



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Jeffrey Provenzano

SUBJECT: See Below

DATE: May 11, 2026

Approved

Date:

5/21/26

COUNCIL DISTRICTS: 2, 4, 7, 8

SUBJECT: Public Hearing and Resolution Approving the San José Municipal Water System's 2025 Water Shortage Contingency Plan and Urban Water Management Plan

RECOMMENDATION

- (a) Conduct a public hearing to allow community input regarding the draft 2025 Water Shortage Contingency Plan prior to its adoption.
- (b) Conduct a public hearing to allow community input regarding the draft 2025 Urban Water Management Plan prior to its adoption.
- (c) Adopt a resolution:
 - (1) Approving the San José Municipal Water System's 2025 Water Shortage Contingency Plan;
 - (2) Approving the San José Municipal Water System's 2025 Urban Water Management Plan; and
 - (3) Directing staff to file the Plans with the California Department of Water Resources.

SUMMARY AND OUTCOME

The approval and adoption of the 2025 Water Shortage Contingency Plan (WSCP) and Urban Water Management Plan (UWMP) will allow the San José Municipal Water System (SJMWS) staff to submit the Plans to the California Department of Water Resources (DWR), which will fulfill the requirements of the California Urban Water Management Plan Act (Water Code Sections 10610, *et seq.*). Additionally, it will enable the City to be eligible for a water management grant or loan administered by DWR, the State Water Resources Control Board, and/or the Delta Stewardship Council.

BACKGROUND

In 1983, the State of California Legislature enacted the UWMP Act, requiring urban water retailers that serve more than 3,000 customers or deliver more than 3,000 acre-feet (AF) (1 AF = 325,000 gallons) annually to prepare and adopt a UWMP every five years. UWMPs evaluate long-term water supply reliability under normal, single dry year, and multiple dry year conditions, assess projected water demands, and identify demand management and conservation strategies. These plans are a key component of local, regional, and statewide water resource planning and support reliable water service over the long term.

SJMWS filed its initial UWMP with the DWR in 1985 and has since filed an update every five years. The deadline to submit the 2025 UWMP to DWR is July 1, 2026.

Substantial revisions and expansions have been made to the Act since 1983, with the most significant changes taking place in 2009 and 2018 following major statewide droughts.

In addition, state law requires preparation of a WSCP, which is a detailed plan for how a water provider intends to respond to and address a water supply shortage. Historically, the WSCP was included as a section within the UWMP; however, as of 2020, DWR has required the WSCP to be a standalone document attached as an appendix to the UWMP, meaning it is prepared and adopted separately from the UWMP and can be amended, as needed, without requiring an amendment to the UWMP. The 2025 WSCP must be adopted and submitted to DWR by July 1, 2026 as part of the 2025 UWMP package. SJMWS maintains a WSCP that complies with state requirements and defines six standardized shortage levels, ranging from 10% to greater than 50%.

ANALYSIS

2025 Water Shortage Contingency Plan

The Water Code requires retailers to prepare and adopt a WSCP (Attachment A) as a separate plan, identifying separate conservation actions to be taken during water supply shortages. SJMWS maintains a WSCP in accordance with state requirements. The WSCP establishes six standard water shortage levels, ranging from 10% to greater than 50% shortage, and defines corresponding response actions for each level.

The San José Municipal Code (Chapter 15.10) contains several water conservation measures based on the levels of the water shortage emergency. During water shortages, the SJMWS implements staged response actions to reduce customer demand, including demand reduction measures, operational adjustments, and mandatory water use restrictions, as appropriate to the severity of the shortage.

2025 Urban Water Management Plan

The 2025 UWMP (Attachment B) satisfies the requirements of the California Water Code and discusses the following:

- Water resources, projected water supply outlook, and water use.
- Reliability of the water supply and planned actions to maintain and enhance long-term supply reliability.
- Compliance with established water use targets pursuant to the Water Conservation Act of 2009 (SB X7-7).
- Existing water conservation measures and contingency actions to be implemented in response to water shortages.

The main objective of the updated UWMP is to address and analyze long-term water management planning. The UWMP evaluates the water supply available to SJMWS up to the year 2050 under normal and drought conditions and projects water demand based on expected new development. The City obtained consultant support to create water use projections through 2050. The consultant utilized econometric regression techniques with end-use conservation accounting, which allowed for a clear separation between the structural factors influencing water demand – such as demographic changes, climate variability, long-term trends in passive conservation savings, historical drought restrictions, and economic trends – and the impacts resulting from policy decisions and conservation programs. Data and growth assumptions from Plan Bay Area 2050 as well as the City's Envision San José 2040 General Plan were incorporated, along with projections from Water Supply Assessments approved by the City through 2025.

SJMWS relies upon the information relating to water supply availability and allocations provided by wholesalers and assumes the accuracy of that data for this UWMP. Overall, water demands are projected to approximately double by 2050, with recycled water accounting for a substantially larger proportional increase relative to potable supply growth. In 2025, SJMWS customers used 14,836 AF of potable water and 3,509 AF of recycled water. By 2050, SJMWS's potable and recycled water use is projected to be 23,620 AF and 8,792 AF, respectively. Demands will be met from a combination of increased potable and recycled water supplies. Potable demands are met from several water supply sources:

1. San Francisco Public Utilities Commission (SFPUC) – Hetch Hetchy water is supplied to the North San José/Alviso area.
2. Valley Water – Valley water treated surface water is supplied to the Evergreen area.
3. Groundwater – Groundwater is available from existing wells throughout all of SJMWS' service areas.

Long-term planning and modeling analysis of all countywide supplies and demands performed by Valley Water as part of its draft 2025 UWMP indicates that future countywide demands can reliably be met under normal and single dry year conditions. Valley Water's analysis is based on projected demands within the County, and the existing and planned supplies and projects as reflected in its Water Supply Master Plan. To help bridge any gap between supplies and demands during a multi-year drought, Valley Water would likely implement a combination of calls for countywide short-term water use reductions, use of reserves, and obtaining additional supplement supplies through transfers and/or exchanges. The actual mix of these options would be determined through Valley Water's annual operations planning process.

The business relationship between the SFPUC and its wholesale customers is largely defined by the "Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County and Santa Clara County" (WSA) entered into on July 1, 2009, and amended and restated in 2018, 2021, and 2025. The 25-year WSA will expire on June 30, 2034, unless extended by up to two additional five-year option terms.

The WSA includes a supply assurance of 184 million gallons per day (mgd) from SFPUC to the wholesale customers; however, the cities of San José and Santa Clara are identified as temporary, interruptible customers and are not contractually included within that supply assurance. In the 2009 WSA, the SFPUC committed to make two decisions before the end of 2018 regarding future water supplies:

- Whether or not to make the cities of San José and Santa Clara permanent customers, if the SFPUC determines that long-term water supplies are available to support their permanent status, and
- Whether or not to increase the supply assurance above 184 mgd to meet future wholesale customer demands.

Within the 2018 WSA amendment, the SFPUC and its wholesale customers deferred the future water supply decisions to the end of 2028 to allow the SFPUC to conduct further water supply planning, including a reevaluation of RWS demands and supply options, and any necessary CEQA analysis. Based on current projections, wholesale customer demands (including the demands of San José and Santa Clara) will continue to be less than the 184 mgd supply assurance through the year 2050.

On May 1, 2026, the cities of San José and Santa Clara submitted a joint letter to the SFPUC as part of the WSA amendment effort to be completed in 2028, requesting permanent status and providing ongoing allocations not less than the cities' annual contractual rights (4.5 mgd each, 9 mgd collectively).

Supplies available from SFPUC are projected to be reduced between 52% to 69% during dry years. Based on cumulative available water supplies, this represents a total

SJMWS potable supply shortage between approximately 8% to 20% during a multiple year drought, which will be managed utilizing the conservation measures detailed within the WSCP.

In summary, the WSCP outlines actions to be taken in the event of a water supply shortage. The UWMP summarizes projected water demands and available water supplies for the next 25 years. Approval of these plans will allow them to be filed with DWR in accordance with California Water Code requirements.

EVALUATION AND FOLLOW-UP

The City will continue to work with Valley Water and SFPUC to ensure long-term water supply reliability and avoid water shortages. Staff will submit the adopted 2025 WSCP and UWMP to DWR, the California State Library, and the County of Santa Clara within 30 days of adoption.

COORDINATION

This memorandum was coordinated with the City Attorney's Office, the City Manager's Budget Office, and Planning, Building, and Code Enforcement Department.

PUBLIC OUTREACH

This memorandum will be posted on the City Council Agenda website for the June 2, 2026 City Council meeting. Public notices were published in the Mercury News on May 12 and 19, 2026, and the draft UWMP and WSCP were posted on the Municipal Water System website.

BOARD, COMMISSION, COMMITTEE RECOMMENDATION AND INPUT

No board, commission, or committee recommendation or input is associated with this action.

CEQA

Not a Project, File No. PP17-001, CEQA Guidelines Section 15262, Feasibility and Planning Studies.

HONORABLE MAYOR AND CITY COUNCIL

May 11, 2026

Subject: Public Hearing and Resolution Approving the San José Municipal Water System's 2025 Urban Water Management Plan and Water Shortage Contingency Plan

Page 6

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/

JEFFREY PROVENZANO, P.E.
Director, Environmental Services

For questions, please contact John Tang, Deputy Director, Environmental Services Department, at (408) 277-3288.

ATTACHMENTS:

Attachment A – Draft 2025 Water Shortage Contingency Plan

Attachment B – Draft 2025 Urban Water Management Plan

MAY 2026

CITY OF SAN JOSE
**DRAFT WATER SHORTAGE
CONTINGENCY PLAN**



TABLE OF CONTENTS

WATER SHORTAGE CONTINGENCY PLAN..... 1

 Water Supply Reliability Analysis 1

 Annual Water Supply and Demand Assessment..... 2

 Six Standard Water Shortage Levels 3

 Supply Augmentation..... 4

 Shortage Response Actions..... 4

 Demand Reduction Actions by Level..... 4

 Effectiveness of Demand Reductions..... 7

 Retailer Emergency Response Plan 9

 Communication Protocols..... 10

 Compliance and Enforcement..... 12

 Demand Reduction through Public Outreach 12

 Penalties, Charges, and Enforcement of Prohibitions..... 12

 Legal Authorities 13

 Financial Consequences of WSCP 13

 WSCP Monitoring, Evaluation, and Refinement Procedures 14

 Monitoring Supply and Demand Conditions..... 14

 Evaluation of WSCP Effectiveness..... 15

 Adaptive Management and WSCP Refinement 15

 Plan Adoption, Submittal, and Availability..... 16

WATER SHORTAGE CONTINGENCY PLAN

This document provides a plan of action for various stages of water shortage, in compliance with Section 10632 of the California Water Code.

This Water Shortage Contingency Plan (WSCP) reflects requirements established by the California Department of Water Resources (DWR), including standardized water shortage levels, Annual Water Supply and Demand Assessment procedures, and the quantification of shortage response actions to address supply and demand imbalances. Tables and figures are numbered to align with DWR's content and submittal requirements.

The City's policy is to maximize the use of its resources, each to its best application, to maintain water supply under varying levels of availability, with a focus on ensuring public health and safety.

Water Supply Reliability Analysis

Water supply reliability analyses conducted in Section 7 of the 2025 Urban Water Management Plan (UWMP) identify constraints on water supply sources and evaluate each source's availability during a normal year, a single dry year, and a multi-year drought. These analyses show that available supply resources are sufficient to meet demands in a normal year; however, implementation of the WSCP may be necessary to reduce demands during some single dry years and extended multi-year drought conditions.

The San José Municipal Water System (SJMWS) relies on a diversified supply portfolio that includes surface water from the San Francisco Public Utilities Commission (SFPUC), local and imported supplies from Valley Water, groundwater, and recycled water. Local and regional drought conditions represent the primary risk to water supply reliability. Additional risks include source water quality degradation, infrastructure failure, or natural disasters. While each supply source has unique constraints, operational flexibility to adjust the proportion of available supplies provides the ability to manage changing supply conditions.

The supply of imported water from SFPUC is constrained by hydrologic conditions, infrastructure capacity, and institutional agreements. SFPUC supply reliability is largely dependent on reservoir storage, and during dry periods, deliveries are managed through a water shortage allocation plan. Climate change may further affect the long-term reliability of this supply.

Supplies managed and provided by Valley Water include local groundwater, surface water, and imported water. These supplies are subject to hydrologic variability, climate change, infrastructure limitations, regulatory requirements, and other external factors. Reservoir storage is generally designed for annual operations, which can limit the ability to capture excess water in wet periods. Valley Water's Water Supply Master Plan includes strategies to improve long-term reliability, including optimizing existing supplies, expanding water recycling, and implementing conservation measures.

The Drought Risk Assessment (2025 UWMP, Section 7) evaluates the ability of available supplies to meet demands during a five-year drought scenario. The analysis indicates that implementation of WSCP response actions will be necessary to address projected supply shortfalls, with demand reductions of up to twenty percent required under extended drought conditions. These findings provide the basis for the shortage levels and response actions described in this WSCP.

Annual Water Supply and Demand Assessment

Beginning in 2022, urban water suppliers are required to prepare and submit an annual water supply and demand assessment (Annual Assessment) pursuant to Section 10632(a)(2) of the California Water Code. These annual assessments are submitted to DWR by July 1 of each year.

Each year beginning in January, City staff compile the data necessary to prepare the Annual Assessment. The assessment undergoes internal review and is submitted to the Director of Environmental Services, or approved designee, for formal approval in the spring of each year. The Annual Assessment summarizes water supply and demand conditions from the previous year and provides an evaluation of projected conditions for the upcoming year.

The Annual Assessment uses the most recent available data to estimate the projected availability of water supplies, including surface water from the SFPUC, local and imported supplies from Valley Water, groundwater, and recycled water. Projected supplies are influenced by hydrologic conditions during the prior water year, current surface water storage levels, groundwater use and basin conditions, and expected imported water allocations.

In determining the projected availability of their managed supplies, wholesale water providers incorporate updated information on climatic conditions, groundwater levels and extraction, imported water deliveries, recharge rates, water quality, and infrastructure conditions that may affect supply reliability. Additionally, wholesalers may utilize supply augmentation sources available to them during dry years, such as groundwater banking, in order to decrease their overall identified water shortage level.

Water demands may vary over individual or multiple years for a variety of reasons, such as abnormally higher or lower temperatures, rainfall levels, varying occupancy of residential units and commercial buildings, actual rates of growth and development within the service area, and slow rebound of water use following a water shortage and/or calls for water use reductions. To conservatively normalize for planning purposes, SJMWS identifies anticipated unconstrained customer demand for the upcoming year at a level consistent with, and as documented in, the most recently adopted UWMP.

Based on the comparison of projected supplies and unconstrained demand, the City determines whether available supplies are sufficient to meet expected demands. If projected demand exceeds available supply, the City will evaluate the need to implement the Water Shortage Contingency Plan (WSCP), engage with wholesale water suppliers regularly to monitor supply conditions, and initiate the appropriate shortage level and response actions as necessary.

Six Standard Water Shortage Levels

The City has established six water shortage levels that are implemented upon declaration of a water shortage condition by the San José City Council (Council) or its authorized designee. These levels are designed to reduce potable water demand in proportion to the severity of the projected water supply shortage and are aligned with the standardized framework required by the California Water Code.

The six water shortage levels correspond to the following percent shortage ranges: Level 1 (≤ 10 percent), Level 2 (>10 – 20 percent), Level 3 (>20 – 30 percent), Level 4 (>30 – 40 percent), Level 5 (>40 – 50 percent), and Level 6 (>50 percent). Each level includes a defined set of response actions intended to achieve demand reductions consistent with the magnitude of the shortage condition. This standardized framework improves consistency in drought response, public communication, and coordination with State and regional agencies. The shortage levels are structured to provide a progressive escalation of response actions.

Shortage response actions are triggered following City Council declaration of a water supply shortage. Absent a Council declaration, the non-shortage condition would be a functional "Stage 0," in which permanent water waste prohibitions (codified in Chapter 15.10 of the San José Municipal Code) remain in effect at all times. These measures establish a foundation for water use efficiency and support communicating to the public the importance of conservation as a way of life.

In 2020, the City's WSCP stages were adapted to align with the State's six-level framework. The shortage levels and associated response actions are presented in **Table 8-1**.

Table 8-1. Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions
1	$\leq 10\%$	The City enacts measures to achieve up to a 10% reduction in potable water use, potentially including intensified conservation messaging and restrictions on outdoor irrigation.
2	$>10\%$ – 20%	The City enacts measures to achieve up to a 20% reduction in potable water use. Restrictions on irrigation may be implemented or expanded, and additional measures targeting discretionary water use may be implemented.
3	$>20\%$ – 30%	The City enacts measures to achieve up to a 30% reduction in potable water use. Significant restrictions on outdoor irrigation and other non-essential uses are implemented.
4	$>30\%$ – 40%	The City enacts measures to achieve up to a 40% reduction in potable water use. Substantial restrictions on outdoor irrigation and other uses are in place.
5	$>40\%$ – 50%	The City enacts measures to achieve up to a 50% reduction in potable water use. Severe restrictions are implemented, including potential additional prohibitions on water uses as needed.
6	$>50\%$	Greater than 50% Shortage Condition (Emergency). The City enacts measures to achieve greater than a 50% reduction in potable water use. Water use is restricted to health and safety needs. Emergency measures, including water rationing or strict allocation, may be implemented as needed.

Notes: Implementation of shortage response actions at each level shall occur upon declaration of a water shortage condition by the City Council

Supply Augmentation

Supply augmentation is managed on an ongoing basis by the wholesalers; SJMWS does not have additional physical water supply augmentation options (**Table 8-2**). A detailed explanation of water supply sources and their use is in Sections 6 and 7 of the 2025 UWMP. Historically, SJMWS has increased public outreach during water shortages. While this activity is not officially documented in an ordinance, staff anticipated continued implementation of this action during future water shortages.

Table 8-2. Supply Augmentation and Other Actions			
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
All	Expand Public Information Campaign	1-5%	See note

Notes: San José does not have physical augmented supplies available as a retailer; supply augmentation for purchased supplies is managed by wholesalers. San José will focus on demand reduction actions as identified in Table 8-3.

Shortage Response Actions

Water shortage response actions are designed to be implementable and scalable, allowing for a progressive escalation in restrictions and enforcement as water shortage conditions worsen. Actions include a combination of conservation outreach, restrictions on discretionary water use, and enforcement measures authorized under the San José Municipal Code. Outreach, education, and social factors are also expected to contribute to reductions in water use in conjunction with formal restrictions. The City may establish water use violation fines and enforce water use targets, as authorized by the San José Municipal Code.

In addition to restrictions on metered water use, certain water utility operational practices may also be modified during shortages where feasible and consistent with public health requirements, such as reducing or eliminating non-essential distribution system flushing by SJMWS staff.

Special Water Feature Distinction

This WSCP distinguishes between decorative and recreational water features and applies specific response and enforcement actions to each category. Decorative water features, such as ornamental fountains, are subject to earlier and more restrictive controls due to their non-essential nature, while recreational water features, such as swimming pools, are addressed separately and in later shortage stages based on their having a more functional use. These distinctions support targeted demand reduction while maintaining consistency with existing regulatory authority and enforcement practices.

Demand Reduction Actions by Level

The California Water Code requires an analysis of mandatory prohibitions, penalties, and consumption reduction methods for water use practices that may be considered excessive during water shortages. The City will implement mandatory demand reduction measures as necessary to decrease consumption during a water shortage. SJMWS also enforces baseline water use efficiency requirements to discourage and prevent excessive and wasteful use during normal water supply conditions, as defined in the San José Municipal Code Chapter 15.10. Additional mandatory restrictions may be implemented as needed to respond to changing water supply conditions, with each water shortage level continuing the restrictions associated with the prior level(s).

Permanent water waste prevention measures

Baseline water use efficiency requirements are listed in San José Municipal Code Chapter 15.10 and are in effect at all times to prohibit water waste:

- No irrigating landscapes between 10 am and 8 pm, unless using a bucket, hand-carried container, or a hose with a shut-off nozzle (15.10.290A).
- Sprinklers cannot run more than 15 minutes per station per day (15.10.290B).
- No excessive water runoff is allowed (15.10.220A & B).
- Leaking or broken water pipes, irrigation systems, and faucets must have repairs initiated within five working days and repaired as soon as practical (15.10.210A & B).
- No cleaning of structures or paved surfaces with a hose without a positive shut-off nozzle (15.10.240).
- No cleaning of vehicles with a hose without a positive shut-off nozzle (15.10.250).
- Commercial car washes must use water recycling equipment, a bucket and hand-washing, or a hose with positive shut-off nozzle (15.10.255A, B, C).
- No serving water in food service establishments unless requested by the customer (15.10.230A).
- Restaurants that use pre-rinse spray valves must use ones that are low flow (15.10.230B).
- Hotels/motels must provide guests the option to decline daily linen washing (15.10.235).
- Potable water cannot be used for building or construction purposes, such as dust control, without written exception by City (15.10.260).
- Water cannot be used from a hydrant without prior City approval (15.10.270).
- Potable water cannot be used for irrigation purposes where a recycled water service is currently plumbed to the site (15.10.295).

Level 1: ≤10% Water Shortage

This Level continues the ongoing mandatory conservation actions specified in San José Municipal Code Chapter 15.10. Additional use restrictions go into effect when the Council declares a ten percent or greater water shortage. Outdoor irrigation may be limited to a specified number of days per week, as established by Council resolution. Increased public outreach may be implemented and continued through increased water shortage stages.

Level 2: >10% – 20% Water Shortage

Level 2 builds upon Level 1. Council may further limit the number of days per week in which outdoor irrigation is permitted.

Level 3: >20% – 30% Water Shortage

Level 3 builds upon Levels 1 and 2 with further restrictions on non-essential uses. Outdoor irrigation may be further limited. The following restrictions automatically go into effect when the declared water shortage is 25% or greater:

- Filling of non-recirculating decorative fountains using potable water is prohibited, and decorative fountains using potable water cannot be operated unless they are recirculating, non-misting, and lined.
- Ornamental lakes or ponds may not be filled with potable water
- Washing hard surfaces with potable water is prohibited without a City exemption
- Vehicle washing is restricted, and limited to commercial facilities using recirculating systems

The following restrictions automatically go into effect when the declared water shortage is 30% or greater:

- Restrictions on new landscape installation with overhead irrigation during May through October
- Limits on refilling pools and spas; initial filling of residential pools/spas is prohibited
- Public use of water from hydrants is prohibited

Level 4: >30% – 40% Water Shortage

Level 4 may include substantial restrictions to achieve significant demand reductions. Restrictions from previous levels remain in effect, and Council may further restrict outdoor irrigation. Additional measures automatically in place at a forty percent or greater water shortage include:

- Accelerated leak repair requirements (within 48 hours of notification)
- Filling of any swimming pool, fountain or spa is prohibited.

Level 5: 41–50% Water Shortage

Level 5 may include severe restrictions to achieve major demand reductions. All previous restrictions remain in effect. Additional measures could include:

- Prohibition of all non-essential outdoor irrigation
- Expanded prohibitions on discretionary water uses
- Mandatory water budget or allocation-based program, as needed
- Increased enforcement and penalties to ensure compliance

Level 6: >50% Water Shortage (Emergency)

Level 6 represents an emergency water shortage condition. All prior restrictions remain in effect. Additional emergency measures may be implemented to protect public health and safety, and could include:

- Prohibition of all outdoor irrigation, except for critical uses
- Accelerated leak repair requirements (within 24 hours of notification)
- Enhanced enforcement actions, including penalties or service limitations as authorized

Additional Potential Demand Reduction Actions

Except as otherwise noted for Levels 5 and 6, the list above includes those actions which have already been incorporated into the San José Municipal Code and which would therefore automatically be enacted at the applicable water shortage level. However, staff may recommend additional actions for Council

consideration and approval as may be deemed appropriate to respond to a specific water shortage event of any level. Additional potential implementation actions could include:

- Mandatory water rationing or strict allocation across some or all customer classes
- Prohibition of most or all outdoor irrigation, except for limited or essential uses
- Implementation of a water budget or allocation-based program
- Increased penalties or fines for non-compliance with an established water budget or allocation
- Restriction of water use to essential indoor and health and safety needs

Effectiveness of Demand Reductions

A quantification of estimated reductions associated with each action has been developed using the best available information, including observed water use reductions during previous droughts, relevant studies and literature on the effectiveness of conservation measures, and local demand data scaled to the SJMWS service area. The specific response actions associated with each shortage level, along with their estimated contributions to demand reduction, are summarized in **Table 8-3** and correspond to the shortage levels identified in **Table 8-1**.

These estimates are intended to provide general guidance on the relative effectiveness of different actions and to inform decision-making regarding implementation of shortage response measures.

It is important to note that the effectiveness of individual response actions is subject to uncertainty. Many actions have not been independently evaluated within the SJMWS service area, and available studies may not fully reflect local conditions. Observed reductions during past droughts are typically the result of combined effects from multiple actions, including restrictions, public outreach, and changes in customer behavior. As a result, estimated reductions for individual measures should be considered approximate and are best used to inform planning and response strategies rather than as precise predictions.

Table 8-3. Demand Reduction Actions

Shortage Level	Demand Reduction Actions	Reduction of Shortage Gap	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1-6	Landscape: Limit landscape irrigation to specific days	10-30%	Outdoor irrigation limited according to schedule set by Council (depending on shortage level)	Yes
3	Water Features: Restrict water use for decorative water features, such as fountains	1%	Operation of non-recirculating decorative fountains using potable water is prohibited; filling of fountains is prohibited	Yes
3	Water Features: Restrict water use for decorative water features, such as fountains	1%	Prohibit filling ornamental lakes or ponds with potable water.	Yes
3	Other: Prohibit use of potable water for washing hard surfaces	1%	No washing of paved or hard surfaces without exemption.	Yes
3	Other: Prohibit vehicle washing except at facilities using recycled or recirculating water	<1%	Vehicle washing only allowed at commercial facilities using recirculating systems.	Yes
3	Landscape: Other landscape restriction or prohibition	1-5%	No new outdoor landscaping or planting during certain months, with exceptions	Yes
3	Other water feature or swimming pool restriction	1%	Limits on refilling residential pools/spas; no initial filling with potable water.	Yes
3	Other	1-3%	Public use of water from hydrants is prohibited	Yes
4	Other: Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Customers must repair leaks within 48 hours of notification.	Yes
4	Other water feature or swimming pool restriction	1%	Filling of any pool, fountain, or spa is prohibited	Yes
5-6	Landscape: Prohibit all landscape irrigation	40%+	Council may prohibit all landscape irrigation other than for public benefit/recreational facilities.	Yes

Notes: Table identifies measures within San José Municipal Code which would automatically go into effect at designated water shortage levels; permanent water waste measures and potential additional measures which may be recommended at various stages are not included in this table as the relative savings has not been quantified.

Retailer Emergency Response Plan

Following is information about SJMWS' emergency response planning. Valley Water and SFPUC have undertaken their own emergency planning efforts, which can be found in their respective UWMP and WSCP.

