



SAN JOSE WATER



2025

Urban Water
Management Plan

San Jose Water Company

2025 Urban Water Management Plan

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Draft Report

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Appendices

Appendices are not included in the draft. Please contact UWMP@sjwater.com for more information.

Abbreviations and Acronyms

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AF	Acre-foot
AMI	Automated Meter Infrastructure
AWWA	American Water Works Association
BARDP	Bay Area Regional Desalination Project
BARR	Bay Area Regional Reliability
BMP	Best Management Practices
CalWEP	California Water Efficiency Partnership
CCAP	Climate Change Action Plan
CII	Commercial, Industrial, and Institutional
CPUC	California Public Utilities Commission
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CWC	California Water Code
DCP	Delta Conveyance Project
DCR	Delivery Capability Report
DDW	California Division of Drinking Water
DMA	District Metered Area
DMM	Demand Management Measures
DOF	California Department of Finance
DPR	Direct Potable Reuse
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
EAMP	Enterprise Asset Management Plan
EPA	Environmental Protection Agency
GIS	Geographic Information System
gpcd	Gallons per Capita per Day
GPSCD	Gallons per Service Connection per Day
GWAMP	Groundwater Well Asset Management Plan
GWMP	Groundwater Management Plan
HCD	California Department of Housing and Community Development
IPR	Indirect Potable Reuse
kWh	Kilowatt Hour
MAP	Monitoring and Assessment Program
MCL	Maximum Contaminant Limit
MG	Million Gallons
MGD	Million Gallons per Day
MOU	Memorandum of Understanding
NPDES	National Pollutant Discharge Elimination System

PFAS	Per- and Polyfluoroalkyl Substances
PFOS	Perfluorooctane sulfonate (a type of PFAS)
PWS	Public Water System
RHNA	Regional Housing Need Allocation
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBWR	South Bay Water Recycling
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SJ/SC RWF	San José/Santa Clara Regional Wastewater Facility
SJW	San Jose Water Company
SLDMWA	San Luis and Delta-Mendota Water Authority
SWP	State Water Project
SWRCB	California State Water Resources Control Board
SWRP	Strategic Water Resources Plan
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
WEAP	Water Evaluation and Adaptation Planning
WSCP	Water Shortage Contingency Plan
WSRA	Water Service Reliability Assessment
WSMP	Water Supply Master Plan
WTP	Water Treatment Plant

Chapter 1

Introduction and Overview

This chapter provides background on San Jose Water Company (SJW), discusses the importance and uses of the 2025 Urban Water Management Plan (UWMP), identifies changes since the 2020 UWMP, presents the organization of the UWMP, describes the relationship of the UWMP to other planning efforts, and demonstrates consistency with the State of California’s Delta Plan.

Founded in 1866, SJW is one of the largest investor-owned utilities in the United States, serving approximately one million residents in Santa Clara County through about 230,000 service connections. SJW’s service area includes most of the cities of San Jose and Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County. As an investor-owned utility, SJW’s rates and operations are regulated by the California Public Utilities Commission (CPUC).

The California Urban Water Management Planning Act of 1983 requires urban water suppliers providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet (AF) annually, to adopt an UWMP every five years. An UWMP serves as a long-term water resource planning document that provides an understanding of a water supplier’s past, current, and future water conditions and management. UWMPs are important for ensuring that adequate water supplies are available to meet existing and future water needs. The UWMP integrates many elements, including land use changes and population growth, historical and projected water demands, water supply reliability, climate change, water shortage contingency planning, and demand management programs. UWMPs prepared throughout California provide the state governing bodies with a picture of statewide water reliability, support coordination between water suppliers and other agencies, and are relevant for other local, regional, and statewide water planning efforts.

1.1 Background and Purpose

Water planning is an essential function of water suppliers and is critical as California grapples with threats of drought conditions and expected long-term climate changes. The 2025 SJW UWMP serves two primary purposes: (1) as a master plan for water supply and resources management, and (2) a reporting document for compliance with the California Water Code (CWC) and California Urban Water Management Planning Act of 1983 (Act).

The Act was originally developed due to concerns regarding potential water supply shortages throughout California and focused on water supply reliability and water use efficiency. Since its original passage, there have been several amendments in response to the state’s water shortages, droughts, and other factors. A significant amendment to the Act was made in 2009, following the drought of 2007-2009 and the governor’s call for a statewide 20% reduction in urban water use by year 2020. This was the California Water Conservation Act of 2009, also known as Senate Bill (SB) x7-7, which required agencies to establish

water use targets for 2015 and 2020 that would result in statewide savings of 20% by 2020. SJW met its 2020 water use target, as reported in its 2020 UWMP.

Another significant amendment to the Act was made in 2018, with SB 606 and Assembly Bill (AB) 1668. Following the 2012-2016 drought, the governor issued Executive Order B-37-16 “Making Water Conservation a California Way of Life.” SB 606 and AB 1668 implement this directive by establishing measures to improve water use efficiency, reduce waste, strengthen local drought resilience, and enhance agricultural water management and planning. Among other provisions, SB 606 and AB 1668 required the State Water Resources Control Board (SWRCB), in coordination with the Department of Water Resources (DWR), to establish long-term urban water use efficiency standards by June 30, 2022. Those standards include components for indoor residential use, outdoor residential use, water losses, and other uses. In addition, water suppliers will be required to report annually on their compliance with their water use objectives, which is based on the water use standards developed by the State. SB 606 and AB 1668 also require new five-year drought risk assessments and additional requirements for water shortage contingency planning. SJW’s 2025 UWMP addresses the SB 606 and AB 1668 requirements, as well as other requirements in the CWC related to the UWMP (Sections 10610-10657 and 10608).

1.2 New Requirements for 2025 UWMPs

There have been no statutory changes to the requirements for UWMPs since the 2020 UWMP. The DWR Guidebook includes some minor revisions and clarifications, but no major changes. The urban water use objectives and water loss standards have been established by the State since the 2020 UWMP and those are discussed.

1.3 Plan Organization

This report is organized in accordance with the recommended format provided by the DWR UWMP Guidebook.¹ The UWMP contains ten chapters, followed by appendices that provide supporting documentation for the information presented in the report. Each chapter begins with an overview of the chapter’s contents and a lay description summarizing key information from the chapter. Most tables throughout this UWMP are standardized submittal tables provided by DWR to be completed by water suppliers.

- **Chapter 1 – Introduction and Overview**
 - Provides a discussion on fundamentals of the UWMP
- **Chapter 2 – Plan Preparation**
 - Provides information on the processes used for developing the UWMP, including efforts in coordination and outreach
- **Chapter 3 – System Description**
 - Includes a description of SJW’s service area and system, a map of the service area, the climate, and land use in the service area

¹ DWR. (Jan. 2026). *2025 UWMP Guidebook*. Urban Water Management Plans: Guidance Documents and Resources. <https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans>

- **Chapter 4 – System Water Use**
 - Describes and quantifies current and projected water uses within SJW’s service area
- **Chapter 5 – Senate Bill x7-7 Baselines, Targets, and 2020 Compliance**
 - Describes SJW’s compliance with the 2020 per-capita water conservation mandate
- **Chapter 6 – System Supplies**
 - Describes and quantifies current and projected potable and non-potable water supplies
- **Chapter 7 – Water Supply Reliability and Drought Risk Assessment**
 - Describes water service reliability through at least a 20-year planning horizon under normal, single dry year, and five consecutive dry year conditions
- **Chapter 8 – Water Shortage Contingency Planning**
 - Provides a structured plan for dealing with water shortage, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption
- **Chapter 9 – Demand Management Measures**
 - Communicates efforts to promote conservation and reduce demand on water supplies
- **Chapter 10 – Plan Adoption, Submittal, and Implementation**
 - Describes and documents steps taken to make the UWMP publicly available, as well as steps taken to adopt and submit the UWMP in accordance with the CWC.

1.4 Relation to Other Planning Efforts

Local planning and preparation remains the fundamental focus of the 2025 UWMP, as UWMPs are prepared by suppliers that have in-depth knowledge of their water systems. However, preparation of the UWMP requires coordination with other planning agencies. Information in this 2025 UWMP reflects SJW’s coordination with Valley Water, South Bay Water Recycling, city and county jurisdictions in which SJW serves water, and Association of Bay Area Governments (ABAG). To ensure a holistic planning process, SJW’s UWMP integrates relevant information from other past SJW planning efforts, including Water Master Plans, Strategic Water Resources Plans, Recycled Water Master Plans, as well as external references, such as city and county General Plans, Groundwater Management Plans, and local and regional Hazard Mitigation Plans.

1.5 Grant or Loan Eligibility

For an urban water supplier to be eligible for any water management grant or loan administered by DWR, the agency must have a current UWMP on file that has been determined by DWR to address the requirements of the CWC. A current UWMP must also be maintained by the water supplier throughout the term of any grant or loan administered by DWR. SJW’s 2025 UWMP has been prepared in order to meet eligibility requirements for grants and loans administered by the State and/or DWR.

1.6 Demonstration of Consistency with the Delta Plan

For water suppliers that anticipate participating in, or receiving water from, a proposed project (covered action) under the Delta Plan, DWR recommends demonstrating consistency with the Delta Plan’s policy to reduce reliance on the Sacramento-San Joaquin Delta (Delta). Covered actions include, but are not limited to, projects such as a multi-year water transfer, conveyance facility, or new diversion that involves

transferring water through, exporting water from, or using water in the Delta, per California Code of Regulations, Title 23, Section 5003.

Through SJW's water wholesaler, Valley Water, SJW receives imported water supplies from the Delta. Additional information on Valley Water's and, by extension, SJW's reduced reliance on the Delta can be found in Section 6.1.1.1 and [Appendix X](#). Calculations for the reduced reliance on the Delta in [Appendix X](#) were prepared using optional submittal tables from DWR.

1.7 Risks Related to Water Supply Availability

As SJW's water wholesaler, Valley Water provides or manages the majority of SJW's water supplies through treated water deliveries and groundwater basin management. As required, certain sections of this UWMP were prepared using information provided by Valley Water from its draft 2025 UWMP, particularly the sections on Future Water Supply Projects (Section 6.1.9) and Water Service Reliability and Drought Risk Assessment analyses (Sections 7.2 and 7.3). Additional details are available in Valley Water's 2025 UWMP. Assumptions for the water service reliability analyses can be found in Section 7.2.1.

Valley Water indicated that it will continue to use its Water Supply Master Plan 2050 (WSMP) and annual Monitoring and Assessment Program (MAP) framework to inform long-term planning and investment decision-making. SJW will continue to independently evaluate Valley Water's planning assumptions, supply forecasts and proposed investments, while also assessing complementary and alternative water supply options to meet customer needs and affordability.

Through these efforts, SJW seeks to maintain reliable and resilient water supplies while prioritizing cost-effectiveness, flexibility, and alignment with customer and regulatory objectives, including minimizing the risk of overinvestment and unnecessary rate impacts.

Chapter 2

Plan Preparation

This chapter describes the preparation of SJW’s 2025 UWMP, including coordination with other relevant agencies, and identifies standard reporting periods and units used throughout this UWMP.

This UWMP covers both water systems that SJW manages – the SJW system and the City of Cupertino Municipal Water System, which SJW operates, maintains, and improves through a lease agreement. SJW is a retail water agency, with Valley Water and South Bay Water Recycling (SBWR) as its water wholesalers. Data in this UWMP is reported on a calendar year basis and uses million gallons (MG) as the unit of measurement. Valley Water and the cities and counties in which SJW serves water were notified of SJW’s UWMP preparation and were encouraged to contact SJW’s UWMP preparers if they had any questions or comments about the UWMP or process. SJW also provided its wholesalers with SJW’s projected water demand over the next 25 years and contacted cities within the service area, as well as Santa Clara County, to identify appropriate land use information to be used in this UWMP.

2.1 Basis for Preparing a Plan

In accordance with CWC Section 10617, 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. CWC Section 10621 states each urban water supplier shall update its UWMP every five years and submit its 2025 UWMP to DWR by July 1, 2026. SJW manages two Public Water Systems (PWSs) as shown in Table 2-1 and is beyond the service connection and AF reporting threshold and therefore has prepared this UWMP.

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (MG) ^(a)
Add additional rows as needed			
CA4310011	San Jose Water Company	227,623	31,810
CA4310018	City of Cupertino	4,644	630
Total		232,267	32,440
NOTES: Includes potable, raw, and recycled water demands. Number of municipal connections in 2025 is as of December 31, 2025.			

(a) In acre-feet, the unit specified in the water code, the SJW system supplied 97,000 AF and the City of Cupertino system supplied 1,900 AF, totaling 99,600 AF in 2025, significantly over the 3,000 AF at which a supplier is required to prepare an UWMP.

2.2 Regional Planning

A group of water suppliers agreeing among themselves to plan, comply, and report as a region on the requirements of SB x7-7, is referred to as a Regional Alliance. Being a member of a Regional Alliance is not required and does not take the place of submitting an UWMP or Regional Urban Water Management Plan (RUWMP). While this 2025 UWMP was developed in coordination with Valley Water, and SJW actively participates in water supply and UWMP retailer meetings facilitated by Valley Water, SJW’s 2025 UWMP was developed as an individual UWMP, as shown in Table 2-2.

Submittal Table 2-2: Plan Identification		
Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
<input checked="" type="checkbox"/>	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	

2.3 Calendar Year and Units of Measure

SJW is a retail water agency and has elected to report data on a calendar year basis using million gallons (MG) as its unit of measurement for DWR standardized tables, as shown in Table 2-3.

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesale supplier
<input checked="" type="checkbox"/>	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
<input checked="" type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
Units of measure used in UWMP (Select from the drop down list).	
Unit	MG

2.4 Coordination and Outreach

Coordination and outreach are key elements to developing a useful and accurate UWMP. To this end, and in accordance with CWC Section 10621, notices of UWMP preparation were sent to Valley Water, Santa Clara County, and all cities served by SJW on January 7, 2026. Notification was provided more than 60 days prior to the public hearing for the UWMP. In addition, notified agencies were encouraged to contact SJW’s UWMP preparers if they had any questions or comments about the UWMP or process. Additional details on the notice of UWMP preparation and public hearing can be found in Chapter 10.

Valley Water is the wholesale water supplier in Santa Clara County and facilitates water supply and conservation subcommittee meetings for all 13 major retailers in Santa Clara County, the cities in Santa Clara County, County of Santa Clara, San Francisco Public Utilities Commission (SFPUC), and the Bay Area Water Supply and Conservation Agency. SJW staff attend these meetings to discuss current and projected water supplies and demands. The development of this UWMP was a collaborative effort between SJW, Valley Water, and other water and wastewater stakeholders in Santa Clara County. In accordance with CWC Section 10631, SJW has informed Valley Water and SBWR of its projected water demand over the next 25 years, as shown in Table 2-4. SJW also contacted representatives from each of the cities within the service area as well as Santa Clara County to identify appropriate land use information.

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name
Add additional rows as needed
Valley Water
South Bay Water Recycling

Chapter 3

Service Area Description

This chapter describes SJW and presents an overview of the system, sources of supply, climate, population, demographics, socioeconomics, and land uses within the service area.

In addition to its own water system, SJW operates, maintains, and improves the City of Cupertino Municipal Water System through a lease agreement. SJW also serves water to, but does not manage, several small water systems. All water systems that SJW operates or serves are included in the analyses that were conducted as part of this UWMP. Population in SJW’s service area is anticipated to increase from 958,269 in 2025 to 1,259,559 in 2050. Most of the service area is built out and most new developments are occurring within urbanized areas. Single-family residential currently comprises the most common land use in the service area. The service area experiences a Mediterranean climate with cool, wet winters and warm, dry summers. Climate change is anticipated to result in warming temperatures, shrinking snowpack, increasing weather extremes, and prolonged droughts.

3.1 General Description

Founded in 1866, SJW is one of the largest investor-owned utilities in the United States, providing high quality, life-sustaining water to approximately one million residents in Santa Clara County through about 230,000 service connections. As an investor-owned utility, SJW is regulated by the CPUC. The CPUC is responsible for regulating SJW’s rates, service, water quality, and operational safety.

In addition to its own water system (PWS number 4310011), SJW also operates, maintains, and improves the Cupertino Municipal Water System (PWS number 4310018) through a lease agreement. Combined, the SJW and City of Cupertino water systems consist of approximately 2,460 miles of pipelines, 101 pressure zones, 226 booster pumps, 89 wells, 94 tanks and reservoirs, 11 raw water intakes, 5 raw water impoundments, 3 water treatment plants, and tens of thousands of other assets including valves, meters, service lines, fire hydrants, and chemical systems.

The two systems are reported together in this UWMP because both systems are operated by SJW and are contiguously connected by zone valves and interties. All analyses that were conducted as part of this UWMP (population projections, water demand projections, water supply reliability, water shortage contingency planning, demand management measures) are applicable to both systems.

SJW also serves water to, but does not manage, several small water systems. Small water systems receive a master water service from SJW but are responsible for distributing the water within their respective systems and are overseen by other regulatory agencies. Their population and demands are accounted for and reported in this UWMP.

Including the other water systems that it operates or serves, SJW’s service area spans about 145 square miles, including most of the cities of San Jose and Cupertino, the entire cities of Campbell, Monte Sereno,

Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County, as shown in Figure 3-1. Most of the service area is built out and new development is primarily urban infill projects.

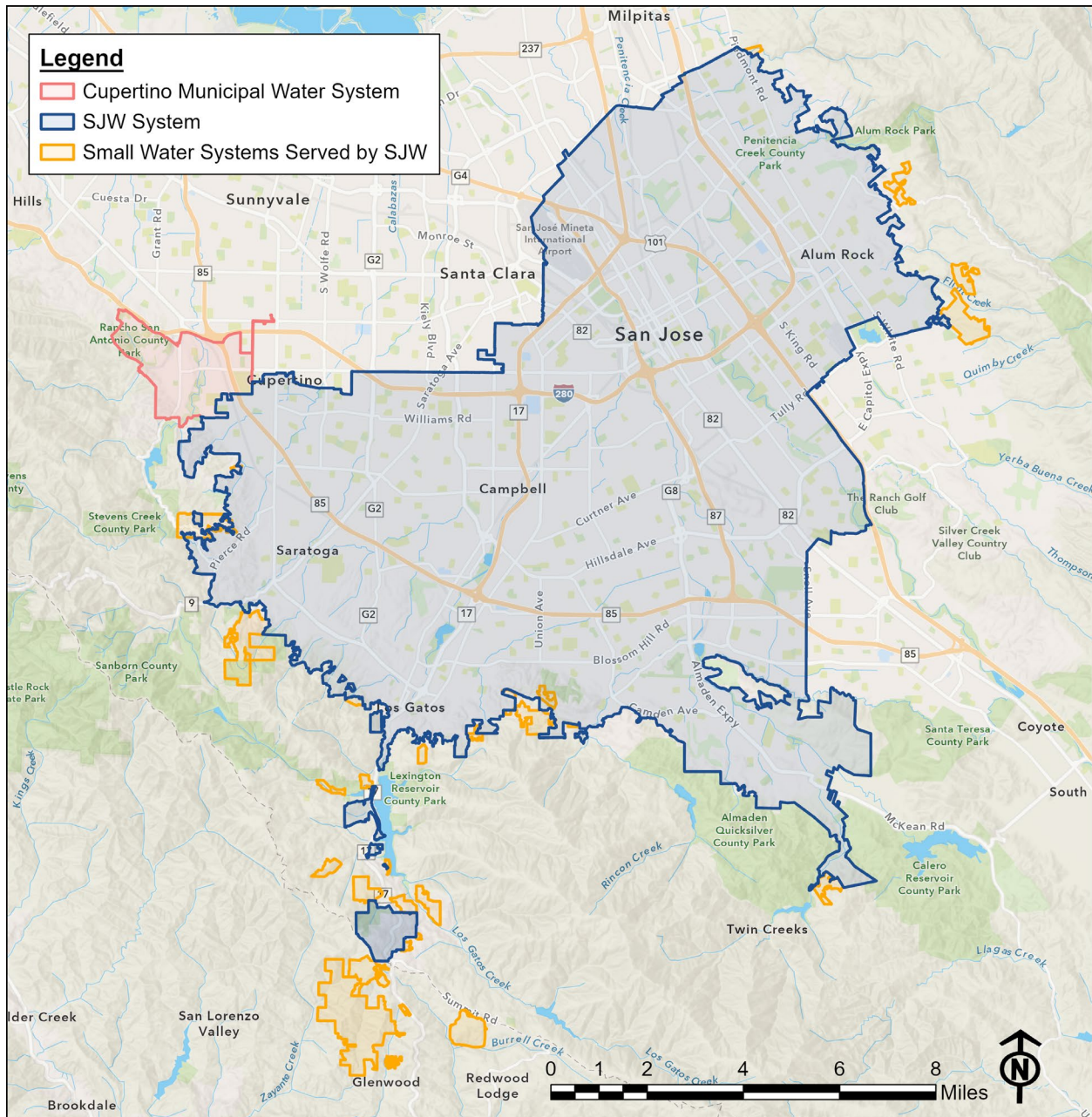


Figure 3-1. SJW Service Area

3.2 Sources of Supply

SJW has three sources of potable water supply: purchased, or imported, treated surface water from Valley Water, groundwater from the Santa Clara Subbasin, and surface water from local watersheds. A fourth and growing source of supply is non-potable recycled water. Figure 3-2 shows a breakdown of these sources of supply in 2025. The amount of supply from each source varies year to year, depending on hydrologic conditions, groundwater levels, water deliveries, and demand for recycled water. Additional details on sources of supply can be found in Chapter 6.

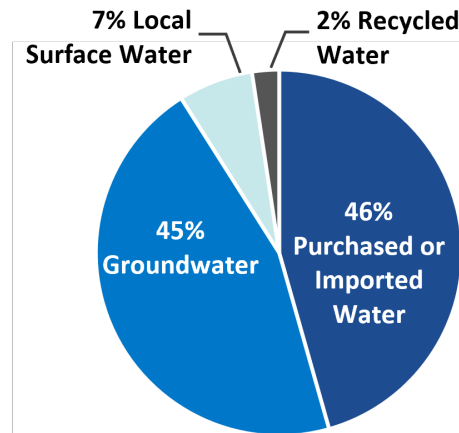


Figure 3-2. SJW Sources of Supply in 2025

SJW is under contract with Valley Water to purchase about 50% of its average water supply needs. This water originates from several sources including Valley Water’s local reservoirs, the State Water Project, and the federal Central Valley Project San Felipe Division before it is treated at one of three Valley Water operated treatment plants and then piped into SJW’s distribution system at various turnout locations.

On average, groundwater from the Santa Clara Subbasin accounts for about 40% of SJW’s total water supply. The aquifer is recharged naturally by rainfall and streams and artificially by recharge ponds operated by Valley Water.

