leak detection and repair effort was implemented in 2012 to locate leaks through the distribution system, including all service connections. The most recent audit was completed in 2025 for calendar year 2024. Analysis and repair efforts continue on an annual basis with corrective actions after each annual water loss report.

Hayward maintains staff dedicated to responding to and repairing reported water main and distribution system leaks on an ongoing basis. As necessary, outside resources are brought in to address emergency situations. Hayward also notifies customers when a leak on the customer's side of the meter is suspected. In addition, operations staff track the hotspots of frequent water main leaks and breaks through Geographic Information Systems (GIS) mapping. The map informs staff to plan for future capital improvement projects.

Since some loss potentially results from high system pressure in certain locations, a pressure management program has been put in place. Operations staff carefully monitor the pressure in key system locations in each elevation zone to reduce the potential for excessive pressure that could result in pipe breaks and leaks.

### 9.2.6 Water Conservation Program Coordination and Staffing Support

Water conservation in Hayward is a collaborative effort, utilizing both local and regional resources. The implementation of conservation activities and functions is currently assigned to the Water Resources Division and is supported by other staff members. This includes the Water Resources Manager, Water Resources Planner, and Assistant Civil Engineer, among others. Hayward's Community and Media Relations Officer is also a key partner in maintaining website information, water conservation messaging, and media outreach.

The current water conservation representative is:

Cheryl Munoz
Water Resources Manager
777 B. Street
Hayward, CA 94541
Email: cheryl.munoz@hayward-ca.gov

Hayward actively participates in regional demand management efforts, including development and implementation of the Regional Water Conservation Implementation Plan. Hayward staff participate regularly in meetings and working groups to develop effective regional programs and evaluate each conservation program to assess its benefits to Hayward customers.

Hayward currently participates in the following regional efforts:

- Water efficient landscape classes
- School education programs (in-class and assembly)
- Large landscape water budgets
- Rain barrel rebates
- Commercial, Industrial, and Institutional (CII) Irrigation Hardware Rebate

Other programs implemented by Hayward on a local basis include the following:

- Lawn replacement rebates
- Conservation devices (showerheads, kitchen and bathroom faucet aerators)
- Residential self-audit toolkits
- Customer AMI portal

Leak notifications, public information, and outreach efforts are typically a mixture of regional and local messaging. Hayward has participated in regional outreach campaigns, particularly during drought, but also maintains a robust local presence on Hayward's website, social media, traditional media, and at local events.

Water conservation programs are solely funded by water sales revenue. For FY 2025, a total of nearly $360,000 was budgeted for water demand management. This amount is in addition to staffing costs for water conservation program management, irrigation management for city-owned landscaping, and monies paid to regional entities for program development and oversight.

## 9.3 Other Demand Management Measures

In addition to the DMMs previously discussed, Hayward is implementing the following programs:

**Rebate Programs**

Hayward currently offers financial incentives for the following water use efficiency measures:

- Lawn Replacement – A rebate of $0.75 per square foot for replacement of existing front yard lawn with water efficient landscaping, $0.50 for replacement of back yard lawn, and an additional $0.25 per square foot of lawn converted using sheet mulching.
- Rain Barrels – A rebate of $50 for the purchase of a rain barrel to collect rainwater for irrigation and other non-potable uses.
- Irrigation Hardware Replacement – A rebate of up to $5 for high-efficiency sprinkler nozzles, up to $10 for spray bodies with pressure regulation, and up to $30 for large rotors.

**Large Landscape Program**

Hayward has contracted with Waterfluence to develop and distribute water budgets and bimonthly water use reports to selected customers with large landscapes.

**Fixture Replacements**

Low water use showerheads and/or kitchen and bathroom faucet aerators are provided at no cost to single family and multi-family residences upon request.

**Water Efficient Landscaping of City-Owned Sites**

Hayward's Water Fund supports staffing in the Maintenance Services Department to install and maintain low water usage irrigation and backflow devices in rights-of-way, medians, and city-owned properties. This includes monitoring and maintaining Cal Sense irrigation and water conservation devices throughout Hayward.

**Water Efficient Landscape Ordinances and Guidelines**

The Hayward City Council has adopted a variety of Ordinances and guidelines for the purpose of conserving water resources and increasing sustainability. These documents address issues such as landscape irrigation water use and water waste prohibitions. The Ordinances are Hayward Municipal Code §11-2.47, Alameda County Bay-Friendly Water Efficient Landscape Ordinance, and Ordinance No. 43: Civic Green Building and Bay-Friendly Gardening.

## 9.4 Implementation over the Past Five Years

The following sections document implementation of the water conservation programs listed in the previous sections over the past five years.

**Water Waste Prohibition Ordinance**

Hayward's Prohibition of Wasteful Water Practices Ordinance was first adopted in 1993 and was most recently updated in 2017. It serves as a cornerstone for actions taken by Hayward to address incidents of wasteful water use. The initial action is a written notice to alert the property owner of wasteful activities. In most cases, corrective action is taken by the property owner. If not, Hayward follows up with a second notice, door hanger, and personal contact. If the situation is still not corrected, Hayward may issue administrative fines and/or limit water service.

The Ordinance is always in effect, regardless of water supply. Over the last five years (2021-2025), 351 reports of water waste were received and acted upon by Hayward.

**Metering**

Hayward's water system is fully metered, and all water bills are based on metered water usage.

**Conservation Pricing**

Hayward's water rates are determined on a cost-of-service basis. Since the early 1990s, water conservation rates have been in place, whereby the volumetric rate increases as the volume of water purchased increases. Further, Hayward has maintained a low fixed service fee, which in FY 2025 generated about 19% of the total Water Fund Revenue.

**Public Education and Outreach**

Hayward's active and robust public education and outreach program utilizes a variety of media, as described in Section 9.2.4 to promote the water conservation message to customers.

Following are some key five-year statistics to illustrate the success of other efforts to educate water customers:

- **School Education** – In FY 2025, Hayward provided the WaterWise in-class curriculum to over 6,033 students across 14 schools.[49] The WaterWise curriculum includes lesson plans, teaching aids, student workbooks, student activities, and a water wise kit for each student (home water use survey, water saving showerhead, faucet aerators, and leak detection aids). The home water use survey and low water using devices provide opportunities for students to engage their families in conservation activities. Both programs are marketed through direct contact with teachers at Hayward Unified School District and private schools. Programs are offered on a first-come, first-served basis if funding is available.
- **Information Booths and Event Participation** – Hayward participates in at least six to eight events each year to distribute informational brochures and devices to the public.
- **Water Efficient Landscape Classes** – In 2025, Hayward hosted 11 in-person classes, attended by approximately 200 people. The class size and hands-on approach serve to provide a meaningful educational experience. The primary methods used to promote the classes are collaborating with the Hayward Downtown Library and promoting the classes on Hayward's website and social media platforms.

**Distribution System Losses**

Hayward tracks and maintains a comprehensive leak detection survey and repair program. In 2025, City crews uncovered 92 water service leaks and main breaks. It is estimated that repair of these leaks resulted in water savings of about 471,267 gpd or about 528-acre feet per year. With this program, City crews respond promptly to reports of main breaks and water service leaks to minimize system losses.