Catastrophic Supply Interruption

A water supplier must prepare for a catastrophic interruption of water supplies. A catastrophic interruption constitutes a proclamation of a water shortage and could be any natural or man-made event. A catastrophic supply interruption can occur when the City loses one or more of its main water supplies. The likelihood of experiencing a simultaneous loss of more than one supply is low. For example, local power outages may limit use of groundwater, but may not affect delivery of supplies purchased from wholesalers.

If the available supply is insufficient to meet the demand and water quality requirements, an emergency notification will be sent to all water customers to inform them of the condition. The message will include the expected duration of the condition, and restrictions on water use for the duration of the condition. SJMWS has developed an Emergency Response Plan which will be implemented as necessary.

Power Outage

SJMWS's facilities have been designed to provide adequate supplies of water during normal and emergency operations. Reservoirs and emergency backup generators have been placed at elevations and locations which will maintain supplies to customers during power failures. SJMWS staff is on duty 24 hours a day to respond to emergency situations and implement the Emergency Response Plan where necessary. SJMWS's facilities are designed such that water stored in reservoirs at higher elevations and pressure zones may be drawn down to the lower pressure zones for emergency use.

SJMWS can continue to supply treated water from its wholesalers to the distribution system in the event of a power outage that does not impact the wholesaler. Some of the service areas (specifically, Edenvale and Coyote Valley) rely on groundwater supplies which require power to be pumped from the groundwater basin. Depending on the expected length of a power outage, SJMWS will evaluate the amount of available storage and supplies, availability of backup generators, and the projected demand to determine whether existing demands can be met while the outage persists. If not, SJMWS could contact some of the customers (e.g., irrigation water users) to request that non-essential water use be curtailed until the outage is addressed.

As most power outages tend to be localized, SJMWS would use backup generators to provide power to supply sources where necessary, or can request mutual aid from adjacent water agencies for additional supply. Many pump stations within the SJMWS service area have permanent backup generators installed onsite which automatically activate upon loss of the primary power supply, and several portable generators are maintained and stored at various locations within the service area. Emergency connections are maintained with adjacent water utilities to provide limited supplies in the event of an emergency. Emergency interties with San Jose Water Company are maintained in the Evergreen service area. Emergency interties with the City of Santa Clara are maintained in the North San José/Alviso service area.

Seismic Risk Assessment and Mitigation Plan

Locally, earthquakes present the greatest threat of an unanticipated interruption of water to customers. An earthquake can cause various kinds of failure that are structural or mechanical, such as rupture of a pipeline in the distribution system or damage to a water storage facility. Following an earthquake event, SJMWS will assess the condition of the water distribution system and arrange to provide emergency water where needed (e.g., use of groundwater supplies in the event of non-availability of wholesale water supplies or vice versa) in accordance with its Emergency Response Plan and in coordination with the City's Emergency Operations Center, where activated. Santa Clara County's Local Hazard Mitigation Plan will also be consulted and references where applicable (<https://emergencymanagement.sccgov.org/partners>).

Distribution system integrity and damage assessment reports will be prepared. SJMWS will coordinate with the City's Fire Department and Emergency Operations Center to identify immediate water and/or firefighting needs. To the greatest extent possible, alternate water supply will be made available to customers in affected regions. Water can be pumped from one location and/or redirected via valves within the distribution system to allow water to be delivered to central areas for distribution by container, which may be necessary if certain areas of the distribution system have been compromised.

In an event of health hazard of the water supply and distribution system, SJMWS will notify its customers and make arrangements to conduct laboratory analyses to be able to update the community on the status of its water supply and ensure that essential water needs are met.

Communication Protocols

In the event of a water shortage, SJMWS will implement enhanced communication protocols to ensure timely, accurate, and consistent dissemination of information to customers, City and local leaders, stakeholders, and the public. Communication efforts are scaled based on the declared water shortage level and are designed to support implementation of the WSCP response actions described in **Table 8-3**.

SJMWS utilizes a variety of communication channels to reach customers, including social media, press releases, digital and print advertising, radio and television outreach, a customer web portal, and the City's website. Information is provided in multiple languages, including Spanish and Vietnamese, to ensure accessibility to the community.

SJMWS also uses its web-based customer engagement platform to communicate directly with customers. This platform allows staff to send targeted messages, deliver Home Water Reports, provide conservation guidance, and issue automated alerts related to water use and leak detection. These tools enable SJMWS to reach customers quickly and provide actionable information to support water use reductions.

For non-time-sensitive communications, SJMWS may partner with community organizations, local businesses, and regional entities to promote water conservation and reinforce messaging. SJMWS also coordinates with water wholesalers and neighboring retail agencies to ensure consistent messaging across Santa Clara County and the broader Bay Area. Direct customer communication may also include bill inserts, on-bill messaging, and other materials distributed through the regular billing cycle.

Communication protocols are further defined by water shortage level, as shown in **Table 8-4**. Messaging will increase in frequency, urgency, and specificity as shortage levels escalate. Upon declaration of a water shortage by the City Council or its authorized designee, SJMWS will initiate the corresponding communication actions, including notification of applicable restrictions, required demand reductions, and enforcement measures. Additional or revised communication protocols may be implemented as needed to respond to evolving conditions.

Table 8-4. Communication Protocols by Shortage Level	
Water Shortage Level	Communication Protocols
1	• Continue messaging consistent with the “Conservation is a Way of Life” initiative • Enforce San José Municipal Code Chapter 15.10 • Provide routine updates via website, social media, and Home Water Reports • Direct contact with local media regarding general conditions • Notify stakeholders and elected officials of current conditions and outlook
2	• Continue Level 1 actions • Communicate new restrictions through website, social media, and press releases • Initiate targeted messaging via Customer Web Portal (email alerts, group messaging) • Monitor water production and use data monthly • Continue stakeholder and media outreach
3	• Continue Level 2 actions • Communicate new restrictions through website, social media, and press releases • Increase frequency and visibility of messaging (digital ads, expanded media outreach) • Monitor water production and use data biweekly or monthly, and increase frequency of updates on water supply conditions as needed • Provide detailed messaging on demand reduction goals and compliance expectations • Increase coordination with regional agencies
4	• Continue Level 3 actions • Communicate new restrictions through website, social media, and press releases • SJMWS will monitor water production and use data daily to weekly as possible • Expand direct communication channels (email, phone) • Increase communications on enforcement actions and penalties • Provide regular briefings to Department/City leadership
5	• Continue Level 4 actions • Increase urgency and frequency of messaging across all channels • Use Customer Web Portal, email, and phone for targeted high-use customer outreach • Provide frequent updates (multiple times per week as needed) • Emphasize mandatory compliance and enforcement
6	• Continue Level 5 actions • Implement emergency communication protocols with high-frequency alerts • Provide clear direction limiting water use to health and safety needs • Use all communication channels for rapid information dissemination • Coordinate with regional agencies and emergency partners • Provide frequent updates to Department/City leadership

Compliance and Enforcement

Demand Reduction through Public Outreach

Public messaging is a critical component of WSCP implementation and supports achievement of demand reductions. For example, drought-specific messaging and outreach during the 2012–2016 drought helped Santa Clara County residents and businesses reduce water use by approximately 35 percent compared to 2013 baseline conditions. SJMWS’s water conservation outreach programs are described in more detail in Section 9 of the UWMP.

Table 8-5 summarizes the outreach-based consumption reduction methods used by the City. These measures are implemented across all shortage levels and are designed to complement use restrictions by encouraging behavioral changes and improving water use efficiency.

Table 8-5. Consumption Reduction Methods Through Outreach		
Level	Consumption Reduction Methods by Water Supplier	Description
All Levels	Expand Public Information Campaign	Public education and outreach programs that promote water conservation, support compliance with restrictions, and reinforce behavioral changes across all shortage levels
All Levels	Offer Water Use Surveys	Provides individualized water use assessments and tips to improve efficiency and reduce consumption
All Levels	Provide Rebates on Plumbing Fixtures and Devices	Incentivizes installation of high-efficiency indoor fixtures to reduce baseline water demand
All Levels	Provide Rebates for Landscape Irrigation Efficiency	Supports conversion to efficient irrigation systems, reducing outdoor water use
All Levels	Provide Rebates for Turf Replacement	Encourages removal of high-water-use turf and replacement with drought-tolerant landscaping
All Levels	Increase Water Waste Patrols	Identifies and addresses water waste violations, improving compliance with WSCP restrictions
All Levels	WaterSmart Residential Home Water Reports	Provides customers with detailed water use data, comparisons, and conservation recommendations to encourage behavioral changes
All Levels	Waterfluence Commercial Irrigation Water Use Software	Supports efficient irrigation management for commercial customers through data-driven water budgeting and monitoring

Penalties, Charges, and Enforcement of Prohibitions

The City will enforce mandatory reduction programs as necessary to achieve demand reductions during a declared water shortage. Enforcement of water use restrictions within the Municipal Code described in **Table 8-3**, as well as the permanent water waste prevention measures, may be escalated based on the declared shortage level.

San José Municipal Code Section 1.08.010 provides that failure to comply with mandatory requirements of the Municipal Code or any other City ordinance may be charged as a misdemeanor, unless designated as an

infraction. Violations of the Municipal Code may be punishable by a fine of up to \$1,000, imprisonment for up to six months, or both.

In addition, the City may issue administrative citations for violations. Administrative citation penalties range from \$160 to \$500 for first and second violations per Council Resolution No. RES2025-403 (<https://sanjoseca.govnita.com/workspaces/Resolutions?query=administrative%20citation%20schedule>). During a declared water shortage, enforcement would follow a progressive structure, beginning with warnings and escalating to higher penalties for repeated violations.

Water use restrictions for Levels 1 through 4 are codified in Chapter 15.10 of the San José Municipal Code. Restrictions applicable to Levels 5 and 6 will be determined based on the specific shortage conditions and adopted by the City Council. All customers are required to comply with restrictions adopted by Council, including those described in **Table 8-3**. Customers who do not comply with adopted restrictions are subject to enforcement actions, including warnings, citations, fines, and other measures as authorized by the Municipal Code. The City Council may adopt additional penalties or charges as needed to ensure compliance.

Any person may submit a written request for an exception to potable water use restrictions. Requests must include justification and demonstrate that no alternative water source is available. An exemption review fee is required, and approval is not guaranteed.

Legal Authorities

In the event of a water shortage, SJMWS may declare a water shortage emergency in accordance with applicable provisions of the California Water Code. The City may also proclaim a local emergency under the California Emergency Services Act (Government Code Section 8558), as coordinated with other local agencies where applicable.

The San José Municipal Code provides authority for the City Council to declare a water shortage condition when water supplies are projected to be insufficient to meet at least 90 percent of demand, or when a minimum conservation level of 10 percent or greater is established by Valley Water, and such declaration would activate the water shortage restrictions within the San José Municipal Code (**Table 8-3**). However, Council could take action to adopt a resolution and set other voluntary or mandatory water use restrictions as may be necessary.

This authority has been exercised during previous droughts. Most recently, the City Council declared a 15 percent water shortage in November 2021, extended the initial drought declaration in November 2022, and ultimately declared the end of the water shortage in August 2023. These actions enabled implementation and adjustment of WSCP response measures consistent with changing water supply conditions.

Financial Consequences of WSCP

Implementation of the WSCP may result in reduced water sales and corresponding decreases in utility revenue. At the same time, implementation of demand reduction programs, outreach efforts, and enforcement activities may increase operational costs.

In addition, wholesale water purchase costs may increase during drought conditions. For example, SFPUC retail water rates include a drought surcharge provision that allows for an increase to water purchase costs during a declared shortage.

The City's annual budget and rate-setting process considers potential revenue reductions and increased costs associated with water shortages, as well as long-term conservation trends. During a shortage, SJMWS will evaluate potential revenue impacts based on factors including drought severity, wholesale rate changes, projected water sales, and status of the water utility operating fund.

If necessary, off-cycle adjustments to the SJMWS rate schedule may be proposed and submitted to the City Council for approval following required public noticing procedures. SJMWS maintains a rate stabilization reserve, which may be used to offset or mitigate financial impacts during periods of reduced revenue.

WSCP Monitoring, Evaluation, and Refinement Procedures

SJMWS will implement an adaptive management approach to monitor, evaluate, and refine the WSCP to ensure that risk tolerance remains appropriate and that water shortage mitigation strategies are effective.

Monitoring Supply and Demand Conditions

SJMWS will continuously monitor water supply availability and customer demand throughout all water shortage conditions. Monitoring efforts include:

- Water production and supply availability (SFPUC, Valley Water imported water, groundwater)
- Customer water use by sector and overall system demand
- Progress toward demand reduction targets associated with each declared shortage level
- Operational system conditions and constraints

SJMWS monitors water production and customer usage through bi-monthly meter readings and completes monthly water use reporting in accordance with State requirements. Most water production/purchase volumes can be monitored by SJMWS at any required frequency, though staff may have to rely on wholesale water providers for updates on some of their source meters.

Monitoring data may be reported to the Deputy Director, Director of Environmental Services, and City Council as appropriate to inform real-time decision making. The specific monitoring and reporting approach for a given shortage will be confirmed at the time of the Council's declaration. Monitoring frequency increases with shortage severity and is expected to be generally consistent with the communication protocols described in **Table 8-4**, unless directed otherwise by City leaders.

Customer water meters are read on a rolling bimonthly cycle, and water use data can be exported from the City's billing system for reporting purposes after each meter reading cycle is billed. SJMWS is pursuing the implementation of Advanced Metering Infrastructure (AMI) technology that allows for near real-time monitoring of water meters. A fully implemented AMI system will significantly increase the utility's ability to monitor customer water use levels and patterns in near real time. SJMWS also plans to install AMI at its source meters where possible, which would allow for comparisons of water supply and demand over the same corresponding time intervals.

Risk Tolerance and Trigger Evaluation

SJMWS will assess whether current water supply conditions and projected availability meet acceptable risk tolerance thresholds for maintaining reliable service. This includes:

- Comparing projected supply and unconstrained demand under current and dry-year scenarios
- Evaluating the likelihood and severity of potential supply shortfalls
- Considering regional supply conditions, including regular collaboration with wholesale providers
- Assessing storage levels, groundwater conditions, and system reliability risks

If projected conditions indicate that supply reliability may fall below acceptable thresholds, SJMWS will evaluate the need to escalate shortage response actions or declare a higher shortage level.

Evaluation of WSCP Effectiveness

SJMWS will evaluate the effectiveness of implemented shortage response actions by comparing observed water use reductions to the targeted demand reductions identified for each shortage level. This evaluation includes:

- Assessing whether cumulative demand reduction actions are achieving the intended level of savings
- Reviewing compliance rates with mandatory restrictions
- Evaluating the effectiveness of outreach, enforcement, and programmatic measures
- Incorporating lessons learned from prior drought conditions and ongoing implementation

Because individual conservation measures are implemented in combination, evaluation focuses on overall system performance rather than isolated impacts of individual actions.

Adaptive Management and WSCP Refinement

Based on monitoring and evaluation results, SJMWS may modify, expand, or refine WSCP response actions to ensure that demand reduction targets are achieved and risk tolerance remains appropriate. Adaptive management actions may include:

- Increasing or modifying water use restrictions
- Expanding enforcement and penalty structures
- Enhancing public outreach and customer engagement strategies
- Coordinating with regional partners to align response strategies

The Annual Water Supply and Demand Assessment serves as a key tool for evaluating WSCP performance and informing future refinements. Findings from annual assessments, drought response experience, and updated supply and demand data will be used to:

- Improve demand reduction estimates
- Refine shortage response actions
- Update risk assumptions and planning thresholds
- Inform potential updates to Chapter 15.10 of the San José Municipal Code

Continuous Improvement

SJMWS is committed to continuous improvement of its WSCP to reflect evolving regulatory requirements, improved data availability (including future AMI data), and best practices in water shortage management. The WSCP will be updated as needed through the UWMP process, during an active water shortage, or as part of ongoing planning efforts to ensure continued effectiveness and alignment with State requirements.

Plan Adoption, Submittal, and Availability

The WSCP is adopted in conjunction with the 2025 UWMP in accordance with Water Code Section 10642 and Government Code Section 6066. A public hearing is required prior to adoption. The last WSCP was adopted in 2020.

The draft WSCP is made available to the public through the City's website prior to adoption, with the final adopted plan posted online and distributed to the city and county within 30 days. Future updates to the WSCP will be approved by the City Council as needed.

MAY 2026

CITY OF SAN JOSE
**DRAFT 2025 URBAN WATER
MANAGEMENT PLAN**



EXECUTIVE SUMMARY TABLE OF CONTENTS

Executive Summary.....	ES-1
Introduction.....	ES-1
Plan Preparation.....	ES-1
System Description.....	ES-1
System Water Use	ES-2
SB X7-7 Baselines and Targets.....	ES-2
Water Supplies.....	ES-3
Water Supply Reliability	ES-4
Water Shortage Contingency Planning.....	ES-4
Demand Management Measures.....	ES-4

EXECUTIVE SUMMARY LIST OF TABLES

Table ES-1. Current and Projected Population	ES-2
Table ES-2. Projected Jobs within SJMWS Service Areas.....	ES-2
Table ES-3. Projected Water Use	ES-2
Table ES-4. Projected Water Supplies.....	ES-3

TABLE OF CONTENTS

1. Introduction	1-1
Background	1-1
Changes to the California Urban Water Management Planning Act	1-3
Urban Water Management Plans in Relation to Other Planning Efforts	1-3
2025 UWMP Organization	1-4
2. Plan Preparation	2-1
Basis and Approach for Preparing the UWMP	2-1
Level of Planning and Compliance	2-2
Agency Coordination and Outreach	2-3
Wholesale and Retail Coordination.....	2-3
Coordination with Other Agencies and the Community.....	2-3
Notification to Agencies and Public	2-4
Plan Adoption.....	2-5
3. System Description	3-1
Service Area General Description	3-1
History	3-1
Organization Structure	3-1
Service Area Boundary and Land Use	3-2
North San José/Alviso	3-2
Evergreen.....	3-2
Edenvale.....	3-2
Coyote Valley	3-2
Service Area Climate.....	3-4
Climate Change and Drought Affecting Water Resources.....	3-5
Service Area Population and Demographic.....	3-6
Demographics	3-7
4. System Water Use.....	4-1
Water Demand	4-2
Historical and Projected Water Uses by Sector	4-2
Future Water Savings	4-4
Water Use for Lower Income Households	4-4
Distribution System Water Losses.....	4-4

Impacts of Climate Change	4-6
5. SB X7-7 Baselines, 2020 Target, and Compliance	5-1
Baseline Water Use and 2020 Target	5-1
2020 Compliance	5-2
Nexus to Urban Water Use Objectives	5-2
6. Water Supplies	6-1
Sources of Supply	6-3
North San José/Alviso.....	6-3
Evergreen	6-3
Edenvale	6-3
Coyote Valley.....	6-3
Purchased or Imported Water.....	6-4
SFPUC – Wholesaler	6-4
Water Supply Agreement	6-4
Individual Supply Guarantee	6-5
SFPUC Future Supply Decisions	6-5
BAWSCA	6-5
Regional Projects	6-6
Valley Water – Wholesaler.....	6-7
Groundwater	6-8
Groundwater Basin Description	6-8
Santa Clara Subbasin - Santa Clara Plain.....	6-9
Santa Clara Subbasin - Coyote Valley	6-9
Llagas Subbasin	6-9
Groundwater Management and Overdraft Conditions	6-10
Historical Groundwater Pumping.....	6-12
Surface Water	6-13
Stormwater	6-13
Wastewater and Recycled Water	6-14
Wastewater Collection, Treatment, and Disposal	6-14
Recycled Water System.....	6-15
Non-Potable Reuse – SBWR Program	6-16
Current, Potential, and Projected Recycled Water Use.....	6-18

Projected vs Actual Recycled Water	6-19
Actions to Encourage and Optimize Future Recycled Water Use.....	6-19
Potable Reuse.....	6-20
Desalinated Water Opportunities	6-20
Exchanges or Transfers	6-21
Future Water Projects	6-21
Summary of Existing and Planned Sources of Water	6-22
Energy Use	6-22
7. Water Supply Reliability.....	7-1
Constraints on Water Sources.....	7-2
SFPUC: Reliability and Constraints.....	7-2
Constraints on Water Quality.....	7-3
Climate Change Impacts.....	7-3
SFPUC Climate Change Studies	7-4
Impacts of Bay-Delta Plan Amendment.....	7-5
Additional Reliability Factors.....	7-7
Actions to Improve Reliability	7-8
SFPUC’s Water System Improvement Program	7-8
Alternative Water Supply Program.....	7-9
Additional Efforts	7-10
SFPUC Water Shortage Allocation Plan.....	7-11
Tier One Drought Allocations.....	7-11
Tier Two Drought Allocations	7-12
Valley Water: Reliability and Constraints	7-13
Climate Change Impact to Overall Water Supply.....	7-13
Imported Water Supplies	7-14
Local Surface Water Supplies	7-14
Groundwater Supplies.....	7-15
Water Transfers.....	7-15
Recycled and Purified Water Supplies	7-15
Basis of Reliability Analysis	7-16
SFPUC	7-17
Valley Water.....	7-18

Recycled Water	7-18
Comparison of Supplies and Demands.....	7-18
Average Year	7-18
Single Dry Year	7-19
Multiple Dry Years	7-19
Drought Risk Assessment	7-20
Past and Current Water Conservation Programs and Strategies	7-21
Past Conservation Programs	7-22
Current Programs and Strategies	7-22
8. Water Shortage Contingency Plan	8-1
9. Demand Management Measures	9-1
Demand Management Measures by Valley Water	9-1
Public Outreach	9-1
Landscape Programs	9-2
Demand Management Measures by SJMWS	9-2
Water Waste Prevention Ordinance	9-2
Metering.....	9-3
Conservation Pricing	9-3
Public Education and Outreach	9-3
Programs to Assess and Manage Distribution System Real Loss	9-5
Water Conservation Program Coordination and Staffing Support	9-5
Other Demand Management Measures	9-5
Implementation and Effectiveness.....	9-6
10. Plan Adoption, Submittal, and Implementation	10-1
Notice of Public Hearing	10-2
Notice to Cities and Counties	10-2
Notification Requirement – 60 days prior to Review/Adoption Hearing.....	10-2
Notice to the Public	10-2
Public Hearing and Adoption	10-3
Plan Submittal.....	10-3
Amending an Adopted UWMP or WSCP	10-3
Public Availability	10-4

References

APPENDICES

Appendix A – California Water Code: Urban Water Management Planning

Appendix B – DWR UWMP Checklist

Appendix C – DWR Standardized UWMP Data Tables

Appendix D – Public Involvement Materials

Appendix E – AWWA Free Water Audit Software Data Worksheets

Appendix F – San José Municipal Code

Appendix G – Valley Water: Groundwater Management Plan, Delta Reliance

Appendix H – Water Shortage Contingency Plan

Appendix I – Public Education and Outreach Materials

Appendix J – 2025 UWMP & WSCP Adoption Resolution

LIST OF FIGURES

Figure 3-1 City of San José Municipal Water System Service Areas3-3

Figure 3-2 USDM drought map of California on December 29, 2020 (US Drought Monitor).....3-5

Figure 3-3 USDM drought map of California on April 7, 2026 (US Drought Monitor).....3-6

Figure 6-1. Santa Clara County Groundwater Basin and SJMWS Groundwater Wells6-12

Figure 6-2. SBWR Pipeline System6-17

LIST OF TABLES

Table 2-1. Public Water Systems.....	2-2
Table 2-2. Plan Identification	2-2
Table 2-3. Supplier Identification.....	2-3
Table 2-4. Water Supplier Information Exchange.....	2-3
Table 2-5. Coordination with Notified Agencies	2-4
Table 3-1. City of San José Monthly Mean Average Climate Data.....	3-4
Table 3-2 (DWR Table 3-1). Population - Current and Projected.....	3-7
Table 3-3. Projected Jobs within SJMWS Service Area	3-7
Table 4-1. Total Uses for Potable and Non-Potable Water – Actual	4-2
Table 4-3. Inclusion in Water Use Projections	4-4
Table 4-4 (DWR Table 4-5). Water Loss Audit Reporting.....	4-5
Table 4-5 (DWR Table 4-6). Progress Towards 2028 Water Loss Standard	4-5
Table 5-1. SB X7-7 2020 Target Progress	5-2
Table 6-1. Water Source by SJMWS Service Area.....	6-3
Table 6-2. Outcome Measures and Outcome Measure – Lower Thresholds	6-11
Table 6-3 (DWR Table 6-1). Groundwater Volume Pumped.....	6-12
Table 6-4 (DWR Table 6-2). Wastewater Collected Within Service Area in 2025.....	6-15
Table 6-5 (DWR Table 6-3). Wastewater Treatment and Outcomes in 2025	6-15
Table 6-6 (DWR Table 6-4). Recycled Water Uses Within Service Area	6-18
Table 6-7 (DWR Table 6-5). Recycled Water Use – 2020 Projected, 2025 Actual	6-19
Table 6-8 (DWR Table 6-6). Methods to Expand Future Recycled Water Use.....	6-19
Table 6-9 (DWR Table 6-7). Expected Future Water Supply Projects or Programs	6-21
Table 6-10 (DWR Table 6-8). Water Supplies – 2025 Actual.....	6-22
Table 6-11 (DWR Table 6-9). Reasonably Available Water Supplies – Projected	6-22
Table 6-12 (DWR Table O-1B). Recommended Energy Reporting – Total Utility Approach.....	6-23
Table 7-1. Distribution of Reduced SFPUC Supplies	7-12
Table 7-2 (DWR Table 7-1). Basis of Water Year Data (Reliability Assessment)	7-17
Table 7-3 (DWR Table 7-2). Normal Year Supply and Demand Comparison (Potable)	7-19
Table 7-4 (DWR Table 7-3). Single Dry Year Supply and Demand Comparison (Potable)	7-19
Table 7-5 (DWR Table 7-4). Multiple Dry Year Supply/Demand Comparison (Potable).....	7-20
Table 7-6 (DWR Table 7-5). Five-Year Drought Risk Assessment Tables (Potable).....	7-21
Table 9-2. Demand Management Measure Implementation 2021-2025.....	9-7
Table 10-1. Notification to Cities and Counties	10-2

ABBREVIATIONS AND ACRONYMS

ABAG	Association of Bay Area Governments
Act	1983 California Urban Water Management Planning Act
AF	acre-feet
City	The City of San José
CVP	Central Valley Project
CWC	California Water Code
CY	calendar year
DMM	Demand Management Measures
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
ETo	evapotranspiration
FAHCE	Fisheries and Aquatic Habitat Collaborative Effort
FY	Fiscal Year
GPCD	Gallons per capita per day
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWMP	Groundwater Management Plan
ISG	Individual Supply Guarantees
MGD	million gallons per day
NSJ/Alviso	North San José/Alviso
RWF	San José/Santa Clara Regional Wastewater Facility
RWS	Regional Water System
SBWR	South Bay Water Recycling
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SJMWS	San José Municipal Water System
SWP	State Water Project
SWRCB	State Water Resources Control Board
USDM	U.S. Drought Monitor
UWMP	Urban Water Management Plan
WMP	Water Master Plan
WSA	Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County and Santa Clara County
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WSIP	Water System Improvement Program
WSMP	Water Supply Master Plan
WTP	Water Treatment Plant
TAZ	Transportation Analysis Zone

DEFINITIONS

Chapter 2, Part 2.6, Division 6 of the California Water Code provides definitions for the construction of Urban Water Management Plans. **Appendix A** contains the full text of the Urban Water Management Planning Act.