SJW also diverts surface water from Saratoga Creek and Los Gatos Creek watersheds to one of the three SJW water treatment plants for treatment prior to entering the distribution system. Surface water supplies are variable depending on annual rainfall and generally contribute less than 10% of total water supply.

Recycled water use has grown over the years with increased customer demand for recycled water and construction of new recycled water pipelines. As of 2025, recycled water made up 2% of the total water supply.

3.3 Service Area Climate

Santa Clara County experiences a Mediterranean climate with cool, wet winters and warm, dry summers. From 1950-2025, the county received an annual average precipitation total of 19.5 inches. Most precipitation in the region occurs between the months of November and April. Temperature is typically moderate. Maximum monthly average temperatures range from 59.9°F to 87.4°F. Minimum monthly average temperatures range from 35.7°F to 55.3°F.² The annual average evapotranspiration rate is 49.4 inches.³ Figure 3-3 shows the monthly average maximum temperature and minimum temperature as well

² Rainfall and temperature data provided by National Oceanic and Atmospheric Administration (station USW00023293).

³ Evapotranspiration data comes from California Irrigation Management Information System (Zone 8, Inland San Francisco Bay Area, encompassing most of Santa Clara County).

https://cimis.water.ca.gov/App_Themes/images/etozonemap.jpg

as the monthly average precipitation over two time periods: 1950 to 2025 and the last 20 years, 2006 to 2025. Comparing these long-term historical averages to near-term data shows that climate change, as discussed in Section 3.3.1, is influencing the SJW service area’s climate.

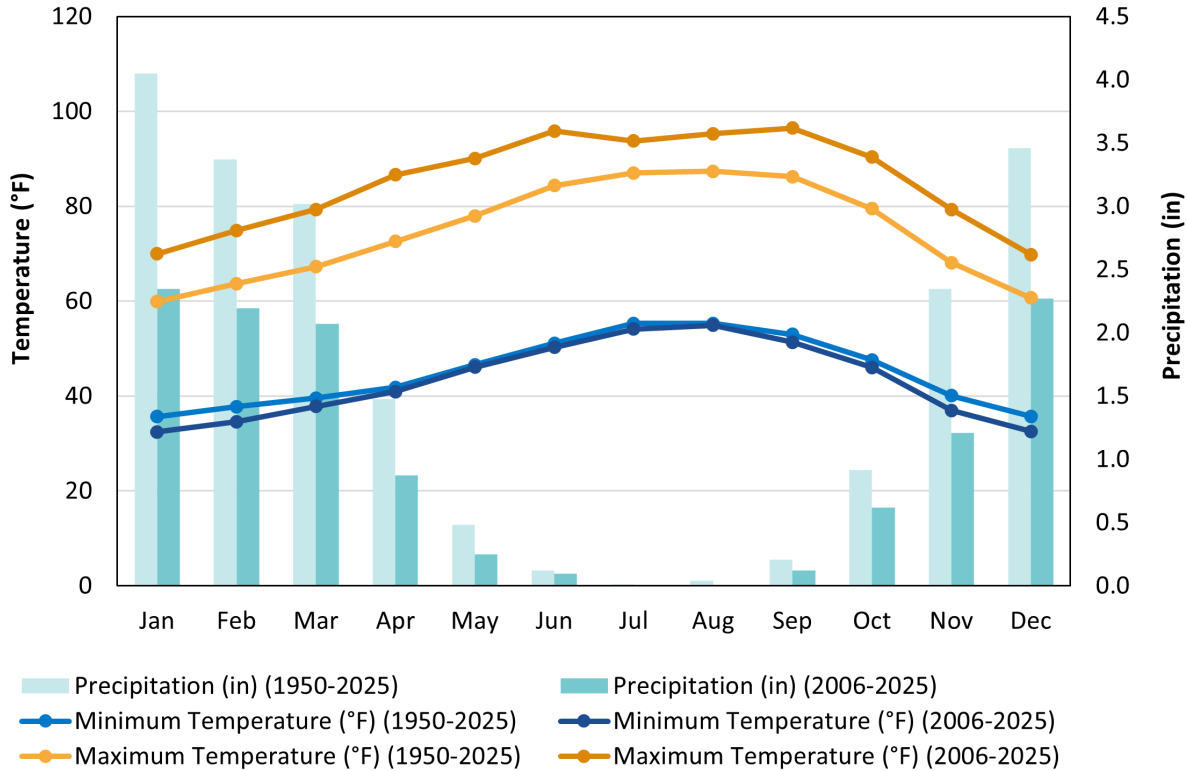


Figure 3-3. Historical Average Monthly Temperature and Precipitation

3.3.1 Climate Change

Climate change is expected to present significant challenges to the reliable operation of water supply systems. Elevated emissions of greenhouse gases, particularly carbon dioxide, are driving an increase in global average temperature. As a result, water suppliers need to prepare for alterations to natural systems such as the hydrologic cycle and ocean conditions. For SJW, the anticipated impacts of climate change include:

- Higher temperatures: Increased demand for water during hot and dry years, particularly for irrigation.
- Alterations in precipitation patterns: Rising average global temperatures lead to more precipitation falling as rain instead of snow, affecting the availability of water supplies. Extended periods of drought may become more common.
- Increased flooding: Extreme bursts of rainfall increase the potential for large runoff events, causing severe flooding damage to people and infrastructure. Runoff events may also raise the amount of sediment, pollutants, and waste in water supplies. Rising sea levels may impact the reliability of imported water supplies and exacerbate potential flood damage.

Although climate-modeling projections are not consistent, SJW expects to see changes in precipitation patterns, warmer temperatures, and drier conditions. Climate change considerations are noted in various sections of this UWMP as they relate to projected demands, constraints on sources of supply, and water supply reliability.

3.4 Service Area Population and Demographics

The current population, population projections into the future, and the demographics of SJW’s service area are discussed in this section.

3.4.1 Historical Population Count

SJW’s *2025 Strategic Water Resources Plan (SWRP)* included a detailed study of the population of the service area.⁴ SJW’s 2020 population count, based on US Census tract data, was 984,519. However, population decreased in the wake of the COVID-19 pandemic. The SWRP estimated the 2025 population utilizing several different projections, which are discussed in detail in section 3.4.2. As of January 2025, the population of the SJW service area was estimated to be 958,269.

3.4.2 Population Projections for 2025 – 2050

Numerous factors influence population change within a given area, making it inherently challenging to predict future population levels with high accuracy. Nevertheless, available data and established analytical methods can be used to develop reasonable population projections. These estimates are essential for long-term planning purposes, such as the present document and the design of future infrastructure.

As part of the SWRP, several population projections were created based primarily on information and analysis from the Association of Bay Area Governments (ABAG). ABAG develops the Plan Bay Area (PBA) report for the nine-county San Francisco Bay Area, which includes a series of statistical compilations on demographic, economic, and land use changes in the coming decades. SJW’s SWRP utilizes PBA 2050, which was adopted in 2021, and PBA 2050+, a limited update to PBA 2050 which captures changes brought about by the COVID-19 pandemic and which was adopted in March 2026. A population projection was also generated using an autoregressive model, which is a statistical trend analysis based on historical population data. The autoregression does not capture planned developments or regional changes as ABAG projections do. The population projections from the 2025 SWRP are: PBA 2050 county share of growth, PBA 2050 superdistrict share of growth, PBA 2050+, and the autoregression.

In PBA 2050 and 2050+, housing and job projections are at the county and superdistrict levels.⁵ Superdistricts are subcounty areas created by ABAG to group cities, towns, and unincorporated areas that show more localized growth patterns. There are four superdistricts in the SJW service area.

PBA 2050 was started prior to the publication of the 2020 US Census results and therefore uses data from 2015 as a starting point. For the county share of growth, projected growth in Santa Clara County represents 32.4% and 36.5% of the total housing and job growth in the region, respectively. The

⁴ CDM Smith. 2025. *Strategic Water Resources Plan for San Jose Water*.

⁵ While PBA 2040, used for SJW’s 2020 UWMP, included detailed population projections at the census tract level, PBA 2050 and 2050+ do not include projections at this level.

population growth for the SJW service area was calculated based on the average of housing and job growth, 34.5%, and the percent of the county historically served by SJW, 50.7%. For PBA 2050 superdistrict share of growth, the superdistricts overlapping the service area have 14.6% and 14.9% of the total growth in housing and jobs, respectively. The population growth was calculated using the average of 14.7%.

PBA 2050+ captured the results of the 2020 US Census, which was a lower population in 2020 than assumed by PBA 2050. The population projections for PBA 2050+ are based on the superdistrict share of growth, which is 15% of housing growth and 14% of job growth, with an average of 14.5%.

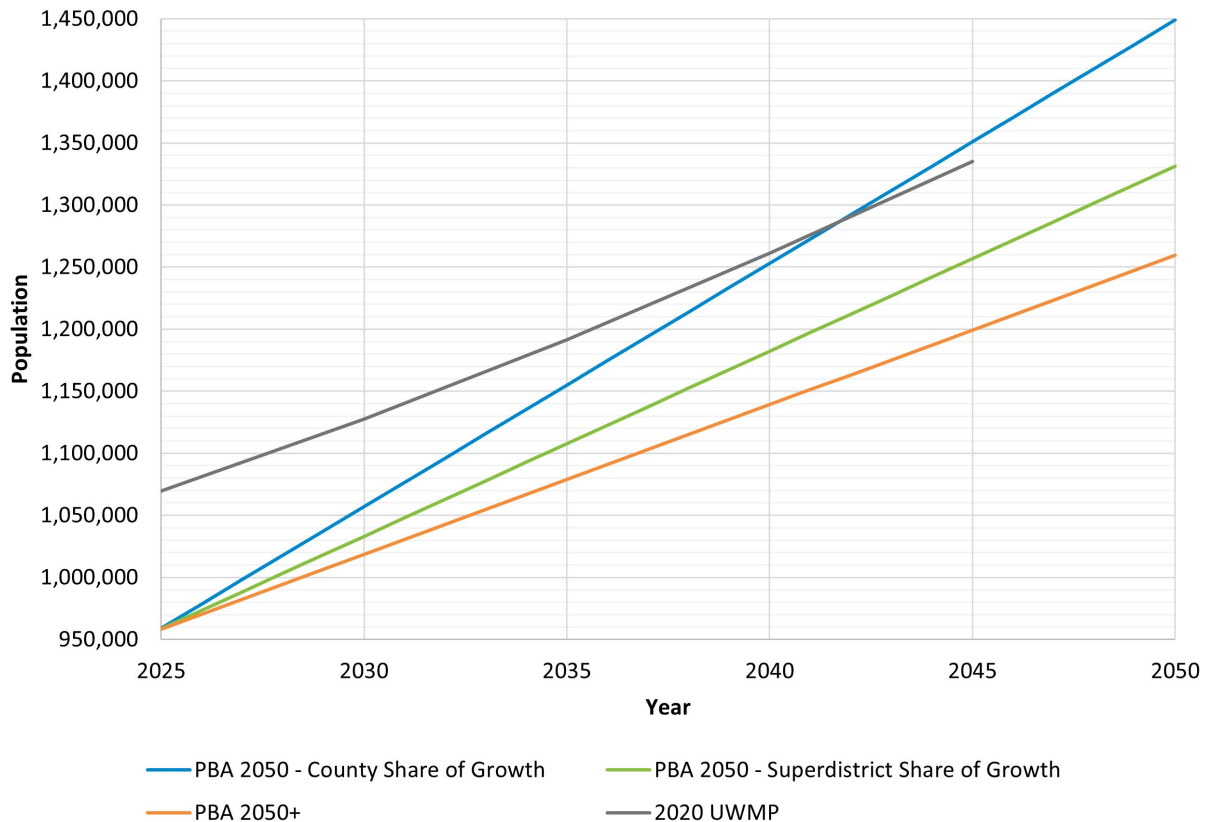


Figure 3-4. Population Projections from 2025 SWRP

While it is helpful for planning purposes to consider a range of possible population projections, such as those shown in Figure 3-4, for the 2025 UWMP, SJW has chosen the PBA 2050+ population projections as the most reasonable. Additional discussion of the projections can be found in Section 4.1.3.2. Service area population was calculated for 2025 through 2050 using the PBA 2050+ projections described above and presented in five-year increments in Table 3-1.

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	958,269	1,018,527	1,078,785	1,139,043	1,199,301	1,259,559

3.4.3 Other Social, Economic, and Demographic Factors

SJW serves a diverse population of residents. According to the American Community Survey 2020-2024 Five-Year Data Profile for Santa Clara County, the population is 40.2% Hispanic or Latino, 33.8% White, 15.3% Asian, 5.2% Black or African American, 0.3% American Indian and Alaska Native, 0.3% Native Hawaiian and Other Pacific Islander, 4.4% two or more races, and 0.6% some other race. The median income is \$99,122. The unemployment rate is 4.2%. Additionally, 44.4% of residents speak a language other than English at home.⁶

3.5 Service Area Land Uses

SJW contacted representatives from each of the cities within the service area as well as Santa Clara County to identify appropriate land use information. Existing land use parcel data was provided by Santa Clara County and sorted into relevant land use categories for water supply management. Current land uses in SJW’s service area are shown in Figure 3-5. Single-family residential comprises the most common land use in the service area.

An analysis of the ABAG Plan Bay Area 2050 data and cities’ General Plans was performed to forecast future land use trends and the subsequent impacts on water demand. This analysis is presented in Section 4.2.2.

⁶ United States Census Bureau. American Community Survey. Data Profiles. <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/>

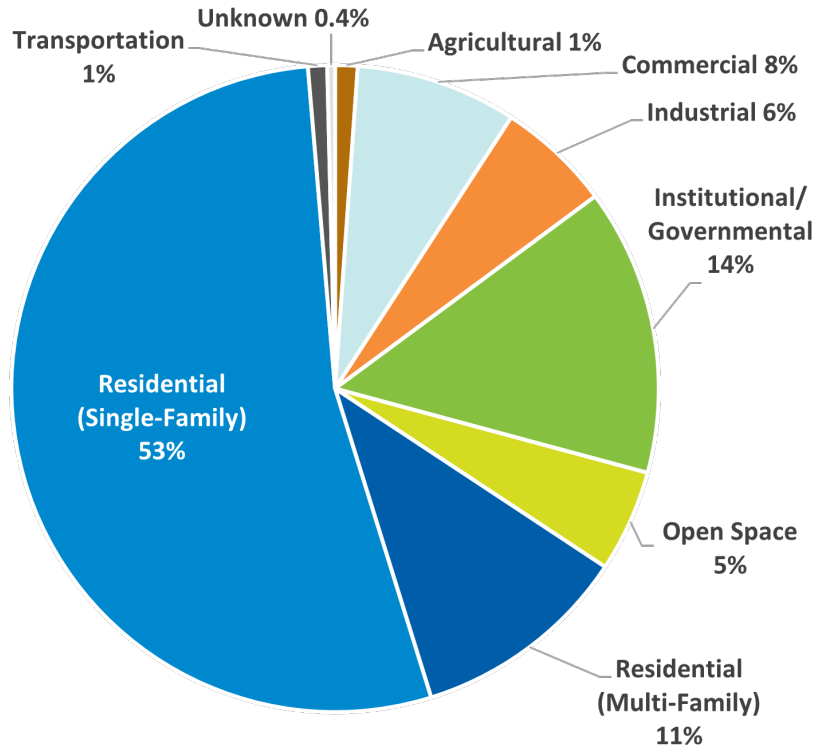


Figure 3-5. Current Land Use in SJW Service Area⁷

⁷ Based on land use parcel data from Santa Clara County.

Chapter 4

Water Use Characterization

This chapter describes and quantifies SJW’s past, current, and projected water use by type through 2050. This chapter primarily covers potable and non-potable water use including both raw and recycled water. Recycled water use and projections are covered in more detail in Chapter 6.

Most of the water use in SJW’s service area is in the residential and commercial sectors. Historical water use shows that per capita consumption has decreased over the years, driven by factors such as past drought conditions, the implementation of water conservation programs, effective public outreach and messaging encouraging efficient water use, improvements in the efficiency of water-using devices, and likely the influence of rising water costs. Demand is expected to increase from 2025 to 2030 based on rebounds in demand that have been observed following past droughts. However, demand is anticipated to decrease from 2030 to 2050 in response to a variety of factors including the *Making Conservation a California Way of Life* conservation regulation (SB 606 and AB 1668). Within the residential sector, multi-family use is anticipated to grow in proportion to single-family use as new housing developments are expected to be multi-family homes. The distribution of demand across other water use sectors is expected to remain relatively constant. Water loss is a component of system water use, and SJW reports water loss numbers on an annual basis. Over recent years, SJW’s water loss has been approximately 7% of water losses as a percent of water supplied.

4.1 Past, Current, and Projected Water Use by Sector

Past and current water use show changes in demand patterns over the years. This provides important insight which can be used to project water use into the future.

4.1.1 Past Water Use by Sector

Past water use by SJW customers shows that total usage has been influenced by past significant droughts as shown in Figure 4-1.

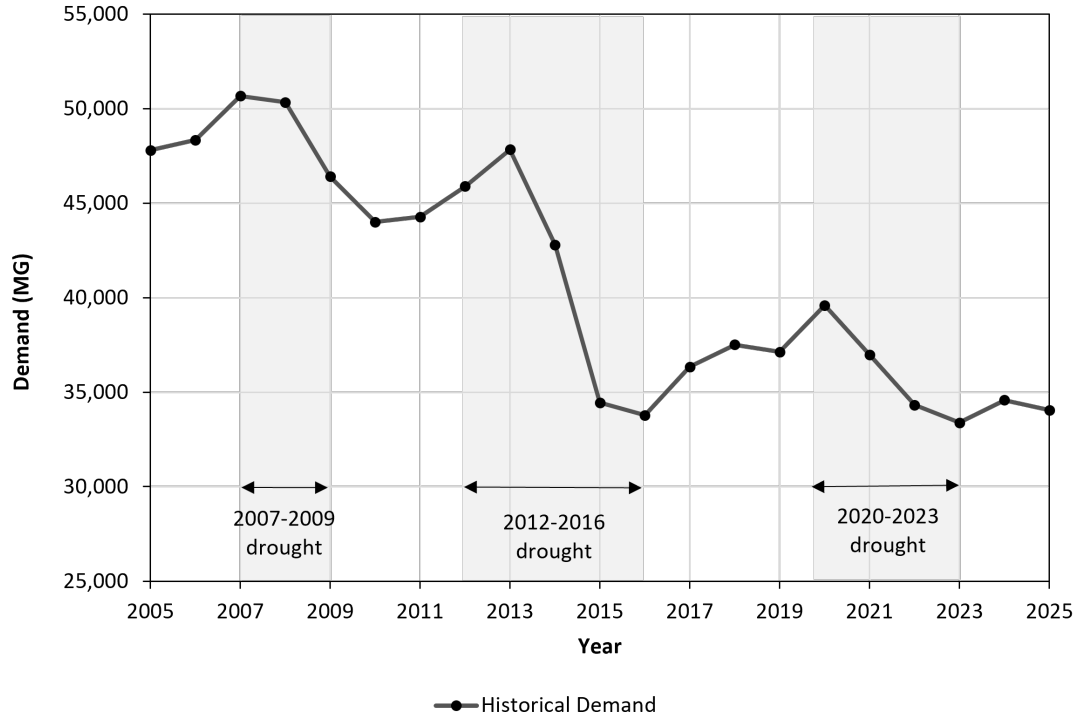


Figure 4-1. Past Water Use

Past and current water use by sector, as reported in UWMPs, is depicted in Figure 4-2. However, there are some caveats to comparing water use data across these years. In the 2015 UWMP, dedicated landscape usage was not a separate sector and many of those services were categorized as commercial. Due to limitations of the billing system in 2015, residential services were not separated into single and multi-family and therefore the percent of residential usage which was from single family homes was estimated.

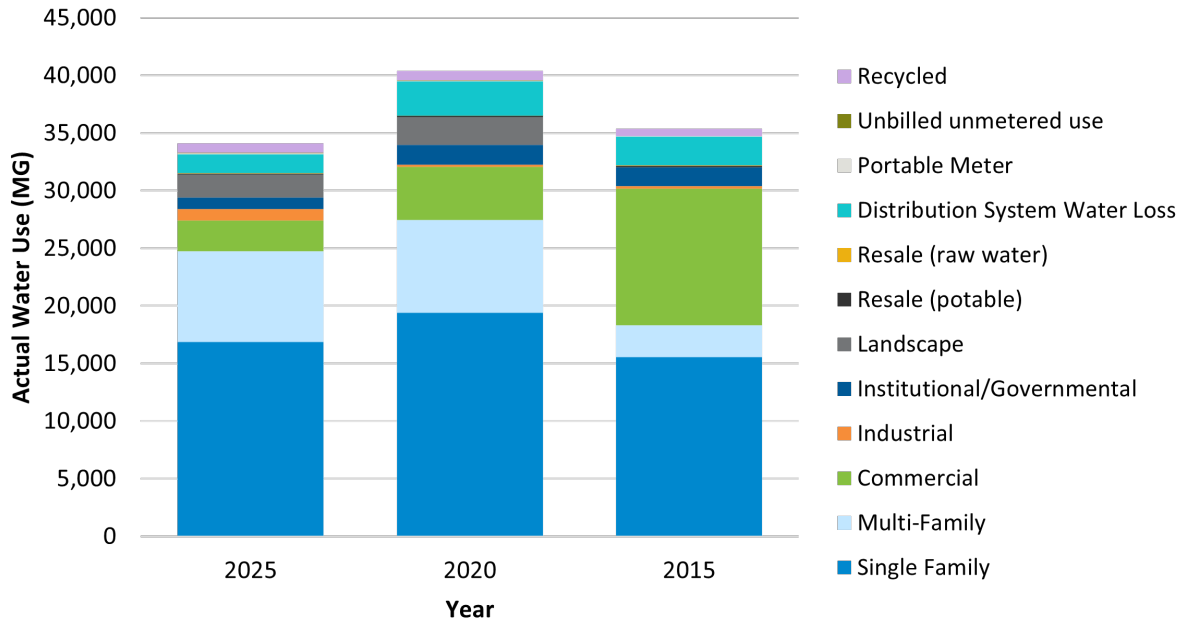


Figure 4-2. Past Water Use by Sector

4.1.2 Current Water Use by Sector

SJW meters all service connections, both new and existing. Most connections to SJW’s distribution system are residential or commercial. SJW also provides water to industrial, institutional/governmental, and landscape services. Portable meters provide water for construction and other uses where normal service is not available. SJW also serves several small water systems, under the resale category. SJW primarily provides potable water to its customers and also supplies raw water to two water systems, both of which maintain independent sources of supply and primarily serve residential uses. SJW’s recycled water system primarily supplies water for landscape irrigation, with some commercial, industrial, and agricultural uses (for more details on the recycled water system at SJW, see Section 6.1.5).