**Other Demand Management Measures**

- **Rebate Programs** – During the past five years, Hayward has provided the customer rebates described below. The rebates are marketed through Hayward's websites, newsletters, brochures, and point-of-purchase information.
    - Lawn Replacements – Over the last five years, a total of 10 rebates have been issued for the replacement of lawn with water efficient landscaping.
    - Rain Barrels – A total of 10 rebates have been issued for the purchase of rain barrels.
- **Large Landscape Water Budgets** – Water budgets have been developed for 202 sites for customers with large landscapes. This program allows participating customers to track their water budgets and usage data in a GIS-based portal to assist them in making informed decisions to conserve water. Hayward selects customers for participation, prioritizing customers who have the largest irrigated landscapes and the highest irrigation water consumption.
- **Fixture Replacements** – Between FY21-22 and FY 24-25, 147 single and multi-family residential units have been provided with water efficient showerheads and kitchen and bathroom faucet aerators. As with rebates, the program is promoted through the website and brochures. Many customers are also referred by the Revenue Office when they call to ask for assistance in reducing water consumption.
- **Water Efficient Landscape Ordinances and Guidelines** – In addition to the Water Waste Prohibition Ordinance,[50] the Hayward City Council has enacted the Bay Friendly Water Efficient Landscape

[49] EarthCapades FY2025 Year-End Report

[50] City of Hayward. Hayward Municipal Code §11-2.47. https://library.municode.com/ca/hayward/codes/municipal_code?nodeId=HAYWARD_MUNICIPAL_CODE_CH11PUUT_ART2HAMUWASY_S11-2.47PRWAWAPR

Ordinance[51] and the Civic Bay Friendly Landscaping Ordinance.[52] Hayward supports a full-time Landscape Architect staff position to administer the Bay Friendly Water Efficient Landscape standards.

## 9.5 Planned Implementation to Achieve Water Use Targets

Hayward's residential and gross per capita water usage is very low compared to both the statewide average and neighboring communities. Hayward's service area includes a large and growing industrial sector; a state university, community college, and chiropractic college, all of which are mainly "commuter" institutions and anticipate growth; and a major regional hospital. Through a combination of factors, Hayward's demand has "hardened" such that achieving further reductions in per capita use will be challenging.

Hayward has achieved its 2020 water use per capita target. Additional information about Hayward's compliance of SB X7-7 is included in Chapter 5 of this UWMP. Nevertheless, Hayward will continue to implement aggressive DMMs. Assuming they remain cost-effective, the following previously described measures are expected to continue:

- Rain barrel rebates
- Lawn replacement rebates
- Water efficient landscape classes
- Public outreach and education
- School education programs (in-class and assembly)
- Large landscape water budgets
- Fixture replacements (showerheads, kitchen and bathroom faucet aerators)
- Customer AMI portal
- Leak notification
- Conservation pricing
- Water efficient landscaping of city-owned sites
- Enforcement of city ordinances

As water conservation is a constantly evolving field, Hayward will continue to research and evaluate programs and technologies to meet its Urban Water Use Objective (see Section 9.6 below). Hayward will expand outreach and education efforts to help residential and CII customers optimize their water use efficiency. This will include enhanced communication campaigns, workshops, and digital resources that promote water-efficient practices and inform customers about available programs and incentives. Hayward will also support customers in adopting Best Management Practices by providing guidance on efficient irrigation, leak detection, fixture upgrades, and landscape conversion. Through proactive engagement and targeted messaging, these efforts will help meet Hayward's long-term water conservation goals.

[51] Alameda County CDA. Bay Friendly / WELO Ordinance Updates. https://www.acgov.org/cda/planning/landuseprojects/welo_ordinance.htm

[52] Oro Loma Sanitary District. Ordinance No. 43. https://orolomasanitarydistrict.ca.gov/files/749012d38/ordinance-43-civic-green-building-and-bay-friendly-gardening.pdf

## 9.6 Urban Water Use Objectives (Future Requirements)

Beginning in 2023, Suppliers are required to calculate and report their annual UWUO, submit validated water audits annually, and implement and report BMP CII performance measures.

An Urban Water Supplier's UWUO is based on efficient water use of the following:

- Aggregate estimated efficient indoor residential water use
- Aggregate estimated efficient outdoor residential water use
- Aggregate estimated efficient outdoor irrigation landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use
- Aggregate estimated efficient water losses
- Aggregate estimated water use for variances approved by the SWRCB
- Allowable potable reuse water bonus incentive adjustments

BAWSCA and Hayward offer a suite of programs, described in detail previously in this chapter which will help Hayward meet and calculate its UWUO. Hayward has successfully met its UWUO for the past three consecutive years, demonstrating a sustained commitment to water conservation and efficient water management. Through a combination of conservation programs, customer outreach, and the implementation of water-efficient technologies and practices, Hayward continues to maintain water use levels below the state's calculated threshold. Continued engagement with top residential and CII water use customers, along with providing practical BMPs, will continue to support long-term reductions in water demand and ensure compliance with state water efficiency standards.


# 10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

**Lay Description**

Procedures for adopting and implementing the 2025 UWMP and WSCP in a transparent and stakeholder-accessible manner. The procedures are designed to provide customers with the opportunity to understand water supply management, planning, and reliability, as well as to provide input. An adopted UWMP may be used to support water supply capital planning and investment, as well as potential rate adjustments. Adequate notification and the associated public hearing allow for interested parties to affect reliability and future investments in local water management.

This chapter details the processes Hayward followed for review and adoption of the 2025 UWMP and WSCP, including noticing, public availability and review, public hearing, adoption, submission, and implementation, as well as the processes for a potential amendment of an adopted UWMP.

## 10.1 Notice of Plan Preparation

On January 22, 2026, notices of preparation and intent to update the UWMP and WSCP were emailed to the applicable cities, county, and other agencies as required more than 60 days in advance of the public hearing. A copy of the Notice of Intent to Update the 2025 UWMP and WSCP is included in Appendix B.

In May 2026, notices of the public hearing were emailed to the applicable cities, county, and other agencies as required more than 14 days prior to the hearing. The notices included the location where the 2025 UWMP and WSCP could be viewed, the revision schedule, and Hayward's contact information. A copy of the Notice of Public Hearing is included in Appendix C.

Table 10-1 lists the specific entities notified.

**Table 10-1. Notification to Cities and Counties**

| Submittal Table 10-1 Retail: Notification to Cities and Counties - Water Code Section 10621(b) and 10642 | | |
|---|---|---|
| City Name | 60 Day Notice | Notice of Public Hearing |
| City of Brisbane | Yes | Yes |
| City of Burlingame | Yes | Yes |
| City of Daly City | Yes | Yes |
| City of East Palo Alto | Yes | Yes |
| City of Foster City | Yes | Yes |
| Town of Hillsborough | Yes | Yes |
| City of Menlo Park | Yes | Yes |
| City of Millbrae | Yes | Yes |
| City of Milpitas | Yes | Yes |
| City of Mountain View | Yes | Yes |
| City of Palo Alto | Yes | Yes |
| City of Redwood City | Yes | Yes |

| Submittal Table 10-1 Retail: Notification to Cities and Counties - Water Code Section 10621(b) and 10642 | | |
|---|---|---|
| City Name | 60 Day Notice | Notice of Public Hearing |
| City of San Bruno | Yes | Yes |
| City of San Jose | Yes | Yes |
| City of Santa Clara | Yes | Yes |
| City of Sunnyvale | Yes | Yes |
| County Name | 60 Day Notice | Notice of Public Hearing |
| Alameda County | Yes | Yes |
| Other Agencies | 60 Day Notice | Notice of Public Hearing |
| Alameda County Water District (ACWD) | Yes | Yes |
| BAWSCA | Yes | Yes |
| California Water Service | Yes | Yes |
| Coastside County Water District (CCWD) | Yes | Yes |
| East Bay Dischargers Authority (EBDA) | Yes | Yes |
| East Bay Municipal Utility District (EBMUD) | Yes | Yes |
| Hayward Area Recreation and Park District (HARD) | Yes | Yes |
| North Coast County Water District | Yes | Yes |
| Mid-Peninsula Water District | Yes | Yes |
| Purissima Hills Water District | Yes | Yes |
| SFPUC (San Francisco Public Utility Commission) | Yes | Yes |
| Stanford University | Yes | Yes |
| Valley Water – Wholesaler | Yes | Yes |
| Westborough Water District | Yes | Yes |

## 10.2 Notice of Public Hearing

The public hearing scheduled for June 16, 2026, was announced by public notice on May 29, 2026, and June 5, 2026, indicating the City of Hayward would discuss and receive comments/input on the 2025 UWMP and WSCP prior to adoption. The notification appeared in *The Daily Review*, the Hayward newspaper with the largest circulation, for two successive weeks (14 calendar days), two times, with at least five days between publication dates prior to the public hearing as prescribed in Government Code Section 6066.[53] The notice included the time and place of the hearing, as well as the location where the UWMP and WSCP were available for public review. Notification came through a display advertisement (see Appendix C) and by posting the 2025 UWMP and WSCP on the City's website[54] by June 2, 2026.