10611.3. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Drought risk assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

10617.5. "Water shortage contingency plan" means a document that incorporates the provisions detailed in subdivision (a) of Section 10632 and is subsequently adopted by an urban water supplier pursuant to this article.

10618. "Water supply and demand assessment" means a method that looks at current year and one or more dry year supplies and demands for determining water shortage risks, as described in Section 10632.1.

Executive Summary

The City of San José Municipal Water System (SJAWS) has prepared this 2025 Urban Water Management Plan (UWMP) update to comply with the legislative requirements of the UWMP Act and subsequent California Water Code requirements.

An UWMP is a water supply planning tool that evaluates the agency's water supply reliability in five-year increments over a 20-to-25-year planning horizon. Thus, the UWMP provides an assessment of projected water demands and water supplies. The following summary provides a simple description and high-level summary of the UWMP contents.

Introduction

UWMPs are water supply planning documents required by the California Department of Water Resources (DWR) to be updated every five years by all water suppliers that have 3,000 or more service connections or who supply 3,000 or more Acre Feet per Year (AFY) of water. This UWMP meets the requirements of the DWR's 2025 *UWMP Guidebook*.

Plan Preparation

SJAWS submitted its first SJAWS UWMP in 1985 and has since submitted updates every five years including the last update for 2020. SJAWS operates two permitted water systems and is required to prepare an UWMP as water is provided to over 3,000 service connections with a supply greater than 3,000 AFY. UWMP tables are in calendar years, and volumetric measurement units are Acre Feet (AF) unless otherwise noted.

To prepare for the 2025 UWMP update, SJAWS coordinated with its two wholesale water suppliers – Valley Water (previously called the Santa Clara Valley Water District) and the San Francisco Public Utilities Commission (SFPUC) – local agencies, and the general public.

System Description

San José is located in Santa Clara County, south of the San Francisco Bay. It was founded in 1777 and incorporated in 1850 and is the third largest city in California. Within the city, SJAWS is one of three water retailers and only provides water service within specific areas of San José, referred to as service areas: North San José/Alviso, Evergreen, Edenvale, and Coyote Valley.

In 2025, SJAWS provided water service to 26,297 metered connections with a population of over 145,000. SJAWS retained a consultant to develop an alternative population estimation methodology for planning and reporting purposes. The approach utilizes the growth rate from the Association of Bay Area Governments (ABAG) / Metropolitan Transportation Commission's Plan Bay Area 2050 analysis. The traffic Analysis Zone (TAZ) dataset was utilized, which spatially allocated data to the SJAWS service area using GIS. In March 2026, SJAWS coordinated with the California Department of Water Resources to review the

methodology, and it was determined to be acceptable for use. The current and projected population for the SJMWS service area is shown in **Table ES-1**.

Table ES-1. Current and Projected Population						
Population	2025	2030	2035	2040	2045	2050
	147,864	171,890	193,348	231,725	279,886	328,046

The City's General Plan (Envision San José 2040) identified the addition of 120,000 dwelling units and 382,000 new jobs throughout the City limits. By 2050, within the SJMWS service area, jobs are projected to increase to 144,042 as shown in **Table ES-2**.

Table ES-2. Projected Jobs within SJMWS Service Areas						
Jobs	2025	2030	2035	2040	2045	2050
	84,861	92,136	99,409	114,287	129,165	144,042

System Water Use

Actual water use data comes from the City's water meter readings and the customer billing system, except for information on water loss. Billed water use is categorized by SJMWS as single-family, multi-family, commercial, industrial, government, and landscape irrigation. In 2025, water use for the SJMWS service area was 14,836 AF of potable water and 3,509 AF of recycled water.

SJMWS used consultant support to create water use projections through 2050. The consultant used econometric regression techniques with conservation accounting. This method allowed for a clear separation between the structural factors influencing water demand – such as demographic changes, climate variability, long-term trends in conservation savings, historical drought restrictions, and economic trends – and the impacts resulting from policy decisions and conservation programs. Data and growth assumptions from the City's Envision San José 2040 General Plan as well as Plan Bay Area 2050 were used, along with projections from Water Supply Assessments approved by San José through 2025. By 2050, potable water use is projected to be 23,620 AF and recycled water use is projected to be 8,792 AF. **Table ES-3** provides a summary of projected water use.

Table ES-3. Projected Water Use						
	2025	2030	2035	2040	2045	2050
Potable Water	14,836	17,454	18,402	20,159	21,896	23,620
Recycled Water	3,509	8,012	8,383	8,748	8,768	8,792
TOTAL	18,345	25,466	26,785	28,907	30,664	32,412

SB X7-7 Baselines and Targets

In the 2015 UWMP, SJMWS calculated a 10-year baseline water use of 181 gallons per capita per day (GPCD), and a 2020 water use target of 145 GPCD. SJMWS' actual 2020 water use was 118 GPCD, which was below the target. A Compliance Form was submitted and included in the City's 2020 UWMP.

Water Supplies

Supply sources received by SJMWS are generally considered to be reliable sources, except during times of extended drought during which supplies would be decreased due to reduced availability from wholesale suppliers. Water supply sources for each of the City's four service areas include groundwater, purchased water from its two wholesale water suppliers (Valley Water and SFPUC), groundwater, and recycled water. The potable water supply source for each service area includes:

- **North San José/Alviso** – SFPUC and groundwater
- **Evergreen** – Valley Water and groundwater
- **Edenvale** – groundwater
- **Coyote Valley** – groundwater

Each of the SJMWS supply sources is discussed below, and projected water supplies through 2050 are shown in **Table ES-4**.

- **SFPUC** – The SFPUC has a Water Supply Agreement from 2009 with its wholesale customers, which was amended and restated in 2018, 2021, and 2025. This supply is mostly from the Hetch Hetchy reservoir, with additional local surface water.
- **Valley Water** – SJMWS purchases treated surface water from Valley Water under a treated water contract. This supply include water from the Sacramento-San Joaquin Delta, and local surface water.
- **Groundwater** – Groundwater provides about half of the county's water supply for potable use, through pumping by retail water agencies or individual well owners. Valley Water acts as the Groundwater Sustainability Agency for Santa Clara County.
- **Recycled Water** – The City of San José operates the South Bay Water Recycling (SBWR) system and distributes disinfected treated wastewater for non-drinking water uses.

SJMWS is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA) which represents the interests of the 26 agencies in Alameda, Santa Clara, and San Mateo counties that purchase water from SFPUC. BAWSCA provides regional water supply planning and conservation programming for the benefit of its member agencies.

Table ES-4. Projected Water Supplies					
Water Supply	2030	2035	2040	2045	2050
Purchased/Imported Water	15,803	16,029	16,653	17,366	18,082
Groundwater	1,651	2,373	3,506	4,530	5,538
Recycled Water (non-potable)	8,012	8,383	8,748	8,768	8,792
TOTAL	25,466	26,785	28,907	30,664	32,412

Water Supply Reliability

Water wholesalers are facing various challenges associated with imported water supplies, such as operational challenges and climate change. Both Valley Water and SFPUC are addressing future supply planning and are making efforts to address these challenges.

- The supply of imported water from SFPUC is challenged by hydrology, infrastructure, and institutional parameters. In general, the SFPUC supply depends on reservoir storage. During dry periods, imported water through SFPUC is allocated using a water shortage allocation plan. Climate change may affect the reliability of this resource.
- Valley Water supplies include groundwater, local surface water, and imported water. Their sources may be vulnerable to items such as climate change, changes in rainfall levels, infrastructure failure, regulatory actions. In general, their reservoirs are sized for annual operations and it can be challenging to capture and store all the available water.

SJMWS can meet water demands within its service area in normal water years through 2050. However, during a single dry year or multiple dry years, the SJMWS may have a supply shortage and would need to implement conservation measures identified in its Water Shortage Contingency Plan. Based on total potable water supplies, SJMWS may have supply shortages between approximately 8-20% during a drought.

The UWMP includes a drought risk assessment which compares water supplies and demands for a drought beginning in 2026 and lasting for five years. The assessment shows that it is necessary to reduce water demands and offset a water supply shortage in 2030.

Water Shortage Contingency Planning

SJMWS has a Water Shortage Contingency Plan (WSCP) in accordance with State requirements. The WSCP sets six standard water shortage levels, ranging from 10 percent to greater than 50 percent shortage, and defines response actions for each level. During water shortages, SJMWS will implement response actions to reduce water demands, including water use restrictions and operational adjustments as appropriate to the level of the shortage.

Demand Management Measures

SJMWS coordinates with Valley Water on demand management (water conservation) programs offered in the county. Valley Water provides resources for public information and landscape programs that improve outdoor water use efficiency. San José has permanent water use efficiency requirements in its Municipal Code to prevent water waste and promote long-term conservation. SJMWS has several actions and programs to achieve water savings, including customer metering, public information messaging, and distribution system water loss control.

1. INTRODUCTION

Background

The 1983 California Urban Water Management Planning Act (Act), also referred to as Assembly Bill 797, requires all urban water suppliers who directly serve 3,000 or more customers or who provide 3,000 or more-acre feet of water per year to prepare an Urban Water Management Plan (UWMP) every 5 years and submit the UWMP to the California Department of Water Resources (DWR). The purpose of the Act is to ensure that water suppliers plan for the long-term conservation and efficient use of the State's limited urban water supplies. The complete text of the Act is in **Appendix A** of the Department of Water Resources' 2025 *Urban Water Management Plan Guidebook* (2025 Guidebook). Guidance for addressing the requirements of the Act is found in the Guidebook and Guidebook appendices.

The City of San José (City) operates the San José Municipal Water System (SJMWS), a retail water supplier that provides water service within the City. The City submitted the first SJMWS UWMP in 1985 in compliance with the Act. The City prepared updates to the SJMWS UWMP in 1990, 1995, 2000, 2005, 2010, 2015, and 2020. The Act requires that the SJMWS UWMP be updated and submitted every five years on or before July 1, in years ending in six and one. For the 2025 UWMP update, each urban water supplier must submit its UWMP by July 1, 2026. This SJMWS UWMP is referred to as the 2025 UWMP to retain consistency with the five-year submittal cycle.

In 2009, State officials determined that for California to continue to have enough water to support its growing population, it needs to reduce the amount of water each person uses per day (Per Capita Daily Consumption). This reduction of urban per capita use, commonly called the 20x2020 plan, was codified through SBX 7-7 (Steinberg) in November 2009 with the goal of reducing California's urban per capita water use by 20% by December 31, 2020. The City met its 2020 target and provided associated documentation in the 2020 UWMP. Confirmation of the City's compliance with its target is included in this 2025 UWMP, as required by legislation. (Water Code §10608.40)

In adopting SBX7-7, the Legislature found and declared, as follows:

Section 10610.2.

(a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.*
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.*
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.*

Section 1. Introduction

- (4) *As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years now and into the foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.*
- (5) *Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.*
- (6) *Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.*
- (7) *Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.*
- (8) *Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.*
- (9) *The quality of source supplies can have a significant impact on water management strategies and supply reliability.*
- (b) *This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.*

Section 10610.4.

The Legislature finds and declares that it is the policy of the state as follows:

- (a) *The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.*
- (b) *The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.*
- (c) *Urban water suppliers shall be required to develop water management plans to achieve the efficient use of available supplies and strengthen local drought planning.*

Changes to the California Urban Water Management Planning Act

Amendments were made to the California Water Code since preparation of the City's 2020 UWMP; however, none of these updates were specific to the required content of the 2025 UWMP. The updates primarily address water use efficiency and the use of potable water to irrigate nonfunctional turf. Water Code updates include the following:

- Establishment of a prohibition on the irrigation of nonfunctional turf, with set compliance and self-certification dates for different sectors. Public water systems must revise their regulations, ordinances, or policies to incorporate the irrigation prohibition. (Water Code §10608.14)
- Establishment of standards for indoor residential water use. (Water Code §10609.4)

Urban Water Management Plans in Relation to Other Planning Efforts

This UWMP provides information on water management specific to the SJMWS service areas. However, water management happens in conjunction with other planning processes that integrate with the UWMP to accomplish urban planning. Some of these plans include: the City's General Plan (Envision San José 2040) (<https://www.sanjoseca.gov/home/showpublisheddocument?id=22359>), Santa Clara County's General Plan (<https://plandev.santaclaracounty.gov/codes-and-policies/general-plan/>), Recycled Water Master Plan (<https://www.sanjoseca.gov/home/showpublisheddocument/518/636612938942830000>), Integrated Regional Water Management Plan, Groundwater Management Plan (<https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater/sustainable-groundwater-management>), Plan Bay Area 2050 (<https://planbayarea.org/>), and others. Each of these planning efforts is greatly enhanced when it relies upon the information found in the other documents. The City utilized other planning processes and documents when developing this UWMP and shared this UWMP with other agencies.

The 2025 UWMP must include water deliveries and uses; water supply sources; efficient water uses; and demand management measures, including the nature and extent of each water demand management measure implemented over the past five years and planned to be implemented to achieve its water use targets. The DWR has the responsibility for the review and certification process of the UWMP pursuant to the Act. A current UWMP is required to be eligible for water management grants or loans administered by DWR, the State Water Resources Control Board, or the Delta Stewardship Council.

This document presents the City's UWMP for SJMWS, the retail water supplier operated by the City. This UWMP examines SJMWS' current and projected water supplies, demands, and sources; details SJMWS' water shortage contingency plan; confirms compliance with the 20x2020 water use target; and discusses the City's conservation efforts. The UWMP documents the City's planning efforts involved in ensuring a reliable, high quality supply of water to the public.

2025 UWMP Organization

The 2025 UWMP (this document) is an update to the City's 2020 Plan. The 2025 UWMP includes updated elements in accordance with DWR's 2025 Guidebook as required by law. This UWMP utilizes the organization outlined in the 2025 Guidebook. Tables provided by DWR for each section are also added into this plan.

Each section in this UWMP follows the 2025 Guidebook outline. A checklist of the required elements addressed in this UWMP is provided in **Appendix B**. The checklist has been numbered and those numbers are included at the beginning of each section in italicized text.

The requirements for Section 1 are a description of the supplier's UWMP per Water Code Sections 10615 and 10630.5 (items are from the 2025 Guidebook – Appendix F, UWMP checklist):

#1. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. (Water Code §10615)

#2. 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. (Water Code §10630.5)

The required simple description is fully contained within the Executive Summary of this UWMP.

In response to the requirements of the Water Code, standardized tables provided by DWR for the reporting and submittal of UWMP data have been used and are included in **Appendix C**. Standardization of data tables allows for more efficient data management, expedited review of UWMPs by DWR, and easier compilation of data for regional and statewide planning.

2. PLAN PREPARATION

Water Code Sections 10620 and 10642 requires a description of the basis and approach for developing the UWMP (items are from the 2025 Guidebook: Appendix F, UWMP checklist):

#3. Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier. (Water Code §10620(b))

#4. Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP. (Water Code §10644)

#5. Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance. (Water Code §10644)

#6. Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes. (Water Code §10644)

#7. 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. (Water Code §10642)

#8. Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. (Water Code §10620(d)(2))

#9. Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source. (Water Code §10631(h))

This section provides the basis and approach that the City used to update its UWMP. It also includes the data reporting periods (calendar vs. fiscal year) and units of measure used by the City to report water volumes. This section also includes the details of the coordination and outreach activities conducted by the City during the preparation of this UWMP.

Basis and Approach for Preparing the UWMP

As mentioned in Section 1, the City submitted the first SJMWS UWMP in 1985 and subsequently submitted updates to the SJMWS UWMP in 1990, 1995, 2000, 2005, 2010, 2015, and 2020. The California Water Code requires urban water suppliers with 3,000 or more service connections or supplying 3,000 or more AF of water per year are required to prepare an UWMP every five years. As an urban water supplier, the City is required to update and submit the 2025 SJMWS UWMP to DWR by July 1, 2026, as SJMWS served 26,297 municipal connections and supplied 14,836 AF of potable water in 2025 (**Table 2-1**).

Table 2-1. Public Water Systems			
Public Water System Number	Public Water System Name	Number of Connections	Water Supplied in 2025
CA4310019	City of San José – North San José/Alviso	2,207	4,361
CA4310020	City of San José – Evergreen/Edenvale/Coyote	24,090	10,475
TOTAL		26,297	14,836

Notes: Reflects potable water data only, with potable connections as of the end of 2025

The City prepared this UWMP in accordance with the Water Conservation Act of 2009 (SB X7-7) and the 2025 UWMP Guidebook, which ensures that urban water suppliers plan for the long-term reliability, conservation, and efficient use of water supplies to meet existing and future demands. The City achieved its 2020 per capita water use target pursuant to SB X7-7; this UWMP reflects the transition to ongoing compliance with urban water use objectives established under subsequent legislation, including Senate Bill 606 and Assembly Bill 1668. This UWMP includes projections of the future demands and supplies for SJMWS, based on estimates of future growth in its two service areas: North San José/Alviso (NSJ/Alviso) and Evergreen/Edenvale/Coyote Valley (EVG/EDV/COY). The UWMP also discusses the steps the City has taken to promote water conservation and to ensure water is being used wisely.

The City utilized planning documents that have been prepared over the years by the City and other entities to inform this UWMP. The results of those documents have been incorporated, as applicable, into this UWMP. The list of the documents is provided for reference in Section 11.

The adopted 2025 SJMWS UWMP will be made available for public review on the City of San José website (<https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/drinking-water/muni-water-documents-reports>). Copies of the UWMP will be submitted to DWR, cities and counties within the service area, the State Library, and other applicable institutions within 30 days after approval of the UWMP by the City Council.

Level of Planning and Compliance

The City is a retail water agency, preparing an individual UWMP as mentioned in **Table 2-2**.

Table 2-2. Plan Identification	
Select One	Type of Plan
X	Individual UWMP
	Water Supplier is also a member of a SB X7-7 Regional Alliance.
	Regional Urban Water Management Plan (RUWMP)

The City has reported its records of water use on a calendar year (CY) basis that runs from January 1 through December 31 (**Table 2-3**). In this document, projections of water demand and water supply over the course of a year are also reported on a calendar year basis.

Table 2-3. Supplier Identification	
Type of Supplier (select one or both)	
	Supplier is a wholesale supplier
X	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
X	UWMP Tables are in calendar years
	UWMP Tables are in fiscal years
Units of Measure Used in UWMP (select from drop down)	
Unit	Acre Feet (AF)

Agency Coordination and Outreach

Wholesale and Retail Coordination

The City has coordinated the preparation of the SJMWS UWMP with other appropriate agencies in the area, including its wholesalers, San Francisco Public Utilities Commission (SFPUC) and Valley Water (**Table 2-4**). Since the City relies upon the water supply from these wholesalers, the City has worked with the wholesalers and shared information for water supply and demand projections.

Table 2-4. Water Supplier Information Exchange	
	Valley Water
	San Francisco Public Utilities Commission

Coordination with Other Agencies and the Community

The City implemented two key elements - coordination and outreach - in developing this UWMP. The City initiated agency coordination with e-mailed notices to the two wholesale water agencies, SFPUC and Valley Water; water management agencies within and outside its service area including other retail water suppliers that contract with the wholesalers; the regional coordinator, Bay Area Water Supply and Conservation Agency (BAWSCA); the local wastewater agency; and the County of Santa Clara. The notifications informed these agencies of the City's intent and that the planning efforts were underway and welcomed any comments or other participation. Coordination with the wholesalers also included requested data for the preparation of the UWMP. Follow up with staff from the agencies was conducted. The goal of coordination was to encourage input and participation in its planning.

To maintain a level of plan consistency throughout the planning process and to collect relevant information from other agencies, the City attended and participated in meetings among other local retailers hosted by the wholesalers, Valley Water and SFPUC, and by BAWSCA. By consulting with the planning documents completed by the wholesalers and by BAWSCA, including water supply studies and the Groundwater Management Plan, the City is better able to plan for future water supplies and minimize the need to import water from other regions by creating a realistic, consistent source supply plan.

Notification to Agencies and Public

The City encouraged community participation in its urban water management planning efforts since the first plan was developed in 1985. Pursuant to the requirement in CWC Section 10642, the City notified the appropriate agencies that the 2025 UWMP was being reviewed and changes were being considered. The notification was sent 60 days prior to the UWMP public hearing. **Table 2-5** lists the agencies contacted during the preparation of this UWMP. Information was made available to the public in multiple locations in order to reach a broad audience. In addition to information published in the local newspaper and in the City Council Agenda, information was also made available on the City's website which includes a tool that allows users to translate website content into twelve languages.

For consistency in planning and reporting, the City coordinated and solicited input from other City departments and other agencies responsible for developing related reports or planning documents such as Master Plans, General Plans, and Groundwater Management Plan.

Table 2-5. Coordination with Notified Agencies				
Coordinating Agencies	Notification Sent	Participated in Development	Commented on the Draft	Was Contacted for Assistance
Wholesale Water Supplier				
Valley Water	x			x
San Francisco Public Utilities Commission	x			x
Other Coordination				
Alameda County Water District	x			
City of Hayward	x			
City of Milpitas	x			
City of Mountain View	x			
City of Palo Alto	x			
City of Sunnyvale	x			
Purissima Hills Water District	x			
City of Burlingame	x			
City of Daly City	x			
Town of Hillsborough	x			
City of Menlo Park	x			
City of Millbrae	x			
City of Redwood City	x			
City of San Bruno	x			
City of Santa Clara	x			
City of Brisbane/Guadalupe Valley Municipal Improvement District	x			
Stanford University	x			
Coastside County Water District	x			
Mid-Peninsula Water District	x			
Westborough Water District	x			

Table 2-5. Coordination with Notified Agencies				
Coordinating Agencies	Notification Sent	Participated in Development	Commented on the Draft	Was Contacted for Assistance
North Coast County Water District	x			
California Water Service Company	x			
Great Oaks Water Company	x			
San Jose Water Company	x			
City of East Palo Alto	x			
City of Gilroy	x			
City of Morgan Hill	x			
County of Santa Clara	x			
Bay Area Water Supply & Conservation Agency	x			x
San José/Santa Clara Regional Wastewater Facility				x
Estero Municipal Improvement District/City of Foster City	x			
General Public	x			

Plan Adoption

This 2025 UWMP was presented at a public hearing immediately prior to adoption by the City Council on the same day. Additional information on UWMP adoption is included within Section 10.

3. SYSTEM DESCRIPTION

Water Code Section 10631 (a) requires the UWMP include a detailed description of the City's service area. (items are from the 2025 Guidebook: Appendix F, UWMP checklist):

#10. Describe the service area of the supplier. (Water Code §10631(a))

#11. Describe the climate of the Supplier's service area.(Water Code §10631(a))

#12. Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050. (Water Code §10631(a))

#13. Describe other social, economic and demographic factors affecting the supplier's water management planning. (Water Code §10631(a))

#14. Describe the land uses within the service area. (Water Code §10631(a))

This section summarizes the City's water system service area and presents an analysis of available information on demographics, population growth projections, and climate data to provide a basis for estimating future water requirements.

Service Area General Description

History

The City was founded in 1777 and incorporated in 1850. The City consists of 179.2 square miles. It is the third largest city in California following Los Angeles and San Diego, and the 12th largest city in the US. The City is located in Santa Clara County, south of the San Francisco Bay, and is the center of a large and expanding metropolitan area commonly known as Silicon Valley. The City is bordered by the Santa Cruz Mountains on the west and the Diablo Mountain range on the east. The majority of the City lies in the bay flats with various hills subdividing the valley into smaller areas such as Almaden Valley, Blossom Valley, and Evergreen Valley.

As stated earlier in Section 1, SJMWS is one of the retail water suppliers in San José. SJMWS entered the water business in May 1961 with the purchase of the Evergreen Water Company. The Evergreen system served a 6,000-acre franchise area with several hundred customers. The City was concerned that a safe, adequate, and reliable supply of water be assured for new development within this and other areas newly annexed to the City. It was felt that the extension of City services and facilities to these newly annexed areas would greatly encourage their improvement and development. When the City of Alviso was annexed, SJMWS acquired the North San José and Alviso areas. The Edenvale service area was established in 1983, and the Coyote Valley service area was established in 1988.

Organization Structure

The City operates under the City Council/City Manager form of government, a system that combines the policy leadership of elected officials in the form of a City Council, with the managerial expertise of an appointed City Manager. The City Council is the legislative body that represents the community and is empowered by the City Charter to formulate citywide policy. The City Council is comprised of the Mayor,

Section 3. System Description

who is elected by the community at-large, and ten council members who are elected by districts. Under the City Charter, the Mayor is responsible for recommending policy, program, and budget priorities to the City Council, which in turn approves policy direction for the City. The City Charter limits the Mayor and Council members from serving more than two consecutive terms.

The City Manager is appointed by the City Council and serves as the chief administrative officer of the organization. The City Manager is responsible for administration of City affairs, day-to-day operations, and implementation of City Council policies.

The City is organized by City Service Areas (CSAs) that best reflect the way the organization delivers services to the residents. A CSA represents the policy-making level for strategic planning, policy setting, and investment decisions in the critical functions the City provides to the community. SJMWS operates under the CSA of Environmental and Utility Services.

Service Area Boundary and Land Use

SJMWS services four different areas of the city: North San José/Alviso, Evergreen, Edenvale, and Coyote Valley (**Figure 3-1**). The service area boundaries and land use for each service area is described below. As mentioned in Section 2, the City's service area is classified as two Public Water Systems:

- CA4310019 - consists of NSJ/Alviso area
- CA4310020 - consists of Evergreen, Edenvale, and Coyote Valley (EVG/EDV/COY) areas

North San José/Alviso

The North San José/Alviso (NSJ/Alviso) Service Area consists of 5,600 acres and extends from Trimble Road on the south to the Alviso Slough on the north. The area is bordered on the west by the Guadalupe River and on the east by Coyote Creek. The land use is predominantly industrial, with some residential and commercial.

Evergreen

The Evergreen Service Area consists of approximately 10,750 acres and extends from Highway 101 on the west to the foothills of the Mount Diablo Range on the east. The area is bounded on the north by Tully Road and on the south by the City limits. The current land use in Evergreen is predominantly residential with some commercial.

Edenvale

The Edenvale Service Area consists of about 700 acres and the area is located east of Coyote Creek and south of Hellyer Avenue. Edenvale is zoned for industrial and commercial use.

Coyote Valley

The Coyote Valley Service Area consists of approximately 7,500 acres and the area is located west of Highway 101, south of Tulare Hill, and north of Palm Avenue. The area is currently largely undeveloped and primarily contains permanent open space lands.