The water use type for each service was determined based on Santa Clara County parcel land use data and data provided by Eagle Aerial as part of the *Making Conservation a California Way of Life* regulation and Urban Water Use Objective (UWUO) reporting.⁸ This determination is necessary as SJW’s existing billing system classifies customers from a billing perspective, such that multi-family residential developments may be classified as commercial if the account holder is a homeowners’ association or an entity rather than an individual. In the future, SJW’s billing system will also track water use type for each service for UWMPs and UWUO reporting. Table 4-1 lists SJW’s water demands and losses for 2025.

⁸ AB 1668 and SB 606.

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	Volume (MG)
Add additional rows as needed			
Single Family		Potable	16,892
Multi-Family		Potable	7,838
Commercial		Potable	2,705
Industrial		Potable	960
Institutional/Governmental		Potable	1,005
Landscape		Potable	1,993
Sales/Transfers/Exchanges to other Suppliers	Resale	Potable	113
Distribution System Water Loss	Real and apparent losses	Potable	1,634
Other (optional)	Portable Meter	Potable	96
Other (optional)	Unbilled unmetered use	Potable	42
Sales/Transfers/Exchanges to other Suppliers	Resale	Non-Potable	3
Agricultural	Recycled Water	Non-Potable	1
Commercial	Recycled Water	Non-Potable	13
Industrial	Recycled Water	Non-Potable	137
Landscape	Recycled Water	Non-Potable	679
Subtotal Potable			33,278.13
Subtotal Non-Potable			832.85
Total			34,111
NOTES: Unbilled unmetered use includes use for construction activities, tank/reservoir cleaning, irrigation at SJW stations, hydrant testing, meter testing, etc. Volumes for losses and unbilled unmetered use are estimated, based on the difference between system production data and metered use, and the typical distribution between losses and unbilled unmetered use from SJW's recent water loss audits that were submitted to DWR as part of SB 555 requirements.			

4.1.3 Projected Water Demands

SJW developed demand projections from 2025 to 2050 as part of its *2025 Strategic Water Resources Plan* (SWRP).⁹ The demand projections were created using an econometric model for residential and

⁹ Demographic information for the SWRP was sourced from the California Department of Finance (DOF), ABAG, U.S. Bureau of Labor Statistics, and the U.S. Census Bureau.

nonresidential customers, where residential demand is driven by households and nonresidential demand is driven by employment. Both models consider climate data and conservation. The residential model includes housing growth, percent multi-family housing, housing density, and people per household. The nonresidential model includes total employment and median household income.

4.1.3.1 Factors which Influence Water Demands

Projecting water usage into the future is complex as many variables influence water use over time. Population growth, employment, land use changes, conservation efforts, and climate change are among the factors discussed in this section.

4.1.3.1.1 Population and Housing Growth

Population and housing growth is one of the most significant factors affecting long-term water supply. Population growth for the SJW service area is projected to be between 283,000 (29%) and 472,000 (48%) more residents by 2050. The number of households in the service area will increase from 318,344 in 2020 to between 464,145 and 521,765 in 2050. Multi-family residential urban infill projects in areas are projected to drive the housing increase; multi-family residences are expected to make up over half of all housing in the SJW service area by 2050. Total employment is projected to increase 34.5% to 54% by 2050. The percent of manufacturing jobs is expected to decrease over that period.

4.1.3.1.2 Land Use Changes

ABAG's Plan Bay Area 2050+ was used to address planned land use. The report provided useful projections of population growth and changing land use over the next two decades. General plans from each of the cities were also reviewed. As residential and commercial, industrial, and institutional (CII) demands make up the majority of SJW's demands, land use projections from ABAG were used to examine potential differences in future demands across these sectors for SJW's 2025 SWRP. The proportion of residential versus commercial/industrial acreage within SJW's service area is projected to remain constant throughout future years, as shown in Figure 4-3. Though the land use in terms of area is not projected to change, the proportion of water demands in each sector is expected to change as discussed in Sections 4.1.3.1.3 and 4.1.3.2.

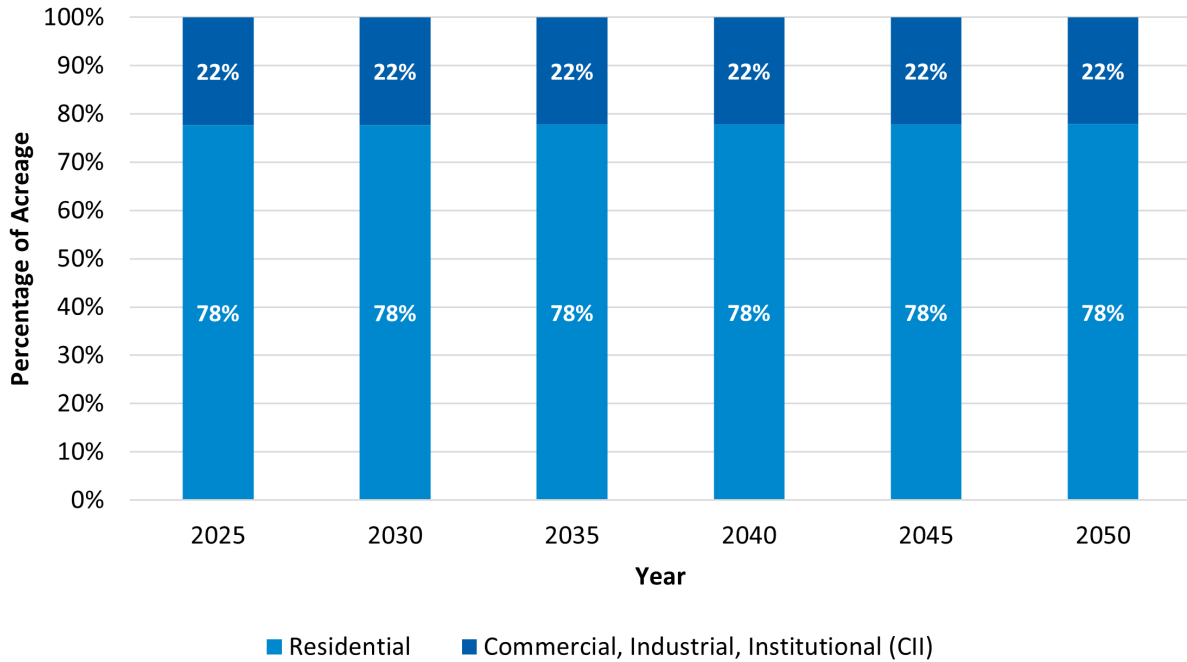


Figure 4-3. Projections for Residential and Commercial/Industrial Land Use

According to ABAG and cities’ General Plans, multi-family developments, including mixed-use developments, are planned to address the Regional Housing Needs Allocation (RHNA). The 6th Cycle RHNA (2023-2031) had increased required housing numbers due to changes in state methodology and the jurisdictions in SJW’s service area are planning higher-density multi-family housing as the primary way to address that requirement. Multi-family households use less water than single-family households and higher density housing results in less irrigable area per lot, lowering outdoor landscape water demands. As shown in Figure 4-4, the SWRP projections show that multi-family development units are expected to account for most of the residential growth within SJW’s service area, which aligns with the trend that SJW has seen in recent years with new developments.

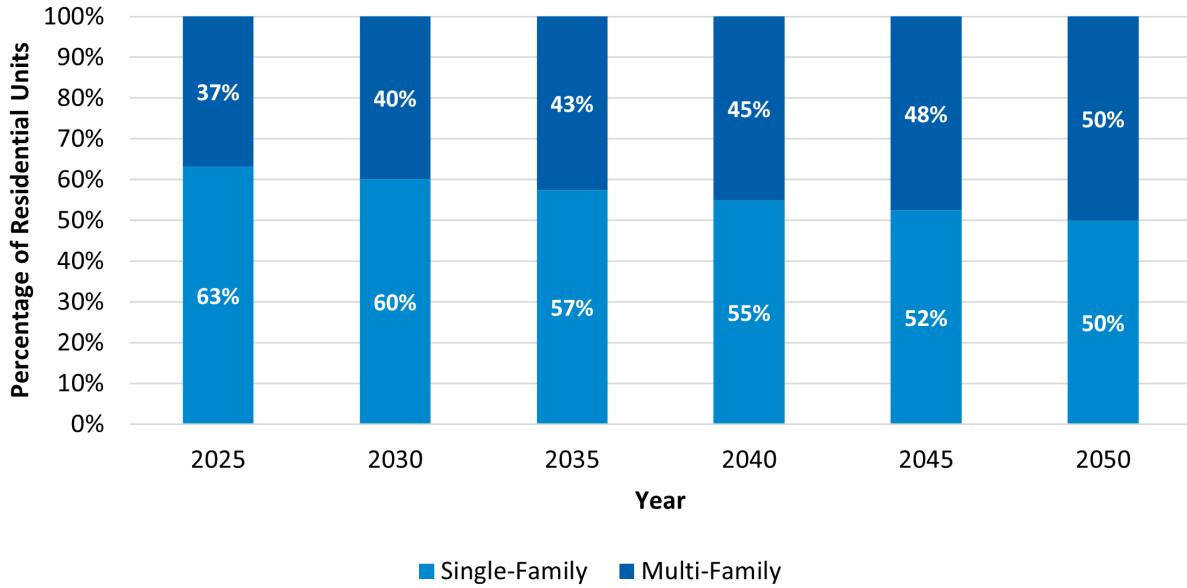


Figure 4-4. Projections for Single-Family and Multi-Family Residential Units

4.1.3.1.3 Water Use for Lower Income Households

State law recognizes the vital role local governments play in the supply and affordability of housing. Each local government in California is required to adopt a housing element as part of its General Plan that shows how the community plans to meet the existing and projected housing needs of people at all income levels.

The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its Housing Element. As part of this process, the California Department of Housing and Community Development (HCD) identifies the total housing need for the San Francisco Bay Area. ABAG then develops a methodology to distribute this need to local governments. Once a local government has received its final RHNA, it must revise its Housing Element to show how it plans to accommodate its portion of the region's housing need. ABAG has sought to engage local jurisdictions, stakeholders, and members of the public throughout the process of developing the RHNA. Per the June 2025 update of ABAG’s final RHNA plan,¹⁰ the housing unit allocations for the cities within SJW’s service area are listed in the table below, where 85% of the City of San José’s and 100% of all other cities’ allocations are assumed to fall within the SJW service area.

¹⁰ ABAG. (June 2025.) “Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031. June 2025 Update.” <https://abag.ca.gov/tools-resources/digital-library/final-rhna-methodology-report-2023-2031jun2025update0pdf>

Final RHNA Allocations in SJW Service Area					
Jurisdiction	Very Low Income (<50% of Area Median Income)	Low Income (50-80% of Area Median Income)	Moderate Income (80-120% of Area Median Income)	Above Moderate Income (>120% of Area Median Income)	Total
Campbell	752	434	499	1,292	2,977
Cupertino	1,193	687	755	1,953	4,588
Los Gatos	537	310	320	826	1,993
Monte Sereno	53	30	31	79	193
San Jose ^(a)	12,826	7,384	9,105	23,557	52,872
Saratoga	454	261	278	719	1,712
Total	15,815	9,106	10,988	28,426	64,335

(a) 85% of San Jose’s housing allocation is assumed to be in SJW’s service area

Based on these allocations, 24,921 lower-income residential units will be added within SJW’s service area within RHNA’s 2023-2031 time frame. Based on SJW’s projected 2030 demands, this translates to approximately 7.6 MG per day in 2030 for the new low-income residential units. This estimate is part of the total projected residential demands as reported in Table 4-2. Table 4-5 notes the inclusion of low-income residential demands in SJW’s demand projections.

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections?	No
If "Yes" to above, state the section or page number , in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. Optional Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	
Are Lower Income Residential Demands Included In Projections?	Yes
Optional If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	
NOTES: SJW's demand projections account for passive water conservation savings. However, demand projections do not directly account for future water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans.	

4.1.3.1.4 Demand Distribution across Water Use Sectors

The majority of water use is residential, as shown in Figure 4-5. Residential usage was proportionally higher than commercial, industrial, and institutional (CII) usage in 2025 than in 2019.¹¹ The majority of residential growth in the service area is expected to be from new multi-family developments and therefore demands in the multi-family residential sector are projected to increase at a higher rate than demands in the single-family residential sector.

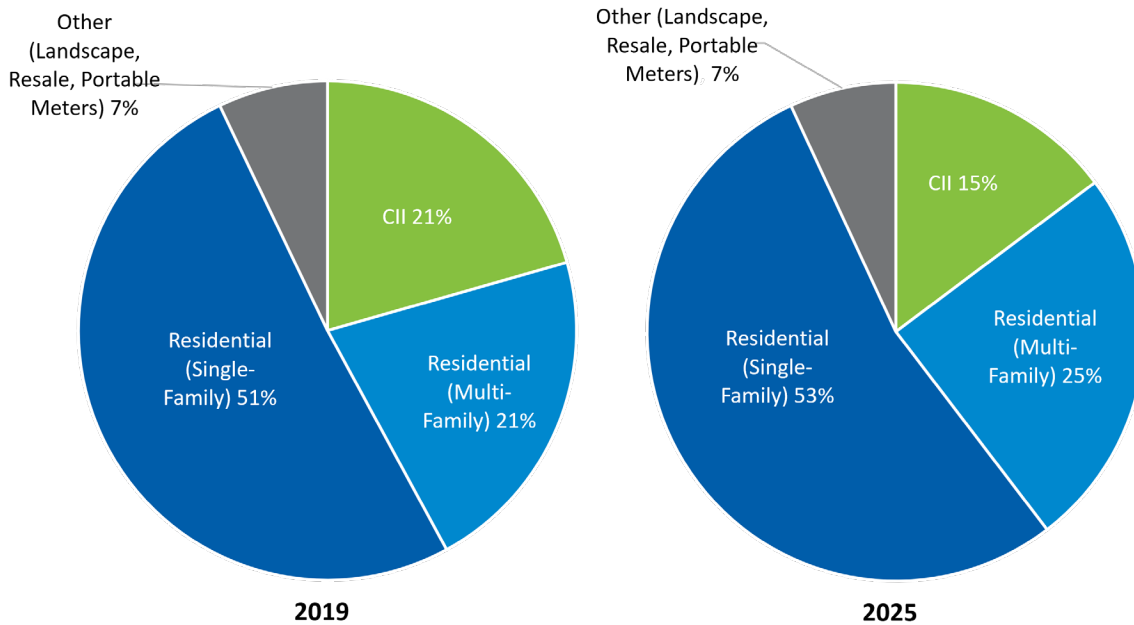


Figure 4-5. Distribution of Demands across Water Use Sectors¹²

4.1.3.1.5 Water Conservation

Water conservation has resulted in lower per capita water usage that is particularly noticeable after the 2012 to 2016 drought. Water conservation can come from passive savings, which includes conservation from high-efficiency fixtures required by state plumbing codes and reduced outdoor usage in accordance with landscape ordinances. Water conservation can also come from active savings, which refers to direct actions taken by water utilities like reduction in system losses, fixture rebate programs, turf replacement, and public education.

Significant strides have already been made for water conservation, such as for indoor water use. WaterSense labeled toilets, clothes washers, showerheads, and faucet aerators dominate the retail market and offer consumers a variety of options when purchasing new indoor water-using devices. These

¹¹ 2019 was usage was used in the 2020 UWMP as more representative of typical demand distributions as the lockdown for the COVID-19 pandemic resulted in increased residential use during 2020.

¹² As a percent of total customer water use, which excludes water losses and unbilled unmetered use.

efficient fixtures are required for new developments. Valley Water offers water conservation devices and educational materials to SJW customers who may have less efficient fixtures in their existing properties.¹³

Conservation savings achieved during periods of drought have led to lasting changes in public attitudes toward water use. While some rebound in demand typically occurs following drought conditions, a portion of these savings persists over time. Valley Water’s landscape rebate programs incentivize customers to transition to low-water use landscaping, resulting in long-term reductions in water demand.¹⁴ More detailed discussion of SJW’s and Valley Water’s conservation programs can be found in Chapter 9.

The *Making Conservation a California Way of Life* regulation (AB 1668 and SB 606) requires each urban water supplier, like SJW, to meet a unique UWUO which becomes more stringent over time. Therefore, this regulation is expected to influence future water demand. See Section 9.3 for further discussion of the UWUO.

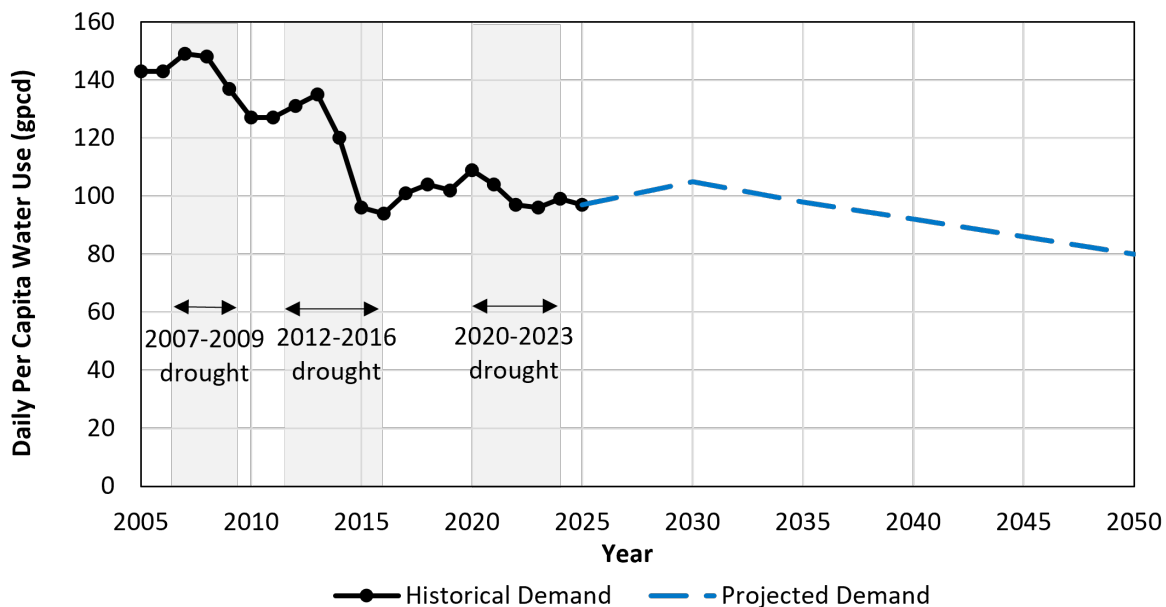


Figure 4-6. Historical and Projected Daily per Capita Water Use (excluding recycled water)

4.1.3.1.6 Water Loss and Unbilled Unmetered Use

Based on recent water loss audits submitted to DWR in accordance with SB 555 requirements, average annual water loss in SJW’s distribution system over the past five years has been approximately 7.9% of water supplied (excluding raw and recycled water), with average annual unbilled unmetered use of 69 MG. For planning purposes, water loss is projected at 7.2%, reflecting anticipated improvements in system efficiency and ongoing loss reduction efforts. Unbilled unmetered use is expected to remain constant in future years. Water loss is discussed in more detail in Section 4.3.

¹³ Valley Water. *Water Saving Devices*. <https://www.valleywater.org/saving-water/indoor-conservation/water-saving-devices>

¹⁴ Valley Water. *Landscape Rebates*. <https://www.valleywater.org/saving-water/rebates-surveys/landscape-rebates>

4.1.3.2 Methodology for Projecting Water Demands

SJW’s projected water demands were developed as part of the 2025 SWRP using an econometric model for residential and nonresidential demands. Forecasting water demands is complex as many variables influence water use over time, including: (1) number of households, persons per household, housing type, and housing density; (2) total employment and percent manufacturing employment; (3) impact of income and retail water rates; and (4) climate. Housing characteristics in the model are captured by a housing index which includes the percent of households which are multifamily, housing density, and persons per household. Multifamily households use less water than single-family households, higher density housing results in less irrigable area per lot which lowers outdoor demands, and indoor use is directly affected by persons per household. In the nonresidential sector, average water use per employee varies in direct relation to the change in percent employment in the manufacturing sector. The percent of households in the top quartile of household income is also significant in terms of nonresidential water use, suggesting that retail and service activities increase water use as community affluence increases. In terms of water rates, properly structured water rates can be effective in promoting conservation.¹⁵ SJW has conservation-focused residential water rates where a higher rate is paid as more water is used. Demographic data for the econometric water demand model was gathered from the California Department of Finance (DOF), ABAG, U.S. Bureau of Labor Statistics, and the U.S. Census Bureau for January 2000 through December 2024 with future forecasts for population, households, and employment based on ABAG’s Plan Bay Area 2050 and 2050+.

The residential water demand model included the following explanatory variables: temperature, rainfall, housing index, the unit price for the second tier of water rates, and reduction in use from drought. The adjusted R² value indicates about 92% of the changes in residential water use over time can be explained by the variables in the model, indicating a reliable model.

Similarly, the nonresidential water demand model, used for water use in CII sectors, included the following explanatory variables: temperature, rainfall, percent of households in the top income quartile, percent of manufacturing employment out of total employment, price of water, and reduction in use from drought. Like the residential model, the adjusted R² value for the nonresidential model indicates about 92% of the changes in nonresidential water use over time can be explained by the variables in the model, indicating a reliable model.

4.1.3.3 Summary of Historical and Projected Water Demands

SJW’s historical and projected demands are illustrated in Figure 4-7. Table 4-2 details the projected demands by sector. Additional discussion on historical and projected recycled water use can be found in Chapter 6.

¹⁵ Conservation water pricing is promoted by major water policy and regulatory organizations, including the US EPA and the California State Water Resources Control Board (SWRCB). (US EPA. (1998, Aug. 6.) “Water Conservation Plan Guidelines.” WaterSense. <https://www.epa.gov/watersense/water-conservation-plan-guidelines>; SWRCB. (2026, April 6.) “State Water Board Drought Year Water Actions.” <https://www.waterboards.ca.gov/drought/pricing/>)

The demand projections using the econometric model described in Section 4.1.3.2 and the Plan Bay Area 2050+ population projections were used for the demand projections detailed in this UWMP.