## 10.3 Public Hearing and Adoption

### 10.3.1 Public Hearing

The public hearing, conducted by the Hayward City Council on June 16, 2026, allowed for community input on the 2025 UWMP and WSCP.

### 10.3.2 Adoption

This 2025 UWMP and WSCP were adopted on June XX, 2026, thereby superseding the existing plans prepared in 2020. A copy of the resolution adopting the 2025 UWMP is provided in Appendix F.

[53] California State Legislature. (1949). Government Code Section 6066. http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=6066

[54] Website, City of Hayward: https://www.hayward-ca.gov/documents/urban-water-management-plan

## 10.4 Plan Submittal

Within 30 days of adoption, Hayward submitted a copy of the 2025 UWMP and WSCP to DWR, the California State Library Government Publications Section (Sacramento), and to any city or county to which Hayward provides water in accordance with CWC Sections 10635(c), 10644(a)(1) and (2), and 10645(a) and (b).

### 10.4.1 Submitting a UWMP and WSCP to DWR

To satisfy DWR requirements, all UWMPs and WSCPs must be submitted to DWR within 30 days of adoption and prior to July 1, 2026. Hayward submitted the documents within 30 days of the adoption date of June XX, 2026.

### 10.4.2 Electronic Data Submittal

Hayward submitted its 2025 UWMP and WSCP to DWR electronically. Documentation confirming the City's 2025 UWMP and WSCP submittal can be found in Appendix G.

### 10.4.3 Submitting a UWMP to the California State Library

Hayward submitted a CD or hard copy of its adopted 2025 UWMP and WSCP to the California State Library within 30 days of adoption.

### 10.4.4 Submitting a UWMP to Cities and Counties

Hayward submitted a copy of its adopted 2025 UWMP and WSCP to Alameda County within 30 days of adoption.

## 10.5 Public Availability

Within 30 days after filing the 2025 UWMP and WSCP with DWR, the documents were made available for public review during normal business hours at Hayward City Hall (City Clerk's Office and Department of Public Works & Utilities), the public libraries (Main and Weekes Branches), and on Hayward's website.[55]

## 10.6 Notification to Public Utilities Commission

Per CWC Section 10621(c), Suppliers that are regulated by the California Public Utilities Commission (CPUC) must submit their UWMP and WSCP to the CPUC as part of its general rate case filings. Since this is not applicable to Hayward, the plans were not submitted to the CPUC.

## 10.7 Plan Implementation

Hayward will implement this plan adopted pursuant to this chapter in accordance with the schedule set forth in this plan.

## 10.8 Amending an Adopted UWMP or WSCP

Should any changes be made to the 2025 UWMP and/or the WSCP, per CWC Sections 10621(d) and 10644(a)(1), within 30 days after adoption, Hayward will submit copies of the amendments or changes to DWR, the California State Library, and Alameda County.

### 10.8.1 Amending a UWMP

If Hayward amends the adopted 2025 UWMP, each of the steps for notification, public hearing, adoption, and submittal of the original 2025 UWMP will be followed.

[55] https://www.hayward-ca.gov/documents/urban-water-management-plan

### 10.8.2 Amending a WSCP

Specific to Water Code Section 10644(b), if Hayward revises its WSCP after DWR has approved the 2025 UWMP, Hayward will submit to DWR an electronic copy of the revised WSCP within 30 days of adoption.

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# APPENDICES

A. UWMP Checklist

B. Notice of Intent to Prepare the 2025 UWMP

C. Notice of Public Hearing

D. BAWSCA & SFPUC Regional Water System Supply Reliability Letter for 2025 UWMPs

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# APPENDIX A – UWMP CHECKLIST