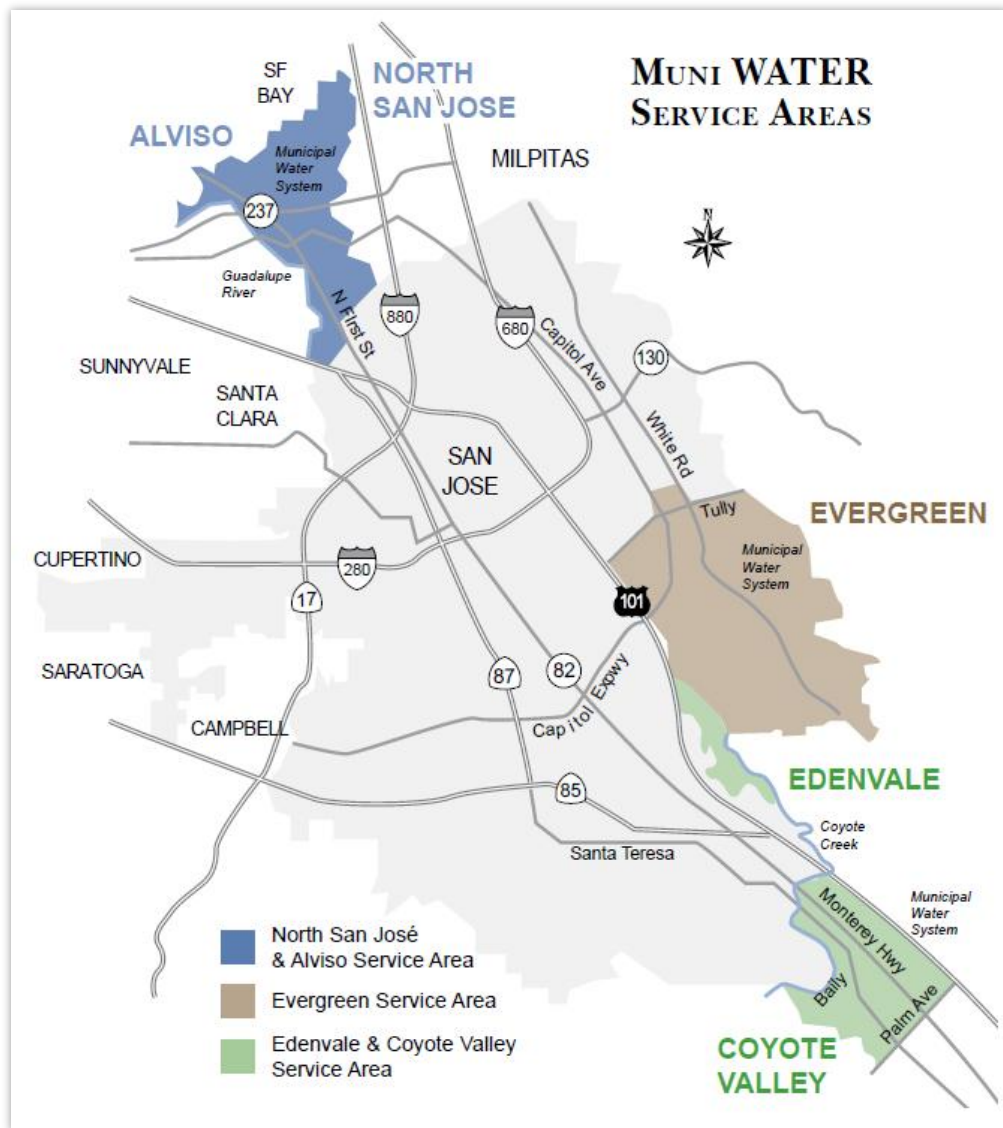


Figure 3-1 City of San José Municipal Water System Service Areas

Service Area Climate

The City has a semiarid, Mediterranean climate, characterized by warm dry summers and cool winters. Irrigation water demand is often high in the dry summer months and in winter is partially fulfilled by rainfall. Temperatures average 61 degrees Fahrenheit annually, ranging from an average minimum of 51.3 degrees Fahrenheit in January and average maximum of 70.3 degrees Fahrenheit in August, with an annual mean precipitation of 12.21 inches (2000-2025 data for the San Jose Area, CA from <https://www.weather.gov/wrh/climate?wfo=mtr>). City's typical rainy season is from November through April. Low humidity occurs in the summer months from May through October. The moderately hot and dry weather during the summer months typically results in moderately high water demand.

The California Irrigation Management Information System (CIMIS) tracks and maintains records of evapotranspiration (ET_o) for numerous weather stations located throughout the state. The monthly summary of ET_o statistics used for this system are derived from the reference evapotranspiration zones map developed by DWR (https://cimis.water.ca.gov/App_Themes/images/etozonemap.jpg) ET_o is a standard measurement of environmental parameters that affect the water use of plants. ET_o is given in inches per day, month, or year and is an estimate of the ET_o of a large field of well-watered, cool-season grass that is 4 to 7 inches tall. The monthly average ET_o is presented in inches in **Table 3-1**. As the table indicates, a greater quantity of water evaporates from May through September, which may result in higher water demand than winter months.

In addition to seasonal variation, the area's climate is subject to periodic droughts that impact water supply. The City continues to promote efficient water use and encourage residents and businesses to do their part to preserve the water supply at all times. Water rules remain in effect to promote efficient water use.

Table 3-1. City of San José Monthly Mean Average Climate Data				
Month	Standard Monthly Average ET _o (inches) ¹	Average Total Rainfall ² (inches)	Average Temperature (degrees Fahrenheit) ²	
			Min	Max
January	1.24	2.30	47.4	54.9
February	1.68	2.36	49.1	57.5
March	3.41	1.90	51.1	60.7
April	4.80	0.94	54.7	62.0
May	6.20	0.29	59.4	67.7
June	6.90	0.09	65.0	70.4
July	7.44	0.00	66.8	75.5
August	6.51	0.00	67.7	73.7
September	5.10	0.11	65.7	73.4
October	3.41	0.64	61.5	70.3
November	1.80	1.20	52.0	60.0
December	0.93	2.49	47.8	56.1

Notes:

1 ET_o Overview from https://cimis.water.ca.gov/App_Themes/images/etozonemap.jpg

2 Rainfall and temperature data from National Weather Service from 2000-2025 for San Jose Area, CA (<https://www.weather.gov/wrh/climate?wfo=mtr>, accessed April 6, 2026)

Climate Change and Drought Affecting Water Resources

In March 2016, the U.S. Drought Monitor (USDM) (<https://droughtmonitor.unl.edu/Maps.aspx>) classified the majority of California as being in extreme drought to exceptional drought. However, by March 2017, the USDM classified the majority of California as having no drought conditions. The trend reversed by December 2020, when the USDM classified the majority of California as being in severe drought to extreme drought (**Figure 3-2**). The vast majority of water resources in the state are stored as snowpack and released into streams and reservoirs as spring snow melts. According to data obtained from DWR (<https://cdec.water.ca.gov/snowapp/sweq.action>), the average April 1, 2026 statewide snowpack was 4.9-inch snow water equivalent or 18% of normal, which is a concern heading into the spring. As of April 2026, much of California is in a state of abnormal dryness (D0) to reflect the low snowpack (**Figure 3-3**).

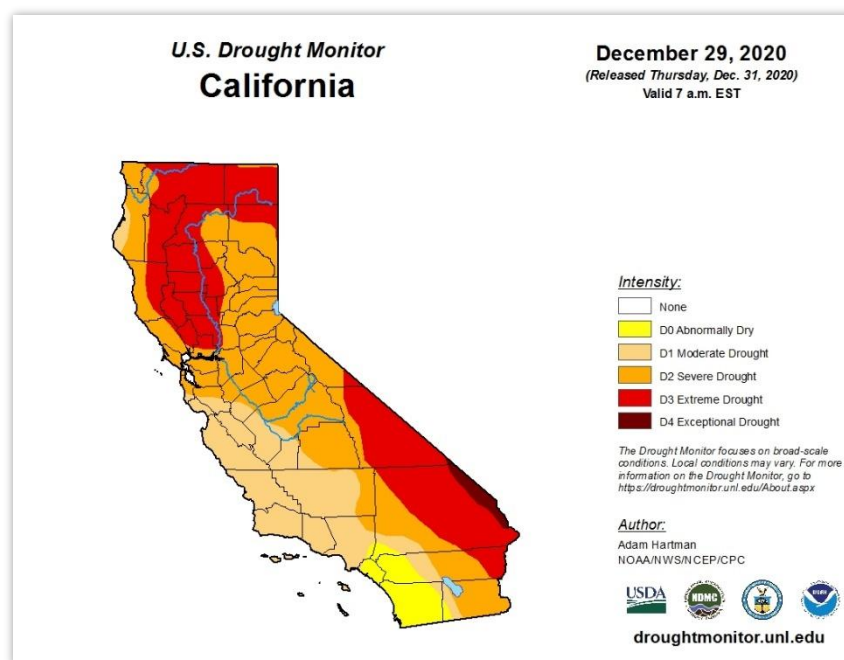


Figure 3-2 USDM drought map of California on December 29, 2020 (US Drought Monitor)

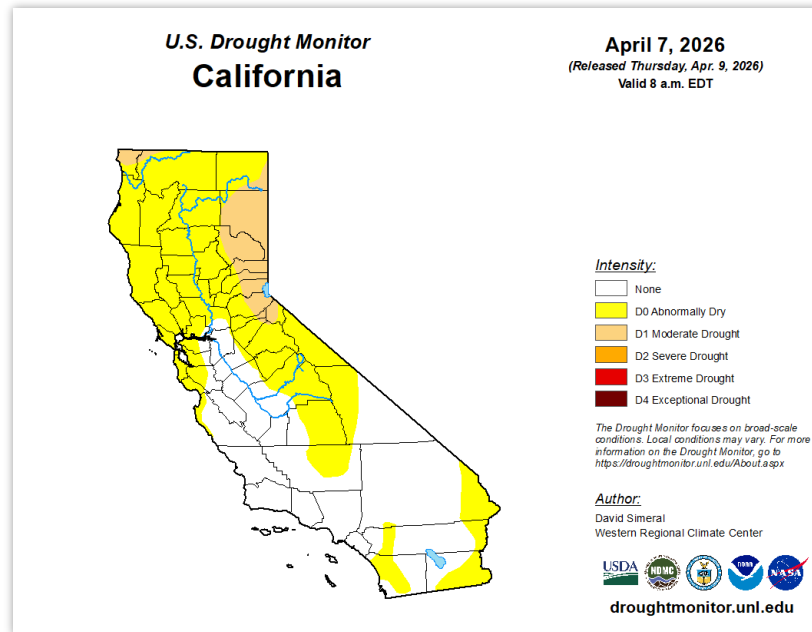


Figure 3-3 USDM drought map of California on April 7, 2026 (US Drought Monitor)

Reservoirs in California are largely fed by water from the mountains, especially the Sierra Nevada and southern Cascades which constitute more than 60% of California’s water supply. As of March 31, 2026, 154 reservoirs in California held 31 million AF of water, which was 120% of average (<https://cdec.water.ca.gov/reportapp/javareports?name=STORAGEW>; accessed on April 30, 2026). The largest reservoir in California, Lake Shasta, was at around 4.1 million AF, which was 90% of capacity by the end of water year 2026 (<https://cdec.water.ca.gov/resapp/RescondMain>; accessed on April 30, 2026).

Service Area Population and Demographic

SJMWS currently provides water service to approximately 12% of the City or 145,000 residents, through 26,297 metered potable water connections. Population growth in SJMWS service areas is expected to increase in the next 25 years by over 120%. The current and projected population for the SJMWS service area is shown in **Table 3-2**.

SJMWS retained a consultant to develop an alternative population estimation methodology for planning and reporting purposes. The approach utilizes the Association of Bay Area Governments (ABAG) / Metropolitan Transportation Commission (MTC) Plan Bay Area 2050 Traffic Analysis Zone (TAZ) dataset, which provides modeled demographic projections for 2015, 2035, and 2050. Because the TAZ data is model-based and the 2015 values did not align with observed historical conditions, ABAG projections were calibrated to the best available 2020 Census block-level data. This dataset was spatially allocated to the SJMWS service area using GIS. Future population projections were then developed by applying Plan Bay Area 2050 growth rates to the 2020 baseline within each service area. In March 2026, SJMWS coordinated with the California Department of Water Resources to review the methodology, and it was determined to be acceptable for use.

Table 3-2 (DWR Table 3-1). Population - Current and Projected						
Population	2025	2030	2035	2040	2045	2050
	147,864	171,890	193,348	231,725	279,886	328,046

Demographics

According to the US census website (<https://www.census.gov/quickfacts/fact/table/sanjosecitycalifornia/PST045224>, accessed on March 17, 2026), San José has an average household size of 2.97 people and a median household income of approximately \$146,427. Residential developments along with commercial and industrial uses represent the predominant land uses in the City of San José. Per the US census website for the period between 2020 to 2024, about 56% of residential units were occupied by owners with a median housing unit value of \$1,233,200. According to the US census website for the period between April 2020 and July 2024, the estimated total population in households in the City of San José decreased by 1.6%.

San José is the capital of Silicon Valley, where many high-tech companies are located. The area is also one of the world's leading centers for medical treatment and research. As the Capital of Silicon Valley, San José is recognized regionally, nationally, and internationally for its leadership in business innovation. The city continues to be the distribution and food-processing center for the surrounding rich agricultural region, which produces seasonal fruits and grapes. More than 50 wineries grace the valley. San José has healthy retail, transportation, and tourism industries and is the primary center for real estate and industrial development in the area.

The General Plan identifies the addition of 120,000 dwelling units and 382,000 new jobs throughout the City limits. The City utilized the same methodology described above for population to project jobs through 2050 for the SJMWS service area. By 2050 within the SJMWS service area, jobs are projected to increase to 144,042 as shown in **Table 3-3**.

Table 3-3. Projected Jobs within SJMWS Service Area						
Jobs	2025	2030	2035	2040	2045	2050
	84,861	92,136	99,409	114,287	129,165	144,042

4. SYSTEM WATER USE

A detailed description of the system's water use is required by Water Code Section 10631 (a) (items are from the 2025 Guidebook: Appendix F, UWMP checklist):

#15. Quantify past, current, and projected water use, identifying the uses among water use sectors. (Water Code §10631(d)(1))

#16. Report the distribution system water loss for each of the five years preceding the plan update. (Water Code §10631 (d)(3)(A))

#17. Retail suppliers shall provide data to show the distribution loss standards were met. 10631 (d)(3)(C)

#18. Include projected water use needed for lower income housing projected in the service area of the Supplier. (Water Code §10631.1(a))

#19. In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws. (Water Code §10631(d)(4)(A))

#20. Provide citations of codes, standards, ordinances, or plans used to make water use projections. (Water Code §10631(d)(4)(B))

#21. 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. (Water Code §10631 (d)(4)(B)(ii))

#22. Demands under climate change considerations must be included as part of the drought risk assessment. (Water Code §10635(b))

As part of the UWMP, California regulation requires water suppliers to quantify past and current water use and to project the total water demand for the water system, including calculations of its baseline (base daily per capita) water use and interim and urban water use targets. Projections of future water demand allow a water supplier to analyze if future water supplies are adequate, as well as help the agency when sizing and staging future water facilities to meet water use targets. Projected water use, combined with population projections, provide the basis for estimating future water requirements.

This section provides the City's current water use and water use projections through the year 2050. In this section, the terms "water use" and "water demand" are used interchangeably. Recycled water is addressed comprehensively in Section 6, but a summary of recycled water demands is also included in this section.

Water Demand

Historical and Projected Water Uses by Sector

Historic actual water use data is collected from SJMWS' meter reading information, as exported from a customer billing system. **Table 4-1** provides the historical (actual) water use data for the City for various water use categories: single-family, multi-family, industrial, government/institutional, and commercial) for 2025. There is no other water use for purposes besides those reported in **Table 4-1**, such as saline water intrusion barrier or groundwater recharge, and the City does not sell any water to other agencies. Note that the City did not use any raw water for meeting demands in 2025. Only potable water was used for all water use categories, whereas recycled water was only supplied to meet certain use types. The categorical water demands in the following tables were prepared from the City's water meter readings and the customer information and billing system, with the exception of data associated with losses in the City's system. For the purposes of these tables, water losses were calculated by subtracting actual metered use from the volume of water supplied. The 2025 actual potable water use data is shown in **Table 4-1**. Between 2020 and 2025, the proportion of total potable water use among each of the use type categories was relatively consistent, despite the slight annual variation in total potable water use.

The actual potable water use in 2025 was lower than as projected in the 2020 UWMP, likely attributed to slow rebound following the drought that ended in 2017, followed by additional drought conditions and calls for reduced water use between 2021-2023. SJMWS and its wholesalers implement robust water conservation programs. Valley Water estimates that as of 2025, approximately 87,000 AFY has been conserved throughout the County from programs they implement (compared to a 1992 baseline). The impact from SJMWS can be estimated based on the portion of the overall population served. Valley Water serves 2.1 million people county-wide, and SJMWS serves 147,864 people, or approximately seven percent of the county. Assuming the water savings is proportional, SJMWS's water demand is reduced by approximately 6,090 AFY (7 percent of the 87,000 AFY county-wide total).

Table 4-1. Total Uses for Potable and Non-Potable Water – Actual			
Use Type	2025 Actual Water Use (AF)		
	Additional Description	Potable or Non-Potable	Volume
Single Family		Potable	6,442
Multi-Family		Potable	2,373
Commercial		Potable	1,220
Industrial		Potable	1,627
Institutional/Governmental		Potable	237
Landscape	Irrigation	Potable	2,411
Distribution System Losses ¹		Potable	526
Other	Recycled Water	Non-Potable	3,509
TOTAL			18,345

Notes:

1 For current and future water demand projections, water losses are reflected as the difference between water supplied and water consumed (based on customer billing records) to reflect the overall mass balance of supplies compared to demands. These values may differ slightly from water losses as calculated in AWWA Water Loss Audits.

The City obtained consultant support to create water use projections through 2050. The consultant created a demand model which integrates econometric regression techniques with end-use conservation accounting. This approach allowed for a clear separation between the structural factors influencing water demand – such as demographic changes, climate variability, long-term trends in passive conservation savings, historical drought restrictions, and economic trends – and the impacts resulting from policy decisions and conservation programs. Data and growth assumptions from the City’s Envision San José 2040 General Plan as well as Plan Bay Area 2050 were incorporated, along with projections from Water Supply Assessments approved by the City through 2025.

Projected water use in the SJMWS service area is summarized by type of customer use in **Table 4-2**. SJMWS supplies water to meet the demands of the population within its service areas and does not supply the demands of any other city, local agencies, or the environment. Population and land use are primary factors that affect urban water demand. Requests for new service connections were growing at about 750 service connections per year in 2000; between 2000 and 2004 the demand for service connections grew at about 500 service connections per year; followed by a decreasing trend in new service connections. Approximately 240 additional services were active in 2025 as compared to 2020..

The projected potable water demand for SJMWS, as shown in **Table 4-2**, indicates that SJMWS anticipates significant growth in demand from 2025 to 2050. The increase in demand is primarily attributable to the proposed development as identified within the Envision San José 2040 General Plan and Plan Bay Area 2050. Demand reduction as a result of conservation is included within the projected demands, particularly within the residential sectors.

SJMWS conservatively estimates the future projected water loss (specifically, unaccounted-for water loss) to be approximately 8% of the projected water use. The projected distribution system water losses in Table 4-2 are based on the 2023 AWWA water loss audits reported values percentages for unbilled authorized, apparent losses, and real losses. The water losses reported for 2025 actuals in **Table 4-1** are determined as the difference between total annual water supply production and billed water use. The larger difference between 2025 actuals and projected water losses is due to different methodologies.

Table 4-2. Total Uses for Potable and Non-Potable Water – Projected						
Use Type	Projected Water Use (AF)					
	Potable or Non-Potable	2030	2035	2040	2045	2050
Single Family	Potable	6,265	6,302	6,264	6,315	6,379
Multi-Family	Potable	3,249	3,824	4,958	6,025	7,052
Commercial	Potable	1,401	1,487	1,676	1,858	2,043
Industrial	Potable	2,242	2,384	2,691	2,986	3,288
Institutional/Governmental	Potable	314	334	377	419	461
Landscape (Irrigation)	Potable	2,541	2,565	2,584	2,605	2,630
Water Loss	Potable	1,442	1,506	1,609	1,688	1,767
Other (Recycled Water)	Non-Potable	8,012	8,383	8,748	8,768	8,792
TOTAL		25,466	26,785	28,907	30,664	32,412

Notes: Demand projections include water savings estimated to result from adopted codes, standards, and ordinances.

Future Water Savings

The City’s water savings plan includes the implementation of codes, ordinances, and land use plans, as presented in Section 8, to reduce overall water use (**Table 4-3**). These passive water savings are included within the methodology used to project future water demands.

Water Use for Lower Income Households

The City included water use for lower income households in projected water demands based on single-family and multi-family household estimates (**Table 4-3**). Note that a lower income household has an income below 80% of area median income, adjusted for family size. Per City’s estimate, approximately 3-5% of total demands are attributable to use at low-income housing.

Table 4-3. Inclusion in Water Use Projections	
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, etc. utilized in demand projections are found.	1
Are Lower Income Residential Demands Included in Projections?	Yes

Notes:

1 Refer to further details in this section, and San José Municipal Code Chapter 15.10 and 15.11 (Appendix F)

Distribution System Water Losses

The State Water Resources Control Board (SWRCB) has established a framework for urban water supplier performance standards pursuant to the Making Conservation a California Way of Life legislation. Urban water suppliers are required to complete and submit annual validated water loss audits in accordance with AWWA M36 methodology. The SWRCB is in the process of developing supplier-specific water loss performance standards that account for system characteristics.

Water losses are characterized using standard water audit terminology, including “real losses” and “apparent losses,” which are included in what has historically been referred to as unaccounted-for water. Real losses represent physical water losses from the distribution system and storage facilities, occurring up to the points of delivery to customers. Apparent losses include non-physical losses such as metering inaccuracies, data handling errors, and unauthorized consumption.

Unaccounted-for water is defined as the difference between total annual water supply production and billed water use and therefore includes real losses, apparent losses, and authorized but unbilled uses (e.g., water used for system operations or fire suppression). However, the term “unaccounted-for water” is being phased out in favor of the more precise AWWA water audit framework, which categorizes individual components of water loss. All components of water loss and non-revenue water are incorporated into total water demand projections as “water losses.”

As required by DWR, SJMWS used the most recent 12-months of data to calculate the unaccounted-for water losses using the American Water Works Association tool. Water audits for the past five years are shown in **Table 4-4**. Copies of the past five years of completed Water Loss Audit reports are provided in **Appendix E**.

Table 4-4 (DWR Table 4-5). Water Loss Audit Reporting		
Public Water System ID	Reporting Period Start Date	Audit Submitted to DWR?
CA4310019, CA4310020	01/2020	Yes
	01/2021	Yes
	01/2022	Yes
	01/2023	Yes
	01/2024	Yes

The City is working toward compliance with all applicable water loss requirements and will continue to monitor regulatory developments. Upon adoption of a final water loss performance standard by the SWRCB, the City will assess compliance using annual validated water loss audit results and implement appropriate water loss control measures, as necessary, to achieve its identified standard. Progress to date based on draft standards are shown in **Table 4-5**.

The City uses the results of its validated water loss audits to inform system operations and identify opportunities for reducing real losses. The City continues to implement the following water loss control measures:

- Timely identification and repair of distribution system leaks.
- Ongoing monitoring of water production and consumption.
- Periodic calibration and testing of production and customer meters.
- Replacement of aging or inaccurate meters.
- Implementation of asset management and leak detection practices.

Table 4-5 (DWR Table 4-6). Progress Towards 2028 Water Loss Standard								
Water System ID	Real Water Loss				Apparent Water Loss			
	2028 Real Water Loss Standard (gpcd)	2024 Number of Connections	2024 Volume of Total Real (AF)	2024 Real Water Loss (gpcd)	2028 Apparent Water Loss Standard (gpcd)	2024 Number of Connections	2024 Volume of Total Apparent Loss (AF)	2024 Apparent Water Loss (gpcd)
CA4310019 ¹	12.2	2,883	227.4	70.4	17.7	2,883	50.02	15.5
CA4310020	29.3	24,553	850.4	30.9	4.5	24,533	119.4	4.3

Notes

1 City is coordinating with DWR to reassess underlying data used to calculate the standard for system CA4310019

Impacts of Climate Change

Hotter and drier weather may lead to an increased demand in landscape irrigation. SJMWS's water demand projections reflect the historical relationship of SJMWS's water demand with weather and then incorporates modeled weather under future climate change conditions. Therefore, the demand projections presented in this Section include considerations of climate change, such as an adjustment of annual average temperature projections. Water resources in California are vulnerable to climate change impacts stemming from a modified hydrology that affects the frequency, intensity, and duration of extreme events, which, in turn, affect water quantity, quality, and infrastructure. As climate change continues to impact the State's water resources, the City is continuously reviewing and updating new strategies and reevaluating existing policies, regulations, facilities, and funding priorities to mitigate the effects of climate change on water resources. Some of the mitigation and adaptation strategies under consideration include: promoting recycled water use; making use of groundwater resources; promoting water use efficiency for urban, commercial, and industrial water users; increasing investments in infrastructure that promote adaptation strategies and mitigate the loss of existing supplies that are susceptible to climate change impacts.

5. SB X7-7 BASELINES, 2020 TARGET, AND COMPLIANCE

The Water Conservation Act of 2009, also known as SB X7-7, mandated a 20% reduction in urban per-capita water use across California by 2020. The Water Conservation Act requires that each retail urban water supplier must determine its baseline water use during its baseline period and water use target 2020, in order to achieve a statewide 20% reduction target. In this UWMP, water agencies must demonstrate compliance with their 2020 target.

Water Code Section 10608 requires the following (items are from the 2025 Guidebook: Appendix F, UWMP checklist):

#23. Retail suppliers shall report on their compliance in meeting their water use targets. (Water Code §10608.4)

The Water Conservation Act of 2009 (SB X7-7) required urban retail water suppliers to reduce per capita water use by 20 percent by 2020 and to establish a baseline and target gallons per capita per day (GPCD). In accordance with California Water Code §10608, the City of San José Municipal Water System (SJMWS) previously established its baseline water use and 2020 target in the 2015 Urban Water Management Plan (UWMP).

This Section reflects the 2020 urban water use target as calculated in the 2015 UWMP without update. The 2015 UWMP established water use targets utilizing historic population estimates obtained from the DWR population tool; while the City now uses an updated population estimation methodology, those updated estimates were not used to revise the SB X7-7 targets presented in this Section.

This section summarizes the previously adopted baseline and target values and documents compliance for statutory completeness. While SB X7-7 requirements are included in this UWMP, ongoing water use efficiency planning is guided by the State’s “Making Conservation a California Way of Life” framework and associated urban water use objectives.

Baseline Water Use and 2020 Target

SJMWS established its baseline water use using a 10-year period from 1997 through 2006, consistent with SB X7-7 requirements. The calculated 10-year baseline water use is 181 gallons per capita per day (GPCD), and the 5-year baseline water use is 179 GPCD.

Using Method 1 (20 percent reduction from baseline), SJMWS established a 2020 water use target of 145 GPCD. This target meets the minimum reduction requirements set forth in California Water Code §10608.22.

2020 Compliance

SJMWS successfully achieved its 2020 per capita water use target by 2020, and remains in compliance with SB X7-7 requirements. The City's actual 2020 water use was 118 GPCD, which is below the target of 145 GPCD. A Compliance Form was submitted and included in the City's 2015 UWMP.