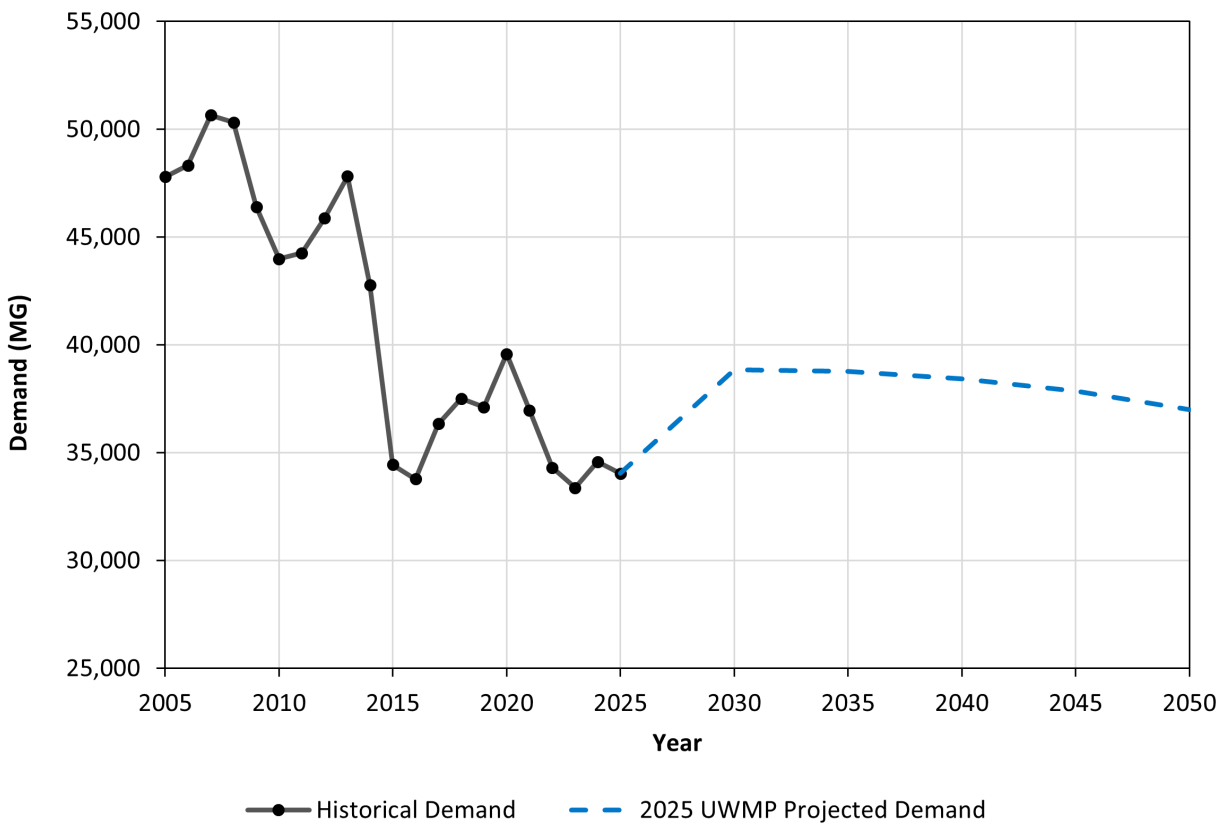


Figure 4-7. Historical and Projected Demands (excluding recycled water)

The SWRP separated demand projections by residential and nonresidential demands only. The demands were further separated by all sectors as listed in Table 4-2 for the UWMP. First, the residential usage was classified as landscape, single-family, or multifamily usage. The projected residential landscape usage was determined based on the percent of residential usage classified as landscape in 2025. Then, resale and raw water usage was escalated based on the escalation of the entire residential sector. Finally, the remaining residential usage was divided into single-family and multifamily based on the changing percent of multi-family homes in the service area as reported in the SWRP. The nonresidential demands are separated based on the percentage of usage for each sector in 2025. The exception is the portable meter usage which was escalated based on the escalation of the entire nonresidential sector. Losses were added based on recent Water Loss Audits which are discussed further in Section 4.3. Recycled water demands were projected based on the 2026 *Recycled Water Master Plan* (see Section 6.1.5 for more details).

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description (as needed)	Projected Water Use (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 opt (MG)
Add additional rows as needed.							
Single Family		Potable	14,595	13,936	13,206	12,430	11,570
Multi-Family		Potable	9,462	10,115	10,647	11,079	11,396
Commercial		Potable	5,838	5,796	5,732	5,648	5,521
Industrial		Potable	2,073	2,058	2,036	2,006	1,961
Institutional/Governmental		Potable	2,169	2,154	2,130	2,098	2,052
Landscape		Potable	2,662	2,652	2,626	2,588	2,529
Sales/Transfers/Exchanges to other Suppliers	Resale	Potable	115	115	114	113	110
Distribution System Water Loss		Potable	1,789	1,788	1,776	1,752	1,714
Other (optional)	Portable Meter	Potable	107	106	105	104	101
Other (optional)	Unbilled Unmetered Use	Potable	46	46	45	45	44
Sales/Transfers/Exchanges to other Suppliers	Resale (Raw)	Non-Potable	2	2	2	2	2
Agricultural	Recycled Water	Non-Potable	1	1	1	1	1
Commercial	Recycled Water	Non-Potable	13	13	13	13	13
Industrial	Recycled Water	Non-Potable	137	137	137	137	137
Landscape	Recycled Water	Non-Potable	781	836	913	943	968
Subtotal Potable			38,857	38,768	38,418	37,862	36,999
Subtotal Non-Potable			934	989	1,066	1,095	1,121
Total			39,790	39,756	39,484	38,958	38,119

4.3 Distribution System Water Losses

Water losses are separated into two categories: apparent losses and real losses. Apparent losses include all types of inaccuracies associated with customer metering as well as data handling errors. Real losses are physical water losses from the pressurized system and the utility’s storage tanks, up to the customer meter. These can include leaks, breaks, and overflows.

4.3.1 Previous Five Years Distribution System Losses

In accordance with SB 555, SJW submits validated water loss audits to DWR on an annual basis, for both the SJW system and the City of Cupertino Municipal Water System. These water loss audits are prepared using American Water Works Association (AWWA) Water Loss Control Committee Water Audit Software and guidelines from the AWWA M36 manual for Water Audits and Loss Control Programs. Copies of SJW and City of Cupertino water loss audits for each of the five years preceding the 2025 UWMP can be found on DWR’s website.¹⁶ Table 4-5 shows the water loss audits’ submittal status for SJW (CA4310011) and the City of Cupertino (CA4310018) for 2020 through 2024.

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available.		
CA4310011	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
CA4310018	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES: https://wuedata.water.ca.gov/awwa_plans		

¹⁶ California Department of Water Resources (DWR). *Water Audit Report Data*. WUEdata. https://wuedata.water.ca.gov/awwa_plans

4.3.2 Progress Toward Meeting the Water Loss Performance Standard

As part of SB 555, the State Water Resources Control Board calculated utility-specific Water Loss Performance Standards. Utilities must comply with their standards by January 1, 2028. The Real Water Loss Standard for SJW and the City of Cupertino water systems are set at 20.5 gallons per service connection per day (GPSCD) and 24.3 GPSCD, respectively. As of the most recent 2024 Water Loss Audit, SJW has 22.3 GPSCD real loss and the City of Cupertino has 14.4 GPSCD (see Table 4-6). Figure 4-8 shows the last five years’ of real water loss per service connection per day compared to the Water Loss Standard.

Although SJW losses are currently above its 2028 water loss standard, SJW has made significant strides in addressing the issue. SJW has significantly ramped up proactive leak detection through the deployment of nearly 13,900 acoustic leak detection sensors. SJW is also advancing AMI analytics and customer outreach to identify suspected customer side leaks earlier. In addition, SJW recently completed its Compound Meter Replacement Program, under which 766 large dual-register compound meters were replaced with ultrasonic meters. This upgrade reduces apparent losses by improving measurement accuracy, particularly by capturing low flows that legacy mechanical meters often under-register. These efforts complement SJW’s ongoing main replacement program, which delivered 24 miles of main replacement projects in 2025 and prioritizes projects using risk-based rankings and artificial intelligence enabled tools to target water mains most likely to leak.

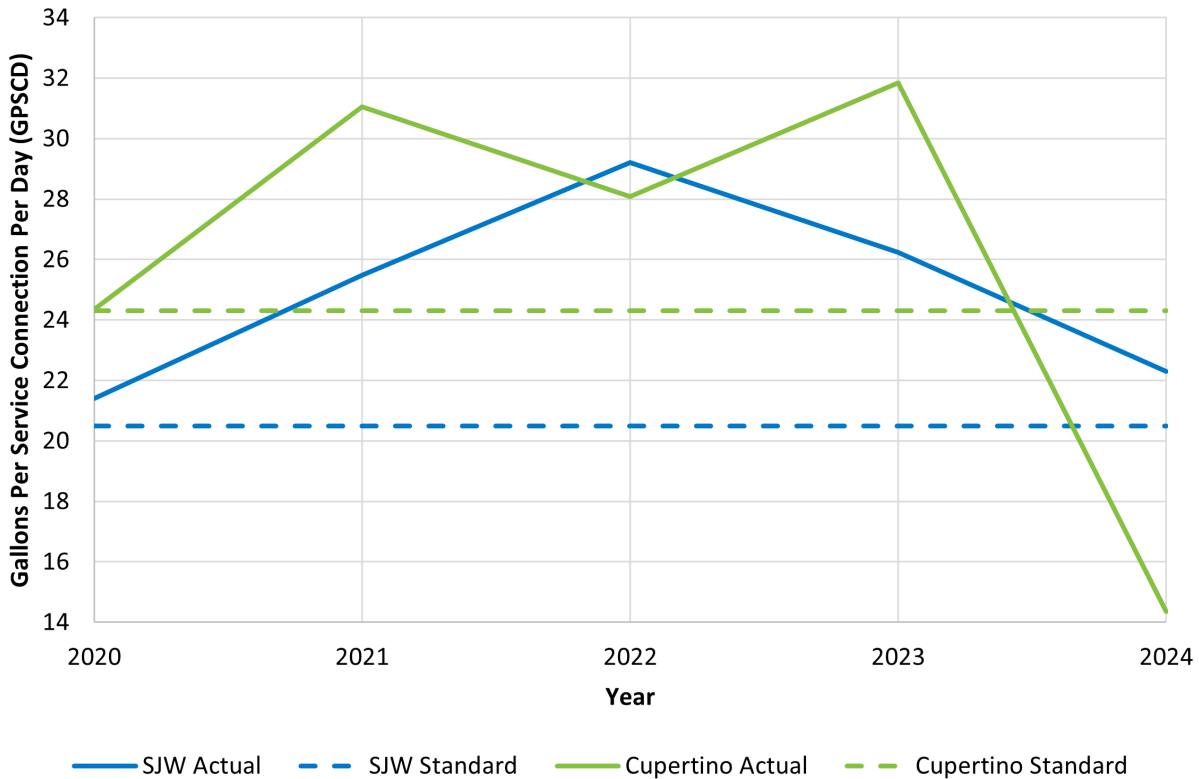


Figure 4-8. Real Water Loss Compared to Water Loss Standard (2020-2024)

**Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)**

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n)	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit		Real Water Loss Per Unit per Day	State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (MG)		2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (MG)	
Add additional rows as needed.											
CA4310011	Yes	20.5	Gallons per Service Connection per Day (GPSCD)	236,388	1923.440	22.3	6.9	Gallons per Service Connection per Day (GPSCD)	236,388	579.715	6.7
CA4310018	Yes	24.3	Gallons per Service Connection per Day (GPSCD)	4,372	22.913	14.4	8	Gallons per Service Connection per Day (GPSCD)	4,372	8.467	5.3
<u>Water Board's Calculated Water Loss Standards</u>											

4.4 Climate Change Considerations

Climate change impacts such as warmer temperatures, shrinking snowpack, and shifting precipitation patterns are already being observed in California and their impacts are being felt in the Bay Area. Although models project a wide range of potential future conditions, climate change has become a key consideration for long-term water resources planning. Rising temperatures may increase water demand for irrigation, while more frequent or prolonged drought conditions could necessitate conservation measures that reduce demand. These uncertainties underscore the need for adaptive planning approaches that balance reliability, flexibility, and affordability for customers.

Purchased water from Valley Water and groundwater from the Santa Clara Subbasin make up the majority of SJW's water supply. Recognizing the importance of managing climate change-related vulnerabilities and risks to fulfill its mission, Valley Water has developed a Climate Change Action Plan (CCAP) which will be updated every 10 years.¹⁷ The CCAP outlines seven goals related to greenhouse gas reduction and climate adaptation, including water supply adaptation, which is particularly relevant to UWMP planning.

The CCAP emphasizes strategies such as diversifying local water supplies, expanding stormwater capture and recycled water use, enhancing demand management and conservation, and improving system flexibility through investments in storage, recharge, and conveyance. Implementation of these strategies will require coordination between Valley Water and its retail agencies, including SJW, particularly where actions influence supply availability, operations, and infrastructure planning.

At the same time, it is essential that decisions about future water supply and system investments prioritize what is most beneficial for customers. Many climate adaptation strategies involve significant capital investment, which can directly affect water rates. Ensuring that investments deliver measurable reliability and resilience benefits, while minimizing cost impacts, will be critical. The timing, prioritization, and extent of these measures should therefore reflect not only technical and regulatory considerations, but also a careful evaluation of customer affordability and overall value.

¹⁷ Valley Water. *Climate Change Action Plan*. <https://www.valleywater.org/your-water/climate-change-action-plan>

Chapter 5

Senate Bill x7-7 Baselines, 2020 Targets, and 2025 Reporting

This chapter describes the Water Conservation Act of 2009 (SB x7-7), baseline daily per capita water use, interim and final urban water use targets, and SJW’s compliance with the final 2020 urban water use target.

SB x7-7 required urban retail water suppliers to reduce per capita water use 20% from the baseline daily per capita water use by December 31, 2020. Water suppliers were required to set a water use target for 2020 and an interim target for 2015. As part of the 2015 UWMP cycle, SJW demonstrated compliance with its interim 2015 target, and as part of the 2020 UWMP cycle, SJW demonstrated compliance with its 2020 water use target. Using the allowed methodologies for calculating baseline water use and targets, SJW’s 2020 target was calculated to be 127 gpcd. SJW’s actual water use in 2020 was 109 gpcd¹⁸, which was lower than the 2020 target of 127 gpcd, and therefore SJW has met its 2020 target. Today, SB x7-7 also serves as a backstop for the Urban Water Use Objective calculations which are part of the *Making Conservation a California Way of Life* regulation; that is, if a supplier’s Urban Water Use Objective is larger than its SB x7-7 target objective, it will comply with the target objective.

5.1 Water Conservation Act of 2009

The Water Conservation Act of 2009, SB x7-7, required urban retail water suppliers to reduce per capita water use 20% from the baseline daily per capita water use by December 31, 2020. Water suppliers were required to set a water use target for 2020 and an interim target for 2015. As part of the 2015 UWMP cycle, SJW demonstrated compliance with its interim 2015 target. As part of the 2020 UWMP cycle, SJW demonstrated compliance with its water use target for 2020.

5.2 2020 Water Use Target Compliance

SJW first calculated its baseline per capita water use, interim 2015 target, and 2020 water use target during the 2010 UWMP cycle. As part of the 2015 UWMP cycle, suppliers were given the opportunity to update their 2020 target and SJW used updated data to recalculate its baseline population and water use targets for 2015 and 2020 at that time.¹⁹ SJW’s calculated baseline per capita water use is 154 gpcd using a ten-year average ending between December 31, 2004 and December 31, 2010 and 147 gpcd using a five-year average ending between December 31, 2007 and December 31, 2010. Determination of annual service area population used for the baseline periods between 1995 and 2007 was based on number of service connections and a person-per-connection calculation. SJW’s 2020 target was calculated to be 127

¹⁸ SJW’s actual water use in 2020 is 108 gpcd if leap year is assumed (366 days in the year). However, DWR’s standard calculations for SB x7-7 assume 365 days in all years and calculates SJW’s actual water use in 2020 as 109 gpcd.

¹⁹ Suppliers were able to recalculate their baselines and 2020 target during the 2020 UWMP cycle, but SJW did not have any service area contractions or mergers or any special circumstances which would require it to adjust its baseline and target and therefore no updates were made.

gpcd. See Figure 5-1 for a graph of the baselines, 2020 target, and actual daily per capita water use. Additional details on methodology and calculations can be found in SJW’s 2020 UWMP.

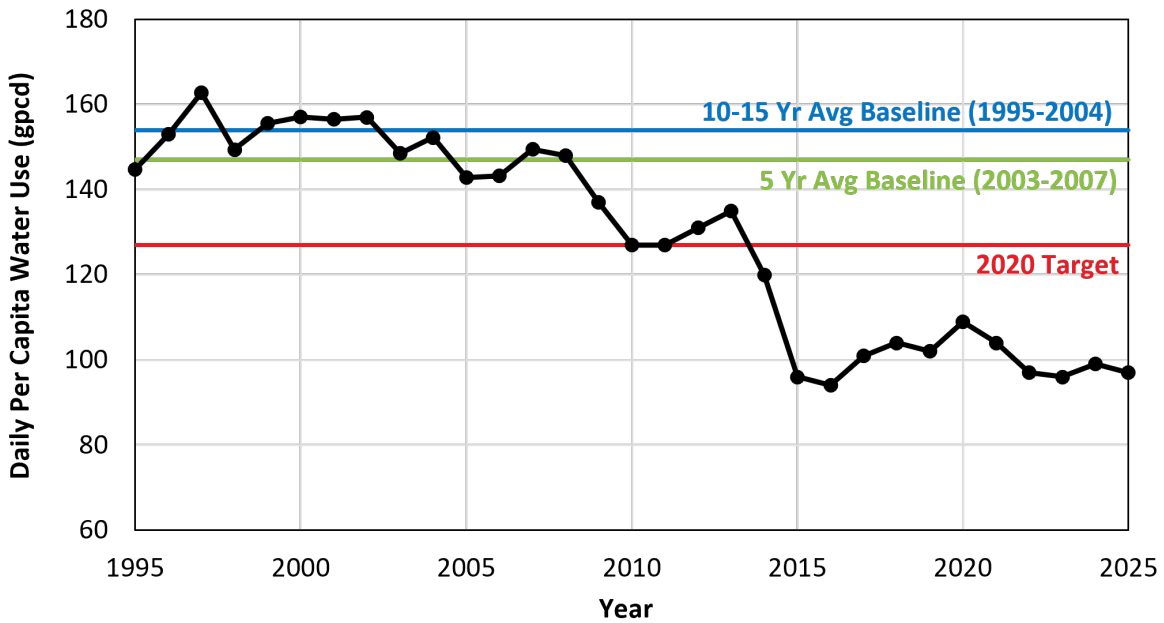


Figure 5-1. Historical Demand, SB x7-7 Baselines, and SB x7-7 2020 Target

SJW’s actual water use in 2020 was 109 gpcd²⁰, which was lower than the 2020 target of 127 gpcd. SJW was in compliance with the 2020 target as shown in Table 5-1. SJW’s actual water use in 2025 was 97 gpcd.

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	127	109	Yes		NA

²⁰ SJW’s actual water use in 2020 is 108 gpcd if leap year is assumed (366 days in the year). However, DWR’s standard calculations for SB x7-7 assume 365 days in all years and calculates SJW’s actual water use in 2020 as 109 gpcd.

Chapter 6

Normal-Year Water Supply Characterization

This chapter describes and quantifies the current and projected sources of water available to SJW. A description and quantification of potential recycled water uses and supply availability is also included.

SJW has three sources of potable water supply: purchased water from Valley Water, groundwater from the Santa Clara Subbasin, and surface water from local watersheds. A fourth and growing source of non-potable supply is recycled water. SJW’s basic water supply strategy is to maximize use of available local surface water and meet its contractual purchased water supply commitments from Valley Water, while using groundwater to supplement remaining supply needs. When supplies are limited, SJW implements WSCP actions to achieve necessary demand reductions. As a non-potable source of supply, recycled water is managed separately from SJW’s potable water supplies. However, recycled water offsets potable demands, and thus, SJW is aiming to increase the amount of recycled water use in future years. As discussed in Chapter 4, potable demands are expected to increase from 2025 to 2030 and decrease from 2030 to 2050. The system supplies to meet those demands are expected to come from the same sources, and the mix of system supplies to meet those demands are expected to remain relatively constant. Valley Water has indicated that it is actively planning, designing, and constructing a range of projects and programs intended to increase water supplies available to its retail agencies, including SJW. These efforts include investments in local supply development, storage, and system improvements. These efforts are intended to enhance long-term regional supply reliability; however, their timing, scope, and ultimate yield remain subject to ongoing planning, funding, and regulatory considerations.

As a result, SJW’s long-term supply planning assumes continued coordination and alignment with Valley Water and recognizes that the availability of these additional supplies will depend on project implementation. SJW also considers the potential cost implications of these investments, as they will affect wholesale water rates and, ultimately, customer affordability.

6.1 Water Supply

SJW’s water supply currently includes purchased or imported water from Valley Water, groundwater, local surface water, and recycled water. These sources of supply, future opportunities, and planned projects are discussed in this section.

6.1.1 Purchased or Imported Water

On average, purchased water from Valley Water makes up over half of SJW’s total water supply. Purchased water from Valley Water originates from several sources including Valley Water’s local reservoirs and the Sacramento-San Joaquin Delta (Delta) via the State Water Project and the federal Central Valley Project. Groundwater aquifers in the Santa Clara Subbasin are supplied with in-stream

releases from reservoirs and using recharge ponds operated by Valley Water.²¹ Purchased water is piped into SJW’s system at various turnouts after it is treated at one of three Valley Water-operated water treatment plants (Rinconada, Penitencia, and Santa Teresa). In 1981, SJW entered into a 70-year master contract with Valley Water for the purchase of treated water. The contract provides for rolling three-year delivery schedules establishing fixed quantities of treated water to be delivered during each period. SJW and Valley Water currently have a three-year treated water contract for fiscal years 2026/2027 – 2028/2029, with contract supplies of 68,265 AF (22,243 MG) in each fiscal year. Figure 6-1 shows the contract amount of purchased water by month, along with the 2025 actual purchased water and total 2025 water production (including all potable sources). The actual amount of purchased water delivered each year depends on considerations including hydrologic variability, interruptions in Valley Water supplies, water quality, and calls for conservation.