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Chapter 1 | 10615 | A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. | Introduction and overview | Section 1.6 |
| Chapter 1 | 10630.5 | Each plan shall include a simple description of the Supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter. | Plan preparation | Section 2.1 |
| Section 2.1 | 10620(b) | Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier. | Plan preparation | Section 2.2 |
| Section 2.5 | 10644 | Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP. | Plan preparation | Table 2-1 |
| Section 2.5 | 10644 | Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance. | Plan preparation | Table 2-2 |
| Section 2.5 | 10644 | Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes. | Plan preparation | Table 2-3 |
| Section 2.4 | 10642 | Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan. | Plan preparation | Section 2.6 |
| Section 2.4.2 | 10620(d)(3) | Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. | Plan preparation | Section 2.6.2 |
| Section 2.4.1 | 10631(h) | Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source. | Plan preparation | Table 2-4 R |
| Chapter 3.0 | 10631(a) | Describe the Supplier service area. | System description | Sections 3.1 and 3.1 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 3.3 | 10631(a) | Describe the climate of the Supplier's service area. | System description | Section 3.3 |
| Section 3.4.1 | 10631(a) | Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050. | System description | Table 3-1 |
| Section 3.4.2 | 10631(a) | Describe other social, economic, and demographic factors affecting the Supplier's water management planning. | System description | Section 3.4 |
| Section 3.5 | 10631(a) | Describe the land uses within the service area… include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area. | System description and baselines | Section 3.5 |
| Sections 4.2.3 and 4.2.4 | 10631(d)(1) | Quantify past, current, and projected water use, identifying the uses among water use sectors. | System water use | Tables 4-1 and 4-2 |
| Section 4.3.1 | 10631(d)(3)(A) | Report the distribution system water loss for each of the five years preceding the plan update. | System water use | Table 4-5 |
| Section 4.3.2 | 10631(d)(3)(C) | Retail Suppliers shall provide data to show the distribution loss standards were met. | System water use | Table 4-6 |
| Section 4.2.5.4 | 10631.1(a) | Include projected water use needed for lower income housing projected in the service area of the Supplier. | System water use | Table 4-3 |
| Section 4.2.5.3 | 10631(d)(4)(A) | In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws. | System water use | Table 4-3 |
| Section 4.2.5.3 | 10631(d)(4)(B) | Provide citations of codes, standards, ordinances, or plans used to make water use projections. | System water use | Table 4-3 |
| Section 4.2.5.3 | 10631(d)(4)(B)(ii) | To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall… Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact. | System water use | Table 4-3 |
| Section 4.2.5.6 | 10635(b) | Demands under climate change considerations must be included as part of the drought risk assessment. | System water use | Section 4.4 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 5.2 | 10608.4 | Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier:<br>- Was considered an urban retail water supplier in 2020,<br>- Met its 2020 target in 2020, or<br>- Was part of a merger or consolidation since 2020.<br>Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations. | Baselines and targets | Table 5-1 |
| Section 6.1 | 10631(b)(2) | When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies. | System supplies | Section 6.1 and 6.2 |
| Sections 6.1 and 6.2 | 10631(b)(1) | Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change. | System supplies | Section 7.2.2 |
| Section 6.2.2 | 10631(b)(4)(C) | Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years. | Water supplies and recycled water | Table 6-1 |
| Section 6.2. 2 | 10631(b)(4)(A) | Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization. | System supplies | Section 6.2.8 through 6.2.16 |
| Section 6.2.2 | 10631(b)(4)(B) | Describe the groundwater basin. | System supplies | Section 6.2.8 through Section 6.2.13 |
| Section 6.2.2 | 10631(b)(4)(B) | Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump. | System supplies | Section 6.2.8 through Section 6.2.14 |
| Section 6.2.2 | 10631(b)(4)(B) | For unadjudicated basins… (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin… | Water supplies and recycled water | Section 6.2.8 through Section 6.2.14 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 6.2.2 | 10631(b)(4)(B) | For unadjudicated basins… describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions. | Water supplies and recycled water | Section 6.2.8 through Section 6.2.14 |
| Section 6.2.2. | 10631(b)(4)(C) | If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years. | System supplies | Section 6.2.14 |
| Section 6.2.2 | 10631(b)(4)(D) | Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped. | System supplies | Table 6-9 |
| Section 6.1 | 10631(b) | Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050. | System supplies | Tables 6-8 and 6-9 |
| Section 6.2.7 | 10631(c) | Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. | System supplies | Section 6.5 |
| Section 6.2.5 | 10633(a) | Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods. | System supplies (recycled water) | Table 6-2 |
| Section 6.2.5 | 10633(b) | Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project. | System supplies (recycled water) | Table 6-3 |
| Section 6.2.5 | 10633(c) | Describe the recycled water currently being used in the Supplier's service area. | System supplies (recycled water) | Table 6-4 |
| Section 6.2.5 | 10633(d) | Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses. | System supplies (recycled water) | Table 6-4 |
| Section 6.2.5 | 10633(e) | Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected. | System supplies (recycled water) | Tables 6-4 and 6-5 |
| Section 6.2.5 | 10633(f) | Describe the actions that may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year. | System supplies (recycled water) | Table 6-6 |
| Section 6.2.5 | 10633(g) | Provide a plan for optimizing the use of recycled water in the Supplier's service area. | System supplies (recycled water) | Section 6.4.3 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 6.2.6 | 10631(g) | Describe desalinated water project opportunities for long-term supply. | System supplies | Table 6-7 |
| Section 6.2.10 | 10631(f) | Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years. | System supplies | Table 6-7 |
| Section 6.3 | 10631.2(a) | The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain. | System suppliers, energy intensity | Tables O-1A, O-1B, O-1C, and O-2 |
| Section 7.1 | 10634 | Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability. | Water supply reliability assessment | Section 7.1.1 |
| Section 7.2 | 10635(a) | Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years. | Water supply reliability assessment | Tables 7-2, 7-3, and 7-4 |
| Section 7.2.3 | 10620(f) | Describe water management tools and options to maximize resources and minimize the need to import water from other regions. | Water supply reliability assessment | Section 9.2 |
| Section 7.3 | 10635(b) | Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects. | Water supply reliability assessment | Section 7.3 |
| Section 7.3 | 10635(b)(1) | Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive years. | Water supply reliability assessment | Section 8.2, 7.3, and 2025 WSCP |
| Section 7.3 | 10635(b)(2) | Include a determination of the reliability of each source of supply under a variety of water shortage conditions. | Water supply reliability assessment | Section 7.1 and 2025 WSCP |
| Section 7.3 | 10635(b)(3) | Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period. | Water supply reliability assessment | Table 7-5 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 7.3 | 10635(b)(4) | Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria. | Water supply reliability assessment | Section 7.3.2 |
| Chapter 8 | 10632(a) | Provide a water shortage contingency plan (WSCP) with specified elements below. | Water shortage contingency planning | Section 8 and 2025 WSCP |
| Chapter 8 | 10632(a)(1) | Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP. | Water shortage contingency planning | Section 8.2, 7.3, and 2025 WSCP |
| Section 8.2 | 10632(a)(2)(A) | Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.2 | 10632(a)(2)(B) | Provide data and methodology to evaluate the Supplier's water reliability for the current year and one dry year pursuant to factors in the code. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.3 | 10632(a)(3)(A) | Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply. | Water shortage contingency planning | Section 8.3 and 2025 WSCP |
| Section 8.3 | 10632(a)(3)(B) | Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories. | Water shortage contingency planning | Table 8-1 |
| Section 8.4 | 10632(a)(4)(A) | Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions. | Water shortage contingency planning | Table 8-2 |
| Section 8.4 | 10632(a)(4)(B) | Specify locally appropriate demand reduction actions to adequately respond to shortages. | Water shortage contingency planning | Table 8-3 |
| Section 8.4 | 10632(a)(4)(C) | Specify locally appropriate operational changes. | Water shortage contingency planning | Table 8-2 |
| Section 8.4 | 10632(a)(4)(D) | Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions. | Water shortage contingency planning | Table 8-3 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 8.4 | 10632(a)(4)(E) | Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action. | Water shortage contingency planning | Tables 8-2 and 8-3 |
| Section 8.4.6 | 10632.5 | The UWMP shall include a seismic risk assessment and mitigation plan. | Water shortage contingency plan | Section 8.2 and 2025 WSCP |
| Section 8.5 | 10632(a)(5)(A) | Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.5 | 10632(a)(5)(B), 10632(a)(5)(C) | Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.6 | 10632(a)(6) | Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.7 | 10632(a)(7)(A) | Describe the legal authority that empowers the Supplier to enforce shortage response actions. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.7 | 10632(a)(7)(B) | Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. *Water Shortage Emergencies*. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.7 | 10632(a)(7)(C) | Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.8 | 10632(a)(8)(A) | Describe the potential revenue reductions and expense increases associated with activated shortage response actions. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.8 | 10632(a)(8)(B) | Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.8 | 10632(a)(8)(C) | Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, *Excessive Residential Water Use During Drought*. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.9 | 10632(a)(9) | Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 8.10 | 10632(a)(10) | Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.11 | 10632(b) | Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Section 8.12 | 10632(c) | Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan. | Water shortage contingency planning | Section 8.2 and 2025 WSCP |
| Sections 9.1 | 10631(e)(1) | Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code. | Demand management measures | Section 8.2 3.2 and 2025 WSCP |
| Chapter 10 | 10608.26(a) | Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance). | Plan adoption, submittal, and implementation | Section 8.2 and 2025 WSCP |
| Section 10.2.1 | 10621(b) | Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan. | Plan adoption, submittal, and implementation | Table 10-1 |
| Section 10.4 | 10621(f) | Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 202 6. | Plan adoption, submittal, and implementation | Section 10.1 |
| Sections 10.2.2, 10.3, and 10.5 | 10642 | Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP. | Plan adoption, submittal, and implementation | Section 10.4 |
| Section 10.2.2 | 10642 | The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water. | Plan adoption, submittal, and implementation | Table 10-1 |
| Section 10.3.2 | 10642 | Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified. | Plan adoption, submittal, and implementation | Section 10.8 |
| Section 10.4 | 10644(a) | Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library. | Plan adoption, submittal, and implementation | Section 10.4.3 |

| 2025 Guidebook Location | Water Code Section | Summary as Applies to UWMP | Subject | 2025 UWMP Location |
|---|---|---|---|---|
| Section 10.4 | 10644(a)(1) | Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption. | Plan adoption, submittal, and implementation | Section 10.4.4 |
| Sections 10.4.1 and 10.4.2 | 10644(a)(2) | The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically. | Plan adoption, submittal, and implementation | Section 10.4.32 |
| Section 10.7.2 | 10644(b) | If revised, submit a copy of the WSCP to DWR within 30 days of adoption. | Plan adoption, submittal, and implementation | Section 10.8 |
| Section 10.5 | 10645(a) | Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours. | Plan adoption, submittal, and implementation | Section 10.3, Appendix G |
| Section 10.5 | 10645(b) | Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours. | Plan adoption, submittal, and implementation | Section 10.5, Appendix G |
| Section 10.6 | 10621(c) | If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings. | Plan adoption, submittal, and implementation | N/A – The City of Hayward is not regulated by the Public Utilities Commission |
| Section 10.5 | 10645(b) | Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan WSCP with the department, the supplier has or will make the plan available for public review during normal business hours. | Plan Adoption, Submittal, and Implementation | Section 10.4 |
| Section 10.6 | 10621(c) | If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings. | Plan Adoption, Submittal, and Implementation | N/A – The City of Hayward is not regulated by the Public Utilities Commission |
| Section 10.7.2 | 10644(b) | If revised, submit a copy of the water shortage contingency plan WSCP to DWR within 30 days of adoption. | Plan Adoption, Submittal, and Implementation | Section 10.6 |

# APPENDIX B – NOTICE OF INTENT TO PREPARE THE 2025 UWMP

**From:** Conrad Braganza <Conrad.Braganza@hayward-ca.gov>
**Sent:** Thursday, January 22, 2026 2:51:40 PM
**To:** (email list removed due to space and privacy)
**Subject:** Preparation of City of Hayward's 2025 Urban Water Management Plan

The City of Hayward is currently preparing its 2025 Urban Water Management Plan (UWMP) and its associated Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act (California Water Code §10608–10656) requires that certain municipal water suppliers, including Hayward, update and adopt an UWMP and WSCP every five years. The UWMP integrates land use, water needs and supply, and demand management to document Hayward's ability to provide a reliable supply of water to its customers. The associated WSCP considers dry-year water supply planning, including strategies to address six levels of water supply shortage conditions, and a drought risk assessment.