Table 5-1. SB X7-7 2020 Target Progress				
Merger or Consolidation?	Regional Alliance or Individual Target?	2020 Target ¹	2020 Actual ¹	Did Supplier Achieve Targeted Reduction for 2020?
No	Individual	145	118	Yes

Notes

¹ Values are in Gallons per Capita per Day (GPCD)

Nexus to 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, and
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. WATER SUPPLIES

Water Code Sections 10631 (a) through (d) requires the Plan include a detailed evaluation of water supplies. The 2050 Guidebook (Appendix F, UWMP checklist) provides the following guidance:

#24. When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies. (Water Code §10631(b)(2))

#25. 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. (Water Code §10631(b)(1))

#26. 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 Code §10631 (b)(4)(C))

#27. 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. (Water Code §10631 (b)(4)(A))

#28. Describe the groundwater basin. (Water Code §10631(b)(4)(B))

#29. 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. (Water Code §10631(b)(4)(B))

#30. 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 Code §10631 (b)(4)(B))

#31. For unadjudicated basins... describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions. (Water Code §10631 (b)(4)(B))

#32. 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 Code §10631 (b)(4)(C))

#33. Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped. (Water Code §10631(b)(4)(D))

#34. Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050. (Water Code §10631 (b))

#35. Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. (Water Code §10631(c))

#36. Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods. (Water Code §10633(a))

#37. 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. (Water Code §10633(b))

#38. Describe the recycled water currently being used in the supplier's service area. (Water Code §10633(c))

#39. Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses. (Water Code §10633(d))

#40. 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. (Water Code §10633(e))

#41. Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year. (Water Code §10633(f))

#42. Provide a plan for optimizing the use of recycled water in the supplier's service area. (Water Code §10633(g))

#43. Describe desalinated water project opportunities for long-term supply. (Water Code §10631(g))

#44. 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 (5) consecutive water years. (Water Code §10631(f))

#45. The UWMP must include energy information, as stated in the code, that a supplier can readily obtain. (Water Code §10631.2(a))

This section addresses water supply sources available to the SJMWS. It includes a description and quantification of each water source, including surface water, groundwater, recycled water, desalinated water, and water transfers and exchange opportunities. The section presents a complete water portfolio for SJMWS. The following sections provide details in response to those requirements of this portion of the Water Code requirements.

Sources of Supply

SJMWS relies on four sources of supply: surface water from SFPUC, local and imported surface water from Valley Water, groundwater from the Santa Clara groundwater basin, and recycled water from the SBWR Program. All groundwater used by SJMWS for potable water supply is not desalinated. As mentioned earlier, the City has four separate service areas, and each service area has its own unique water sources. **Table 6-1** provides a summary of the water source(s) for each service area.

Table 6-1. Water Source by SJMWS Service Area				
Service Area	SFPUC	Valley Water	Groundwater	Recycled Water
North San José/Alviso	X		X	X
Evergreen		X	X	X
Edenvale			X	X
Coyote Valley			X	X

Supply sources received by SJMWS and discussed within this section are generally considered to be consistent sources, except during times of prolonged drought during which supplies would be decreased based on reduced availability of wholesale supplies, as discussed in this section. This section includes the amount of supply from each source that was purchased historically and is anticipated to be purchased in the future as determined by SJMWS.

North San José/Alviso

There are two service connections (turnouts) connected to SFPUC which provide water supply to the distribution system, including two water storage tanks. There are pump station facilities at each of the storage tanks, which are used to boost the pressure of water stored in the tanks from elevation head to system pressure. There are four groundwater wells with a combined pump capacity of approximately 6,500 gpm; two of the wells are currently permitted to be used under normal conditions to supply water, and the other two are available for emergency use purposes.

Evergreen

Three turnouts are connected to Valley Water's East Pipeline. There are five different pressure zones with 13 storage tanks and 13 pump stations. There are four groundwater wells with a combined pump capacity of approximately 6,000 gpm.

Edenvale

There are three groundwater wells, with a combined pump capacity of approximately 2,700 gpm, that pump groundwater to the distribution system and a storage tank.

Coyote Valley

There are three groundwater wells, with a combined pump capacity of approximately 3,500 gpm, that pump groundwater to the distribution system and a storage tank.

Purchased or Imported Water

SFPUC – Wholesaler

The NSJ/Alviso service area receives water from the City and County of San Francisco’s Regional Water System (RWS), which is operated by the SFPUC. This supply is predominantly from the Sierra Nevada mountain range delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo counties. Based on locations and RWS hydraulics, the SFPUC sources which provide water supply to San José are primarily unfiltered Hetch Hetchy water with a blend of filtered Sunol Valley water. There are two turnout connections from SFPUC’s Bay Division Pipelines No. 3 and No. 4 to the NSJ/Alviso service area.

The amount of imported water available to SFPUC’s retail and wholesale customers is constrained by hydrology, physical facilities, and the institutional parameters that allocate the water supply of the Tuolumne River. Due to these constraints, SFPUC is very dependent on reservoir storage to firm-up its water supplies. These constraints are further detailed in Section 7.

Water Supply Agreement

The business relationship between the SFPUC and its 26 wholesale customers is largely defined by the “Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County and Santa Clara County” (WSA) entered into on July 1, 2009, and amended and restated in 2018, 2021, and 2025. This 25-year WSA replaced the 1984 Settlement Agreement and Master Water Sales Contract and will expire on June 30, 2034, unless extended by up to two additional five-year option terms. The WSA addresses the rate-making methodology used by the SFPUC in setting wholesale water rates for its customers in addition to addressing water supply and water shortages for the RWS. The WSA serves as the master agreement and provides 184 million gallons per day (MGD) Supply Assurance to 24 of the 26 SFPUC wholesale customers on an annual average basis. Under the WSA, the cities of San José and Santa Clara have a temporary interruptible supply. However, the SFPUC must provide 10 years’ notice to interrupt the supply, and seek out additional sources of water.

The WSA also contains a Water Shortage Allocation Plan between the SFPUC and its wholesale customers, which describes the method for allocating water during supply shortages. The Tier 1 Plan allocates water from the RWS between San Francisco’s retail and wholesale customers during system-wide shortages of 20% or less. The Tier 2 Plan allocates the collective wholesale customer share among the individual wholesale customers.

The WSA is supplemented by an individual Water Sales Contract between SFPUC and each individual wholesale customer, also entered into in July 2009. The individual Water Sales Contract indicates any specific conditions between SFPUC and the wholesale customer. The Water Sales Contract between SFPUC and San José identifies a temporary, interruptible allocation of 4.5 MGD.

Each Wholesale Customer’s individual Water Sales Contract with the SFPUC describes the service area of the customer, identifies the location and size of service connections between the RWS and the customer’s distribution systems, and in some instances contains additional specific provisions unique to the

customer. The individual water sales contracts may be amended from time to time by the SFPUC and the applicable Wholesale Customer pursuant to the terms of the WSA.

Individual Supply Guarantee

San Francisco has a perpetual commitment to deliver 184 MGD to the permanent Wholesale Customers collectively, referred to as the “Supply Assurance” within the WSA. The Supply Assurance is allocated among the 24 permanent Wholesale Customers through Individual Supply Guarantees (ISG), which represent each Wholesale Customer’s allocation of the 184 MGD Supply Assurance. San José and Santa Clara are not included in the Supply Assurance commitment, and each has temporary and interruptible water supply contracts with San Francisco.

SFPUC Future Supply Decisions

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

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

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

BAWSCA

SJMWS is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA). BAWSCA was created on May 27, 2003 to represent the interests of the 26 agencies that include cities, water districts, a water company, and a university, in Alameda, Santa Clara and San Mateo counties that purchase water on a wholesale basis from the RWS. The BAWSCA agencies are collectively referred to as the Wholesale Customers.

BAWSCA provides regional water reliability planning and conservation programming for the benefit of its member agencies that purchase wholesale water supplies from 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 these agencies on all significant technical, financial, and policy matters related to the operation and improvement of the RWS. BAWSCA has the authority to coordinate water conservation, supply, and recycling activities for its agencies; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the RWS; and build facilities jointly with other local public agencies or on its own to carry out the agency's purposes.

In December 2025, BAWSCA completed the Regional Water Demand and Conservation Projections Report (https://bawasca.org/water/use/2025_Demand_Study). The goal of the 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 agency interest. Implementation of these conservation measures, along with passive conservation, is anticipated to yield an additional 16.14 million gallons per day (mgd) of water savings by 2050. Based on the revised water demand projections, the identified water conservation savings, increased development and use of other local supplies by the Wholesale Customers, and other actions, the collective purchases of the Wholesale Customers from the SFPUC are projected to stay below 184 mgd through 2050.

Regional Projects

Strategy 2050 Future Water Supply Projects and Programs

SJMWS is supporting BAWSCA in the development of its Long-Term Reliable Water Supply Strategy 2050 (Strategy 2050), a regional assessment of its member agencies' water supply needs. Strategy 2050 will identify the water supply and demand management needs and opportunities for the BAWSCA region and establish a framework to collectively support water reliability and resilience. The main objectives of Strategy 2050 include:

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

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

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

Valley Water – Wholesaler

SJMWS purchases treated surface water from Valley Water (previously called the Santa Clara Valley Water District) under a treated water contract. Valley Water contracts with the US Bureau of Reclamation and the State to receive imported CVP water and SWP water. Valley Water also operates its conjunctive use system of surface water from local watersheds and groundwater to optimize the use of these supplies and to prevent groundwater overdraft and land subsidence. Valley Water's water supply system is comprised of local reservoirs, the groundwater subbasins, groundwater recharge facilities, treatment plants, a treated water transmission system, imported supplies, and raw water conveyance facilities. Valley Water supplies water to local water agencies which in turn provide it to their retail customers in Santa Clara County.

Valley Water's imported water is conveyed from the Sacramento-San Joaquin Delta to Santa Clara County through two main conveyance facilities: the South Bay Aqueduct, which carries water from the SWP, and the Santa Clara Conduit and Pacheco Conduit, which bring water from the federal CVP. Local water captured in Anderson and Calero reservoirs and imported water are treated at Valley Water's Santa Teresa, Rinconada, and Penitencia Water Treatment Plants.

Local runoff is captured in local reservoirs for recharge into the groundwater subbasins or treatment at one of Valley Water's Water Treatment Plants (WTPs). The total storage capacity of these surface reservoirs is about 166,000 acre-feet (AF), though several are currently operating at restricted capacity due to seismic stability concerns. The Rinconada WTP was constructed in 1967 and can sustain a maximum flow rate of 75 MGD, though it is currently undergoing improvements to increase production to 100 MGD. The Penitencia WTP was constructed in 1974 and can sustain a maximum flow rate of 42 MGD. The Santa Teresa WTP was constructed in 1989 and can sustain a maximum flow rate of 100 MGD. Each WTP distributes water to one or more transmission pipelines which bring the water to the retail providers. SJMWS receives treated water from Valley Water's Santa Teresa and Penitencia WTPs through the East and Snell Pipelines.

In 1972, Valley Water entered into the first contract to supply SJMWS with treated potable water. Another contract initiated in 1981 remains in effect until 2051. Two amendments have been executed since 1981

with the most recent one adopted in 1994. The contract established a schedule of water deliveries where SJMWS submits a projected request for a five-year period to facilitate planning and Valley Water contracts annually for minimum deliveries, with restrictions based on peak demand and annual distribution.

Groundwater

In 2014, Governor Brown signed the Sustainable Groundwater Management Act (SGMA) to promote local, sustainable groundwater management. Groundwater provides about half of the County's water supply for potable use, through pumping by retail water agencies or individual well owners. The groundwater basin in Santa Clara County is not adjudicated and has not been identified or projected to be in overdraft by DWR. Since 1929, the quality, supply, and management of the local groundwater basin is monitored and managed by Valley Water who acts as the Groundwater Sustainability Agency (GSA) for Santa Clara. For basins designated as medium and high priority by the State, SGMA requires local GSAs to develop and implement Groundwater Sustainability Plans (GSPs) or alternatives to achieve sustainability. Valley Water is the GSA for the Santa Clara and Llagas Subbasins (the primary basins in the county), which are both identified as high priority basins by DWR. Valley Water also manages the small portions of the North San Benito Subbasin located in Santa Clara County.

In 2019, DWR approved Valley Water's 2016 Groundwater Management Plan (GWMP) for the Santa Clara and Llagas Subbasins as an alternative GSP, determining it satisfies the objectives of SGMA. Periodic evaluations of approved plans are required at least every five years, so Valley Water submitted the Board-adopted 2021 GWMP to DWR in December 2021. In June 2024, DWR approved the 2021 GWMP confirming the alternative satisfies the objectives of SGMA and complies with related regulations. Valley Water is currently in the process of developing the 2026 GWMP, which is the second periodic evaluation to the approved alternative plan and due to DWR in December 2026. As part of the 2026 GWMP, Valley Water will build on the 2021 GWMP and address DWR's recommendations.

Groundwater monitoring reports and the 2021 approved alternative plan is available at Valley Water's website (<https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>); the report's Executive Summary is included in **Appendix G**. Valley Water will update its Groundwater Management Plan in 2026 and submit it to DWR by December 2026 to meet SGMA requirements for five-year updates.

Groundwater Basin Description

Within Santa Clara County, Valley Water manages two groundwater subbasins that transmit, filter, and store water: the Santa Clara Subbasin (DWR Subbasin 2-900.02) and the Llagas Subbasin (DWR Subbasin 3-003.01), which cover a combined surface area of approximately 385 square miles. Neither subbasin has been identified by DWR as being critically overdrafted. In its water supply planning, Valley Water frequently splits the Santa Clara Subbasin into two subareas: the Santa Clara Plain and the Coyote Valley. SJMWS draws groundwater from the Santa Clara Subbasin. Wells in the Coyote Valley service area draw from the Coyote Valley subarea while the other three service areas draw from the Santa Clara Plain subarea. The estimated operational storage capacity of the groundwater subbasins is up to 548,000 AF. Valley Water's managed recharge capacity is up to about 144,000 AFY. Although part of the same subbasin, these two subareas have different groundwater management challenges and opportunities and are in different groundwater charge zones.

Valley Water monitors water levels and water quality at wells throughout the county. In addition, it evaluates data from local water suppliers to assess regional groundwater quality and identify potential threats so they can be appropriately addressed. Valley Water also monitors the quality of water used for groundwater recharge to ensure groundwater resources are protected.

These subbasins contain young alluvial fill formation and the older Santa Clara Formation. Both formations are similar in character and consist of gravel, sandy gravel, gravel and clay, sand, and silt and clay. The coarser materials are usually deposited along the elevated lateral edges of the subbasins, while the flat subbasin interiors are predominantly thick silt and clay sections inter-bedded with smaller beds of clean sand and gravel. A general discussion of each groundwater subarea is provided below.

Santa Clara Subbasin - Santa Clara Plain

The Santa Clara Plain is part of the Santa Clara Subbasin, located in a structural trough that is bounded by the Santa Cruz Mountains to the west and the Diablo Range to the east. The Plain, which is approximately 22 miles long, narrows from a width of 15 miles near the County's northern boundary to about half a mile wide at the Coyote Narrows, where the two ranges nearly converge. The Plain has a surface area of 225 square miles and is approximately 15 square miles smaller than the Santa Clara Subbasin, since it does not include the Coyote Valley portion of the Santa Clara Subbasin. Although hydraulically connected, Valley Water refers to the Coyote Valley separately (see description below) since it is in a different groundwater charge zone than the Santa Clara Plain and has fewer water supply options than the Santa Clara Plain. The Plain underlies the northerly portion of the Santa Clara County and includes the majority of the streams and recharge facilities operated by Valley Water.

Santa Clara Subbasin - Coyote Valley

The Coyote Valley portion of the Santa Clara Subbasin is an alluvial-filled basin hydraulically connected to the Santa Clara Plain to the north. The Coyote Valley extends from Metcalf Road south to Cochrane Road, where it joins the Llagas Subbasin at a groundwater divide. The Coyote Valley is approximately seven miles long and ranges in width from a half mile at the Coyote Narrows to three miles, with a surface area of approximately 15 square miles. Valley Water estimates the operational storage capacity of the Coyote Valley to be between 23,000 and 33,000 AF.

Llagas Subbasin

The Llagas Subbasin extends from the groundwater divide at Cochrane Road, near Morgan Hill, to the Pajaro River (the Santa Clara-San Benito County line) and is bounded by the Diablo and Coast Ranges. The Llagas Subbasin is approximately 15 miles long, three miles wide along its northern boundary, and six miles wide along the Pajaro River. DWR Bulletin 118, Update 2003 identifies this subbasin as Basin 3-3.01 and includes it as part of the Gilroy Hollister Groundwater Basin. The depth of alluvial fill and the underlying Santa Clara Formation varies from about 500 feet at the northern divide to greater than 1,000 feet at its south end. Valley Water estimates the operational storage capacity of the Llagas Subbasin to be between 150,000 and 165,000 AF.

Groundwater Management and Overdraft Conditions

The groundwater system in Santa Clara County performs multiple functions: treatment, transmission, and storage. Water enters the groundwater subbasins through recharge areas generally located at or near the subbasins' perimeter and is transmitted into the deeper confined aquifer of the central part of the valley. In the process, the water is filtered and becomes suitable for drinking. Eventually the groundwater reaches pumping zones, where it is extracted for municipal, industrial, and agricultural uses. The groundwater basin has vast storage capacity, enabling supplies to be carried over from wet years to dry years.

Valley Water has about 144,000 AFY of managed recharge capacity, including more than 90 miles of in-stream recharge and 102 off-stream recharge ponds. Runoff is captured in Valley Water's reservoirs and released into both in-stream and off-stream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds for groundwater recharge.

Valley Water's 2021 Groundwater Management Plan identifies two sustainability goals related to groundwater supply: reliability and protection:

- Manage groundwater to ensure sustainable supplies and avoid land subsidence.
- Aggressively protect groundwater from the threat of contamination.

These sustainability goals describe the overall objectives of Valley Water's groundwater management program. The basin management strategies are the methods that will be used to meet the sustainability goals. Many of these strategies have overlapping benefits to groundwater resources, acting to improve water supply reliability, minimize subsidence, and protect or improve groundwater quality. The strategies are listed below.

1. Manage groundwater in conjunction with surface water through direct and in-lieu recharge programs to sustain groundwater supplies and to minimize seawater intrusion and land subsidence.
2. Implement programs to protect or promote groundwater quality to support beneficial uses.
3. Maintain comprehensive, adaptive groundwater models and monitoring networks.
4. Work with regulatory and land use agencies to protect recharge areas, promote natural recharge, and prevent groundwater contamination.

Valley Water and local partners have implemented numerous programs to protect groundwater resources. Valley Water has developed performance measures for groundwater storage, subsidence, groundwater quality, and seawater intrusion to help meet the basin management objectives and sustainability goals as highlighted in **Table 6-2**. Outcome measures are quantifiable goals to track performance of sustainable management and are functionally equivalent to measurable objectives under SGMA. Outcome measure – lower thresholds are quantifiable values used to define undesirable results and are functionally equivalent to minimum thresholds under SGMA.

Groundwater conditions throughout the county are sustainable, with managed and in-lieu recharge programs maintaining adequate storage to meet annual water supply needs and provide a buffer against drought or other shortages. Prolonged drought conditions from 2012 to 2016 resulted in lower groundwater levels and storage in the Santa Clara and Llagas subbasins, prompting the Valley Water

Board to call for water use reduction in 2014, 2015, and 2016 in accordance with Valley Water’s Water Shortage Contingency Plan. Full recovery of groundwater levels and storage was observed by 2017 due to community water use reduction, retailer shifts to treated surface water, and increased managed recharge. Despite the drought, there were very limited impacts to well users. Valley Water has used the management approach outlined in the 2016 GWMP and lessons learned from the 2012–2016 drought to sustainably manage groundwater during the recent dry and drought. Although groundwater levels declined during the two recent (2012–2016 and 2020–2022) statewide droughts, groundwater levels in the Santa Clara and Llagas subbasins quickly recovered after the drought due largely to Valley Water’s proactive response and comprehensive water management activities.

In April of each year, when the quantity of imported water available to Valley Water by contract and the local water yield can be more accurately approximated, Valley Water estimates the carryover storage. Based on the calculated carryover capacity and anticipated customer demand, Valley Water reviews and modifies its groundwater management strategy in order to maintain adequate water in the basin and avoid subsidence. Groundwater supply is largely constrained by hydrologic variability and the estimated 548,000 AF of operational storage capacity within the subbasins. The inflows to the groundwater subbasins are constrained by Valley Water’s managed aquifer recharge program and natural recharge.

Table 6-2. Outcome Measures and Outcome Measure – Lower Thresholds		
Sustainability Indicator	Outcome Measure	Outcome Measure – Lower Threshold
Groundwater Storage	Projected end of year groundwater storage is greater than 278,000 acre-feet (AF) in the Santa Clara Plain, 5,000 AF in the Coyote Valley, and 17,000 AF in the Llagas Subbasin.	Projected end of year countywide groundwater storage is greater than 150,000 AF.
Subsidence	Groundwater levels are above subsidence thresholds at the Santa Clara Subbasin subsidence index wells.	Groundwater levels are above the historical low water levels at the majority of the Santa Clara Subbasin subsidence index wells.
Groundwater Quality	For Santa Clara Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for total dissolved solids (TDS).	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS.
Groundwater Quality	For Llagas Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for total dissolved solids (TDS).	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS
Seawater Intrusion	In the Santa Clara Subbasin shallow aquifer, the 100 milligram per liter chloride isocontour area is less than the historical maximum extent area (57 square miles).	In the Santa Clara Subbasin shallow aquifer, the 100 milligram per liter chloride isocontour area is less than 81 square miles, which represents a one-mile radial buffer of the historical maximum extent area.

Historical Groundwater Pumping

SJMWS draws groundwater from the Santa Clara Subbasin (**Figure 6-1**). Groundwater is a source of supplemental water supply for SJMWS’s NSJ/Alviso and Evergreen service areas. SJMWS owns and operates fourteen groundwater wells. Potable water demands for the Edenvale and Coyote Valley service areas are supplied entirely by groundwater. During the past five years, SJMWS’s groundwater demands have been sufficiently met. **Table 6-3** shows the historical volume pumped from the basin.

Table 6-3 (DWR Table 6-1). Groundwater Volume Pumped						
Groundwater Type	Location or Basin Name	2021	2022	2023	2024	2025
Alluvial Basin – Potable Water	Santa Clara Subbasin and Coyote Valley Subbasin	1,135	951	1,001	913	872
TOTAL		1,135	951	1,001	913	872

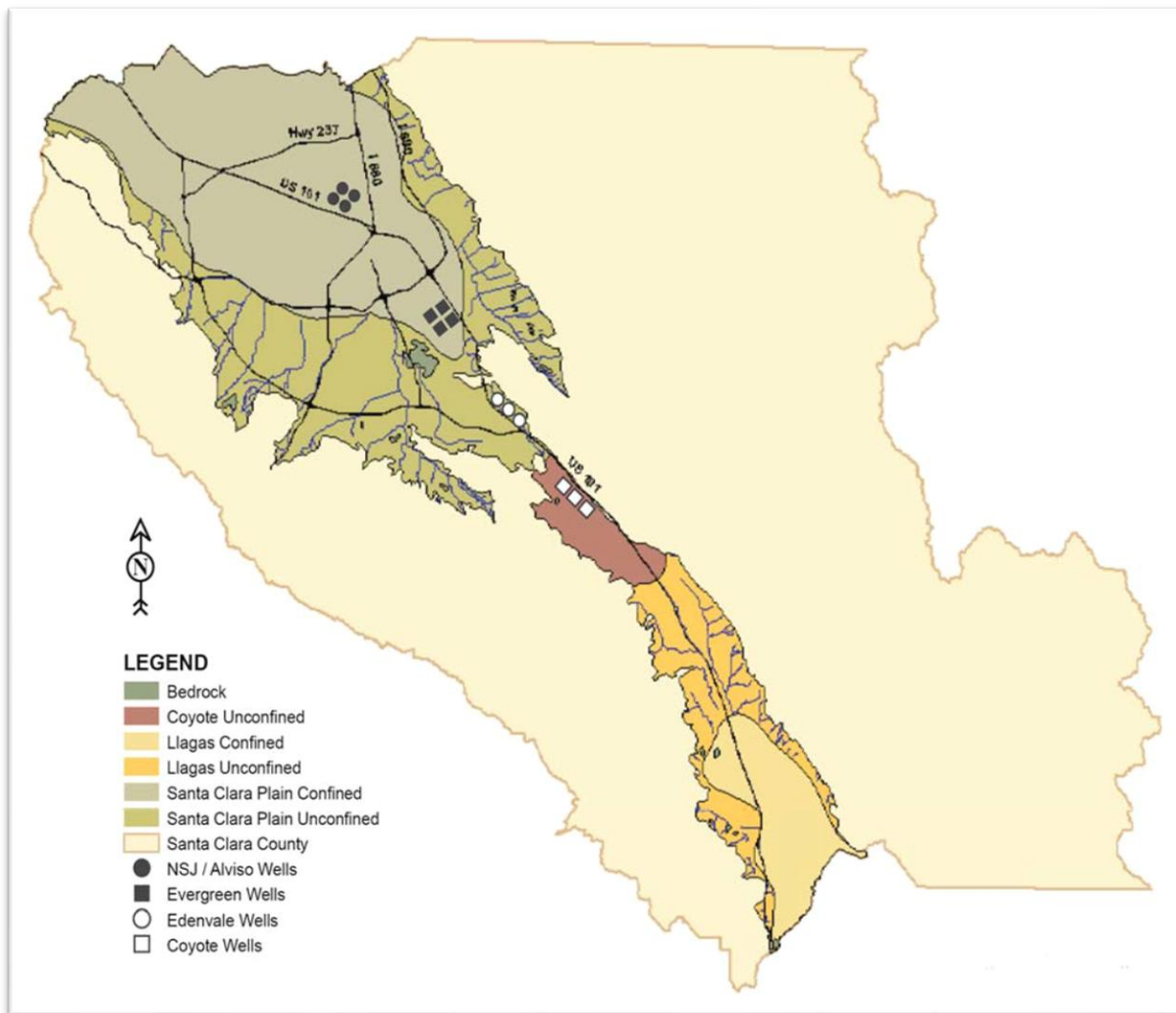


Figure 6-1. Santa Clara County Groundwater Basin and SJMWS Groundwater Wells

As required by the State Water Resources Control Board (SWRCB) for their Drinking Water Source Assessment and Protection Program, drinking water source assessments were conducted for all 14 groundwater wells within SJMWS service areas. The assessments were conducted by SJMWS staff, and consisted of information gathered from City records, databases, staff, the SWRCB, and visual field surveys.

In North San José, potential contamination sources include local electronic manufacturing facilities, gas stations, leaking underground storage tanks and sewer collection facilities. The Evergreen wells are vulnerable to potential contamination from automobile gas stations, underground storage tank leaks and dry-cleaning service activities. The Edenvale wells are vulnerable to potential contamination from chemical/petroleum processing storage activities. The Coyote wells are vulnerable to potential contamination caused by agricultural drainage, illegal activities/unauthorized dumping, storage tank leaks and sewer collection systems. However, the existing well locations and precautions taken during construction, in combination with the local hydrology, have provided a high level of protection against contamination of the local ground waters.