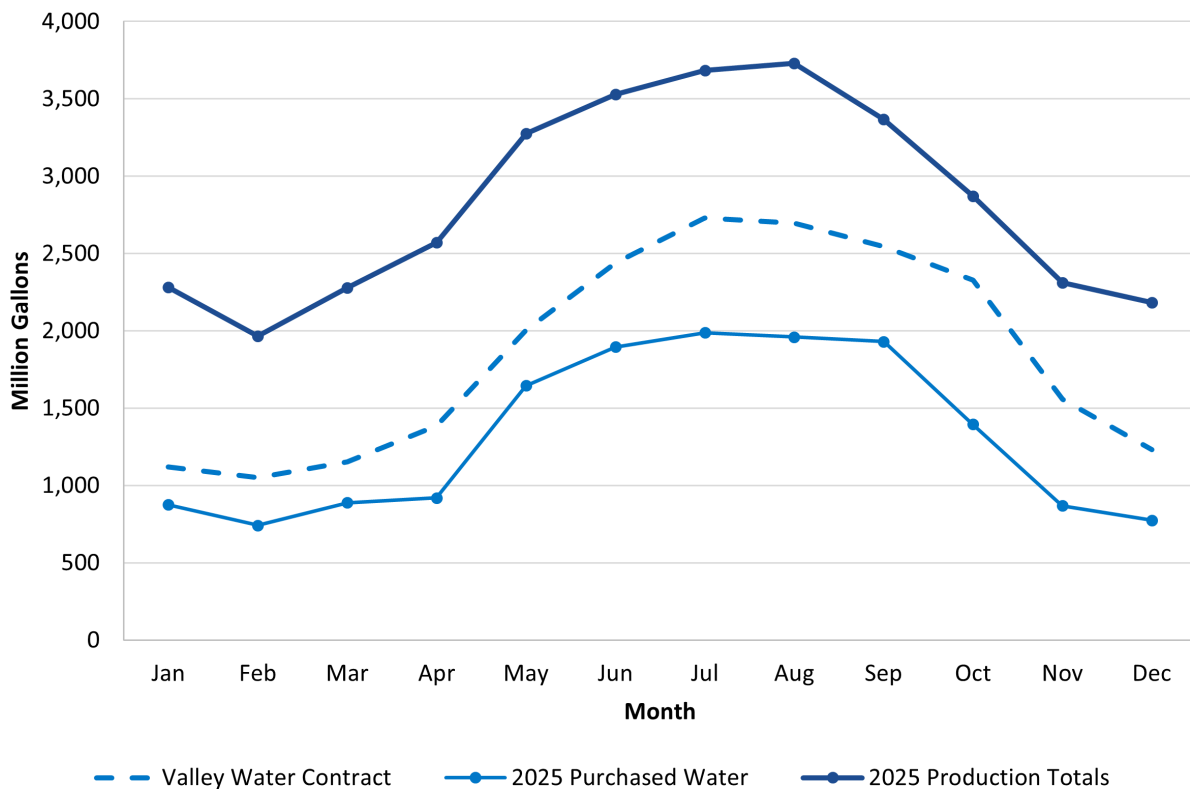


Figure 6-1. Purchased Water Contract Amounts Compared to 2025 Actuals

6.1.1.1 Reduced Delta Reliance

Through SJW’s water wholesaler, Valley Water, SJW receives imported water supplies from the Delta through the SWP and CVP. Valley Water operates a complex and interconnected water supply system to conjunctively manage supplies from surface water (imported and local) and groundwater to meet countywide demand. As a retailer in Santa Clara County that uses groundwater and treated surface water,

²¹ Valley Water. *Where Your Water Comes From*. <https://www.valleywater.org/your-water/where-your-water-comes-from>

SJW relies on Valley Water activities to maintain sustainable supplies, including managed groundwater recharge and in-lieu groundwater recharge (e.g., treated surface water deliveries and demand management programs). Valley Water’s conjunctive management of groundwater and surface water makes it difficult to demonstrate reduced Delta reliance at a retailer level for the following reasons:

- Valley Water uses water from the SWP, CVP, and local watershed runoff to meet groundwater recharge and water treatment plant needs, which in turn produce water for use by retailers and other users. The interconnected nature of the groundwater basins and blended use of sources in Valley Water infrastructure like reservoirs and pipelines make it infeasible to quantify imported water use at the retailer level.
- Valley Water manages most of the water conservation programs for Santa Clara County with the support of retailers. Retailers support the conservation programs through water rates and cost share agreements.
- Valley Water and SJW have recycled and purified water goals for the future. Future potable reuse would be added to surface supplies and may also augment groundwater supplies.
- Valley Water projects an increased use of supplies captured locally, which can contribute to reduced reliance on the Delta. However, given Valley Water’s conjunctive water management, these reductions cannot be allocated to individual retailers.

Valley Water has made investments²² in demand management and local supplies to reduce Santa Clara County’s and thus SJW’s reliance on the Delta. These investments include:

- Conservation and demand management
- Recycled water
- Dam improvements/seismic retrofits to lift storage restrictions on local reservoirs
- Regional collaborations to increase self-reliance

Through careful management and conjunctive use of local surface water and groundwater supplies, as well as increasing conservation and use of recycled and purified water, Santa Clara County (and by extension SJW) is reducing reliance on the Delta. Additional information can be found in [Appendix X](#).

6.1.2 Groundwater

SJW relies on its groundwater supplies to ensure supply resiliency against weather-related and other significant anthropogenic or natural disasters. On average, groundwater makes up between 30% and 40% of SJW’s total water supply. Actual groundwater volume pumped by SJW from 2021 to 2025 is shown in Table 6-1.

²² Details on these investments are provided in Appendix H of Valley Water’s 2025 UWMP.

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)							
Groundwater Type Drop Down List May use each category multiple times	Potable or Non-Potable (OPTIONAL) Drop down list	Location or Basin Name	2021 (MG)	2022 (MG)	2023 (MG)	2024 (MG)	2025 (MG)
Add additional rows as needed							
Alluvial Basin	Potable	Santa Clara Subbasin	17,428.68	14,202.98	10,798.94	14,426.65	15,814.32
Total			17,429	14,203	10,799	14,427	15,814

6.1.2.1 Groundwater Basin Description

As defined by DWR, SJW draws water from the Santa Clara Subbasin (Subbasin 2-009.02) which is part of the larger Santa Clara Valley Basin (Basin 2-009).²³ The Santa Clara Subbasin consists of unconsolidated alluvial sediments and covers a surface area of 297 square miles in the northern part of Santa Clara County. The subbasin is not adjudicated. Valley Water is responsible for maintaining the subbasin and ensuring the subbasin does not become overdrafted. Aquifers in the subbasin are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by Valley Water. Due to different land use and management characteristics, Valley Water further delineates the Santa Clara Subbasin into two groundwater management areas: the Santa Clara Plain and Coyote Valley. SJW draws groundwater from the Santa Clara Plain portion, which has an operational storage capacity estimated to be 350,000 AF (114,000 MG).²⁴ Figure 6-2 presents a map of the Santa Clara Subbasin.

²³ DWR. (March 2026). *California’s Groundwater: Bulletin 118 – Update 2025*. Natural Resources Agency. <https://water.ca.gov/programs/groundwater-management/bulletin-118>

²⁴ Valley Water. (Nov. 2021). *2021 Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. <https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>

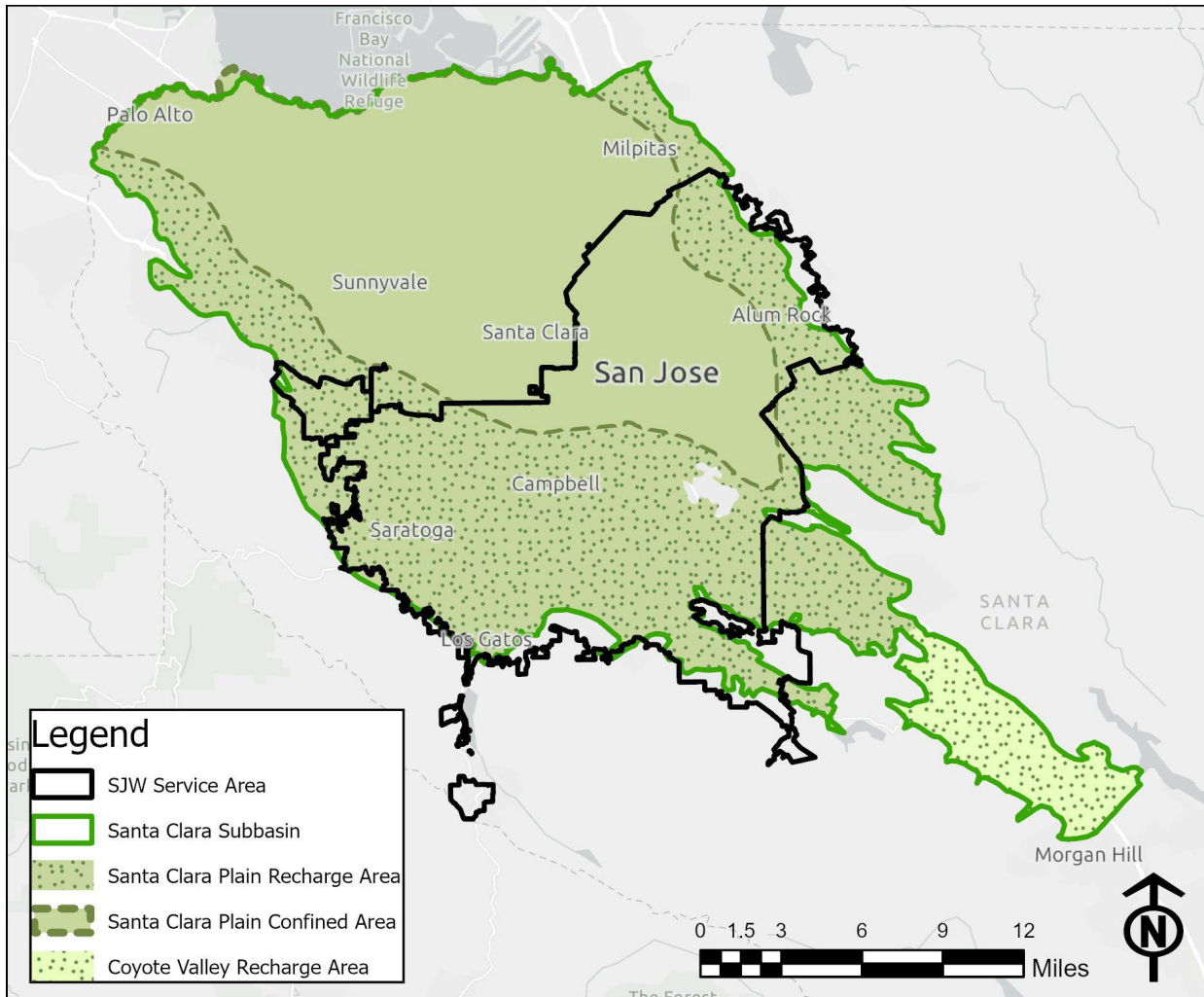


Figure 6-2. Santa Clara Subbasin Map

6.1.2.2 Groundwater Management Plan

Valley Water is the designated Groundwater Sustainability Agency for the Santa Clara Subbasin and neighboring Llagas Subbasin under SGMA. Valley Water’s water supply strategy is to use imported and local surface water to supplement groundwater and to maintain reliability in dry years. Conjunctive use of surface water and groundwater helps protect local subbasins from overdraft, land subsidence, and saltwater intrusion and provides critical groundwater storage reserves for use during droughts or outages.

Valley Water’s 2021 *Groundwater Management Plan (GWMP)*²⁵ describes Valley Water’s comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. Valley Water is currently in the process of developing its 2026 GWMP.

The 2021 GWMP identifies the following two basin management objectives:

²⁵ Valley Water. (Nov. 2021). *2021 Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. <https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>

- Groundwater supplies are managed to ensure sustainable supplies and minimize land subsidence
- Groundwater is protected from contamination, including salt water intrusion

In June 2024, DWR approved the GWMP, which has been submitted as the Alternative Groundwater Sustainability Plan for both the Santa Clara and Llagas Subbasins, determining that it satisfies the objectives of SGMA. The next required plan update is due for submittal to DWR by the end of 2026.

SJW works with Valley Water to implement numerous programs to protect groundwater resources, including comprehensive monitoring programs related to groundwater levels, land subsidence, overdraft, groundwater quality, recharge water quality, and surface water flow. SJW plays a major role in influencing groundwater conditions through its groundwater pumping operations, and thus, SJW and Valley Water collaborate closely on operations as well as long-term planning. As outlined in the 2021 GWMP, effective coordination with water retailers, which includes SJW, have helped to achieve sustainable groundwater conditions. As an example, during previous drought, retailer efforts to use treated surface water and reduce pumping in certain areas were instrumental in groundwater level recovery and minimizing the risk of resumed land subsidence.

SJW coordinates with Valley Water through active participation in Valley Water subcommittees, review of long-term planning documents and planning frameworks, and regular communications regarding water supply conditions and operational considerations. SJW will continue to engage with Valley Water on matters affecting basin sustainability and regional water supply reliability.

In doing so, SJW will evaluate planning efforts and potential actions in the context of delivering reliable, resilient, and cost-effective water service to its customers, while supporting the long-term sustainability of the Santa Clara Subbasin and regional water resources.

6.1.2.3 Current Groundwater Conditions

DWR has identified the Santa Clara Subbasin as a high priority subbasin based on criteria that include overlying population, projected growth, number of wells, irrigation acreage, groundwater reliance, and groundwater impacts. The subbasin has not been identified by DWR as being critically overdrafted.

Figure 6-3 shows groundwater elevation in the Santa Clara Plain since the mid 1930's using well surface elevation as the datum. Groundwater levels declined during the 2012-2016 and 2020-2023 drought periods, consistent with reduced recharge and increased reliance on groundwater supplies. Following these droughts groundwater levels rebounded as hydrologic conditions improved, supported by managed recharge efforts and coordinated water supply management activities, including SJW's operational practices that help reduce groundwater demand when alternative supplies are available.

Groundwater conditions in the Santa Clara Subbasin are reported monthly by Valley Water through its Groundwater Conditions Report²⁶ and Water Tracker²⁷.

²⁶ Valley Water. *Groundwater Monitoring*. Where Your Water Comes From. <https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater/groundwater-monitoring>

²⁷ Valley Water. *Monthly Water Tracker*. Water Supply Planning. <https://www.valleywater.org/your-water/water-supply-planning/monthly-water-tracker>

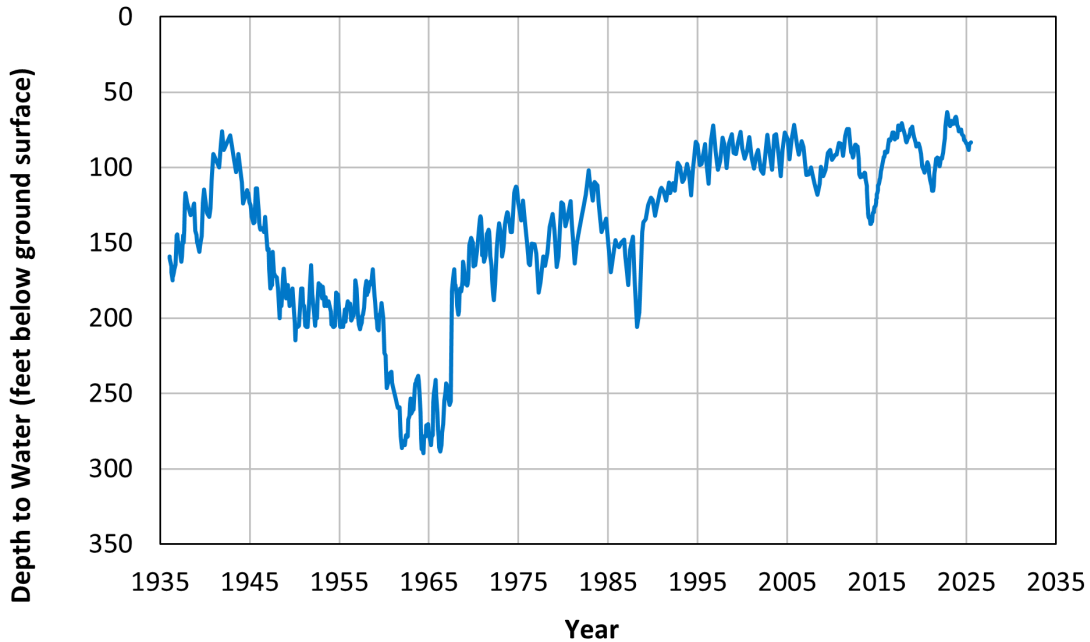


Figure 6-3. Groundwater Elevation in Santa Clara Plain (Well ID: 07S01W25L001)

SJW's groundwater wells produce water that meets all primary drinking water standards with disinfection as the only required treatment. However, several water quality challenges are present and actively managed. Per- and polyfluoroalkyl substances (PFAS) have been detected at a subset of wells, and approximately 12 to 14 wells across four groundwater stations are projected to exceed the federal Maximum Contaminant Level (MCL) for PFOS. Wells with concentrations above California's Notification Levels have been placed on standby and are not delivering water to customers. Nitrate concentrations remain below the MCL across SJW's active wells but are trending upward in portions of the basin, and SJW monitors these trends closely. Arsenic and water hardness are also factors that SJW evaluates when planning treatment investments. Several EPA Superfund cleanup sites are located within the Santa Clara Valley, and SJW's source water assessments identify potential vulnerabilities from historical industrial activity near some wells; however, these activities have not been associated with contaminants detected in the water supply. SJW regularly tests for regulated and emerging contaminants, responds promptly with operational changes when warranted, and has completed a thorough evaluation of contamination likelihood at all of its wells to prioritize monitoring and contingency planning.

In April 2024, the U.S. Environmental Protection Agency (EPA) finalized the first federal Maximum Contaminant Levels for six PFAS compounds under the National Primary Drinking Water Regulation (NPDWR), including individual MCLs of 4 parts per trillion for PFOA and PFOS, and 10 parts per trillion for PFHxS, PFNA, and HFPO-DA (GenX), along with a Hazard Index for certain PFAS mixtures. Public water systems are required to complete initial monitoring by 2027, with compliance monitoring and MCL enforcement beginning thereafter.

On May 18, 2026, EPA proposed two rules that would modify the scope and timeline of the 2024 regulation. The first proposed rule would rescind the MCLs for PFHxS, PFNA, HFPO-DA, and the Hazard

Index mixture, with EPA stating it intends to reevaluate those compounds through a new regulatory determination process. The second proposed rule would retain the PFOA and PFOS MCLs at 4 parts per trillion but allow eligible water systems to apply for up to two additional years, extending the compliance deadline from 2029 to 2031, through a state-administered process. Extensions are not automatic. Systems with PFOA or PFOS detections at or above 12 parts per trillion would still be required to conduct public notification by April 2029 regardless of extension status. Both proposals are open for public comment through July 20, 2026, and the existing standards remain legally in effect pending final rulemaking. California is expected to continue its own PFAS monitoring and rulemaking process, which in some respects is more stringent than the federal framework.

Prior to the establishment of federal MCLs, SJW had already taken proactive measures to address PFAS, including notifying customers and removing wells from service when concentrations exceeded State-defined Notification Levels. Building on these early actions, SJW has substantially advanced the design of a PFAS treatment facility at its largest groundwater production station and has filed an application with the California Public Utilities Commission (CPUC) seeking approval to proceed with implementation. This project represents a key step in SJW's broader approach to maintaining compliance with current and anticipated regulatory requirements while supporting the continued reliability of its groundwater supplies.

6.1.3 Local Surface Water

SJW has a number of raw water reservoirs and intakes in the Saratoga Creek and Los Gatos Creek watersheds, which store or divert water to SJW's water treatment plants that provide treated surface water to the service area. Surface water supplies are highly variable generally contribute less than 10% of total water supply; in recent years, surface water supplies have contributed approximately 7% of total supply on both a 5-year and 10-year average basis. Annual contributions may vary significantly depending on hydrologic conditions and operational and regulatory constraints. Operational constraints include treatment capacity limitations and raw water quality during high-flow events and regulatory constraints include minimum reservoir storage levels maintained for environmental protection and to maintain wildlife habitats and bypass flow requirements as required by California Department of Fish and Wildlife permits. These constraints may limit the volume of water available for diversion, particularly during dry periods or low-flow conditions.

Prior to 1872, appropriative water rights could be acquired by simply taking and beneficially using water. In 1914, the Water Code was adopted and it grandfathered in all existing water entitlements to license holders. SJW has "pre-1914 water rights" to surface water in Saratoga Creek, Los Gatos Creek, and associated watersheds, totaling to approximately 72 MGD, based on capacity of diversion works from Initial Statements of Water Diversion and Use. SJW also filed for licenses in 1947 and was granted license number 4247 in 1956 by SWRCB to draw 1419 AF/year (462 MG/year) from Saratoga Creek, and license number 10933 in 1979 to draw 6,240 AF/year (2,033 MG/year) from Los Gatos Creek.

Similar to the general rainfall pattern in Northern California, precipitation in the watersheds generally occurs between November and April, with the remainder of the year being fairly dry. In the wet winter months, the surface water system is supplied primarily by intakes on Saratoga Creek, Los Gatos Creek, and tributaries to Los Gatos Creek as SJW’s raw water reservoirs fill from winter runoff. As the creeks and tributaries begin to dry up in late spring and early summer, SJW begins releasing water stored in its Lake Elsman (capacity of 2,005 MG) to Los Gatos Creek, where it is diverted by a downstream intake to SJW’s Montevina Water Treatment Plant (WTP). Similarly, flows can also be released from SJW’s Lake Ranch/McKenzie (capacity of 70 MG) to either the Saratoga Creek watershed or Los Gatos Creek watershed, to be diverted by downstream intakes to SJW’s Montevina WTP or Saratoga WTP. With its larger capacity, Lake Elsman is SJW’s primary means for sustaining surface water flows through the summer months. SJW uses stored water releases (e.g., from Lake Elsman and Lake Ranch/McKenzie) to extend the availability of surface water supplies into the dry season when natural streamflow declines. This operational approach improves seasonal reliability but remains dependent on antecedent hydrologic conditions and reservoir storage levels. Future availability of local surface water supplies may be affected by updates to bypass flow requirements and findings from SJW’s forthcoming *Raw Water Master Plan*, which is expected to evaluate long-term infrastructure needs and operational strategies to optimize use of available surface water supplies.

6.1.4 Stormwater

SJW has engineered well blowoff sumps at some of its groundwater stations that capture well blowoff water and stormwater runoff from the site, to facilitate compliance with SJW’s General National Pollutant Discharge Elimination System (NPDES) Permit. These sumps allow for passive treatment and onsite infiltration of both blowoff water and stormwater runoff. Onsite infiltration is considered beneficial reuse under the General NPDES Permit and is a preferred method for discharging potable water. Some of SJW’s other stations have biotreatment areas that provide limited infiltration and passive treatment of stormwater runoff, as part of Municipal Storm Water Permit requirements.

Because SJW does not intentionally divert stormwater for water supply purposes, stormwater is not reported as a water supply source in this UWMP. However, Valley Water has a managed recharge program that includes capturing local runoff in reservoirs and releasing it to groundwater recharge facilities or drinking water treatment plants. As reported in its water supply master planning documents, Valley Water plans to increase stormwater capture and reuse capacity.

6.1.5 Wastewater and Recycled Water

Recycled water provides multiple benefits to SJW customers and is a growing source of supply, as it is locally available, available during dry years, and is less susceptible to changes in hydrology. Participating customers receive recycled water at a discount and are not subject to voluntary and mandatory drought restrictions. The overall customer base benefits since the amount of recycled water used by others reduces the demand on potable water by a 1 to 1 ratio. Therefore, more potable water is available to the overall customer base. Recycled water is important to SJW’s overall water supply portfolio since both SJW and Valley Water rely on recycled water and conservation to meet future demands and growth in Santa

Clara County. In 2025, recycled water made up approximately 2% of SJW’s total water supply, an amount that has increased over recent years, as shown in Figure 6-4. SJW aims to further increase that amount between 2025 and 2050, through customer outreach, investment in additional recycled water delivery infrastructure, and coordination with other agencies.