Hayward coordinates with its wholesale water supplier, nearby water agencies, relevant public entities, and other interested parties in preparing the UWMP and WSCP. A draft of the 2025 UWMP and WSCP will be available for public review, and a public hearing will be scheduled in Spring 2026. In the meantime, if you would like more information regarding the City's 2025 UWMP and WSCP, and the schedule for updating these documents, please contact:

Conrad Braganza | Water Resources Planner
City of Hayward
Water Resources Division
Department of Public Works & Utilities
777 B Street, Hayward, CA 94541
Phone: 510-583-5534
Email: conrad.braganza@hayward-ca.gov

# 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
Phone number: (510) 583-4720
E-Mail: alex.ameri@hayward-ca.gov

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 – BAWSCA & SFPUC REGIONAL WATER SYSTEM SUPPLY RELIABILITY LETTER FOR 2025 UWMPS

BAWSCA
Bay Area Water Supply & Conservation Agency

**March 11, 2026**

**TO:** BAWSCA Member Agencies

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

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

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

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

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

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

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

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

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

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

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

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

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

cc: Tom Smegal
Allison Schutte

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

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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.

# APPENDIX E – 2025 WATER AND WASTEWATER SERVICE RATES

HAYWARD

## WATER AND WASTEWATER SERVICE RATES

(Effective July 1, 2025)

## WATER SERVICES

### WATER RATES

*Note: Hundred cubic feet = approximately 748 gallons of water*

#### Single Family Residential

| | Cost Per CCF of Metered Water Consumption |
|---|---|
| 1 – 8 ccf (hundred cubic feet) | $7.55 |
| 9 – 18 ccf | $8.96 |
| Over 18 ccf | $11.00 |

#### 2 – 4 Dwelling Units

| | Cost Per CCF of Metered Water Consumption Per Dwelling Unit, Based on Average Usage Per Dwelling Unit |
|---|---|
| 1 – 8 ccf (hundred cubic feet) | $7.55 |
| 9 – 18 ccf | $8.96 |
| Over 18 ccf | $11.00 |

#### Multi-Family (Five or more dwelling units per account, including mobile home parks)

| | Cost Per CCF of Metered Water Consumption Per Dwelling Unit, Based on Average Usage Per Dwelling Unit |
|---|---|
| 1 – 8 ccf (hundred cubic feet) | $7.55 |
| 9 – 18 ccf | $8.96 |
| Over 18 ccf | $11.00 |

#### Non-Residential

| | Cost Per CCF of Metered Water Consumption |
|---|---|
| 1 to 110 ccf | $8.19 |
| Over 110 ccf | $9.62 |

#### Irrigation

| | Cost Per CCF of Metered Water Consumption |
|---|---|
| 1 to 170 ccf | $9.68 |
| Over 170 ccf | $12.32 |

#### Hydrant

| | Cost Per CCF of Metered Water Consumption |
|---|---|
| All usage | $9.12 |

## Service Charges
## (Two-Month Billing Period)

| Meter Size | Charge |
|---|---|
| 5/8", Low Income | $13.66 |
| 3/4", Low Income | $19.06 |
| 1", Low Income | $29.85 |
| 5/8" | $39.00 |
| 3/4" | $54.41 |
| 1" | $85.25 |
| 1 1/2" | $162.34 |
| 2" | $254.85 |
| 3" | $547.77 |
| 4" | $979.46 |
| 6" | $2,012.41 |
| 8" | $4,324.98 |
| 10" | $6,483.40 |

## Fire Service Charges
## (Two Month Billing Period)

| Meter Size | Charge |
|---|---|
| 5/8" | $8.30 |
| 3/4" | $8.40 |
| 1" | $8.65 |
| 1 1/2" | $9.95 |
| 2" | $11.14 |
| 3" | $16.82 |
| 4" | $26.61 |
| 6" | $61.74 |
| 8" | $122.31 |
| 10" | $213.44 |

## Construction Meters for Temporary Use

| Meter Size | Service (per month) | Minimum Use |
|---|---|---|
| 3/4" | $16.00 | 1,600 cu. ft. |
| 3" | $120.00 | 12,750 cu. ft. |
| 4" | $210.00 | 28,000 cu. ft. |
| 6" | $650.00 | 50,000 cu. ft. |

## Water Hydrant Meter Deposit Fees

| Meter size | Current fee |
|---|---|
| ¾" | $1,800 |
| 3" | $3,000 |
| 4" | $3,000 |
| 6" | $5,300 |
| Additional fee for failure to report meter readings | $150 / month |

## WASTEWATER SERVICES

### Sewer Service Charges

#### Residential Rates (per month)

| | |
|---|---|
| Standard Residential Living Unit | $47.83<br>(payable bimonthly at $95.66) |
| Economy Rate<br>(for bimonthly water consumption of 5 ccf to 8 ccf) | $22.52<br>(payable bimonthly at $45.04) |
| Lifeline Rate<br>(for bimonthly water consumption of 4 ccf or less) | $11.61<br>(payable bimonthly at $23.22) |
| Multiple Residential Living Unit<br>(per unit) | $43.49<br>(payable bimonthly at $86.89) |
| Mobile Home Unit<br>(per unit) | $32.34<br>(payable bimonthly at $64.68) |

### Commercial and Industrial Rates

The following are rates per hundred cubic feet of water used for the corresponding User Classification Code (UCC) categories of usage:

| | Rate per 100 cubic feet of water used **with** separate irrigation meter | Rate per 100 cubic feet of water used **without** separate irrigation meter |
|---|---|---|
| All Other Domestic Use | $7.95 | $7.16 |
| Restaurant w/ Grease Interceptor | $10.53 | $9.47 |
| Restaurant w/o Grease Interceptor | $12.96 | $11.66 |
| Commercial Laundry | $9.04 | $7.79 |
| Bakery | $14.39 | $13.87 |
| Industrial Laundry | $14.04 | $12.63 |
| Beverage Bottling | $9.13 | $8.21 |
| Food Manufacturing | $25.72 | $30.58 |
| Meat Products | $17.22 | $13.15 |
| Slaughterhouse | $19.82 | $17.85 |
| Dairy Product Processors | $14.21 | $12.78 |
| Canning & Packing | $10.13 | $9.11 |
| Grain Mills | $13.33 | $12.01 |
| Fats and Oils | $9.61 | $8.65 |
| Pulp & Paper Manufacturing | $10.07 | $8.89 |
| Inorganic Chemicals | $16.26 | $14.64 |
| Paint Manufacturing | $25.34 | $22.82 |
| Leather Tanning | $33.37 | $30.02 |
| Fabricated Metal | $5.87 | $5.28 |

## Unclassified and Critical User Rates

Note: All non-critical commercial and industrial users will be included in the above classification that most closely represents the wastewater discharge strength and characteristics in comparison with the domestic wastewater definition in the Regulations, as determined by the Director of Public Works & Utilities. The UCC designation of a particular industry may not necessarily correspond to the Standard Industrial Classification (SIC) assigned for other purposes.