As the groundwater management agency in Santa Clara County, Valley Water has ongoing groundwater protection programs to ensure high water quality and more reliable water supplies. These programs include well permitting, well destruction, wellhead protection, land use and development review, nitrate management (targeted to areas of elevated nitrate in the southern portion of the County), saltwater intrusion programs, and providing technical assistance to regulatory agencies to ensure local groundwater resources are protected (Valley Water, 2026).

In many areas along the coast, shallow groundwater may be vulnerable to rising sea levels and saltwater intrusion. Saltwater intrusion has occurred in the shallow aquifer beneath North San José/Alviso. However, in Santa Clara County, the aquifers that provide the primary drinking water source are protected by a natural barrier made up of extensive horizontal clay layers. Valley Water does not consider saltwater intrusion to be a significant threat.

Surface Water

SJMWS does not directly manage a surface water source. As discussed above, the purchased/imported water from the two wholesalers contains surface water as a part of the supply mix.

Stormwater

SJMWS does not directly use storm water as a supply source. Valley Water utilizes stormwater as a natural source for groundwater recharge. Natural recharge includes all uncontrolled recharge, including the deep percolation of rainfall, septic system and/or irrigation return flows, and natural seepage through creeks. Based on estimates from Valley Water's groundwater flow and water supply models, future average natural groundwater recharge is projected to be fairly constant over the planning horizon at around 60,000 AFY (Valley Water, 2026).

Wastewater and Recycled Water

Wastewater Collection, Treatment, and Disposal

Wastewater from SJMWS' service areas is collected and treated at the San José/Santa Clara Regional Wastewater Facility (RWF) located at the southern end of San Francisco Bay, which has a design capacity of 167 MGD. In addition to the SJMWS service areas, the RWF treats wastewater from San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Monte Sereno and Saratoga, serving an area of over 300 square miles and a population of more than 1.4 million. **Table 6-4** provides information about the RWF and estimated volume of wastewater collected from the SJMWS service area in 2025. Because wastewater flows to the RWF originate from multiple jurisdictions and are not metered by individual water retailer within the City of San José, direct measurement of wastewater generated specifically by SJMWS customers is not available. Accordingly, the volume of wastewater attributable to the SJMWS service area is estimated based on its proportional contribution to total potable water use relative to other agencies discharging to the RWF. This approach has been maintained for consistency since the development of the 2015 UWMP, and is approximated at nine percent of total influent flow to the RWF in 2025.

Table 6-5 provides information regarding the RWF, total wastewater collected at RWF and within SJMWS's UWMP service area, water recycled deliveries within and outside the UWMP service area, and other permitted discharges by treatment level in 2025. As discussed above, RWF collects and treats wastewater from several agencies with SJMWS being one of them. In 2025, RWF collected and treated 116,823 AF of wastewater, as RWF treats 100% of the incoming wastewater whether it is discharged to the Bay, used for onsite purposes as process water, or sent to the recycled water system for non-potable reuse. In 2025, the RWF produced approximately 12,443 acre-feet (AF) of water which was distributed and reused as recycled water.

The RWF provides secondary, disinfected-2.2 treated flows to the Silicon Valley Advanced Water Purification Center (SVAWPC) for advanced treatment. In 2025, the SVAWPC facility produced 4,387 AF of advanced treated water (Valley Water, 2026). For water accounting purposes, SVAWPC operates as an integrated treatment process within the RWF system, with the majority of its purified output conveyed to the recycled water system. The advanced purified water produced by SVAWPC comprises approximately one-third of the total recycled water supply, while the remaining two-thirds is derived from RWF tertiary filtration processes. Accordingly, recycled water totals reported in **Table 6-5** include volumes treated through both tertiary and advanced treatment processes. SVAWPC also generates residual process flows during advanced treatment; however, these flows are returned to the RWF and are therefore captured within the total volume of wastewater treated at the facility.

RWF also discharges to the bay and in 2025, RWF discharged about 84% of the total wastewater it treated to the bay (equivalent to approximately 97,922 AF). The RWF does not have any required discharge for instream flow. Minor discrepancies between total wastewater treated and the sum of flows discharged, recycled, or conveyed for further treatment can occur due to several factors which include wastewater diverted to the Residuals Management (RSM) lagoons, internal plant water use (e.g. process water), residual process flows from the SVAWPC's treatment process, and normal discrepancies associated with flow meter readings, calibration differences, and routine operational adjustments.

Table 6-4 (DWR Table 6-2). Wastewater Collected Within Service Area in 2025				
Wastewater Collection			Recipient of Collected Wastewater	
Wastewater Collection Agency	Metered or Estimated	Volume of Wastewater Collected from UWMP Service Area	Name of Wastewater Treatment Plant and Place ID Number	Is WWTP Located Within UWMP Area?
City of San José	Estimated	10,514	San Jose/Santa Clara WPCP, Place ID 255333	Yes

Table 6-5 (DWR Table 6-3). Wastewater Treatment and Outcomes in 2025					
WWTP Name and ID #	2025 Volume of WW Received from UWMP Service Area				10,514
	Total 2025 Volume of Water Treated				116,823
	Recycled Within Service Area	Recycled Outside of Service Area	Effluent that is not a Permitted RW Use	Required Discharge for Instream Flow	Delivered to Another Entity for Additional Treatment
	Volume (Treatment Level)	Volume (Treatment Level)	Volume (Treatment Level)	Volume (Treatment Level)	Volume (Treatment Level)
San Jose/Santa Clara WPCP, Place ID 255333	3,509 (Tertiary)	8,934 (Tertiary)	97,922 (Tertiary)	N/A	N/A ¹

Notes:

1 Silicon Valley Advanced Water Purification Center (SVAWPC) produced 4,387 AF of advanced treated water in 2025; this volume contributed to the recycled water supply and was distributed within the SBWR system, so is accounted for within the totals for “Recycled Within Service Area” and “Recycled Outside of Service Area.”

Recycled Water System

A growing source of water for Santa Clara County is recycled water. Recycled water is wastewater that is cleaned through multiple levels of treatment. Purified water is highly treated water of wastewater origin that has passed through proven multistage, multibarrier processes (such as microfiltration, reverse osmosis, and ultraviolet disinfection) to produce water at the quality fit to supplement or provide supply for potable (drinking) water purposes, as verified through monitoring for its safety and as regulated by the State Water Resources Control Board Division of Drinking Water (Valley Water, 2026). Using recycled water and purified water offsets drinking water and groundwater supplies through in-lieu recharge; provides a reliable, drought-proof, locally controlled water supply; and reduces reliance on imported water. Within Santa Clara County, recycled water is produced at four wastewater plants – Palo Alto, Sunnyvale, San José/Santa Clara, and South County Regional Wastewater Authority.

Since March 2014, the SVAWPC, with a capacity to produce up to 8 million gallons per day of advanced treated water, has also served as a demonstration platform for advanced treatment technologies—including microfiltration, reverse osmosis, and ultraviolet disinfection—to evaluate their effectiveness in producing purified water suitable for potable reuse research and public outreach. Through this work, the SVAWPC aims to establish the technical foundation for Valley Water’s future potable reuse program, which would use advanced purified water to augment groundwater and/or surface water supplies. (Valley Water, 2026).

Non-Potable Reuse – SBWR Program

The City of San José manages and operates the piping system that distributes recycled water produced by the RWF, known as the South Bay Water Recycling (SBWR) Program. SBWR provides wholesale recycled water to four retailers: SJMWS, City of Santa Clara, City of Milpitas, and San Jose Water Company. As noted in the Wastewater Collection, Treatment, and Disposal section, a portion of RWF's wastewater flows are supplied to Valley Water's adjacent Silicon Valley Advanced Water Purification Center (SVAWPC). Advanced purified water produced at the SVAWPC is blended with tertiary-treated effluent from RWF to improve overall water quality for the non-potable reuse applications serving a broad customer base. Approximately one-third of SBWR supply is derived from advanced purified water produced at SVAWPC, with the remaining two-thirds coming from RWF tertiary treatment processes. The blended supply is then distributed by SBWR.

The SBWR program delivers the non-potable water supply through an extensive recycled water distribution system consisting of over 150 miles of pipeline. **Figure 6-2** shows the regional nature of recycled water production and distribution, where wastewater flow that may be generated in one water retailer service area are distributed across multiple service areas based on recycled water system demands and infrastructure. The recycled water is used for non-potable purposes such as industrial cooling and processing, and irrigation of golf courses, parks, and schools. In 2025, during the peak summer season, SBWR diverted approximately 22 MGD of recycled water for irrigation and industrial uses to over 1,100 customers throughout cities of San José, Santa Clara, and Milpitas.



Current, Potential, and Projected Recycled Water Use

Table 6-6 provides current uses and projected recycled water use projections for non-potable applications within the service area, along with an estimate of the potential recycled water available for use. Recycled water use in the SJMWS service area continues to grow and currently accounts for approximately 20% of the total water supply. Historically, for SJMWS, recycled water use has been relatively evenly distributed between irrigation (including landscape and golf courses) and commercial/industrial applications (such as dual plumbing and cooling towers). However, beginning in 2030, projections based on anticipated development indicate a shift toward increased commercial/industrial demand. This change is driven by the anticipated addition of facilities utilizing recycled water for cooling purposes, as identified in water supply assessments completed through 2025. As a result, commercial/industrial use is expected to represent a larger share of recycled water demand beyond 2030.

In addition to projected future recycled water demands attributed to new development, SJMWS is evaluating the potential to connect several existing sites to recycled water, which are currently high users of potable water for uses that could be served by non-potable supplies. These sites mainly include irrigation uses at parks and schools. **Table 6-6** identifies the volume of potable water use used by these customers in 2025 as the potential uses that could be served by recycled water. The extent to which these uses can be converted to recycled water depends on factors including proximity to existing recycled water infrastructure, costs for system expansion and required onsite retrofits, and seasonal irrigation demand patterns.

The existing non-potable water distribution system that provides recycled water to SJMWS could be used to convey both additional recycled water supplies and other types of non-potable water, as managed by the wholesaler, SBWR. Recycled water continues to receive interest from local water retailers and wholesalers, and the development and business community.

Table 6-6 (DWR Table 6-4). Recycled Water Uses Within Service Area								
Name of Supplier Producing (Treating) the Recycled Water:						San José/Santa Clara WPCP ¹		
Name of Supplier Operating the Recycled Water Distribution System:						South Bay Water Recycling		
Non-Potable Use	Use Description	2025	2030	2035	2040	2045	2050	Potential Use ²
Industrial	Cooling towers, dual plumbing,	1,699	5,059	5,293	5,523	5,536	5,551	39
Other	Landscape irrigation incl golf courses	1,810	2,953	3,090	3,224	3,232	3,241	250
TOTAL		3,509	8,012	8,383	8,748	8,768	8,792	289

Notes:

1 See *Wastewater Collection, Treatment, and Disposal* section for information describing production of the tertiary-treated recycled water supply

2 Includes potential existing irrigation and commercial uses that can be converted from potable water to recycled water

Projected vs Actual Recycled Water

In the 2020 UWMP, SJMWS projected to use 4,776 AF of recycled water in 2025. However, the actual recycled water use in 2025 was 3,509 AF (**Table 6-7**), about 27% lower than projected. The actual usage was less than the projected use due to a variety of factors including more efficient water use, slow rebound of water use following the 2020-2022 drought, and reduced development activity.

Table 6-7 (DWR Table 6-5). Recycled Water Use – 2020 Projected, 2025 Actual		
Use Type	Projected for 2025	2025 Actual Use
Landscape irrigation (includes golf courses)	2,444	1,810
Industrial use	2,332	1,699
TOTAL	4,776	3,509

Notes: Landscape irrigation total includes golf course irrigation; commercial use is included with the industrial use

Actions to Encourage and Optimize Future Recycled Water Use

Currently, the cities of San José, Santa Clara and Milpitas promote recycled water usage through a variety of mechanisms, including:

- Lower cost of recycled water than potable water
- Regulatory approval for recycled water usage
- Ordinances requiring the use of recycled water for irrigation where available
- Prohibition against the use of potable water for uses appropriate to recycled water
- Support for developers' expansion of system to areas where recycled water is unavailable

Within SJMWS service area, use of recycled water will continue to expand as developers construct additional distribution facilities to supply recycled water to serve a project's water needs. SJMWS anticipates increased recycled water usage within the service area as identified in the SBWR Strategic and Master Plan. Infrastructure enhancements, including potable reuse options, are being evaluated to determine the most optimal use of available wastewater. Potable reuse involves using purified water to augment groundwater or surface water supplies. The SBWR Recycled Water Master Plan (<https://www.sanjoseca.gov/home/showpublisheddocument/518/636612938942830000>) discusses non-potable and potable reuse opportunities, and Valley Water analyses and plans related to recycled water are available at <https://www.valleywater.org/your-water/recycled-and-purified-water>. Methods to expand future recycled water uses are shown in **Table 6-8**. Additional recycled water usage in the service area will come from strategic investments in infrastructure to connect existing sites and planned projects.

Table 6-8 (DWR Table 6-6). Methods to Expand Future Recycled Water Use			
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Regional Planning	Valley Water planning efforts underway	ongoing	N/A
Rate Discounts	Priced lower than potable water	ongoing	N/A
Public Education	Support voluntary efforts to use recycled water	ongoing	N/A
Required Use	San José Municipal Code requirement to use recycled water where available	ongoing	N/A

Notes: N/A – Not applicable/not quantifiable

Potable Reuse

In 2021, Valley Water completed a Countywide Water Reuse Master Plan (CoRe Plan) which identifies feasible opportunities to expand water reuse, improve water supply reliability, and increase regional self-reliance. The CoRe Plan was a collaborative effort with wastewater partners, local retailers, State regulators, and interested parties to identify opportunities for both potable and non-potable reuse. The CoRe Plan outlines Valley Water's opportunities and strategies toward achieving potable water reuse and is available at <https://www.valleywater.org/your-water/recycled-and-purified-water> (Valley Water, 2026).

As part of its long-term planning efforts, Valley Water has identified potential to develop up to approximately 32,000 acre-feet per year (AFY) of potable reuse supplies by 2050. Building on the success of the Silicon Valley Advanced Water Purification Center, Valley Water, in partnership with the Cities of San José and Santa Clara, is advancing the Pure Water Silicon Valley (PWSV) program. This program is intended to produce up to approximately 24,000 AFY of highly purified water by 2035, with the potential to expand to approximately 32,000 AFY by 2050. Implementation of PWSV includes development of a regional advanced water purification facility adjacent to the SVAWPC to support future potable reuse.

Initial phases include a demonstration facility and learning center to support pilot testing, operator training, regulatory data collection, and public outreach. The demonstration facility is anticipated to inform the design and permitting of a full-scale facility and help reduce implementation risks. The full-scale phase involves the design, construction, and permitting of a full-scale direct potable reuse (DPR) facility capable of producing up to 24,000 AFY of high-quality water that meets stringent regulatory requirements along with necessary infrastructure for distributing the water to retailers. As part of this phase, a CEQA review will be conducted to evaluate the potential environmental impacts and support the permitting process. A DPR demonstration facility is estimated to be targeted for completion in 2030, with full-scale facility estimated to be completed in 2035.

Potable reuse is expected to provide several regional benefits, including reduced reliance on imported water supplies, improved drought resilience, and support for long-term groundwater basin sustainability. Constraints on recycled water and purified water supplies are discussed in Section 7.

Desalinated Water Opportunities

In an effort to develop backup projects for its potable reuse project, Valley Water is undertaking efforts to study the feasibility of a local bay-water desalination project. The feasibility study evaluates a local desalination project in Santa Clara County to treat water from the South San Francisco Bay. Desalinated water from this facility could provide water supplies directly to the treated water system for distribution to customers or augment raw water supplies, increasing Valley Water's operational flexibility. A desalination plant would have a consistently available supply source, which would help mitigate risks of multi-year droughts and improve Valley Water's overall water supply reliability.

In 2023, Valley Water completed the Desalination Environmental Feasibility and Planning Study, which identified key components including intake options, facility locations and brine management strategies. This study was the first phase in evaluating a potential desalination project in Santa Clara County and established the foundation for the second phase of project development. Valley Water is currently

undertaking the second phase, an engineering feasibility study to evaluate the engineering feasibility, project costs and regulatory permitting requirements associated with a desalination project in the Lower South San Francisco Bay. The Engineering Feasibility Study aims to evaluate the technical, regulatory, and environmental feasibility of each project element including intake locations, facility sitting, and brine management and to develop a preferred alternative for a desalination facility.

Exchanges or Transfers

The majority of the transfer/exchange opportunities are managed by the wholesalers, SFPUC and Valley Water. SJMWS has the contractual ability to purchase additional water from SFPUC as long as the combined amount purchased by SJMWS and the City of Santa Clara does not exceed 9 MGD. SJMWS also has emergency tie-ins with the City of Santa Clara and San José Water Company for potential short-term transfers. Additional details regarding wholesaler transfers and exchanges can be found in each individual wholesaler’s UWMP.

Valley Water conducts short-term water transfers and exchanges as a part of its routine imported water operations. While Valley Water considers water exchange and transfers as one of the potential options to secure additional water during critical dry years through long-term agreements, there are considerable uncertainties with long term costs and ability to make transfers in critical dry years, during which water quality challenges, regulatory requirements, and pumping restrictions may affect the ability to convey transfer supplies across the Delta. Consequently, water transfers and exchanges are not included in projected water supplies as regular supply; instead, they are used as supplemental supply during multi-year droughts to address potential shortages, consistent with Valley Water’s drought management practices. Based on past performance of Valley Water’s transfer programs, the amount of transfer and exchange could range from 4,000 AF to up to 20,000 AF depending on circumstances (Valley Water, 2026).

Future Water Projects

As a water retailer, SJMWS does not plan on developing “new” water supplies. Typically, capital improvement projects address infrastructure replacement and reliability needs. Future groundwater wells are needed to support future demands (**Table 6-9**). The Santa Clara Valley groundwater basin is not adjudicated; however, SJMWS will still rely on Valley Water to actively manage the groundwater basin to prevent overdraft and potential subsidence. SJMWS is actively involved in the planning activities of SFPUC and Valley Water. SJMWS is also involved in the planning activities for recycled water through SBWR. Additional information regarding wholesalers’ future projects can be found in their UWMPs.

Table 6-9 (DWR Table 6-7). Expected Future Water Supply Projects or Programs					
Name of Future Projects or Programs	Joint Project with other suppliers?	Description	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier
Groundwater wells	No	Additional 5-7 wells to use groundwater as primary/backup supply	varies	All Year Types	4,000-9,000

Summary of Existing and Planned Sources of Water

SJMWS relies on four sources of supply: surface water from SFPUC, local and imported surface water from Valley Water, groundwater from the Santa Clara groundwater basin, and recycled water from the SBWR Program. Supply sources received by SJMWS and discussed within this section are generally considered consistent sources in normal years. **Table 6-10** depicts the amount of supply from each source that was purchased in 2025. **Table 6-11** provides details of water supplies anticipated to be purchased in the future as determined by the City.

Statewide and local changes in precipitation and temperature could significantly impact wholesaler-managed supplies and water usage patterns. Climate change poses challenges in water resource management to wholesale suppliers, although the full extent and associated impacts are uncertain. Effects of climate change to wholesale water supplies is further discussed in detail in Section 7.

Energy Use

The City pumps groundwater from fourteen water production wells and diverts water from its wholesalers from five turnouts. Booster pump stations and tanks are used throughout the SJMWS service area to distribute water to the distribution system and customer taps. The total amount of energy used by SJMWS is reflected in **Table 6-12** (DWR Guidebook Appendix O, Table O-1B). This table reflects energy used to extract and divert water from the groundwater aquifer, and convey water from the two wholesalers by pumping supplies through the distribution system. Wastewater and recycled water energy use is not available.

Table 6-10 (DWR Table 6-8). Water Supplies – 2025 Actual		
Water Supply	Notes	Volume
Purchased/Imported Water	SFPUC (potable)	4,330
Purchased/Imported Water	Valley Water (potable)	9,634
Groundwater	Wells (potable)	872
Recycled Water	SBWR (non-potable)	3,509
TOTAL		18,345

Table 6-11 (DWR Table 6-9). Reasonably Available Water Supplies – Projected						
Water Supply	Notes	2030	2035	2040	2045	2050
Purchased/Imported Water	Potable (Valley Water/SFPUC)	15,803	16,029	16,653	17,366	18,082
Groundwater	Potable (wells)	1,651	2,373	3,506	4,530	5,538
Recycled Water	Non-Potable (SBWR)	8,012	8,383	8,748	8,768	8,792
Potable Subtotal		17,454	18,402	20,159	21,896	23,620
Non-Potable Subtotal		8,012	8,383	8,748	8,768	8,792
Total		25,466	26,785	28,907	30,664	32,412

Table 6-12 (DWR Table O-1B). Recommended Energy Reporting – Total Utility Approach		
Start Date for Reporting Period ¹	1/1/2025	Sum of All Water Management Processes
End Date	12/31/2025	
Volume of Water Entering Process (AF)		14,836
Energy Consumed (kWh) ²		3,873,410
Energy Intensity (kWh/vol. converted to MG)		801
Quantity of Self-Generated Renewable Energy (kWh)	N/A	
Data Quality	Metered data	
Data Quality Narrative	Billing periods as billed by energy utility do not exactly overlap identified reporting period. Best available billing data used.	
Narrative	Energy consumed includes some building energy use as it cannot be separated from system asset energy use. Utility utilizes some solar power for occupied buildings and communication equipment; solar power does not contribute to water management process and therefore is not included in this table.	

7. WATER SUPPLY RELIABILITY

Water Code Section 10635 (a) requires the UWMP to include discussion on water supply reliability. The 2025 Guidebook (Appendix F, UWMP checklist) provides this checklist:

#46. 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 Code §10634)

#47. 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 Code §10635(a))

#48. Describe water management tools and options to maximize resources and minimize the need to import water from other regions. (Water Code §10620(f))

#49. Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects. (Water Code §10635(b))

#50. 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 (5) consecutive years. (Water Code §10635(b)(1))

#51. Include a determination of the reliability of each source of supply under a variety of water shortage conditions. (Water Code §10635(b)(2))

#52. Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period. (Water Code §10635(b)(3))

#53. 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 Code §10635(b)(4))

A comparison of the water supplies and demands for the SJMWS is presented in this section. This section also presents an assessment of overall reliability of future supplies regardless of drought or emergency conditions. It includes discussion of the City's planned responses in emergency situations that can affect water supplies.

The City has taken guidance from the following documents/information while preparing this section:

- Valley Water's Draft 2025 Urban Water Management Plan (Valley Water, 2026)
- Email communications from BAWSCA to member agencies (BAWSCA, 2026)

Constraints on Water Sources

While additional water supply infrastructure will be required, the City has the available water supply (discussed in Section 6) to meet the projected demands for the SJMWS. As discussed in Section 6, the City utilizes the following sources of potable water supply for the SJMWS:

- SFPUC
- Valley Water
- Groundwater

Because the system supplies are derived from imported supplies purchased from the wholesalers and local groundwater, statewide and local conditions can impact the reliability of supplies. The following discussion summarizes the reliability of the SJMWS's water supply sources and constraints on those water sources, based on information provided to SJMWS from SFPUC and Valley Water. SJMWS provided demand projections to both agencies for use in their analyses of supply availability during average and dry years. The SJMWS's total supply is expected to meet demands in normal years through 2050. By utilizing different supply sources, SJMWS may reduce the impact of water shortage from a particular source. Since SJMWS relies on wholesalers' portfolio of supplies, the primary role of reducing Delta reliance is undertaken by the wholesalers and SJMWS will continue to coordinate and support those efforts; more information on wholesaler efforts to reduce Delta reliance are in **Appendix G**.

Reliability of the water supply for the SJMWS is determined based upon the reliability of wholesaler supplies and groundwater production, as discussed previously. The total water supply and demand for the SJMWS are presented in Section 6 and Section 4, respectively.

SFPUC: Reliability and Constraints

Over 2.7 million people and thousands of businesses in the San Francisco Bay Area rely on water supplied by the SFPUC to meet their daily water needs. The San Francisco-owned and operated Regional Water System (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.

The SFPUC relies heavily on reservoir storage to firm-up its water supplies. Within the Peninsula watershed, local runoff is captured in the Crystal Springs, San Andreas, and Pilarcitos Reservoirs, located in San Mateo County. 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 SFPUC has identified several potential constraints on its water supplies, including legal, environmental, water quality, climatic, and other factors potentially resulting in inconsistent supply.

Constraints on Water Quality

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.

Climate Change Impacts

Climate change has become an important factor in water resources planning in California and is frequently considered in urban water management planning, although the extent and precise effects of climate change remain uncertain. Increasing concentrations of greenhouse gases have caused and will likely continue to cause a rise in temperatures around the world, which will result in a wide range of changes in climate patterns. Moreover, observational data show that a warming trend occurred during the latter part of the 20th century, the first quarter of the 21st century, and will likely continue through the end of the 21st century. Numerous studies have been conducted to determine the potential impacts of climate change on water resources. These climate change impacts are likely to affect both the Tuolumne River watershed and local watersheds in the Bay Area and include the following:

- Reductions in the average Sierra Nevada annual snowpack due to a rise in the snowline elevation and a shallower snowpack at lower elevations, and a shift in snowmelt runoff to earlier in the year;
- Changes in the timing, annual average, intensity, and variability of precipitation, and an increased amount of precipitation falling as rain instead of as snow;
- Long-term changes in watershed vegetation and increased incidence of wildfires that could affect water quality and quantity;
- Sea level rise and an increase in saltwater intrusion;
- Increase in water temperatures with accompanying potential adverse effects on some fisheries and water quality;
- Increases in evaporation and concomitant increase in irrigation need; and
- Changes in urban and agricultural water demand.

SFPUC Climate Change Studies

The SFPUC views assessment of the effects of climate change as an ongoing need that requires regular updating to reflect improvements in climate science, atmospheric/ocean modeling, observations, and human response to the threat of greenhouse gas emissions. Climate change research by the SFPUC began in 2009 and continues to be refined.

The SFPUC partnered with The Water Research Foundation to develop the Long-Term Vulnerability Assessment (LTVA) of the RWS. The goal of the LTVA is to help quantitatively and qualitatively assess to what extent climate change will be a threat to the RWS in comparison to, or in combination with, other external drivers of change over the next 50 years (2020-2070). The LTVA assessed the potential effects of climate change on RWS water supply using a wide range of plausible increases in temperature and changes in precipitation to address the wide uncertainty in climate projections over the planning horizon. There are many uncertain factors, such as climate change, changing regulations, water quality, growth and economic cycles, that may create vulnerabilities for the RWS's ability to meet Levels of Service. The LTVA used a vulnerability-based planning approach to explore a range of future conditions to identify vulnerabilities, and to assess the risks associated with these vulnerabilities, that could lead to developing an adaptation plan that is flexible and robust to a wide range of future outcomes. The LTVA was completed in 2021 and was amended in 2024. The key findings of the LTVA are:

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

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

- According to climate projections and expert elicitations, there is a central tendency of warming of +2°C and +4°C by 2040 and 2070 (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; and by 2070, estimates of warming range between +3°C and +6°C, and precipitation changes range between -15% and +15% (RCP8.5).
- Changes in hydrology due to climate change affect the RWS's ability to meet water supply targets. At 227 MGD baseline demand, the RWS can sustain up to +4°C and -5% precipitation change before failing to meet targets for delivery reliability, frequency of 20% rationing, storage reliability, and duration of rationing.