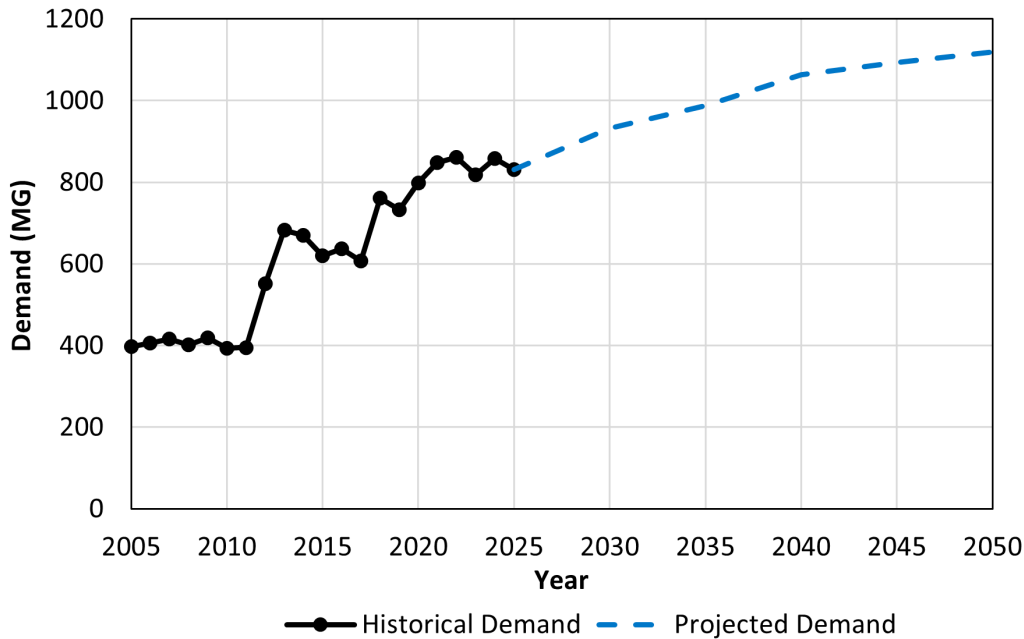


Figure 6-4. Recycled Water: Historical and Projected Demands

6.1.5.1 Recycled Water Coordination

South Bay Water Recycling (SBWR) has provided Silicon Valley communities with a sustainable, high-quality recycled water supply since 1993. The system was originally developed to reduce freshwater effluent discharges to sensitive South San Francisco Bay habitats, supporting environmental protection objectives such as the preservation of the California clapper rail and salt marsh harvest mouse, while also creating a beneficial reuse supply for non-potable demands.

In 1997, SJW entered into a Wholesaler-Retailer Agreement with the City of San José to deliver recycled water to existing and future SJW customers located near SBWR distribution facilities. Under this arrangement, the City of San José serves as the wholesaler, while SJW provides retail service to its customers. While the initial structure of the agreement primarily supported the City’s regulatory and environmental compliance objectives, it also established the foundation for expanding recycled water use within SJW’s service area to offset potable water demand and provide a lower-cost, drought-resilient supply option for appropriate uses such as irrigation and industrial processes. Under the agreement, SBWR constructed, owned, operated, and maintained the recycled water distribution system, while SJW owned the recycled water meters and served as the customer interface.

In 2010, the agreement was amended to allow SJW to construct, own, operate, and maintain recycled water infrastructure within its service area. Subsequent amendments in 2012 and 2024 further expanded

SJW's ability to invest in recycled water facilities. These updates have enabled SJW to play a more direct role in system development, improving service reliability, supporting system expansion to additional customers, and enhancing the long-term value of recycled water as a cost-effective and resilient component of the overall water supply portfolio.

6.1.5.2 Wastewater Collection, Treatment, and Disposal

SJW does not own or operate wastewater treatment facilities. The majority of sewage generated within SJW's service area is provided to the San José-Santa Clara Regional Wastewater Facility (SJ/SC RWF)²⁸ via the Burbank Sanitary District, City of San José, Cupertino Sanitary District, County Sanitation District 2-3, and West Valley Sanitation District collection systems. A small portion of SJW customers are on septic systems. The estimated volume of wastewater collected from SJW's service area is shown in Table 6-2. Wastewater is not treated or disposed of within SJW's service area, as indicated in Table 6-3.

²⁸ City of San José. *San José-Santa Clara Regional Wastewater Facility*. Environmental Services. <https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility>

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area Water Code Section 10633(a)				
<input type="checkbox"/>		Check the box if there is no wastewater collection system. Proceed to the next table.		
		Percentage of 2025 service area served by wastewater collection system (OPTIONAL)		
		Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)		
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL Drop Down List	Volume of Wastewater Collected from UWMP Service Area 2025 (MG)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number Drop down list	Is WWTP Located Within UWMP Area? Drop Down List
Add additional rows as needed				
Burbank Sanitary District, City of San José, Cupertino Sanitary District, County Sanitation District 2-3, West Valley Sanitation District	Estimated	25,263	San Jose/Santa Clara WPCP, Place ID 255333	No
Total Wastewater Received from UWMP Service Area in 2025:		25,263		
<p>NOTES: Total volume of wastewater treated at SJ/SC RWF in 2025 provided by City of San José. Volume of wastewater collected from SJW service area in 2025 estimated based on the proportion of SJW’s potable water demands in 2015 and 2020 relative to potable water demands of other water retailers served by SJ/SC RWF. This methodology is consistent with the one used in SJW’s 2015 and 2020 UWMPs, which SJW coordinated with City of San José to develop.</p>				

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area
Water Code Section 10633(b)

<input checked="" type="checkbox"/>	Check the box if no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.													
Wastewater Treatment Plant Name and Place ID Number Drop down list	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) Drop down list	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (MG)	Total 2025 Volume of Water Treated (MG)	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		Water Recycled Outside of UWMP Service Area (enter data as applicable)		Effluent Discharge that is not a Permitted Recycled Water Use (enter data as applicable)		Required Discharge for Instream Flow (enter data as applicable)		Delivered to Another Entity for Additional Treatment (enter data as applicable)		
				Treatment Level Drop down list	Volume (MG)	Treatment Level Drop down list	Volume (MG)	Treatment Level Drop down list	Volume (MG)	Treatment Level Drop down list	Volume (MG)	Treatment Level Drop down list	Volume (MG)	Name of other entity
Add additional rows as needed														
		0	-		0		0		0		0		0	

6.1.5.3 Recycled Water System Description

The SJ/SC RWF is managed and operated by the City of San José. The plant treats an average of 110 million gallons per day (MGD) of wastewater, with a capacity of up to 167 MGD, using advanced tertiary treatment processes. The majority of treated effluent is discharged into the South San Francisco Bay.

According to information provided to SJW by the City of San José, SJ/SC RWF received 38,067 MG of wastewater in 2025, of which 31,908 MG was discharged as treated effluent to the Bay. Approximately 4,055 MG was directed toward recycled water production, including flows conveyed to the SBWR²⁹ system and to Valley Water's Silicon Valley Advanced Water Purification Center (SVAWPC)³⁰. At SVAWPC, secondary-treated effluent from the SJ/SC RWF undergoes advanced treatment, and a portion of this advanced-treated water is blended with SBWR supplies to improve recycled water quality. Figure 6-5 provides an overview of the wastewater and recycled water agencies and facilities serving the SJW service area.

The SBWR system consists of over 150 miles of pipe, 5 pump stations, and 10 MG of storage. SBWR blends tertiary-treated water from SJ/SC RWF with advanced-treated water from SVAWPC to improve the quality of recycled water for non-potable use and to maintain total dissolved solids below 500 parts per million. The SVAWPC receives secondary-treated wastewater from SJ/SC RWF and uses microfiltration, reverse osmosis, and ultra-violet disinfection to produce advanced-treated water. SBWR is regulated by the Regional Water Quality Control Board (RWQCB) - San Francisco Bay Region under Order No. 95-117. This order specifies the Water Reclamation Requirements promulgated by the RWQCB for recycled water produced by the SJ/SC RWF and distributed to SBWR.

²⁹ South Bay Water Recycling. "Recycled Water." City of San José. <https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/recycled-water>

³⁰ Silicon Valley Advanced Water Purification Center. <https://purewater4u.org/>

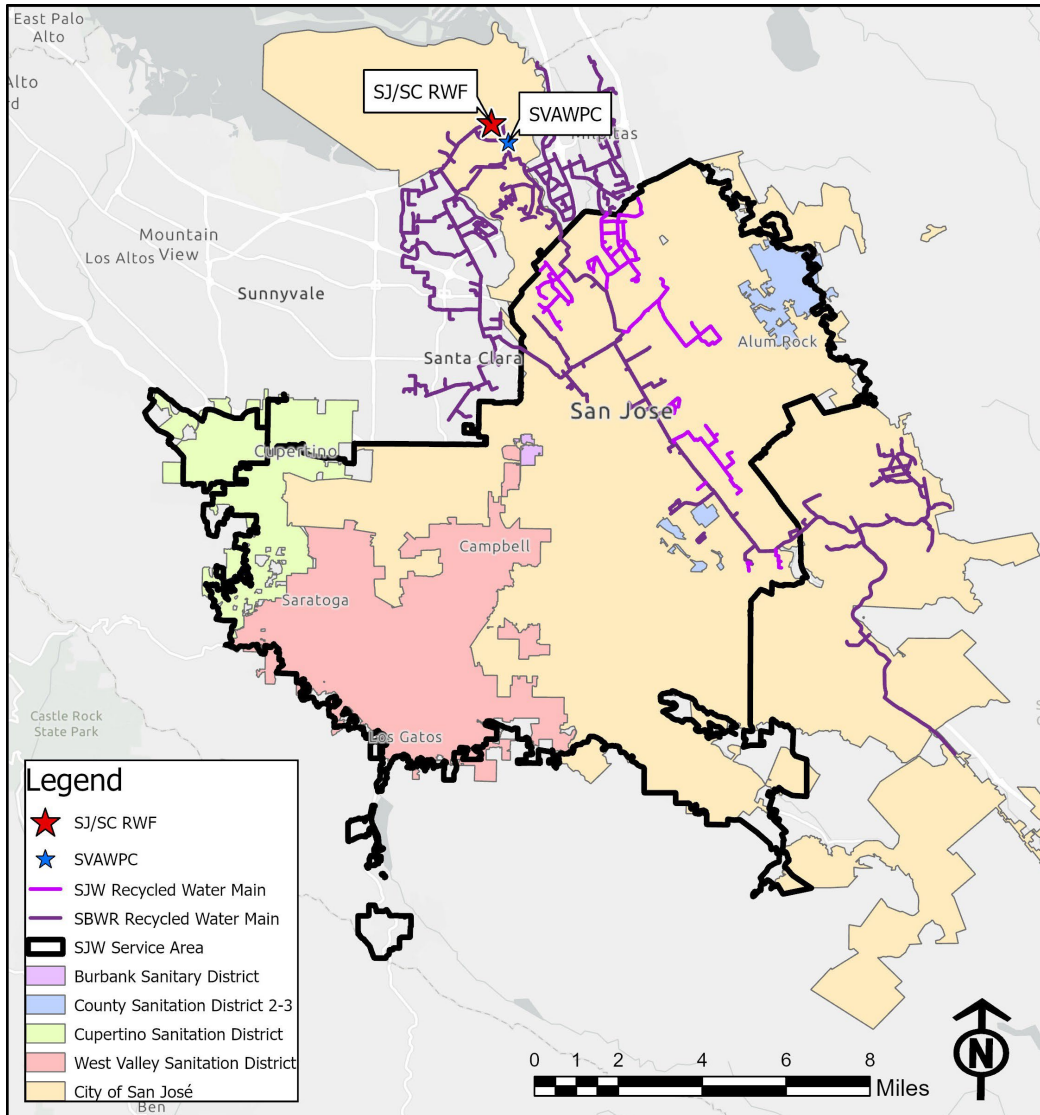


Figure 6-5. Wastewater and Recycled Water Systems within SJW Service Area

6.1.5.4 Current, Potential, and Projected Recycled Water Uses

Existing and projected recycled water deliveries by beneficial use type and project name are described in Table 6-4 through Table 6-6. Recycled water in the SJW service area is delivered through both SBWR and SJW recycled water mains. The majority of existing recycled water use in SJW’s service area is for landscape irrigation. Recycled water is also used for golf course irrigation, commercial use (toilet/urinal flushing at dual-plumbed buildings, car wash), industrial uses, and agricultural irrigation.

Recycled water use projections are based on planned recycled water main alignments identified in SJW’s *Recycled Water Master Plan*, along with updated alignment information. Projected increases in recycled water demand are expected to be driven primarily by landscape irrigation associated with new development and system expansion areas.

Opportunities to expand recycled water use to additional customer classes are more limited. While dual-plumbed systems can support indoor non-potable uses, such applications are not expected to represent a meaningful source of demand within SJW’s service area due to relatively low water use, high retrofit costs, and limited applicability outside of select new developments.

Continued commercial growth, particularly the expansion of data centers and other high water-use facilities, may create opportunities for recycled water use in cooling tower makeup and similar applications. These uses have the potential to provide more consistent and higher-volume demand relative to irrigation; however, implementation depends on site-specific factors, including retrofit feasibility, customer water quality requirements, and operational considerations related to equipment performance and maintenance.

Given these constraints, near-term increases in recycled water demand are anticipated to be driven primarily by landscape irrigation, with commercial and industrial applications, including data center cooling, representing a longer-term opportunity as infrastructure, customer needs, and water quality considerations evolve.

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
Use Type Drop Down list	2020 Projection for 2025 (MG)	2025 Actual Use (MG)
Add additional rows as needed		
Agricultural irrigation	1	1
Landscape irrigation (exc golf courses)	757	610
Golf course irrigation	64	69
Industrial use	11	13
Commercial use	57	137
Other (Description Required)	0	0
Total	890	830
NOTES: Other use includes construction and dust control via portable meter which customers used prior to 2020.		

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area Water Code Section 10633 (c),(d),(e)										
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :			South Bay Water Recycling							
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :			South Bay Water Recycling and San Jose Water Company							
Volume of Supplemental Water Added in 2025 (OPTIONAL) :										
Source of 2025 Supplemental Water (OPTIONAL) :										
Use Type Drop down list	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (MG)	2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 (MG)	Potential Recycled Water Use	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
Agricultural irrigation	Non-Potable	Community Garden	1	1	1	1	1	1		
Landscape irrigation (exc golf courses)	Non-Potable		610	697	766	843	873	898		
Golf course irrigation	Non-Potable		69	69	69	69	69	69		
Commercial use	Non-Potable	Toilet/urinal flushing, car wash	13	13	13	13	13	13		
Industrial use	Non-Potable	Cooling towers	137	137	137	137	137	137		
Subtotal Potable			0	0	0	0	0	0	0	
Subtotal Non-Potable			830	917	986	1,063	1,093	1,118	0	
Total			830	917	986	1,063	1,093	1,118	0	0
NOTES: New projected recycled water use is anticipated to be for landscape irrigation. Assumed agricultural irrigation, commercial, and industrial use remains constant. Agricultural irrigation is for Guadalupe Community Gardens. Golf course irrigation is for San Jose Municipal Golf Course. Multiple users under commercial and industrial categories (largest use is for cooling towers at San José State University).										

6.1.5.4.1 Projected Direct Potable Reuse

SJW is actively advancing a proof-of-concept demonstration facility for direct potable reuse (DPR) and is currently completing the design of this pilot system. The project will include a mobile treatment unit that can be deployed throughout the service area to demonstrate treatment performance under a range of source water conditions and support community outreach and education. The demonstration facility is expected to be operational in 2027.

While this pilot program is not included in projected supply quantities, it represents a key step in developing operational expertise, validating treatment performance, and building public understanding of DPR. This effort will position SJW to evaluate and pursue future DPR opportunities, including potential partnerships or expansion to a regional-scale facility that could enhance drought resilience in the Silicon Valley region. SJW intends to continue advancing feasibility evaluations for full-scale DPR implementation during the next UWMP cycle in parallel with completion and operation of the demonstration facility.

Valley Water's UWMP identifies the development of up to 24,000 acre-feet per year (7,800 MG/year) of DPR capacity (see Section 6.1.9.2). Valley Water has indicated that their DPR facility will be reserved primarily to supplement demand during droughts and emergencies only, and that potable water produced from this plant would be combined with raw imported water for subsequent treatment and distributed to retailers from their Penitencia Water Treatment Plant. SJW will consider this and other potential DPR supply options in the context of meeting customer water supply needs and affordability. Evaluation of these alternatives will focus on reliability, water quality, implementation timing, and overall cost to customers to determine the most effective approach for future supply development.

6.1.5.5 Actions to Encourage and Optimize Future Recycled Water Use

SJW aims to further increase recycled water use through customer outreach, investment in additional recycled water delivery infrastructure, and coordination with other agencies. The RWMP details SJW's plans including proposed new recycled water main alignments and infill of new customers onto existing recycled water mains as listed in Table 6-6.

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
Section 6.1.5.5	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (MG)
Sign up of new customers	Existing recycled water main extension	2025 - 2050	45
Alignment D Phase 3B	New recycled water main extension	2026	83
Extensions - Package 1	New recycled water main extension	2029	35
Alignment T1	New recycled water main extension	2032	38
Alignment T2	New recycled water main extension	2035	44
Alignment K	New recycled water main extension	2038	21
Alignment U	New recycled water main extension	2041	9
Alignment J	New recycled water main extension	2044	18
Total (MG)			293
Unit Conversion to AF			900

6.1.6 Desalinated Water Opportunities

SJW does not currently use desalinated water as a water supply. In 2023, SJW conducted a feasibility study to evaluate whether brackish desalination could serve as a viable alternative supply in the Alviso area of north San Jose. After reviewing multiple potential locations and drilling test wells in the sites with the greatest potential, hydraulic data and borehole geology indicated limited production capacity, and the sites were not found to be suitable for brackish groundwater extraction.

Given these findings, desalination is not currently identified as a near-term supply option for SJW. However, desalination technologies may have a role in the region’s long-term water supply portfolio if developed at an appropriate scale. Due to the significant capital and operational costs associated with desalination, any future implementation would likely need to be pursued in the context of a regional approach to be cost-effective for customers. SJW will continue to evaluate alternative technologies and locations for potential future desalinated supplies as part of long-term planning efforts.

Following SJW’s evaluation, Valley Water completed its own preliminary environmental feasibility study for a potential desalination project in the South San Francisco Bay, which found that a project could be feasible if certain environmental considerations are addressed, including potential effects on sensitive Bay habitats, brine discharge management, energy use, and permitting requirements. Valley Water is continuing to evaluate this concept through additional engineering and technical studies.³¹ However,

³¹ Valley Water. *Desalination*. Water Supply Planning. <https://www.valleywater.org/your-water/water-supply-planning/desalination>

desalination is not currently included in its projected water supply portfolio. As regional discussions progress, desalination will need to be considered alongside other supply options, with careful attention to overall costs, reliability, environmental impacts, and the value provided to customers.

6.1.7 Water Exchanges and Transfers

SJW's distribution system has interties with the following retailers: California Water Service Company (Los Altos District), City of San José Municipal Water, City of Santa Clara, City of Sunnyvale, City of Milpitas, and Great Oaks Water. SJW currently has no plans to use these interties for normal system operation as they are exclusively used for potential emergencies. These emergency interties are not reported as a water supply source in this UWMP.

6.1.8 Supply From Storage

SJW's wholesaler, Valley Water, has participated in a water banking and exchange program with the Semitropic Water Storage District in Kern County since 1996. Under this program, Valley Water has a contractual right to store up to 350,000 AF (114,000 MG) in the Kern County Subbasin for use during dry years. The program is intended to provide operational flexibility by allowing surplus supplies to be banked in wetter periods for later use. The current agreement expires in 2035.

While the program provides significant storage capacity, recovery of banked water is subject to operational, hydrologic, and conveyance constraints. Stored water is not physically conveyed directly from Kern County to Santa Clara County; instead, it is recovered through exchange or transfer arrangements within the State Water Project system. Under its contract, Valley Water may withdraw between approximately 31,000 and 78,000 acre-feet per year (10,000 and 25,400 MG per year, respectively) of banked water, depending on State Water Project allocation conditions, with higher withdrawal levels generally associated with wetter year allocations. Actual recovery in any given year depends on the availability of conveyance capacity, regulatory conditions, and broader system operations. As a result, the ability to access banked supplies may be constrained during extended drought conditions when system-wide limitations are most pronounced.

Valley Water can also store water supplies in San Luis Reservoir in Merced County when capacity is available. Both SWP and CVP water may be stored in the reservoir. However, storage availability is dependent on hydrologic conditions and reservoir operations, and stored supplies may be at risk of spill during wet periods when the reservoir reaches capacity.

6.1.9 Future Water Projects

SJW engages with Valley Water on planning efforts related to future water supply reliability under average, single dry, and multiple dry year conditions. Valley Water's current level of service goal is to develop supplies sufficient to meet 100% of annual water demand in non-drought years and at least 80%

of annual demand during drought conditions³² is intended to balance drought resilience with the need to avoid overinvestment in water supply infrastructure.

Valley Water is currently planning, designing, and constructing a number of water supply projects and programs to support this level of service, as summarized in Table 6-7, with additional details provided in its UWMP and *Water Supply Master Plan 2050* (WSMP 2050).³² The WSMP 2050, most recently updated in November 2025, is supplemented by annual Monitoring and Assessment Program (MAP) reports that track project costs, benefits, and evolving factors such as demand forecasts, climate change, and regulatory requirements. These planning processes inform Valley Water's ongoing investment decisions and identification of future supply projects.

As these efforts progress, SJW evaluates Valley Water's planned projects in the context of delivering reliable, high-quality water supplies while maintaining affordability for customers. This includes consideration of project costs, implementation timing, and overall rate impacts, as well as comparison with alternative supply strategies. SJW continues to participate in regional planning discussions and provides input where appropriate, with focus on identifying supply solutions that provide the greatest overall value to customers.

In parallel with Valley Water efforts, SJW is advancing its own water supply initiatives to complement wholesale supplies and enhance portfolio flexibility. This includes progressing design of a direct potable reuse (DPR) demonstration facility, evaluating long-term opportunities for DPR implementation, and assessing other alternative supply options such as desalination where technically and economically viable. SJW is also exploring opportunities for regional collaboration where such approaches can improve cost-effectiveness and system resilience.