Critical users and those whose discharge does not correspond to any UCC because of variations in wastewater constituents or treatment costs shall pay an amount calculated in accordance with the following formula, where:

$$C = V/M\ (160\ C_V + C_B \times BOD + C_S \times SS)$$

C = Sewer service charge during period for which billing is calculated

V = Volume of water consumed in hundred cubic feet (CCF) during period for which the billing is calculated (total of public water service, metered flow, and all private sources, except those meters or services specifically identified for irrigation only)

BOD = Average Biochemical Oxygen Demand, in milligrams per liter, from user during period for which the billing is calculated

SS = Average Suspended Solids, in milligrams per liter, from user during period for which the billing is calculated

| | | |
|---|---|---|
| $C_V$ = | Treatment cost per CCF of water | $5.49120 |
| $C_B$ = | Treatment cost per pound of BOD | $0.51680 |
| $C_S$ = | Treatment cost per pound of SS | $1.78620 |

M = 160 for users with separate irrigation meter and 178 for users without separate irrigation meter

The minimum fee for each non-residential user shall be established for one (1) service unit per month

## RECYCLED WATER SERVICES

### Recycled Water Usage Rates

Cost Per CCF of Metered Recycled Water Consumption

All ccf (hundred cubic feet) ..... $7.44

### Recycled Water Service Fees
### (Two-Month Billing Period)

| Meter Size | Charge |
|---|---|
| 5/8" | $39.00 |
| 3/4" | $54.41 |
| 1" | $85.25 |
| 1 1/2" | $162.34 |
| 2" | $254.85 |
| 3" | $547.77 |
| 4" | $979.46 |
| 6" | $2,012.41 |
| 8" | $4,324.98 |
| 10" | $6,483.40 |

## OTHER FEES AND CHARGES

### Water Service Deposits

Deposits are based on expected two-month consumption. Contact Revenue Office for information.

### Miscellaneous Fees

| | Charge |
|---|---|
| Account Establishment | $87 |
| After-Hours Meter Activation | $108 |
| Meter Test (up to 1" meter) | $333 |
| Meter Test (1 ½" – 2" meter) | $441 |
| Meter Test (3" meter or larger) | $549 |

## Payment Delinquency Charges

| | Charge |
|---|---|
| Meter Lock | $138 |
| Meter Removal | $134 |
| Service Restoration/Unlock Fee | $117 |
| Returned Check | $25 |
| Noticing Fee | $6 |
| Collection Agency Charge | Up to 30% |
| Late Charge | $5 / month |

Note: If additional repairs/measures are required, additional charges may be assessed.

## For More Information

Water and Sewer Service ..... (510) 583-4600

Water and Sewer Billing Questions ..... (510) 583-4600

Collection Officer..... (510) 583-4624

Water Installation and Facilities Fees/Sewer Connection Fees..... (510) 583-4722

Wastewater Discharge Permits/Industrial Sewer Charges ..... (510) 881-7900

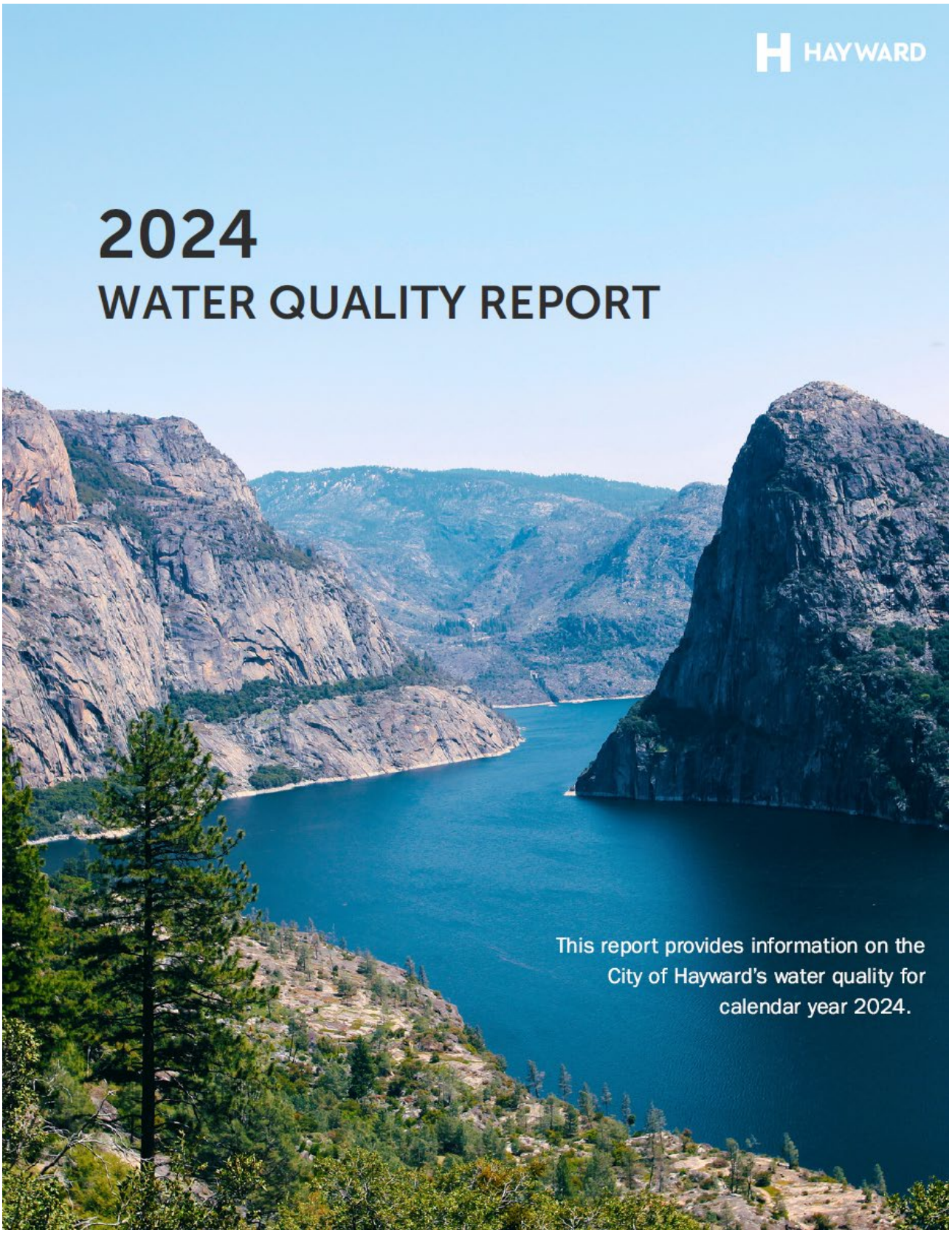
# APPENDIX F – ADOPTION RESOLUTION

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

# APPENDIX G – DOCUMENTATION OF 2025 UWMP AND WSCP SUBMITTALS

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

# APPENDIX H – CITY OF HAYWARD 2024 WATER QUALITY REPORT



## Our Drinking Water

The City of Hayward (City) is pleased to present the 2024 Water Quality Report (Consumer Confidence Report) to our customers and interested parties. This report provides information about where our drinking water comes from, how it is treated, and details about its quality.

The City purchases all of its drinking water supply from the SFPUC, which delivers water to the City through its Regional Water System (SFRWS).

The SFRWS is the wholesale customer system, owned and operated by the SPFUC. The SFRWS supply is predominantly snowmelt from the Sierra Nevada Mountains, delivered through the Hetch Hetchy aqueducts, and includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties.

To meet drinking water standards for consumption, all surface water supplies, including upcountry (Sierra Nevada) non-Hetch Hetchy sources (UNHHS), undergo treatment before delivery to connections to the City's water systems. Although water from the Hetch Hetchy reservoir is exempt from filtration requirements by the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board's Division of Drinking Water (SWRCB-DDW), it receives disinfection using: ultraviolet light and chlorine, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation of regulated disinfection byproducts.