- Precipitation change is an important driver for RWS performance. A decrease by 10% or more will cause RWS water supply targets to be missed. The climate projections and expert elicitations show that such a change in precipitation is possible by 2040, although unlikely. The likelihood of this change increases toward 2070.
- The RWS shows minor sensitivity to temperature change for the metrics evaluated in this study. Most metrics stay above target under warming conditions. However, warming conditions often magnify the loss in system performance if precipitation or demand change.
- Demand change appears to be a major driver of future RWS performance. An increase in demand by 15% (265 MGD) will lead to failure to meet rationing frequency targets under current climate conditions. At 265 MGD demand, the rationing frequency targets would be met if there is an increase in precipitation of 10%. If demand increases by 30%, the rationing target cannot be met even when precipitation increases by 40%, which is believed plausible but unlikely over the planning horizon.
- The RWS is particularly vulnerable to the state-amended new instream flow requirements below Don Pedro Dam, which represents a huge reduction in water available. Under all demand and climate scenarios the system reliability, defined as frequency of years without rationing, remains below 5%.
- The RWS is also vulnerable to the draft Tuolumne voluntary agreement new instream flow requirements below Don Pedro Dam, which represents a large reduction in water available, although significantly less than for the state-amended new instream flow releases. The implementation of the draft Tuolumne voluntary agreement under current climate and demand conditions would reduce the system reliability to 75%, which corresponds to the effects of a reduction in average rainfall by 20% under the current Federal Energy Regulatory Commission agreement.

Impacts of Bay-Delta Plan Amendment

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”¹ 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. Implementation of the Bay-Delta Plan Amendment remains uncertain for multiple

¹ "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.)

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 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 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.

On November 10, 2022, the SFPUC along with the Modesto and Turlock Irrigation Districts signed a Memorandum of Understanding Advancing the Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan and Other Actions. Voluntary Agreements are now referred to as the Agreements to Support Healthy Rivers and Landscapes and negotiations remain ongoing. The Healthy Rivers and Landscapes Program (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.

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. Because of the uncertainty surrounding implementation of the Bay-Delta Plan Amendment, SFPUC conducted water supply reliability assessments 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 may significantly impact the supply available from the RWS. If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet their projected water demands 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.

San José's UWMP analysis on supply reliability assumes implementation of the Bay-Delta Plan Amendment as adopted, which is consistent with SFPUC's analysis of supply availability. Using this analysis results in a "worst case" supply reduction scenario, with supplies to wholesale customers reduced between 50-60% during some multi-year drought periods. These reductions are not adjusted to reflect the Bay-Delta Plan Amendment-related considerations noted above, in addition to other considerations such as SFPUC's implementation of additional water supply projects and SFPUC's contractual obligations related to supply reliability.

Additional Reliability Factors

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 SFPUC's 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 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 by the SFPUC for the purpose of completing their 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.

Actions to Improve Reliability

SFPUC's Water System Improvement Program

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 complete 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 LOS Goals and Objectives related to water supply for wholesale customers 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.

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

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

with instream flow release and bypass requirements related to the Calaveras Dam Replacement Project. The project is anticipated to be completed in 2032.

- **Lower Crystal Springs Dam Improvements.** The Lower Crystal Springs Dam Improvements Project was completed in May 2012. The related joint San Mateo County/SFPUC Bridge Replacement Project to replace the bridge across the Lower Crystal Springs Dam was completed in January 2019.
- **Regional Groundwater Storage and Recovery Project.** The Regional Groundwater Storage and Recovery (RGSR) Project is a strategic partnership between the SFPUC and three Wholesale Customers in San Mateo County: the California Water Service Company (serving South San Francisco and Colma), the City of Daly City, and the City of San Bruno. The project sustainably manages groundwater and surface water resources to provide the RWS with additional supplies during times of drought. During years of normal or heavy rainfall, the SFPUC provides additional surface water from the RWS to the three agencies in northern San Mateo County, allowing them to reduce the amount of groundwater that they pump from the southern Westside Groundwater Basin. Over time, the reduced pumping allows the aquifer to naturally recharge and result in increased groundwater storage of up to 61,000 AF 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 AF) through the project.
- **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 above.

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. The AWS Program aims to help fill dry-year supply gaps through local and regional capital projects. The 2024 AWS Plan 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.

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:

- **South Bay Purified Water** is 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. In 2023, the SFPUC along with the cities of San José and Santa Clara completed an initial feasibility study for the South Bay Purified Water project. Separately, Valley Water is working with San José and Santa Clara to design a larger project to meet broader regional needs, a project in which SFPUC could also be involved. Either of these distinct projects – SFPUC’s South Bay Purified Water project or the larger Valley Water purified water project – could provide the regional benefits necessary to assist the SFPUC with its decision regarding permanent status for San José and Santa Clara, and the fulfillment of a long-term water supply obligation.
- **PureWater Peninsula** 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.

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.

Additional Efforts

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. While no transfer was secured, the SFPUC continues to engage in discussions with irrigation districts to explore potential transfer opportunities.

SFPUC Water Shortage Allocation Plan

The WSA between San Francisco and its Wholesale Customers includes a Water Supply Allocation Plan (WSAP) that describes the method for allocating the SFPUC water supply between Retail and Wholesale Customers 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 WSAP has two components:

- The Tier One Plan, which allocates water between San Francisco and the wholesale customers collectively; and
- The Tier Two Plan, which allocates the collective wholesale customer share among the wholesale customers.

Tier One Drought Allocations

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. **Table 7-1** 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 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.

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.

Table 7-1. Distribution of Reduced SFPUC Supplies		
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%

Tier Two Drought Allocations

The Wholesale Customers negotiated a Tier 2 Plan which allocates the Wholesale Customers' Tier 1 Allocation among each of the 26 Wholesale Customers. The Tier 2 Plan was renegotiated and adopted by all Wholesale Customers in 2025. The Tier 2 allocations are based on a formula that takes into account multiple factors for each Wholesale Customer including:

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

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

The Tier 2 plan systematically allocates 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 gallons per person per day (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. For San José, a value of 4.5 mgd – matching the quantity identified in the Water Sales Contract between SFPUC and San José – is used as the ISG value for purposes of the calculation.

The result of the Tier 2 Plan is each Wholesale Customer's 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 its Allocation Factor as calculated and identified in the Tier 2 Plan when adopted.

Valley Water: Reliability and Constraints

Valley Water's long-term water supply level of service goal is to meet 100% of annual water demand during non-drought years and at least 80% of annual water demand in drought years. To maintain water supply reliability and flexibility, Valley Water's water supply includes a variety of sources including local groundwater, local surface water, imported surface water from the SWP and CVP, recycled and purified water, and transfers. Current and projected water supply yields are presented in Valley Water's UWMP (Valley Water, 2026). Valley Water has an active conjunctive water management program to optimize the use of groundwater and surface water, and to prevent groundwater overdraft and land subsidence. Additionally, Valley Water has made investments to reduce Santa Clara County's reliance on the Delta and increase regional self-reliance. Additional information on Valley Water's efforts to reduce Delta reliance are included within **Appendix G**. Supplementary information on Valley Water's supply reliability can be found in their UWMP (Valley Water, 2026).

Several factors have the potential to negatively impact reliability, including hydrologic variability, climate change, invasive species, infrastructure failure, regulatory actions as well as institutional, political, and other uncertainties. Hydrologic uncertainties influence the projections of both local and imported water supplies and the anticipated reliability of those supplies. Valley Water's supply projections include future projects that they are currently planning and/or implementing to ensure long-term water supply reliability. Projects included in the supply projections are Anderson dam seismic retrofit (2034); Guadalupe, Calero, and Almaden dam seismic retrofits (2035); Pure Water Silicon Valley for DPR (2035); B.F. Sisk Dam Raise (2035); participation in the State's Delta Conveyance Project (2045); groundwater banking; South County Recharge (recharge projects in the South County to increase groundwater recharge capacity). Additionally, Valley Water's long-term conservation goals are to achieve 99,000 AFY in water savings by 2030, and 126,000 AFY by 2050.

Valley Water uses the Water Evaluation and Planning (WEAP) system model to evaluate reliability under different conditions. This deterministic, integrated water resources management modeling tool uses water demand and supply information and accounts for multiple competing uses and priorities. The WEAP model is used primarily to simulate Valley Water's water supply system comprised of facilities to recharge the county's groundwater subbasins, local water supply systems including the operation of reservoirs and creeks, treatment and distribution facilities, and raw water conveyance systems. The model also accounts for non-Valley Water sources and distribution of water in the county such as supplies from the SFPUC, and recycled water. In essence, the model was formulated to simulate the management of the current and future water resources with the county. In addition, Valley Water groundwater flow models were used to estimate initial groundwater storage and natural groundwater recharge. Analyzing projected water supplies and demands requires establishing many assumptions. These modeling assumptions are summarized in Appendix D of Valley Water's 2025 UWMP (Valley Water, 2026).

Climate Change Impact to Overall Water Supply

Valley Water's ability to provide a reliable, clean water supply is challenged by warming temperatures, shrinking snowpack, increasing weather extremes, and prolonged droughts. Valley Water's water supply vulnerabilities to climate change include a decrease in the quantity of imported water supplies as a result of a potential reduction in snow pack and a shift in the timing of runoff, a decrease in the ability to utilize

local surface water supplies as result of reduced precipitation, increases in the severity and duration of droughts, and decreases in water quality due to higher temperatures, wildfire, and changes in flow patterns. Additional vulnerabilities include sea level rise contributing to increased salinity in Delta conveyed supplies. Imported water supplies are subject to hydrologic variability. Storage can help mitigate the impacts of hydrologic variability, as does the development of all-weather supplies.

Recognizing the challenges posed by climate change to water supply reliability, Valley Water incorporated climate change impacts into future demand and supply projections for its water supply planning. In addition, Valley Water's water supply strategy of managing demands, providing drought-resilient supplies, and increasing system flexibility helps adapt to future climate change. Furthermore, Valley Water developed a Climate Change Action Plan to ensure it can continue to provide a clean, reliable water supply, natural flood protection, and water resources stewardship in the future. The plan provides goals, strategies, and actions for each of Valley Water's mission areas, including water supply reliability, flood risk reduction, and water resources stewardship, as well as for emergency response. Valley Water is actively promoting water conservation and reuse to increase resilience and mitigate climate change impacts. Valley Water's long-term and comprehensive water conservation and demand management efforts are discussed in Section 6 of Valley Water's 2025 UWMP (Valley Water, 2026).

Imported Water Supplies

Much of Valley Water's current water supply comes from hundreds of miles away from natural runoff and releases from statewide reservoirs. Imported water supplies are subject to hydrologic variability. This imported water is pumped out of the Delta and brought into the county through the complex infrastructure of the State Water Project (SWP) and Central Valley Project (CVP). Valley Water's SWP and CVP water supplies are subject to a number of additional constraints including regulatory requirements to protect fisheries and water quality in the Delta, and conveyance limitations. Delta-conveyed supplies are also at risk from Delta levee failures due to seismic threats and flooding, sea level rise and climate change, declining populations of protected fish species, and water quality variations (including algal blooms).

Many water quality variations are addressed by blending sources and/or switching sources to the drinking water treatment plants. Algae and disinfection byproduct precursors have been especially challenging during recent drought conditions. To address some of these constraints, Valley Water continues to evaluate the costs and benefits of participating in the Delta Conveyance Project in addition to other water supply options such as developing additional local supplies, securing and optimizing Valley Water's existing water system, and expanding water conservation.

Local Surface Water Supplies

Local surface water supplies are vulnerable to hydrologic variability, with most reservoirs sized for annual operations. In wetter years, Valley Water is challenged to capture all available supply due to reservoir capacity constraints and flood protection needs.

Other factors can also impact Valley Water's reservoir operations and its use of surface water rights, including meeting reservoir operating rules designed to provide incidental flood risk reduction, maintaining storage levels for environmental or recreation purposes, and dam safety requirements. In

1996, a water rights complaint was filed at the State Water Resources Control Board (SWRCB) challenging Valley Water's use of its appropriative water rights in the Stevens Creek, Coyote Creek, and Guadalupe River watersheds (Three Creeks) over its impact on fish habitats. In 2003, Valley Water initiated a Settlement Agreement, Fisheries and Aquatic Habitat Collaborative Effort (FAHCE), with relevant entities to balance the use of Three Creeks waters for meeting the county's water supply needs, while improving habitat conditions. In 2023, Valley Water's Board adopted the FAHCE Final EIR for two of the watersheds (Stevens Creek and Guadalupe River) and started the full implementation of FAHCE Plus flow measures, which modify reservoir releases to continue to support instream flow needs for fish in these two watersheds. The implementation of FAHCE in the Coyote Creek watershed will start after completion of the Anderson Dam Seismic Retrofit Project. Valley Water's local supply is and will continue to be impacted by the implementation of FAHCE.

Groundwater Supplies

Groundwater supply is largely constrained by hydrologic variability and the estimated 548,000 AF of operational storage capacity within the subbasins. The inflows to the groundwater subbasins are constrained by Valley Water's managed aquifer recharge program and natural recharge. Valley Water has about 144,000 AFY of managed recharge capacity, including more than 90 miles of in-stream recharge and 102 off-stream recharge ponds.

Maintaining Valley Water's managed recharge program requires ongoing operational planning for the distribution of local and imported water to recharge facilities; maintenance and operation of reservoirs, diversion facilities, distribution systems, and recharge ponds; and the maintenance of water supply contracts, water rights, and relevant environmental clearance. Valley Water's managed recharge program is critical to maintaining groundwater supply, because natural recharge is insufficient to meet groundwater demands. In drier years, Valley Water is challenged to maintain its groundwater recharge program due to reduced storage in local reservoirs, reduced imported water allocations, and regulations and permit conditions that require Valley Water to maintain environmental stream flows.

Additional details about constraints on groundwater supply and quality and Valley Water's comprehensive groundwater management strategies are described in the 2021 Groundwater Management Plan (<https://www.valleywater.org/SGMA>).

Water Transfers

As discussed in Section 6, Valley Water's Water Master Plan includes dry year options/transfers in critical dry years. The biggest constraints on transfers are transfer capacity in the Delta, water quality, and costs.

Recycled and Purified Water Supplies

While Valley Water has established long-term goals to expand reuse, future recycled and purified water supplies are subject to several key constraints. First, supply availability for both indirect and direct uses is dependent on influent wastewater flows (wastewater generated within the service area), and existing treatment, equipment, and infrastructure capacity within the wastewater treatment plant. Though not a major constraint at this time, it should be noted that in the long term, continued implementation of water

conservation and efficiency measures may reduce wastewater generation within the service area, which could incrementally constrain influent flows available for recycled and purified water production.

Recycled water supplies

For planning purposes, the maximum potential recycled water supply available for use is estimated at approximately 40 million gallons per day (MGD) in the SBWR system, equating to approximately 44,800 AFY. Recycled water production is not subject to a fixed regulatory limit; however, recycled water output is constrained by treatment and system capacities, including RWF's tertiary filtration treatment process capacity. SBWR delivers recycled water to its four retailers via its transmission pump station, which has a maximum pumping capacity of 40 MGD. Accordingly, the 40 MGD value represents a systemwide planning-level estimate of recycled water availability rather than a dedicated supply specific to SJMWS. Based on current conditions, SBWR has capacity to meet all of SJMWS projected recycled water demands and potential recycled water uses as identified within this UWMP. SBWR will continue to evaluate improvements to increase distribution system and/or pump station capacity to meet future recycled water demands of the recycled water retailers. Currently, recycled water supplies are assumed to be 100% reliable under normal, single-dry, and multiple-dry year conditions.

Potable reuse supplies

There is an inherent interdependency between non-potable recycled water and potable reuse supplies. As purified water production increases, it may constrain the volume of recycled water available for non-potable uses. In addition, the planning and operation of purified water projects introduces regulatory, technical, and implementation challenges including reverse osmosis concentrate disposal, source water availability, public acceptance, permitting, and cost. One of the largest challenges with production of purified water supplies will be maximizing the use of those supplies during wetter years when local storage is at or near capacity and/or having other lower-cost supplies available for use. Valley Water is considering and addressing these types of constraints and challenges as it develops its purified water program (Valley Water, 2026).

Basis of Reliability Analysis

Reliability of SJMWS' water supply is determined based upon the reliability of imported water and groundwater production. SJMWS relies upon the information relating to water supply availability and allocations provided by wholesalers and assumes the accuracy of that data for this UWMP.

The normal year supply represents the expected supply under average hydrologic conditions. The dry year supply represents the expected supply under the single driest hydrologic year, and the multiple-dry year supply represents the expected supply during a period of five consecutive dry years. The supply projected to be available to SJMWS during different hydrologic conditions is based upon analyses done by each wholesaler; the basis for each wholesaler's analysis follows on subsequent pages (this data is not compatible with DWR Table 7-1).

Table 7-2 (DWR Table 7-1). Basis of Water Year Data (Reliability Assessment)			
✓	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: Beginning on Page 7-18		
Year Type	Base Year	Volume Available	% of Average Supply
Average Year			
Single-Dry Year			
Consecutive Dry Year 1			
Consecutive Dry Year 2			
Consecutive Dry Year 3			
Consecutive Dry Year 4			
Consecutive Dry Year 5			

SFPUC

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. The HHLSM combines a historical record of hydrology from 1920 through 2025 with a current representation of RWS infrastructure and operations. The simulated operations include decisions on water supply rationing during droughts. The use of those results is described below.

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

In a normal year the SFPUC can provide up to 265 mgd of supply from the RWS. However, within the context of this document, normal year RWS supply is defined as the supply that will be used to meet the full demands on the RWS in a non-drought year.

During development of the 2025 UWMP, SFPUC provided information identifying the total quantity of supply projected to be available to wholesale customers in single and multi-dry years. BAWSCA analyzed SFPUC's information and provided further information identifying the proportion of that supply that would be available to each wholesale customer. The information in SJMWS' analysis includes the proportion of supply identified to be available to San José, as calculated by BAWSCA.

Valley Water

Valley Water’s level of service (LOS) goal is to meet 100% demand during normal years and at least 80% demand during droughts. Valley Water’s water supply planning model simulates the water supply and demand over 100 years, using the historic hydrologic sequence of 1922 through 2021.

The single driest year in the 100 model years occurred in 1977, based on the historic hydrological record. With supplemental supply availability from storage, Valley Water’s modeling indicates that supplies are sufficient to meet demands during any single-dry year through 2050. The greatest challenge to Valley Water’s water supply reliability is multiple dry years, such as those that occurred in 1988 through 1992 and in 2012 through 2016. The five dry-year period used in their analysis is 1988 to 1992, which was an extended and more severe drought within historic record and the modeling period.

Valley Water’s basic water supply strategy to compensate for supply variability is to store excess wet year supplies in the groundwater basin, local reservoirs, San Luis Reservoir, and/or Semitropic Groundwater Bank, and draw on these reserve supplies during dry years to help meet demands. These reserves, along with existing and planned future projects in the WSMP help Valley Water meet demands during a prolonged drought. Future projects and programs recommended in the WSMP – including additional long-term water conservation savings, potable reuse, recharge capacity increases, and banking and storage – were developed in accordance with this policy to minimize the need to call for water use reductions greater than 20%. In summary, as mentioned earlier, to help bridge the gap between supplies and demands during a multi-year drought, Valley Water would likely implement a combination of calls for countywide short-term water use reductions, use of reserves, and obtaining additional supplement supplies through transfers and/or exchanges. The actual mix of these options would be determined through Valley Water’s annual operations planning process. In the first year of drought, Valley Water would most likely rely on available reserves. In subsequent years as reserves are depleted, Valley Water would need to rely more on short-term water use reductions and supplemental supplies. As possible and necessary, SJMWS would coordinate regularly with Valley Water during any dry period to utilize supplies which are most readily available, while preserving and/or limiting use of other supplies.

Recycled Water

Non-potable (recycled) water supplies are projected to be 100% available to meet demands in all water year types; therefore, recycled water is excluded from subsequent reliability calculations and tables.

Comparison of Supplies and Demands

Average Year

Table 7-3 summarizes the service reliability assessment for a normal water year based on water supply and water demand projections. Projected supplies meet projected demands through 2050, as the supplies of the wholesalers, Valley Water and SFPUC, are available to meet the projected demands for all retailers. The demands presented in **Table 7-3** include projected potable water use within the SJMWS.

Table 7-3 (DWR Table 7-2). Normal Year Supply and Demand Comparison (Potable)					
	2030	2035	2040	2045	2050
Supply totals	17,454	18,402	20,159	21,896	23,620
Demand totals	17,454	18,402	20,159	21,896	23,620
Difference	0	0	0	0	0

Notes: Table excludes recycled water which is 100% available in all years.

Single Dry Year

As noted in Valley Water’s draft 2025 UWMP, imported and groundwater supplies appear to be sufficient to meet demands during a single dry year through 2050. This assumes that reserves are at healthy levels at the beginning of the year and that the projects and programs identified in their WSMP are implemented. If reserves are low at the beginning of a single dry year, Valley Water might need to call for water use reductions in combination with using reserves.

Imported supplies from SFPUC during a single dry year are projected to be reduced based on their supply reliability analysis as discussed in this Section. The projected SFPUC supply available to San José in a single-dry year ranges from 62-69% through 2050. Accounting for total water supply management, this represents a total SJMWS potable supply shortage of under 10% in any given year, which will be managed utilizing conservation measures as identified in SJMWS’ Water Shortage Contingency Plan.

Table 7-4 illustrates the reliability of water supplies to meet projected annual water demands for the SJMWS in a single-dry year.

Table 7-4 (DWR Table 7-3). Single Dry Year Supply and Demand Comparison (Potable)					
	2030	2035	2040	2045	2050
Supply totals	15,886	16,733	18,389	20,036	21,682
Demand totals	17,454	18,402	20,159	21,896	23,620
Difference	(1,568)	(1,669)	(1,770)	(1,860)	(1,938)

Notes: Table excludes recycled water which is 100% available in all years. Resulting supply shortfalls will be addressed via use reductions achieved through implementation of the WSCP.

Multiple Dry Years

The greatest challenge to Valley Water’s water supply reliability is multiple dry years, such as those that occurred in 1988 through 1992 and in 2012 through 2016. Multiple dry year periods have the potential to deplete supply reserves in, including local groundwater storage.

With existing and planned projects’ supplies under their WSMP, Valley Water’s diverse water supplies are sufficient to meet demands throughout the full five-year drought in demand base years 2035 and 2040 without having to call for short-term water use reductions, but in demand base years 2030, 2045, and 2050, there will be shortages in the last two years of the drought. The shortages are less than 10% of projected demands, thus within Valley Water’s level of service goal of meeting at least 80% of annual water demand in drought years. Those shortages will be addressed through a combination of supply augmentation from transfer and exchange and water use reductions (Valley Water, 2026).

Projected supplies available to San José from SFPUC during multi-dry years range from 52%-69% each year through 2050. Based on cumulative available water supplies, this represents a total SJMWS potable supply shortage between approximately 8-20% during a given multi-dry year, which will be managed utilizing conservation measures as identified in SJMWS' Water Shortage Contingency Plan. **Table 7-5** presents the projected multiple-dry year water supply and demand assessment for the SJMWS for base years 2030 through 2045.

Table 7-5 (DWR Table 7-4). Multiple Dry Year Supply/Demand Comparison (Potable)					
		2030	2035	2040	2045
First Year	Supply Totals	15,886	16,733	18,389	20,036
	Demand Totals	17,454	18,402	20,159	21,896
	Difference	(1,568)	(1,669)	(1,770)	(1,860)
Second Year	Supply Totals	15,515	16,591	18,232	19,888
	Demand Totals	17,644	18,753	20,506	22,241
	Difference	(2,128)	(2,162)	(2,274)	(2,352)
Third Year	Supply Totals	15,705	16,943	18,580	20,233
	Demand Totals	17,833	19,105	20,854	22,586
	Difference	(2,128)	(2,162)	(2,274)	(2,352)
Fourth Year	Supply Totals	14,914	17,294	18,927	19,558
	Demand Totals	18,023	19,456	21,201	22,930
	Difference	(3,109)	(2,162)	(2,274)	(3,373)
Fifth Year	Supply Totals	14,505	17,646	19,275	19,309
	Demand Totals	18,212	19,808	21,549	23,275
	Difference	(3,707)	(2,162)	(2,274)	(3,967)

Notes: Supply Totals include projected supplies available from SFPUC and Valley Water (which includes groundwater) during five-year shortages ranging from 2030-2034 through 2045-2049. Resulting supply shortfalls will be addressed via use reductions achieved through implementation of the WSCP. Table excludes recycled water which is 100% available in all years.

Drought Risk Assessment

In addition to the long-term water service reliability assessment presented above, the Drought Risk Assessment (DRA) evaluates SJMWS's supply risks under a severe drought period lasting for the next five consecutive years after the assessment is completed (i.e., from 2026 through 2030). The DRA is intended to inform the demand management measures and water supply projects and programs to be included in the UWMP. As a first step to the DRA, SJMWS 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 City uses a combination of groundwater and imported water from its two wholesalers, Valley Water and SFPUC, along with recycled water, to meet customer water demands. Next, SJMWS compared projected demands to the supply availability as identified by the wholesale agencies.

Historically, the City has successfully implemented its Water Shortage Contingency Plan during periods of drought and/or extended dry periods including the recent droughts, such that supply availability was successfully managed. **Table 7-6** below provides a comparison of SJMWS's water supply and demand for an assumed five-year drought period from 2026 through 2030. Under this scenario, the analysis shows that it may be necessary for SJMWS to implement use reduction actions to offset a water supply shortfall

in 2030, unless actual water demands are lower than projected. Recycled water supplies are excluded from **Table 7-6**, such that the table represents potable water use reductions as identified within the WSCP.

Table 7-6 (DWR Table 7-5). Five-Year Drought Risk Assessment Tables (Potable)	
2026	Total
Gross Water Use	15,360
Total Supplies	15,360
Surplus/Shortfall w/o WSCP Action	0
2027	Total
Gross Water Use	15,883
Total Supplies	15,883
Surplus/Shortfall w/o WSCP Action	0
2028	Total
Gross Water Use	16,407
Total Supplies	16,407
Surplus/Shortfall w/o WSCP Action	0
2029	Total
Gross Water Use	16,930
Total Supplies	16,930
Surplus/Shortfall w/o WSCP Action	0
2030	Total
Gross Water Use	17,454
Total Supplies	17,088
Surplus/Shortfall w/o WSCP Action	(366)
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	366
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	2%

Note: Resulting supply shortfalls will be addressed via use reductions achieved through implementation of the WSCP. Table excludes recycled water which is 100% available in all years.