Through this combined approach, SJW seeks to maintain a balanced and diversified water supply portfolio. Future investments, whether developed by Valley Water, SJW, or through regional partnerships, will be evaluated based on their ability to provide reliable service at a reasonable cost, supporting long-term water supply resilience while managing rate impacts for customers.

³² Valley Water. (Nov. 2025). *Water Supply Master Plan 2050*. <https://www.valleywater.org/your-water/water-supply-planning/water-supply-master-plan>

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)					
Section 6.1.10	Provide page location of narrative in the UWMP				
Name of Future Projects or Programs	Joint Project with other suppliers?		Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier (This may be a range) (MG)
	Drop Down List (yes/no)	If Yes, Supplier Name			
Anderson Dam Seismic Retrofit	Yes	Valley Water	2034	All Year Types	28,000
Guadalupe, Calero, and Almaden Dam Seismic Retrofits	Yes	Valley Water	2035	All Year Types	2,200
Pure Water Silicon Valley for DPR	Yes	Valley Water	2035	All Year Types	7,800
B.F. Sisk Dam Raise	Yes	Valley Water, US Bureau of Reclamation, San Luis & Delta-Mendota Water Authority	2035	All Year Types	42,400
Delta Conveyance Project	Yes	Valley Water	2045	All Year Types	4,600
Groundwater Banking and South County Recharge	Yes	Valley Water	2030	All Year Types	5,900

6.1.9.1 Dam Seismic Retrofits

Valley Water has several surface water reservoirs that are operating at restricted capacity due to seismic stability concerns. Thus, Valley Water has some dam improvement and seismic retrofit projects planned for its Almaden, Anderson, Calero, and Guadalupe reservoirs, to restore these reservoirs to their full operating capacities. Anderson Reservoir is Valley Water's largest reservoir and is currently drained down to deadpool (i.e. no water is available as a supply) due to seismic concerns. The construction project there is ongoing with an expected completion in 2034. Seismic retrofits at Almaden, Calero, and Guadalupe dams will be completed between 2030 and 2035. All these seismic retrofits will result in an increase in Valley Water's local surface storage capacity from the current 63,000 AF to 155,000 AF (20,500 MG to 50,500 MG).

6.1.9.2 Pure Water Silicon Valley for DPR

Valley Water has established a potable reuse goal of 24,000 AFY (7,800 MG/year) by 2035 and up to 32,000 AFY (10,400 MG/year) by 2050. The 2035 target is included in its projected supplies in the UWMP. Valley Water's current planning approach envisions construction of a new advanced purification facility adjacent to the existing Silicon Valley Advanced Water Purification Center. A demonstration facility is expected to be in service around 2030, with full-scale implementation anticipated by 2035.

As these plans advance, the scale, cost, and implementation approach of regional potable reuse projects will be key considerations. While large centralized facilities may provide significant supply volumes, they also involve substantial capital investment, complex infrastructure integration, and long development timelines.

SJW recognizes potable reuse as an important component of a diversified and drought-resilient water supply portfolio and is actively advancing its own DPR initiatives. As a result, SJW will evaluate Valley Water's proposed potable reuse projects in the context of alternative approaches, including utility-scale and modular implementation strategies, with a focus on overall cost-effectiveness, implementation timing, and value to customers. This evaluation will help inform the most appropriate pathway for developing potable reuse supplies in a manner that meets reliability objectives while managing rate impacts.

6.1.9.3 Delta Conveyance Project

The Sacramento-San Joaquin Delta is a critical part of California's water supply system and water which passes through the Delta is delivered to over 27 million people and approximately 750,000 acres of farmland.³³ The Delta Conveyance Project (DCP) is a climate adaptation strategy designed to improve the water infrastructure in the Delta, which provides water to the SWP, a source of SJW's purchased water from Valley Water. Consistent with Executive Order N-10-19, in early 2019, the State announced a new single tunnel project, which proposed a set of new diversion intakes along the Sacramento River in the north Delta for the SWP. In 2019, DWR initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the reliability of SWP supplies from the effects of climate change and seismic events, among other risks. In December 2023, DWR certified the Environmental

³³ DWR. *Delta Conveyance*. State Water Project. <https://water.ca.gov/deltaconveyance>

Impact Report and approved the CDP selecting the “Bethany Reservoir Alignment” for further engineering, design, and permitting. DWR is continuing with the design refinements, environmental planning and permitting through 2026-2027 including resolving appeals on its Delta Plan certification. DCP will potentially be operational in 2045 following extensive planning, permitting, and construction.

Valley Water is one of the SWP contractors participating in the project at a level of 3.23%, which could provide approximately 14,000 AFY (4,600 MG/year) of water supply benefits on average. The DCP is recommended by Valley Water’s WSMP 2050 and its benefits are included in their future imported water supply estimates.

6.1.9.4 B.F. Sisk Dam Raise

The B.F. Sisk Dam and San Luis Reservoir in Merced County provide Valley Water with additional storage for imported water from both the SWP and CVP. Storage amounts vary with hydrologic conditions and are at risk of spilling (i.e. being lost as a supply) if the reservoir fills completely. In the last five years, Valley Water has stored an average of 54,708 AFY (17,800 MG/year) in San Luis Reservoir and only lost a total of 9,220 AF (3,000 MG) due to the reservoir filling.

The B.F. Sisk Dam Raise and Reservoir Expansion Project,³⁴ jointly led by the U.S. Bureau of Reclamation and the San Luis and Delta-Mendota Water Authority (SLDMWA), will raise the existing dam by 10 feet and increase the storage capacity of the reservoir by 130,000 AF (42,400 MG), allowing Valley Water to capture and store SWP and CVP surplus supplies when available.

6.1.9.5 South County Recharge

Several groundwater recharge projects are being evaluated by Valley Water for the South County. Four alternatives are currently under consideration to determine which of the four managed recharge projects will best support water supply needs. Three of the alternatives would recharge the Llagas Subbasin, which is located south of SJW’s service area. The Coyote Valley Recharge Ponds Project would recharge the southern end of the Santa Clara Subbasin. See the Coyote Valley Recharge Area in Figure 6-2.

6.2 Energy Use

SJW has three surface water treatment facilities, more than 80 groundwater wells, and over 200 booster pumps. The operation of these facilities is energy intensive and represents a significant operational expense. Accordingly, SJW monitors and manages energy consumption across its system on an ongoing basis.

The table below summarizes annual electricity use, in kilowatt-hours, by major operational category including groundwater extraction, system distribution, treatment, and storage.

³⁴ Bureau of Reclamation. (Sept. 11, 2025). *B.F. Sisk Dam Raise and Reservoir Expansion Project*. <https://www.usbr.gov/mp/sccao/sisk/raise.html>

Energy Use						
Retail Supplier	Energy Use Description	2020	2021	2022	2023	2024
SJW	Ground Water Extraction, Treatment, and Distribution	28,543,738	29,937,731	22,458,791	16,437,469	22,250,808
SJW	Distribution Throughout the System	9,406,387	10,871,744	8,318,140	6,953,640	7,337,028
SJW	Treatment of Surface Water	1,350,312	686,841	1,300,792	2,327,310	2,102,737
SJW	Raw Water Conveyance	67,996	43,579	65,062	97,786	66,246
SJW	Administrative and Water Storage	940,880	846,984	811,438	939,796	1,062,642
SJW	Total	40,309,313	42,386,879	32,954,223	26,756,001	32,819,461
City of Cupertino	Ground Water Extraction, Treatment, and Distribution	97,493	152,170	33,576	49,256	34,822
City of Cupertino	Distribution Throughout the System	871,028	843,773	642,859	639,348	676,284
City of Cupertino	Water Storage	82,532	90,650	83,772	80,438	72,945
City of Cupertino	Total	1,051,053	1,086,593	760,207	769,042	784,051
NOTES: Energy Use Data are in Kilowatt-hours						

6.3 Summary of Existing and Planned Sources of Water

SJW’s historical and projected volumes of water by source of supply are presented in Table 6-8, Table 6-9, and Figure 6-6. SJW’s current sources of supply (purchased water from Valley Water, groundwater from the Santa Clara Subbasin, surface water from local watersheds, and recycled water from SBWR) will continue to be important sources of supply to meet future demands. Future purchased water amounts from Valley Water will be dependent on agreed-upon delivery schedules between SJW and Valley Water. Subsequently, groundwater supplies will depend on purchased water amounts, surface water supply availability (heavily dependent on hydrologic conditions), and the remaining amount of supply needed to meet SJW’s potable demands. Available recycled water supplies to meet projected recycled water demands will be based on SJW’s ability to construct new recycled water pipelines.

For projected demands, surface water supply volume is assumed to hold constant at the 10-year historical average as SJW’s water rights and the watersheds supplying the water treatment plants are not expected to change. Remaining potable demands are made up by purchased water and groundwater, based on the

10-year historical average of distribution between these two sources of supply. Projected recycled water supplies are based on projected recycled water demands.

Submittal Table 6-8 Retail: Water Supplies — Actual Water Code Section 10631(b)				
Water Supply	Additional Description (as needed)	2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)
Add additional rows as needed				
Purchased or Imported Water		Potable	15,886	
Groundwater (not desalinated)		Potable	15,814	
Surface water (not desalinated)		Potable	2,293	
Recycled Water		Non-Potable	831	
		Subtotal Potable	33,993	0
		Subtotal Non-Potable	831	0
		Total	34,824	0

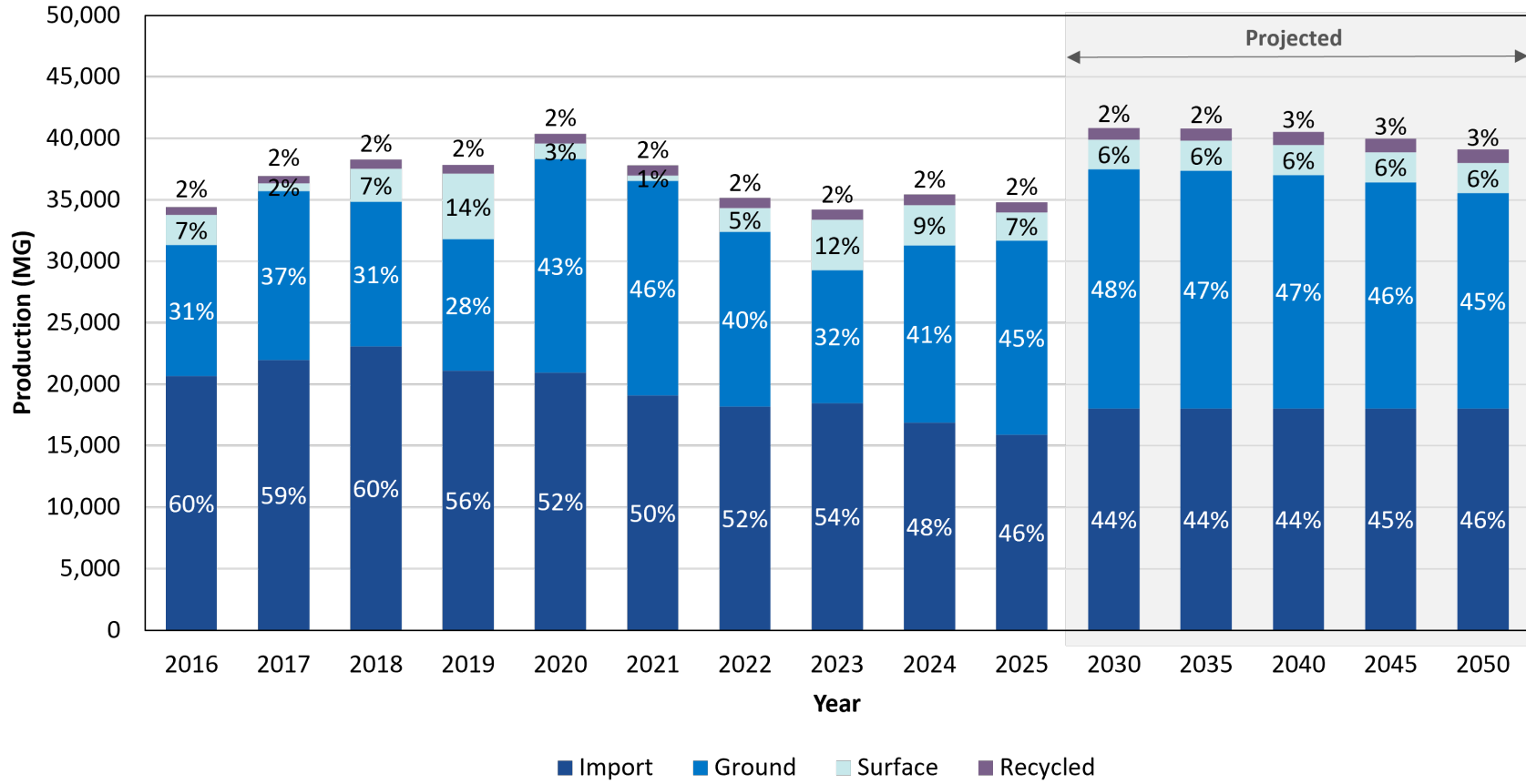


Figure 6-6. Historical and Projected Sources of Supply

Table 6-9 Retail: Water Supplies — Projected

Water Supply	Additional Detail on Water Supply	Projected Water Supply				
		2025	2030	2035	2040	2045
Purchased or Imported Water		25,025	24,997	25,104	25,424	25,702
Groundwater		15,844	15,826	15,894	16,097	16,272
Surface Water	Potable Water	2,435	2,435	2,435	2,435	2,435
Surface Water	Raw Water	7	7	7	7	7
Recycled Water		890	1,010	1,189	1,193	1,189
Total		44,201	44,275	44,629	45,156	45,605

NOTES: Volumes are in MG. 2040 use accounts for leap year. Projected surface water supply volume held constant at the 10-year production average (2011-2020). Remaining potable demands made up by purchased water and groundwater, based on the 10-year historical average (2011-2020) of distribution between these two sources of supply. Projected recycled water supplies are based on projected recycled water demands.

Chapter 7

Water Supply Reliability and Drought Risk Assessment

This chapter identifies constraints on SJW's water sources and assesses the reliability of the water supply, compares expected water supply with projected water use under average year, single dry year, and five consecutive dry year conditions, and presents a Drought Risk Assessment (DRA) of near-term reliability.

Constraints on SJW's sources of supply include climate change, reductions in imported water supplies from the Delta, threats to delivery infrastructure, groundwater basin overdraft, water quality concerns, and increased environmental regulations that may limit supply availability. As Valley Water provides or manages the majority of SJW's water supplies, SJW used information provided by Valley Water in their draft UWMP to evaluate the reliability of SJW's water supplies. According to Valley Water's draft UWMP, Valley Water will have sufficient supplies to meet SJW's and other retailers' demands through 2050 under average year and single dry year conditions. For five consecutive dry years, Valley Water will have sufficient supplies to meet SJW's and other retailers' demands for the first three years. During the last two years of the drought, Valley Water will experience shortages which will be addressed through their Water Shortage Contingency Plan actions. However, SJW anticipates meeting 100% of demands for all five consecutive dry years. For the near-term Drought Risk Assessment, Valley Water anticipates having sufficient supplies for the first three years and meeting the shortages of the last two years with WSCP actions. SJW's assessment shows that it will meet all demands over the first four years of the near-term drought with a small shortage in the last year which will be met by WSCP actions. These analyses account for identified constraints on sources of supply, upcoming projects that will increase supplies or reliability of supplies, and water conservation programs that will reduce future demands.

7.1 Constraints on Water Sources

SJW has four sources of water supply: purchased water from Valley Water, groundwater, local surface water, and recycled water. These sources of supply are constrained in one or more ways, driven by hydrologic conditions, water quality, and legal or environmental restrictions. Additionally, there is potential for interruption of supply caused by catastrophic events as discussed in Chapter 8.

7.1.1 Purchased Water Supply Reliability

SJW relies on Valley Water for purchased water supplies, which make up over half of SJW's total water supplies. Constraints to purchased water supplies from Valley Water include climate change impacts, reductions in imported water supplies, and threats to infrastructure, as detailed below.

- **Climate Change** – Climate change is anticipated to result in warming temperatures, shrinking snowpack, increasing weather extremes, and prolonged droughts. Valley Water's water supply vulnerabilities to climate change include decreases in the quantity of Delta-conveyed imported water supplies, decreases in the ability to capture and use local surface water supplies due to shifts in the timing and intensity of rainfall and runoff, increases in irrigation and cooling water demands, decreases in water quality, and increases in the severity and duration of droughts.

Potential effects of climate change on Delta-conveyed imported water supply availability have been incorporated into Valley Water’s UWMP water supply projections.

- **Reductions in Imported Water Supplies** – Valley Water’s SWP and CVP water supplies are also subject to several additional constraints including regulatory requirements to protect fisheries and water quality in the Delta, and conveyance limitations. Valley Water is anticipating additional future regulations that will result in greater reductions in imported water allocations than currently provided by DWR in their 2025 *Delivery Capability Report* (discussed in Section 7.2.1). 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 Valley Water’s three water treatment plants. Algae and disinfection byproduct precursors have been especially challenging during recent drought conditions. To address at least some of these constraints, Valley Water is participating in the Celta Conveyance Project which could provide approximately 14,000 AFY (4,600 MG/year) of water supply benefits on average (as discussed in Section 6.1.9.3).
- **Threats to Infrastructure** – Valley Water’s imported supply infrastructure must travel large distances to reach turnouts. As California is a seismically active state, infrastructure could be damaged and the result would be a disruption to water supply availability. California’s water supply infrastructure is also potentially a target for acts of terrorism.

7.1.2 Groundwater Supply Reliability

Groundwater supplies are often a reliable supply during normal and short-term drought conditions because supplies are local and large aquifer storage capacity means that groundwater supplies will still be available when surface flows become limited. However, groundwater supply availability can become threatened when overdraft occurs and when recharge and inflow decrease. Water quality is another potential constraint of this source of supply. Threats to groundwater supplies are detailed below.

- **Overdraft** – Under extended supply pressures, groundwater basins can enter overdraft conditions, which can have a series of consequences including land subsidence. Threat of overdraft conditions were witnessed in the 2012-2016 drought when groundwater levels declined. However, groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due to Valley Water’s proactive response and comprehensive water management activities. Valley Water monitors groundwater levels at wells throughout Santa Clara County, has groundwater recharge programs to maintain aquifer storage, and manages the aquifers to avoid overdraft conditions.
- **Climate Change** – Climate change could increase the potential for overdraft by increasing demand, reducing other sources of supply, and reducing natural recharge and inflows from surface water and precipitation.
- **Regional Growth** – Population growth could increase demands on groundwater supplies, potentially creating risk of overdraft. Regional growth could also increase the amount of contaminants entering groundwater basins as a result of increased urban runoff or industrial or

other activities. Growth can also impact recharge areas by expanding impervious surfaces into areas that would otherwise represent entry points for surface water recharging local aquifers.

- **Aging Infrastructure and High Land Costs** – In 2020, SJW prepared a Groundwater Well Asset Management Plan (GWAMP). Objectives of the GWAMP included evaluating risks associated with existing wells, prioritizing wells for renewal, developing a sustainable rate of replacement for wells, presenting mitigation strategies for water quality issues, developing a 10-year Capital Improvement Plan, and conducting a well siting survey for new well locations. Findings from the GWAMP showed that SJW’s groundwater well system is vulnerable due to the age of the well infrastructure. Two-thirds of the wells are 50 years or older and were installed with low carbon steel casing using a cable tool drilling method. A low carbon steel casing is susceptible to corrosion and damage in the event of an earthquake. Furthermore, many of SJW’s older cable tool wells were installed without sanitary seals as newer wells are, and as such, are more vulnerable to acting as conduits for downward migration of surface contaminants into the aquifer. Space for replacement wells at SJW’s existing groundwater stations is limited, and thus, the majority of future wells will need to be located on new properties. However, favorable sites are limited, as they must meet certain production yield and water quality requirements within the confined areas of the aquifer. In addition, the availability of suitable land in these locations is constrained, and while land costs in the Bay Area are high, the primary challenge is identifying sites that meet both hydrogeologic and operational criteria for long-term use.
- **Water Quality** –The presence of per- and polyfluoroalkyl substances (PFAS) in groundwater has become an area of regulatory and operational focus. In California, SJW monitors PFAS in accordance with State requirements and takes action when concentrations exceed established Notification Levels, including removing wells from service where operationally feasible and notifying customers as required. In certain cases, continued operation of impacted wells is necessary to maintain system reliability, particularly during high-demand periods or when alternative supplies are limited. While these Notification Levels are not enforceable standards, they inform operational decisions and customer communication. In parallel, SJW is advancing evaluation and design of treatment solutions to address PFAS and support the continued use of groundwater supplies. SJW’s approach is also informed by evolving federal regulations, including U.S. EPA Maximum Contaminant Levels (MCLs) for select PFAS compounds.
- SJW’s system relies on multiple water sources that employ different disinfection strategies, including free chlorine and chloramines. Blending of these sources can present operational challenges, as variations in source water contributions and disinfectant residuals can result in localized reductions in system residual if not actively managed. Maintaining a consistent disinfectant residual throughout the distribution system is critical for regulatory compliance and overall water quality stability.
- To address these challenges, SJW is implementing system improvements to enhance operational consistency and water quality. This includes planning for the installation of chloramination systems at select groundwater stations over the next 10 years. These improvements are intended to support stable disinfectant residuals across the distribution system and ensure continued reliable use of groundwater supplies.

7.1.3 Surface Water Supply Reliability

Local surface supplies are highly variable depending on hydrologic conditions. In years of limited local surface water supplies, SJW relies more heavily on groundwater. Threats to local surface water supplies are detailed below.