If Hetch Hetchy-sourced water is supplemented by surface water from local watersheds and UNHHS, then this water receives filtration, disinfection, fluoridation, optimum corrosion control, and taste and odor removal to ensure it meets federal and state drinking water standards. In 2024, neither upcountry non-Hetch Hetchy sources of water nor groundwater was used.

Water quality is monitored by the San Francisco Public Utilities Commission (SFPUC) and the City of Hayward to ensure that we continue to meet and exceed all state and federal standards. In 2024, The City met all state and federal drinking water health standards. The following sections of this report show the testing and monitoring results for the period of January 1 to December 31, 2024, and may include earlier monitoring data.

# Water Quality

Together with the SFPUC, we regularly collect and test water samples from our reservoirs and designated sampling points throughout our transmission system to ensure that the water delivered to our customers meets or exceeds federal and State drinking water standards. In 2024, the SFPUC conducted more than 45,650 drinking water tests in the sources and the transmission system.

## Contaminants and Regulations

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that our tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the SWRCB-DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Sources of drinking water (both tap and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. Water can also pick up substances from the presence of animal or human activity. Such substances are called contaminants and may be present in source water as:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

### Who Should Seek Advice About Drinking Water?

Some people may be more vulnerable to contaminants in drinking water than the general population. People with immune system disorders, elderly persons, and infants are particularly at risk from infections. These individuals should seek advice about drinking water from their healthcare providers. The Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to reduce the risk of infection from *Cryptosporidium* and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline, (800) 426-4791, or at **www.epa.gov/safewater**.

## Watershed Protection

The SFPUC conducts watershed sanitary surveys for the Hetch Hetchy water source annually, and for non-Hetch Hetchy surface water sources, every five years. The purpose of the surveys are to evaluate the sanitary conditions and water quality of the watersheds and to review the results of watershed management activities conducted in the preceding years.

The latest sanitary surveys for the non-Hetch Hetchy watersheds were completed in 2021 for the years 2016 to 2020. With support from partner agencies, including the National Park Service and US Forest Service, the SFRWS's watershed protection management activities and surveys were completed. Wildfire, wildlife, livestock, and human activities continue to be potential contamination sources. For more information, contact the SWRCB-DDW at (510) 620-3474.

## Fluoridation & Dental Fluorosis

Mandated by State law, water fluoridation is a widely-accepted practice proven to be safe and effective for preventing and controlling tooth decay. The SFPUC has maintained an optimum water fluoride of 0.7 milligram per liter (mg/L, or part per million, ppm) since May 2015 based on the SWRCB-DDW's regulatory guidance on the optimal fluoride level. Infants fed formula mixed with water containing fluoride at this level may still have a chance of developing mild to very mild dental fluorosis (tiny white lines or streaks in their teeth). These marks are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. The Centers for Disease Control and Prevention (CDC) considers it safe to use optimally fluoridated water for preparing infant formula. To lessen the chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. However, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste, and dental products.

Contact your healthcare provider or the SWRCB-DDW if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the SWRCB's website at **www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html**, or the CDC website at **www.cdc.gov/fluoridation**.

## Boron Detection Above Notification Level in Source Water

In 2024, boron was detected at a level of 2.3 parts per million (ppm) in the raw water stored in Pond F3 East, one of the SFRWS's approved sources in the Alameda Watershed. Similar levels were detected in the same pond in preceding years. Although the detected value was above the California Notification Level of 1 ppm, the water was typically delivered to San Antonio Reservoir where it was substantially diluted to below the Notification Level before treatment at the Sunol Valley Water Treatment Plant. Boron is an element in nature and is typically released into air and water when soils and rocks naturally weather.

## Drinking Water & Lead

Elevated levels of lead in drinking water, if present, can cause serious health problems, especially for pregnant women and young children. Infants and children are typically more vulnerable to lead in drinking water than the general population.

If you are concerned about lead levels in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the USEPA's Safe Drinking Water Hotline (800) 426-4791, or at **www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water**.

Infants and children who drink water containing lead could have decreases in intelligent quotient and attention span as well as increases in learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for identifying an removing lead service lines if found in the City's service system. However, plumbing components in your home outside of the City's service system may contain lead materials. Because lead levels may vary over time, lead exposure is possible even when your tap sample results do not detect lead at one point in time. You can protect yourself and your family from the lead in your home plumbing by taking one or more of the following actions:

- Identify and remove lead materials within your home plumbing.
- If you use a water filter, make sure it's certified for lead to National Sanitation Foundation (NSF)/ANSI standards. Make sure to replace and maintain the filter according to the manufacturer's instructions.
- Use only cold water for drinking, cooking, and making baby formula (Do not boil your water to remove lead. Boiling water will not remove lead).
- Flush your pipes for several minutes before using your water for drinking, cooking, and preparing baby formula (this can be done by running your tap, taking a shower, doing laundry or a load of dishes, or reusing for watering plants).
- Flush for a longer period if you have pipes made of lead or galvanized material. Visit **www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water** for more information.

### Lead Service Line Inventory

There are no known lead service lines in our water distribution system. The City's policy is to remove and replace any lead service lines promptly if it is discovered during pipeline repair and/or maintenance.

### Lead and Copper Tap Sampling

The City regularly tests for lead in drinking water in compliance with the USEPA's Lead and Copper Rule (LCR), which requires water agencies to test for lead at customer taps every three years. If lead concentrations exceed the Regulatory Action Level (AL) of 15 parts per billion in more than 10% of customer taps sampled, the agency must take action to notify the public and reduce corrosion of lead within the distribution system. Since the LCR's inception in 1991, the City has always been below the AL threshold for lead. The most recent Lead and Copper Rule monitoring was in 2022 and is conducted every three years. In 2022, 62 residences were tested for lead and all were below the AL. The next sampling will be conducted in 2025.

# Water Quality Data

The following are definitions of key water quality terms included on the data tables on Pages 6 and 7.

- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Turbidity:** A water clarity indicator that measures cloudiness of the water and is also used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.

The data tables in this section lists all drinking water contaminants detected in 2024 and the information about their typical sources. Contaminants below detection limits for reporting are not shown in accordance with regulatory guidance. The SFPUC holds a SWRCB-DDW monitoring waiver for some contaminants in its surface water supply, and therefore, the associated monitoring frequencies are less than annual.

# Hayward Water System - Water Quality Data for 2024 [1]

| Detected Contaminants | Unit | MCL/TT | PHG or (MCLG) | Range or Level Found | Average or [Max] | Typical Sources in Drinking Water |
|---|---|---|---|---|---|---|
| **TURBIDITY** | | | | | | |
| Unfiltered Hetch Hetchy Water | NTU | 5 | N/A | 0.3 - 0.5 [2] | [2.1] | Soil runoff |
| Filtered Water from Sunol Valley Water Treatment Plant (SVWTP) | NTU | TT = 1 | N/A | - | [0.2] | Soil runoff |
| | - | TT= Min 95% samples ≤ 0.3 NTU | N/A | 99.97% | - | Soil runoff |
| **DISINFECTON BY-PRODUCTS AND PRECURSOR** | | | | | | |
| Total Trihalomethanes | ppb | 80 | N/A | 24 - 66.8 | 43 [3] | Byproduct of drinking water disinfection |
| Five Haloacetic Acids | ppb | 60 | N/A | 11.1 - 40.3 | 27.5 [3] | Byproduct of drinking water disinfection |
| **MICROBIOLOGICAL** | | | | | | |
| *E. coli* | - | 0 Positive Sample | (0) | - | <1 | Human or animal fecal waste |
| **INORGANICS** | | | | | | |
| Chromium (VI) | ppb | 10 | 0.02 | ND - 0.1 | 0.1 | Leaching from natural deposits |
| Flouride [4] (raw water) | ppm | 2.0 | 1 | ND - 0.8 | 0.2 | Erosion of natural deposits; water additive to promote strong teeth |
| Nitrate (as N) | ppm | 10 | 10 | ND - 0.4 | ND | Erosion of natural deposits |
| Chlorine (including free chlorine and chloramine) | ppm | MRDL=4.0 | MRDLG=4 | 2.2 - 3.3 | 2.9 [5] | Drinking water disinfectant added for treatment |

| Lead & Copper | Unit | AL | PHG | Range | 90th Percentile | Typical Sources in Drinking Water |
|---|---|---|---|---|---|---|
| Copper | ppb | 1,300 | 300 | <1.0 - 180 [6] | 103 | Internal corrosion of household |
| Lead | ppb | 15 | 0.2 | <1.0 - 5.9 [6] | 3.1 | Naturally present in the environment |