Past and Current Water Conservation Programs and Strategies

As population and economic growth increases, water conservation is a key strategy towards the vision of San José as a thriving, environmentally sustainable city. San José has updated its Water Shortage Contingency Plan, which will provide the direction to manage this finite resource in a way that maintains the quality of life and economic viability in San José. There are multiple drivers for the City to implement water conservation efforts, including for water supply reliability and sustainability. Provided below is a description of City's water conservation efforts.

SJMWS has also been implementing, and plans to continue to implement, the demand management measures described in Section 9. Further, to address potential future dry year supply shortfalls, SJMWS has developed a robust WSCP that systematically identifies ways in which SJMWS can reduce water

demands. At a regional level, SJMWS maintains active involvement in the efforts led by SFPUC and BAWSCA to optimize the use of regional water supplies and pursue additional supplies.

Past Conservation Programs

San Jose Municipal Water System has consistently offered water conservation programs over the past three plus decades. Prior to the mid-1990s, the City conducted indoor and outdoor water conservation programs, primarily in response to the drought of 1987-1992 and flow reduction requirements in the wastewater discharge permit for the RWF. Conservation measures included rebates for Ultra Low Flush Toilets and front-loading washing machines.

Since the mid-1990s, the City's water conservation efforts focused on conservation strategies such as toilet retrofits, washing machine rebates, water use audits, and other residential and commercial conservation programs to reduce indoor water use.

Current Programs and Strategies

Since 1998, SJMWS and Valley Water have maintained a cost-sharing agreement under which both agencies financially support each other's water conservation programs. Through this partnership, the City continues to participate in Valley Water's Landscape Rebate Programs while also benefiting from regional program efficiencies at the county and state levels. Under this arrangement, the City contributes to programs administered by Valley Water and, in turn, receives funding from Valley Water for programs implemented by the City.

Together with wholesaler activities and coordination, the City uses water management tools and options that are being implemented, or are planned for implementation, that maximize the use of local water resources and minimize the need to import water from other regions. To ensure sufficient water supplies continue to be available, the City utilizes actions such as increased implementation of demand management measures, increased use of recycled water, and participation in improvements in regional water management through coordination with BAWSCA and Valley Water. The City has adopted permanent water waste prevention measures which are in effect at all times, addressing items such as water run-off, repair of leaks, landscape irrigation, and the use of water in commercial facilities such as car washes, hotels, and restaurants.

Another key conservation strategy is the City's continued efforts to meet water use efficiency standards consistent with the State's "Making Conservation a California Way of Life" framework and associated legislation (e.g., Senate Bill 606 and Assembly Bill 1668). The former Best Management Practices framework has largely been replaced by updated performance-based standards and urban water use objectives. These standards are incorporated into the City's water conservation programs and are consistent with requirements for State funding eligibility through the California Department of Water Resources.

The City continues to implement and enforce water efficiency standards through the adopted Water Efficient Landscape Ordinance (WELO). The WELO was last updated in 2022, which included new requirements such as limitations and/or prohibitions on the use of turf, non-native or high-water use plants, and hardscape within certain landscape areas. All new development projects are reviewed by the

City's Building Division for compliance with WELO. Additionally, the City will be taking action to align with Assembly Bill 1572, which over the next five years will prohibit the use of potable water for irrigating nonfunctional turf on commercial, industrial and institutional properties. To ensure compliance, the City is in the process of incorporating AB 1572 into the Municipal Code.

The City has also enacted ordinances which limit certain water uses during periods of water shortages. Chapter 15 of the City's Municipal Code includes short-term measures to be implemented for water shortage conditions of 10% and higher if a water shortage is declared by the City Council. Measures include, but are not limited to, landscape irrigation restrictions, public noticing and outreach, and restrictions on filling of pools, spas, and fountains. These measures supplement ongoing water conservation programs and water waste prevention ordinances, and are described further within Section 9 and the WSCP.

8. WATER SHORTAGE CONTINGENCY PLAN

Water Code Section 10632(a) requires that the UWMP address a water shortage through a Water Shortage Contingency Plan (WSCP). The City's WSCP is included as **Appendix H**. The 2025 Guidebook (Appendix F, UWMP checklist) requires the following:

#54. Provide a water shortage contingency plan (WSCP) with specified elements below. (Water Code §10632(a))

#55. Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP. (Water Code §10632(a)(1))

#56. Provide the written decision-making process and other methods that the supplier will use each year to determine its water reliability. (Water Code §10632(a)(2)(A))

#57. 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 Code §10632(a)(2)(B))

#58. Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent 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 Code §10632(a)(3)(A))

#59. Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories. (Water Code §10632(a)(3)(B))

#60. Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions. (Water Code §10632(a)(4)(A))

#61. Specify locally appropriate demand reduction actions to adequately respond to shortages. (Water Code §10632(a)(4)(B))

#62. Specify locally appropriate operational changes. (Water Code §10632(a)(4)(C))

#63. Specify additional mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions are appropriate to local conditions. (Water Code §10632(a)(4)(D))

#64. Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action. (Water Code §10632(a)(4)(E))

#65. The plan shall include a seismic risk assessment and mitigation plan. (Water Code §10632.5)

#66. Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages. (Water Code §10632(a)(5)(A))

#67. 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 Code §10632(a)(5)(B) and 10632(a)(5)(C))

#68. Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP. (Water Code §10632(a)(6))

#69. Describe the legal authority that empowers the supplier to enforce shortage response actions. (Water Code §10632(a)(7)(A))

#70. Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3. (Water Code §10632(a)(7)(B))

#71. 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 Code §10632(a)(7)(C))

#72. Describe the potential revenue reductions and expense increases associated with activated shortage response actions. (Water Code §10632(a)(8)(A))

#73. Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions. (Water Code §10632(a)(8)(B))

#74. Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought. (Water Code §10632(a)(8)(C))

#75. Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance. (Water Code §10632(a)(9))

#76 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 Code §10632 (a)(10))

#77. Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas. (Water Code §10632(b))

#78. Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan. (Water Code §10632(c))

9. DEMAND MANAGEMENT MEASURES

The evaluation of Demand Management Measures (DMMs) occupies a significant portion of the Act. Section 10631 requires the following (items are from the 2025 Guidebook: Appendix F, UWMP checklist):

#81. 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 Water Code Section 10631(e)(1).

The goal of this section is to provide a comprehensive description of the water conservation programs that SJMWS is currently implementing, and plans to implement, in order to meet its urban water use objectives. These Demand Management Measures collectively support compliance with the “Making Conservation a California Way of Life” framework by reducing indoor and outdoor water use, improving system efficiency, and supporting long-term demand reductions.

The Water Code section addressing DMMs was significantly modified in 2014. Retail agencies are required to report six general DMMs (water waste prevention ordinances, metering, conservation pricing, public education and outreach, programs to manage distribution system real loss, and water conservation program coordination and staffing support), along with an “other” category of DMMs, instead of the 14 specific measures previously included in the Water Code.

This section presents a comprehensive description of the City’s past, current, and planned water conservation activities for SJMWS in compliance with these requirements.

Each DMM is discussed below including a description of the DMM program, and a quantification of implementation (e.g., number of participants, devices installed, or outreach reach), including methods used to estimate water savings where applicable.

Demand Management Measures by Valley Water

Santa Clara County is now one of the most water-efficient counties in the State, with water savings around 87,000 AFY as of fiscal year 2024-2025 from the 1992 baseline (Valley Water, 2026). Valley Water is the wholesaler to SJMWS, and the two agencies maintain a strong partnership to plan future water supply and promote water conservation within the service area and throughout Santa Clara County. Valley Water provides regional programs that support SJMWS’s demand management goals, particularly in public outreach and landscape efficiency. To date, Valley Water’s water conservation activities have achieved an estimated 431,000 AF of cumulative water savings from a 1992 baseline (Valley Water, 2026).

Public Outreach

Valley Water conducts extensive public outreach and education programs, including workshops, demonstration gardens, community partnerships, volunteer programs, and educational events such as the annual landscape summit and Going Native Garden Tours. Additional outreach includes classroom presentations, school assemblies, and field trips to water treatment facilities and the San José/Santa Clara Regional Wastewater Facility.

Landscape Programs

Valley Water has made significant investments in reducing countywide water demand through landscape programs. The following programs and actions were completed between FY 2020-2021 and FY 2024-2025, and additional details are given in **Table 9-1**:

- Over 18.8 million square feet of landscape conversion has been rebated
- Over 26,000 irrigation devices have been installed (e.g., high-efficiency nozzles, rain sensors, flow sensors)
- Over 2,400 weather-based irrigation controllers (WBICs) have been installed. WBICs use evapotranspiration (ET_o) data to automatically adjust irrigation schedules based on site-specific and weather conditions, potentially reducing irrigation water use by up to 20%

Additionally, since the launch of rainwater capture rebates:

- Rainwater has been diverted from approximately 80,500 square feet of roof area
- 779 rain barrels have been installed
- Cisterns totaling over 56,500 gallons of storage capacity have been installed

Valley Water plans to continue these programs to support long-term regional conservation goals. Through the cost sharing agreement between Valley Water and SJMWS, SJMWS customers are eligible to receive increased rebate amounts for certain Valley Water rebate programs, which further incentivizes water efficiency improvements by making them more affordable for customers.

Demand Management Measures by SJMWS

SJMWS is committed to reducing water demand and promoting efficient water use. Many programs are implemented in partnership with Valley Water through cost-share agreements.

Water Waste Prevention Ordinance

The City enforces a permanent water waste prevention ordinance under San José Municipal Code Chapter 15.10. These provisions prohibit and limit specific water-wasting practices and promote efficient water use. Key provisions include:

- No landscape irrigation between 10 a.m. and 8 p.m. (with limited exceptions)
- Maximum irrigation run times of 15 minutes per station per day
- Prohibition of excessive runoff
- Timely repair of leaks (initiation within five working days)
- Restrictions on washing paved surfaces and vehicles without shut-off nozzles
- Requirements for water-efficient practices in commercial operations
- Restrictions on potable water use where recycled water is available

These actions are enforced with any violations handled by the City's Code Enforcement Division. There have been no violations recorded in the past five years due to robust public outreach with customers and coordination with Code Enforcement and Valley Water. To minimize violations SJMWS continues to provide outreach to customers to ensure they are aware of these regulations. Between FY 2020-2021 and FY 2024-2025, 363 water waste complaints were logged and addressed within the SJMWS service area through customer engagement.

Table 9-1. Valley Water Landscape Program Participation		
Landscape Programs	Last 5 Years	To Date
Large Landscape Surveys	135	309
Large Landscape Program ¹	1,804	4,819
Turf Conversion (square feet) ²	5,919,558	18,895,998
Irrigation Equipment ³	26,059	388,219
Weather Based Irrigation Controllers (WBIC) ⁴	2,431	8,683
In-Line Drip Conversion (square feet)	933,590	1,100,051
Rain Barrels (number of units)	669	779
Cisterns (gallons)	23,810	56,555
Rain Gardens (square footage of roof area diverted)	68,062	80,451
Landscape Maintenance Program	726	1,441

Notes:

1 Represents total active sites in program: “Last 5 Years” shows number of sites added over indicated period, and “To Date” shows total active sites.

2 Includes pilot programs and partnership with Our City Forest; square footage estimated up to 2011

3 Excludes WBICs

4 Includes pilot programs and participation from residential, commercial, industrial, and institutional sites

Metering

SJMWS meters all potable and recycled water use, with the exception of fire services, and bills customers on a bi-monthly basis. The San José Municipal Code requires the installation of dedicated irrigation meters to certain customers. SJMWS offers a sub-meter rebate, in partnership with Valley Water.

SJMWS utilizes Automatic Meter Reading (AMR) technology, which enables early leak detection. Over 7,000 customers were notified of potential leaks in the past year, with notifications delivered via print, customer engagement portal messaging, and email.

SJMWS is planning to implement an Advanced Metering Infrastructure (AMI) system. The City Council has approved the project, and implementation is expected to begin in the second half of 2026. The AMI system is anticipated to significantly enhance leak detection, improve customer engagement through near real-time usage data, and support long-term water use reductions. SJMWS plans to transition all meters to AMI and develop a formal meter testing program in future years.

Conservation Pricing

SJMWS currently utilizes a uniform volumetric rate structure and does not have a conservation pricing structure. SJMWS will continue to evaluate potential conservation-oriented rate structures as part of future water rate studies, which would allow for better alignment with State efficiency goals.

Public Education and Outreach

SJMWS engages in outreach to customers in a variety of ways including advertisements, social media, print, and direct outreach, as described below. In addition, SJMWS partners with Valley Water for consistent messaging throughout Santa Clara County, including promoting workshops and webinars.

SJMWS provides customers with online tools. All single-family residential customers are eligible to receive Home Water Reports, get water saving tips, and receive leak alerts. Commercial customers may be eligible for Waterfluence, an online tool to assist commercial customers with site-specific irrigation efficiency recommendations.

Public outreach is crucial to Muni Water for water conservation efforts. Between FY 2020-2021 and FY 2024-2025, SJMWS' outreach expenditures were approximately \$30,000-\$35,000 per year. Primary outreach activities included:

Advertisements

- During the identified period, ten digital newspaper ads were posted on Mercury News and distributed in SJMWS' service area to promote key water conservation messages and water saving tips. On average, each ad received 150,000 impressions. An example ad is included in **Appendix I**. The same messages were digitally advertised via Google AdWords and YouTube, and had approximately 300,000 impressions each.
- Other avenues, such as video ads at local Department of Motor Vehicles offices (DMV) and laundromat locations, helped expand the reach of the campaigns. Seven video ads promoting water efficiency were on display at a local DMV near SJMWS' service area, with each ad running approximately 1,900 times. Nine similar video ads were run at five laundromat locations within or near the service area, with each ad running approximately 2,000 times, helping to expand the reach of water efficiency messaging to a broader audience.
- Nine radio ads were aired on Spotify targeting SJMWS' service area zip codes. Those ads had approximately 58,000 impressions each. SJMWS also partnered with Uforia and Hot News 1500 Radio – local Spanish and Vietnamese language radio stations – to promote water conservation messages during the 2021-2022 drought.

Social Media / Web

- More than 100 social media posts were added to the Environment Services Department's Facebook, Instagram, and Twitter pages with topics including water use rules, tips to find and fix leaks, indoor and outdoor water saving tips, tree watering tips, drought-tolerant plant choices, available rebates, water-wise gardens, free Home Water Reports, and Valley Water's webinars and workshops. The social media posts were developed and released to align with current trends, holidays, and seasons. An example social media post is included in **Appendix I**.
- SJMWS' webpages have been regularly updated with new information and practical water saving tips. In particular, the "Finding and Fixing Water Leaks" page was revamped in 2025 to include step-by-step instructions on how to detect a home water leak in the home or identify whether it is indoors or outdoors.

Print

- Multiple printed postcards were developed highlighting simple ways residential water customers can reduce water use, particularly during peak demand periods. Each postcard was mailed to over 23,500 residential customers.
- Since 2024, Muni Water has also promoted the Non-Functional Turf Irrigation Ban to Commercial, Industrial and Institutional (CII) customers through targeted outreach. Two postcards distributed to more than 1,000 CII customers provided information on the new ban's requirements, and

available programs and rebates to help customers comply. Example postcards are included in **Appendix I**.

- Approximately 600,000 Home Water Reports were sent out over the past five years, with each residential customer receiving six reports per year.

Events

- SJMWS provides water conservation outreach at information booths at fairs and public events within its service area, including materials and tools such as aerators, toilet leak detection tablets, and educational materials.

These outreach efforts have contributed to long-term behavioral changes and sustained reductions in water use.

Programs to Assess and Manage Distribution System Real Loss

SJMWS implements a comprehensive program to improve system efficiency and reduce non-revenue water losses, including:

- Hydrant maintenance completed on a rolling three-year cycle
- Leak detection and investigation, including a full system leak detection audit completed during 2025 via sounding analysis conducted at each hydrant and water meter
- Infrastructure replacement through the Capital Improvement Program
- Annual AWWA Water Loss Audit reporting
- AMR data supports proactive leak detection, with over 7,000 customer leak alerts issued in the past year

Water Conservation Program Coordination and Staffing Support

SJMWS has employed dedicated water conservation staffing since 1995. The current program is managed by:

Benjamin Pink
Supervising Environmental Services Specialist
3025 Tuers Rd., San José, CA 95121
(408) 277-3671
Benjamin.Pink@sanjoseca.gov

The program currently includes three full-time staff, supported by additional personnel as needed. The annual conservation program budget is approximately \$640,000, funded through water rates and cost-sharing agreements.

Other Demand Management Measures

Rebates and Retrofits

SJMWS offers conservation devices (e.g., aerators, showerheads) and partners with Valley Water to provide rebates for landscape conversions, irrigation equipment upgrades, rainwater capture systems, and graywater systems. Through the cost-sharing program with Valley Water, SJMWS contributes

additional funding for its customers to receive increased rebate amounts on top of rebates provided by Valley Water.

Landscape Programs

Approximately 60 landscape surveys were conducted in the past five years within the service area. Programs promote irrigation efficiency and landscape water budgeting. The Waterfluence online platform is offered to commercial customers with a dedicated irrigation meter and creates a site-specific water usage estimate, allowing customers to track usage.

Residential Surveys

SJMWS customers are eligible for free indoor and outdoor water use surveys through Valley Water programs. These surveys include leak detection, irrigation system evaluation, installation of efficiency devices, and customized water-saving recommendations. Since 2017, Valley Water has conducted 1,296 residential surveys.

Water-Efficient Device Distribution

Through Valley Water's eCart online service program launched in 2021, 18,386 orders have been processed countywide with device distribution including faucet aerators, showerheads, and DIY kits.

Graywater Programs

Valley Water provides graywater rebate programs countywide, in which 36 rebates and 71 installations have been completed in the past five years.

Implementation and Effectiveness

Water conservation programs over the past five years (summarized in **Table 9-2**) have resulted in lasting reductions in water demand, particularly through permanent landscape changes and improved irrigation efficiency. Per capita water use has remained below pre-drought levels, reflecting sustained behavioral and structural changes. Programs such as turf conversion, irrigation upgrades, and public outreach have contributed to long-term water savings. While future gains may be more limited, SJMWS will continue to implement, expand, and refine its conservation programs, including AMI technology, public outreach and education, policy and ordinance updates, and partnerships with wholesale providers and other agencies.

Table 9-2. Demand Management Measure Implementation 2021-2025			
Program	Unit	Total	Notes
Water Waste Ordinances			San José Municipal Code Chapter 15.10
Water Conservation Staff	employees	3	
Social Media Posts	posts	100+	@sjenvironment
Digital Advertisements	ad	30+	approximately 300,00 impressions each
Digital News Advertisements	ad	10	each ad received 150,000 impressions
Radio Advertisements	ad	12	
Postcards	ad	8	
DMV Advertisements	ad	7	each ad running approximately 1,900 times
Laundromat Advertisements	ad	9	each ad running approximately 2,000 times
Website	# reached	100,000+	SJEnvironment.org/WaterEfficiency SJEnvironment.org/WaterWiseBusinesses SJEnvironment.org/Fix-Leaks
Email	emails	20	over 10,000 email recipients
Residential Bill Comparison	households reached	600,000	Home Water Report sent to each residential customer 6 times per year
High Bill Contact Programs	households	3,000+	leak alert outreach (staff outreach)
Notification of Leaks	households	3,000+	leak alert outreach (WaterSmart, Customer Service)
Landscape Irrigation Hardware Rebate Program ¹	# rebates	25	
Turf Removal Program ¹	square feet	343,419	landscape removed/converted
Landscape Water Surveys/Audits ¹	# surveys	17	
Water Wise Outdoor Survey ¹	# surveys	43	
DIY home audit kits ¹	# kits	413	

Notes:

1 This item is implemented and/or distributed by wholesaler (Valley Water) on behalf of SJMWS

10. PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

This section provides guidance for addressing the Water Code requirements for a public hearing; Plan adoption, submittal, and implementation; and the process for amending the adopted Plan. Section 10 of the 2025 Guidebook (Appendix F, UWMP checklist) requires the following:

#80. Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance). (Water Code §10608.26(a))

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

#82. Each urban water supplier shall update and submit its 2025 plan to the department by July 1, 2026. (Water Code §10621(f))

#83. Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan. (Water Code §10642)

#84. The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. (Water Code §10642)

#85. Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified. (Water Code §10642)

#86. Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library. (Water Code §10644(a))

#87. Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption. (Water Code §10644(a)(1))

#88. The plan, or amendments to the plan, submitted to the department shall be submitted electronically. (Water Code §10644(a)(2))

#89. If revised, submit a copy of the WSCP to DWR within 30 days of adoption. (Water Code §10644(b))

#90. Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours. (Water Code §10645(a))

#91. Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours. (Water Code §10645(b))

This section includes specific information on how the UWMP for the City of San José for their SJMWS was prepared and adopted. To satisfy the requirement, this 2025 UWMP includes the water use and planning data for the entire year of 2025 and the data in this UWMP are included on a calendar year basis.

Notice of Public Hearing

The City held a public hearing on June 2, 2026 prior to adopting this UWMP and the WSCP. The public hearing notice and draft UWMP were posted on the City website during the same timeframe as published in the local newspaper, San José Mercury News. The two government agencies noticed for the public hearing included the city and county as shown in **Table 10-1**, in addition to the public. The public hearing provided an opportunity for the public to provide input to the UWMP before it was adopted. Notice of the public hearing was also sent to all agencies listed in **Table 2-5**.

Table 10-1. Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
San José	X	X
County Name	60 Day Notice	Notice of Public Hearing
Santa Clara	X	X

Notice to Cities and Counties

The following subsections provide description of the two required notices that the City of San José provided to cities and counties. **Table 2-5** lists additional agencies contacted during the preparation of this UWMP.

Notification Requirement – 60 days prior to Review/Adoption Hearing

The City has encouraged agency and community participation in its UWMP development efforts since the first plan was developed in 1985. Pursuant to the requirement in Section 10642 of the Water Code, the City notified the appropriate agencies that the 2025 UWMP was being reviewed and changes were being considered. During February 2026, the City emailed notice to the two wholesale water agencies, SFPUC and Valley Water; water management agencies within and outside its service area including other retail water suppliers that contract with the wholesalers; the regional coordinator, Bay Area Water Supply and Conservation Agency (BAWSCA); and the County of Santa Clara. **Table 2-5** lists the agencies contacted during the preparation of this UWMP. The notifications informed these agencies of the City's intent and that the planning efforts were underway and welcomed any comments or other participation. Follow up with staff from some agencies was conducted to further coordinate and obtain information necessary for the Plan. The goal of coordination was to encourage input and participation during planning.

Notice to the Public

Notices of the public hearing were advertised in the local newspaper (San José Mercury News) and posted on the City website as part of the City Council meeting agenda, and included the time and place of hearing as well as the location where the UWMP and WSCP are available for public inspection. A sample copy of the notice is included in **Appendix D**.

Public Hearing and Adoption

A public hearing of the 2025 UWMP and the WSCP must take place prior to or on the day of adoption by City Council. In conformance with the requirements, the public hearing took place at the same Council meeting as the adoption hearing. The City Council meeting agenda is included in **Appendix D**.

As required by the Water Code, a formal public hearing was held on June 2, 2026, to receive public input on the 2025 UWMP and WSCP. Any written and oral comments were considered at the public hearing. The City Council formally adopted the 2025 UWMP and WSCP on June 2, 2026 prior to its submittal to DWR. Implementation will take place as identified in the plan. The adoption resolution is included in **Appendix J**. After implementation, any amendments to the adopted UWMP and WSCP will follow each of the steps for notifications, public hearing, adoption, and submittal as outlined in Section 10 and 2025 UWMP Guidebook for the amended UWMP and WSCP.

Plan Submittal

Submittal to DWR

The 2025 UWMP and WSCP was submitted to DWR within 30 days of adoption and by July 1, 2026. Following submittal, DWR will review the UWMP utilizing the provided checklist (in Appendix F of the 2025 Guidebook) and make a determination as to whether or not the UWMP addresses the requirements of the Water Code. Upon completion of the UWMP review, DWR will issue a letter to the City with the results of the review.

As stated in the 2025 Guidebook, DWR has developed an online submittal tool, WUE data, which was used to submit the 2025 UWMP. The tool accepts completed UWMPs as well as tabular data from all the DWR data tables. The WUE data portal is publicly available online and can be accessed at <https://wuedata.water.ca.gov/>.

Submittal to the California State Library, Cities, and County

To satisfy the Water Code Section 10635(b), the City submitted a copy of the adopted 2025 UWMP, including WSCP, to the California State Library within 30 days from the date of adoption. The City also shared a copy of the adopted 2025 UWMP and WSCP with Santa Clara County, as well as City of San José staff.

Amending an Adopted UWMP or WSCP

Amendments to the Adopted UWMP or WSCP

After implementation, any future amendments or changes to the adopted 2025 UWMP or WSCP will be adopted and filed in the same manner as the original plan. Using the UWMP checklist below, and consistent with the requirements of Article 3 of the Urban Water Management Planning Act and the 2025 UWMP Guidebook, the City will complete all applicable notification, public hearing, adoption, and submittal requirements for any amended UWMP or WSCP.

UWMP Amendment Checklist:

Notification	Water Code Section
Notify at least 60 days prior to public hearing to any city or county that the City will be reviewing plan and considering amendments or changes to plan	10621(b)
Encourage active involvement of diverse cultural, economic, social elements of service area population	10642
Prior to adopting—make available for public inspection on City’s website	10642
Provide notification of time and place of hearing, publish in City’s jurisdiction pursuant to Government Code §6066. Publish UWMP and WSCP notification in local newspaper at least once a week for two successive weeks with at least 5 days in between	10642
Provide notification of time and place of hearing to any city or county within which the City provides water supplies in accordance with Government Code Chapter 17.5	10642
No later than 30 days after adoption, submit the amended or revised Plans to DWR. Submit to the California State Library. Submit to any city or county within which the Supplier provides water	10644(a)(1)

As an urban water supplier, if the City amends the adopted UWMP or WSCP, copies of the amended plan will be submitted within 30 days of adoption to the DWR, the California State Library, and the local city/county.

In accordance with Water Code Section 10644(b), if the City revises its WSCP after DWR acceptance of the 2025 UWMP, the revised WSCP will be submitted electronically to DWR within 30 days of adoption using the DWR developed online submittal tool, WUE data.

Public Availability

The UWMP and WSCP were made available to the public within 30 days of submission to the DWR. The UWMP and WSC are on the City’s website at <https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/drinking-water/muni-water-documents-reports>.

REFERENCES

2025 Guidebook. Department of Water Resources. January 2026.

BAWSCA, 2026. List of Documents provided from BAWSCA to member agencies.

City of San José, 2016. *San José Municipal Water System 2015 Urban Water Management Plan*.

City of San José, 2021. *San José Municipal Water System 2020 Urban Water Management Plan*.

City of San José, 2020. *Envision San José 2040 General Plan*.

Department of Water Resources, 2016. California Department of Water Resources. *California Drought Contingency Plan (2010)*.

State Water Resources Control Board, Proposed Water Loss Performance Standards.

https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/waterlosscontrol/2020/proposed_water_loss_standards_1dec2020.pdf

Valley Water, 2026. Valley Water Draft 2025 Urban Water Management Plan.