06

| Constituents with Secondary Standards | Unit | SMCL | PHG | Range | Average | Typical Sources in Drinking Water |
|---|---|---|---|---|---|---|
| Aluminum | ppb | 200 (MCL=1000) | 600 | ND - 59 | ND | Erosion of natural deposits; some surface water treatment residue |
| Chloride | ppm | 500 | N/A | <3 - 9.9 | 4.9 | Runoff/leaching from natural deposits |
| Iron | ppb | 300 | N/A | <6 - 41 | 20 | Leaching from natural deposits |
| Manganese | ppb | 50 | N/A | <2 - 2.7 | <2 | Leaching from natural deposits |
| Specific Conductance | µS/cm | 1,600 | N/A | 31 - 317 | 174 | Substances that form ions in water |
| Sulfate | ppm | 500 | N/A | 1 - 41 | 21 | Runoff/leaching from natural deposits |
| Total Dissolved Solids | ppm | 1,000 | N/A | 24 - 169 | 97 | Runoff/leaching from natural deposits |
| Turbidity | NTU | 5 | N/A | 0.1 - 0.4 | 0.2 | Soil runoff |

| Non-Regulated Water Quality Parameters | Unit | ORL | Range | Average |
|---|---|---|---|---|
| Alkalinity (as $CaCO_3$) | ppm | N/A | 7.4 - 120 | 56 |
| Boron | ppb | 1,000 (NL) | 23 - 65 | 44 |
| Calcium (as Ca) | ppm | N/A | 3.2 - 28 | 15 |
| Chlorate[7] | ppb | 800 (NL) | 24 - 597 | 134 |
| *Giardia lamblia* | cyst/L | N/A | 0 - 0.06 | 0.02 |
| Hardness (as $CaCO_3$) | ppm | N/A | 8.4 - 106 | 57 |
| Lithium | ppb | N/A | <2 - 4 | 2 |
| Magnesium | ppm | N/A | 0.2 - 9.5 | 4.9 |
| pH | - | N/A | 5.6 - 9.8 | 9.2 |
| Silica | ppm | N/A | 4.9 - 9.9 | 7.4 |
| Sodium | ppm | N/A | 3.1 - 24 | 13 |
| Total Organic Carbon[8] | ppm | N/A | 1.1 - 1.8 | 1.5 |

**Key**

< / ≤ = less than / less than or equal to
AL = Action Level
Max = Maximum
Min = Minimum
N/A = Not Available
ND = Non-detect
NL = Notification Level
NTU = Nephelometric Turbidity Unit
ORL = Other Regulatory Level
pCi/L = picocurie per liter
ppb = part per billion
ppm = part per million
PS = Number of Positive Samples
µS/cm = microSiemens/centimete

**Footnotes on Water Quality Data**

**(1)** All results met State and Federal drinking water health standards.
**(2)** These are monthly average turbidity values measured every 4 hours daily at Tesla Treatment Facilities.
**(3)** This is the highest locational running annual average value.
**(4)** Natural fluoride in the Hetch Hetchy water was ND. Elevated fluoride levels in raw water at the SWTP were attributed to the transfer of the fluoridated Hetch Hetchy water into local reservoirs. The fluoride level in our treated water ranged from 0.5 ppm to 0.8 ppm with an average of 0.7 ppm.
**(5)** This is the highest running annual average.
**(6)** The 90th percentile level of lead and copper must be less than the action level. The most recent Lead and Copper Rule monitoring was in 2022 and is conducted every three years. In 2022, 0 of 62 sampled residences exceeded the Action Level at customer taps for copper and lead.
**(7)** The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.
**(8)** The range and average values of the total organic carbon were from operational monitoring results at Tesla Treatment Facilities.

# Water Conservation & Sustainability

The City of Hayward has historically been a steward of our water resources and remains vigilant in using water wisely. We offer a variety of water conservation programs, rebates, and educational resources for Hayward water customers, residents and businesses.

For a full list of programs and resources, visit **www.hayward-ca.gov/water-conservation**.

- **Free water conservation classes:** Every spring and fall, the City hosts free workshops and classes focused on sustainable garden design, lawn conversion, water-efficient irrigation systems, and composting. For more information on upcoming classes, visit **www.bawsca.org/classes.** To be added to an email notification list of upcoming classes, email **utilities.development@hayward-ca.gov** with your request.

- **Free low-flow water fixtures and indoor leak audit kits:** These water fixtures and kits are provided at no cost to residents and are available for pick up at Hayward City Hall from 8 AM to 5 PM, Monday to Friday. For bulk requests, please email **utilities.development@hayward-ca.gov** to arrange for pick-ups.

- **Outdoor Water Efficiency Incentives:** The City offers rebates for lawn conversion projects and rain barrel installations.

- **EarthCapades:** School assemblies are offered free-of-charge to increase student awareness using water wisely. EarthCapades performances combine age- appropriate state science standards with circus skills, juggling, music, storytelling, comedy, and audience participation to teach environmental awareness, water science and conservation.

- **WaterWise Education Program:** Water Conservation Kits are distributed to 5th grade students to empower them to install water-saving devices and perform water audits in their homes. The Kits include high-efficiency shower heads, low-flow faucet aerators, energy cost calculators, flow rate test bags, toilet leak detection kits, and more. The water conservation curriculum can be easily implemented by teachers and includes methods to quantify the water savings as a result of taking the actions in the curriculum.

HAYWARD

Department of Public Works & Utilities

777 B Street
Hayward, CA 94541

utilities.development@hayward-ca.gov

(510) 583-4700

www.hayward-ca.gov/waterquality

The Hayward City Council is the governing authority of the Hayward Water System. City Council meets the first, third, and fourth Tuesday every month at 7 PM at Hayward City Hall, 777 B Street. The public is invited to participate in these meetings.

The SFPUC is the governing authority of the Regional Water System that supplies water to Hayward. The SFPUC meets on the second and fourth Tuesdays of the month at 1:30 PM at San Francisco City Hall, Room 400. The public is invited to participate in these meetings.

This report contains important information about your drinking water. Please contact the City of Hayward at (510) 583-4700 or utilities.development@hayward-ca.gov for questions this regarding this report.

Este informe contiene información muy importante sobre su agua para beber.Favor de comunicarse City of Hayward, a 777 B Street, Hayward CA 94541, (510) 583-4700 para asistirlo en español.

本報告包含閣下飲用水嘅重要訊息。 如需廣東話垂詢，請聯絡: City of Hayward, 777 B Street, Hayward CA 94541, (510) 583-4700。

この報告書には上水道に関する重要な情報が記されております。
ご質問等ございましたら、City of Hayward, 777 B Street, Hayward CA 94541, (510) 583-4700 まで日本語でご連絡下さい。

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ City of Hayward tại 777 B Street, Hayward CA 94541, (510) 583-4700 để được trợ giúp bằng tiếng

इस रिपोर्ट में आपके पीने के जल से सम्बंधित महत्वपूर्ण जानकारी है। हिंदी में सहायता के लिए, City of Hayward को 777 B Street, Hayward CA 94541 अथवा (510) 583-4700 पर संपर्क करें।