- **Climate Change** – Climate change is expected to further increase variability in local surface water supplies by altering the timing, intensity, and form of precipitation. These changes may result in earlier runoff, reduced snowpack contributions, and increased frequency of both high-flow storm events and prolonged dry periods, reducing the reliability and predictability of surface water supplies. SJW’s local surface water supplies are subject to the same climate change impacts as Delta-conveyed supplies and Valley Water’s local surface water supplies, which can result in decrease surface water supplies. Increased weather extremes and changing precipitation patterns as a result of climate change may prevent surface water supplies from being fully utilized during heavy rain events and may result in lower surface water supplies during other times of the year. During high-flow conditions, SJW’s ability to capture and treat surface water may be limited by raw water system hydraulics, elevated turbidity levels, and water treatment plant capacity constraints. As a result, not all available surface water can be fully utilized during peak runoff events, which may reduce the effective yield of this supply source. Fluctuations in the availability of surface supplies and possible impacts of climate change have already been observed in SJW’s historical surface water production, as shown in Figure 7-1. Greater variability in the availability of surface water supplies from climate change are likely to occur in the future. To allow surface water to be used during as much of the year as possible, SJW stores water in its Lake Elsmar and Lake Ranch/McKenzie in the wetter months and releases flow downstream to be diverted to the WTPs in the drier months. However, storage and releases from these reservoirs are limited by hydrologic conditions and environmental regulations.
- **Environmental Regulations** – SJW has bypass flow requirements (environmental water) at its surface water reservoirs and intakes. These requirements establish flow rates that must be released past diversion points to preserve downstream habitat. SJW also maintains minimum levels in reservoirs for habitat preservation. These environmental regulations limit the amount of surface water that SJW is able to divert for water supply. SJW finalized bypass flow requirements with the California Department of Fish and Wildlife in 2023. These requirements may have some impact on future available surface water supplies.
- **Water Quality** – SJW owns approximately 6,000 acres of land in the watersheds and manages these watershed lands to protect water supplies. Contamination of surface water supplies from upstream activities (animal grazing, residential septic systems, stormwater runoff) is a potential threat, although a low one as there is limited development in the watershed. To mitigate these threats, SJW conducts a Watershed Sanitary Survey every five years that examines potential sources of contaminants in the watersheds draining into reservoirs and includes recommendations for managing these impacts. SJW also regularly collects water quality data on the Los Gatos and Saratoga creeks and monitors Title 22 constituents and additional constituents.
- **Aging Infrastructure** – Some of SJW’s raw water infrastructure was constructed in the late 1800s or early 1900s and is in need of renewal to ensure reliability of surface water supplies. To address this

aging infrastructure, SJW is planning to conduct a Raw Water Master Plan that will provide a long-term asset management plan for its raw water infrastructure.

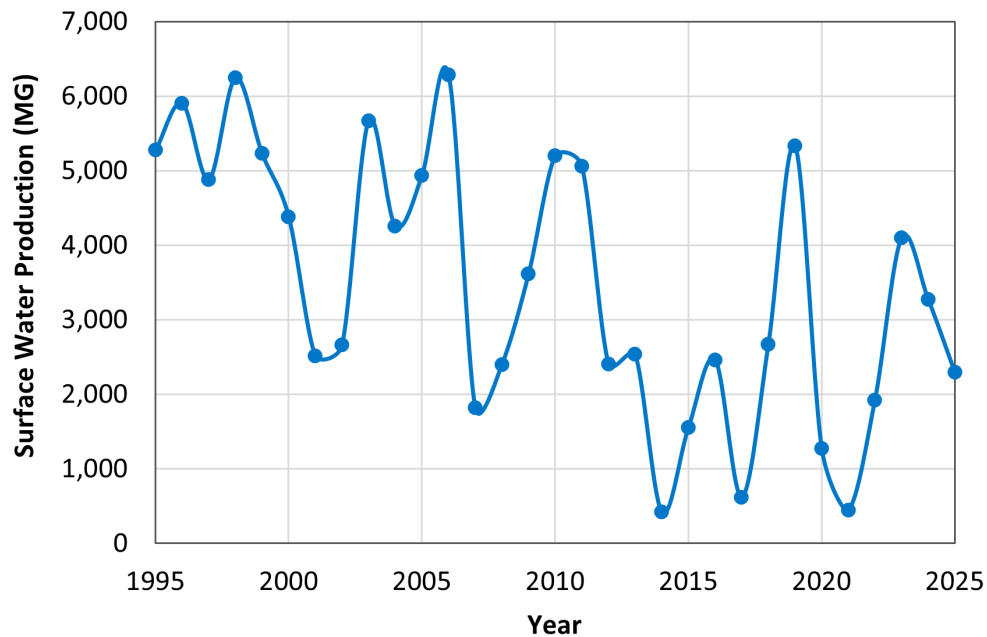


Figure 7-1. Historical Surface Water Production³⁵

7.1.4 Recycled Water Supply Reliability

Constraints on recycled water supplies are infrastructure-related, as wastewater supplies to produce recycled water supplies are otherwise sufficient to meet projected non-potable demands in Santa Clara County based on Valley Water’s draft UWMP. SBWR has a Strategic Master Plan³⁶ last updated in 2014 that was prepared in collaboration with Valley Water and other recycled water retailers, including SJW. The Strategic Master Plan contains an assessment on the feasibility of recycled water as a reliable, sustainable water supply for northern Santa Clara County over a 20-year planning horizon. Continued coordination between SBWR, Valley Water, and recycled water retailers in the area would be needed to ensure that recycled water infrastructure is adequate to meet future recycled water demands. As multiple agencies benefit from the SBWR system, expansion of this recycled water infrastructure would be dependent on agreed-upon water supply goals, projects, and cost-sharing structures.

7.2 Water Service Reliability Assessment

The Water Service Reliability Assessment includes an evaluation of SJW’s projected supplies and demands for the next 25 years under three scenarios: 1) average year, 2) single dry year, and 3) five consecutive dry years. As Valley Water provides or manages the majority of SJW’s water supplies, SJW used information

³⁵ Montevina WTP was offline for upgrades for parts of 2015-2017, which also contributed to lower surface water production in those years.

³⁶ <https://www.sanjoseca.gov/your-government/environment/water-utilities/recycled-water>

provided by Valley Water in their draft UWMP for this Water Supply Reliability analysis. Valley Water’s Water Supply Reliability analysis is conducted for aggregated countywide demands across all retailers and total available supplies, including, for example, SJW’s local surface water supplies. Available supplies are not separated out for each retailer. Assumptions and considerations affecting the Water Supply Reliability analyses should be noted, as detailed in Section 7.2.1.

Water supplies presented in Table 7-1 are based on Valley Water’s Water Evaluation and Adaptation Planning (WEAP) model,³⁷ which operates on a monthly time-step that simulates the water supply and demand over a period of 100 years, using the historical hydrologic sequence of 1922-2021. According to Valley Water, this model simulates their water supply system comprised of facilities to recharge the county’s groundwater basins, local water 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 Santa Clara County such as imported water from San Francisco Public Utilities Commission (SFPUC), recycled water, and local water developed by other agencies, such as SJW’s local surface water. The model tracks water resources throughout the county and delivery of water to meet demands according to availability and priority. The established priorities in the model are: first, in-stream flow requirements are met in accordance with regulatory and operational requirements; then, non-Valley Water supplies, including SFPUC deliveries and recycled water, are used to meet demands; next, Valley Water managed local surface water and imported supplies are used to meet demands; and, finally, groundwater pumping is used to meet remaining demands. Excess supplies are directed to recharge facilities, stored in reservoirs, or delivered to groundwater banking programs.

Valley Water has identified average, single dry, and multiple dry year periods for water supply reliability planning. According to Valley Water, the basis for these water years is as follows:

- Average Year (1922-2015): Average supply over the 100 years of 1922-2021.
- Single Dry Year (1977): Within the historical hydrological record, this was the single driest year.
- Multiple Dry Years (1988-1992): The 1988-1992 drought was an extended and more severe drought than other multi-year droughts in the historical record and WEAP modeling period, including the more recent 2012-2016 drought.

³⁷ WEAP is a well-established, internationally recognized, integrated water resources planning tool. Its development and distribution are managed by the Stockholm Environment Institute (SEI). WEAP has received major funding from many organizations, including the California State Water Resources Control Board (SWRCB), DWR, and US EPA. WEAP. “Water Evaluation and Adaptation Planning.” <https://www.weap21.org/>

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)			
Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (MG)	% of Average Supply
Average Year	1922-2021		100%
Single-Dry Year	1977		41%
Consecutive Dry Years 1st Year	1988		64%
Consecutive Dry Years 2nd Year	1989		88%
Consecutive Dry Years 3rd Year	1990		72%
Consecutive Dry Years 4th Year	1991		73%
Consecutive Dry Years 5th Year	1992		76%
NOTES: Base years and available supplies are based on information that SJW received from Valley Water in their draft UWMP.			

7.2.1 Assumptions and Limitations to Water Supply Reliability Analyses

Key assumptions or notes that Valley Water made in their UWMP Water Supply Reliability analysis are as follows:

- Actual availability of each supply during any given year depends on hydrology, groundwater recharge operations and conditions, and other factors.
- The analysis assumes that recommended projects from Valley Water’s WSMP³⁸ are implemented. These include the 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 (2025); Delta Conveyance Project (2045); and Groundwater Banking and South County Recharge (2030). There is uncertainty associated with projected project benefits – some WSMP projects and/or their yields may not be realized as currently expected.
- Groundwater storage shown assumes groundwater can be drawn down to the severe stage of Valley Water’s WSCP. This does not represent a sustainable long-term groundwater condition, but these supplies represent water that may be needed to get through a prolonged drought.
- Imported water allocations to Valley Water were provided by DWR in their 2025 *Delivery Capability Report (DCR)*³⁹ which includes climate change assumptions in CalSim3 analysis starting in 2035. For 2030, the DCR Baseline Conditions were applied. For 2035 and 2040, the DCR 2043 Level of Concern 50 was used. For 2045 and 2050, the DCR 2043 Level of Concern 95 was applied.

³⁸ Valley Water. “Water Supply Master Plan.” Water Supply Planning. <https://www.valleywater.org/your-water/water-supply-planning/water-supply-master-plan>

³⁹ DWR. “Delivery Capability Report and Studies.” <https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-3/DCR>

- Climate change was included in the local water supply – reservoir inflows, evaporation, demands, and natural groundwater recharge – using the CESM1 model from the National Science Foundation.⁴⁰

The results of Valley Water’s WEAP modeling analysis are reflective of the input data and modeling assumptions. Their UWMP provides an opportunity for Valley Water to work with its retailers and other agencies to understand their water supply planning for the next 25 years. Valley Water has assured retailers that they will continue to use their WSMP and annual MAP⁴¹ framework to guide its long-term water supply planning efforts and inform their Board of Directors on recommended investment decisions. This process includes monitoring projects costs and benefits, demands, climate change science, policy or regulatory actions, and making adjustments to the water supply investment strategy as needed to ensure reliability.

Valley Water’s Board of Directors updated its long-term water supply reliability level of service goal in January 2019, which is to develop supplies to meet 100% of annual water demand during non-drought years and at least 80% of annual water demand in drought years. Future projects and programs in the WSMP and MAP updates were developed in accordance with this policy to minimize the need to call for water use reductions greater than 20% during droughts, and to avoid overinvestment in water supply projects and programs. Through the WSMP and MAP updates and other planning efforts, SJW will continue to evaluate Valley Water’s proposed projects in the context of delivering reliable, cost-effective water supply solutions that provide the greatest overall benefit to customers.

7.2.1.1 Valley Water’s Demand Projections

Valley Water used their modeled demand projections for retailers in their Water Service Reliability Assessment (WSRA) and Drought Risk Assessment (DRA). Valley Water uses a statistically based Demand Model which was developed in 2020. It integrates historic water use trends, housing and economic growth, climate change, and post-drought water use rebound.⁴² Housing and jobs projections are from ABAG’s Plan Bay Area 2040 and Valley Water conservatively assumed there will be a muted drought rebound from the most recent drought. This Demand Model was used to forecast demands for retailers like SJW and for independent groundwater pumping.⁴³ Other demands, such as agricultural groundwater, were estimated based on historical data. Water conservation was included in Valley Water’s demand projections. Valley Water currently saves approximately 87,000 AFY (28,300 MGY) from a 1992 baseline. Valley Water’s demand projections include 99,000 AF (32,300 MG) of water savings by 2030 and an additional 11,000 AF (3,600 MG) of water conservation by 2040 to achieve their goal of a total of 110,000 AF (35,800 MG) by 2040 compared to the 1992 baseline. Demands for Valley Water’s 13 retailers make up 87% of the total countywide demands included in Valley Water’s UWMP. Valley Water is projecting that retailer demands remain constant from 2030 to 2050 at 288,000 AFY (93,800 MGY).

⁴⁰ National Center for Atmospheric Research (NCAR). “Community Earth System Model.” National Science Foundation. <https://www.cesm.ucar.edu/about>

⁴¹ https://www.valleywater.org/sites/default/files/MAP_Report_10-6-2020_withBaselineDroughtFigure.pdf

⁴² Additional information on Valley Water’s Demand Model can be found in their UWMP and WSMP.

⁴³ Note that independent groundwater pumping does not include retailers like SJW.

While the aggregated retailer-provided projections and Valley Water’s model results are generally similar in magnitude, differing by approximately 1% in 2040 and up to 6% in 2050, there are important methodological differences. SJW’s demand projections are based on more recent planning assumptions, including updated land use and growth forecasts consistent with the latest ABAG regional projections and local development information. As a result, SJW’s projections are lower than those projected by Valley Water and are considered by SJW to more accurately reflect current development patterns and anticipated demand within its service area.

Because Valley Water’s UWMP does not disaggregate projected demands and supplies by retailer, SJW used an average historical allocation factor to estimate its share of Valley Water supplies in its WSRA and DRA analyses. Based on the 2015, 2020, and 2025 UWMPs, SJW’s demands represent approximately 41.6% of Valley Water’s total demands, and this factor has been applied for planning purposes as described below.

7.2.2 Average Water Year

According to Valley Water, the average water year represents average supply over the hydrologic sequence of 1992-2015. Table 7-2 shows that based on information from Valley Water, SJW anticipates adequate supplies to meet system demand under average year conditions for years 2025 to 2045. Projections are based on demands described in Chapter 4 and supplies described in Chapter 6.

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 (MG)
Supply totals (autofill from Submittal Table 6-9 R)	40,837	40,812	40,525	39,982	39,118
Use totals (autofill from Submittal Table 4-2 R)	38,858	38,769	38,419	37,864	37,000
Surplus/(shortfall)	1,979	2,042	2,106	2,118	2,118

7.2.3 Single Dry Year

The single driest year in the 100 model years occurred in 1977, based on local hydrology within the 1922-2021 hydrologic sequence. Table 7-3 shows that based on information from Valley Water, SJW anticipates adequate supplies to meet system demand under single dry year conditions for years 2025 to 2045. The supply totals are based on SJW’s average portion, 41.6%, of Valley Water’s supplies as described in their draft UWMP.

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 (MG)
Supply totals	44,836	57,163	56,892	57,163	57,433
Use totals	39,916	39,821	39,458	38,885	37,996
Surplus/(shortfall)	4,920	17,341	17,434	18,278	19,438
NOTES: Supply totals include supply from storage as detailed in Valley Water's draft UWMP.					

7.2.4 Multiple Dry Years

The multiple dry year period used in this analysis assumes a repetition of the hydrology that occurred in 1988 through 1992. Table 7-4 shows that based on information from Valley Water, SJW anticipates adequate supplies to meet system demand under multiple dry year conditions for years 2030 to 2050. The supply totals are based on SJW’s average portion, 41.6%, of Valley Water’s supplies as described in their draft UWMP.

Multi-year droughts present the greatest challenge to Valley Water’s water supply reliability. 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. As of 2019, Valley Water’s long-term water supply reliability level of service goal is to develop supplies to meet 100% of annual water demand during non-drought years and at least 80% of annual water demand in drought years. Future projects and programs in the WSMP were developed in accordance with this policy to minimize the need to call for water use reductions greater than 20%. Table 7-4 includes all water supplies currently planned by Valley Water as listed in Table 6-7 and detailed in their WSMP. Assumptions and considerations for the Water Service Reliability Assessment should be noted, as detailed in Section 7.2.1.

Valley Water’s UWMP indicates shortages in the last two years of the five-year drought for 2030, 2045, and 2050. These shortages are less than 10% of projected demands and therefore within Valley Water’s level of service goal to meet at least 80% of annual water demand in drought years. Accordingly, Valley Water shows WSCP actions which are included in Table 7-4.

SJW’s analysis does not show similar shortages during multiple dry year conditions. This difference is primarily driven by the use of lower demand projections, as discussed in Section 7.2.1.1, which reflect updated population and employment forecasts based on the most recent ABAG regional planning

information, as well as local development data. These updated assumptions result in lower projected demands compared to those used in Valley Water’s modeling. As a result, under SJW’s demand projections, available supplies are sufficient to meet anticipated demands during multiple dry year scenarios without resulting in projected shortages.

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 (MG)
First year	Supply totals	55,131	65,967	65,290	63,258	62,987
	Use totals	39,916	39,821	39,458	38,885	37,996
	Surplus/(shortfall)	15,215	26,146	25,832	24,373	24,991
Second year	Supply totals	62,039	67,593	65,425	61,633	61,497
	Use totals	39,916	39,821	39,458	38,885	37,996
	Surplus/(shortfall)	22,123	27,772	25,968	22,748	23,501
Third year	Supply totals	51,880	56,485	54,995	49,171	49,171
	Use totals	39,916	39,821	39,458	38,885	37,996
	Surplus/(shortfall)	11,964	16,664	15,537	10,286	11,175
Fourth year	Supply totals	40,772	49,035	46,868	41,179	41,179
	Use totals	39,916	39,821	39,458	38,885	37,996
	Surplus/(shortfall)	856	9,214	7,410	2,294	3,183
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit	2,032	0	0	1,355	1,355
	WSCP - use reduction savings benefit	1,896	0	0	2,167	2,167
	Revised Surplus/(shortfall)	4,785	9,214	7,410	5,816	6,705
Fifth year	Supply totals	41,856	48,493	45,920	42,262	42,262
	Use totals	39,916	39,821	39,458	38,885	37,996
	Surplus/(shortfall)	1,940	8,672	6,462	3,378	4,267
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit	2,032	0	0	1,355	1,355
	WSCP - use reduction savings benefit	813	0	0	1,084	1,084
	Revised Surplus/(shortfall)	4,785	8,672	6,462	5,816	6,705
NOTES: Supply totals include supply from storage as detailed in Valley Water's draft UWMP. Planned WSCP actions are from Valley Water. SJW is not projecting shortages requiring WSCP actions.						

7.3 Drought Risk Assessment

The Drought Risk Assessment (DRA) is conducted to evaluate SJW’s near-term water supply reliability by comparing projected water supplies and demands for a drought period starting in 2026 that lasts five consecutive years. The DRA is intended to guide Demand Management Measures, water supply projects and programs to be included in the UWMP, and water shortage actions to be included in the WSCP. As

Valley Water provides or manages the majority of SJW’s water supplies, SJW used information provided by Valley Water in their draft UWMP for this DRA. The supply totals are based on SJW’s average portion, 41.6%, of Valley Water’s supplies as described in their draft UWMP.

According to Valley Water, the DRA follows their annual water supply and demand assessment procedure. The water balance used in that assessment is based on the previous year end-of-year groundwater storage, carryover supplies stored in San Luis reservoir, storage in local reservoir, non-potable recycled water production, and expected SWP and CVP contract allocations. The DRA combines the two most recent droughts, 2020-2022 and 2014-2015 out of the 2012-2016 drought, to create a five-year drought that represents current conditions and the driest among historical records as shown in the table below. Demands were based on the linear interpolation between projected 2025 and 2030 demands with 10% voluntary reduction on the 2030 demands. This is in line with Valley Water’s master plan analysis which assumes that during droughts demand is reduced by 10% to reflect voluntary water use reductions.

DRA Year	Modeled After Historical Supply Conditions from Year
2026	2020
2027	2021
2028	2022
2029	2014
2030	2015

According to Valley Water, the DRA considers all of Valley Water’s water supply sources, including imported water (SWP and CVP contract water deliveries, banked supplies in Semitropic, carryover in San Luis Reservoir, and SFPUC deliveries), local surface water storage, recycled water, and local groundwater. Transfers and exchanges are also considered based on existing long-term agreements and past practices. To adequately assess near-term drought risk, Valley Water focuses on the most recent historical drought data, using information and operations from 2020-2022 and 2014-2015, including significantly reduced imported water allocations, to represent the supplies available.

According to the DRA in Valley Water’s draft UWMP, Valley Water will be able to meet countywide demands for first three years of a near-term drought with a combination of local and imported surface water, groundwater, banked supplies in Semitropic storage, and imported water transfer purchases. During the last two years of the drought, Valley Water will experience approximately 5% and 9% shortages respectively. These shortages will be addressed through supply augmentation and short-term water use reduction in accordance with Valley Water’s WSCP.

SJW’s DRA shows that SJW is able to meet all projected demands in the first four years of a near-term drought with a small shortfall in the last year met by shortage actions as shown in Table 7-5. Demands for

2026-2030 are based on linear interpolation between projected 2025 water use and projected 2030 demands with 10% voluntary reduction applied to the 2030 demands to align with Valley Water’s DRA. The same assumptions and considerations from Section 7.2.1 which apply to the WRSA also apply to the DRA.

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment	
Water Code Section 10635(b)(3)	
2026	Total
Total Water Use (MG)	36,831
Total Supplies (MG)	51,406
Surplus/Shortfall w/o WSCP Action	14,575
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	542
WSCP - use reduction savings benefit (MG)	0
Revised Surplus/(shortfall)	15,116
2027	Total
Total Water Use (MG)	36,854
Total Supplies (MG)	47,911
Surplus/Shortfall w/o WSCP Action	11,057
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	1,490
WSCP - use reduction savings benefit (MG)	0
Revised Surplus/(shortfall)	12,547
2028	Total
Total Water Use (MG)	36,877
Total Supplies (MG)	42,777
Surplus/Shortfall w/o WSCP Action	5,901
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	677
WSCP - use reduction savings benefit (MG)	0
Revised Surplus/(shortfall)	6,578
2029	Total
Total Water Use (MG)	36,899
Total Supplies (MG)	37,846
Surplus/Shortfall w/o WSCP Action	947

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	2,032
WSCP - use reduction savings benefit (MG)	0
Revised Surplus/(shortfall)	2,979
2030	Total
Total Water Use (MG)	36,922
Total Supplies (MG)	36,844
Surplus/Shortfall w/o WSCP Action	(78)
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	2,032
WSCP - use reduction savings benefit (MG)	1,355
Revised Surplus/(shortfall)	3,309
NOTES: Total supplies are based on Valley Water's draft UWMP.	

Chapter 8

Water Shortage Contingency Plan

SJW's Water Shortage Contingency Plan (WSCP) is a detailed proposal for how a water supplier intends to act in the case of an actual water shortage condition. This plan is part of good drought policy even if a supplier's water supply appears to have a low probability of shortage conditions, as it improves preparedness for droughts and other impacts on water supplies.

The WSCP outlines the six water shortage stages, shortage response actions, communication protocols, and compliance and enforcement measures that are enacted at each water shortage stage. The WSCP also describes the authorities governing implementation of the WSCP, financial consequences and mitigation measures for WSCP activation, monitoring and reporting of WSCP implementation, and procedures for plan refinement, adoption, submittal, and availability.

Section 10632(a) of the California Water Code (CWC) outlines the requirements for the WSCP. The WSCP is intended to be a standalone plan that can be amended on a different cycle than the UWMP's five-year update cycle. SJW's WSCP is included as **Appendix X** of the 2025 UWMP.

Chapter 9

Demand Management Measures

The purpose of this chapter is to provide a comprehensive description of the water conservation and water loss management programs that SJW has implemented and plans to implement to meet state and regional water conservation goals.

SJW has maintained a long tradition of promoting water conservation. SJW educates customers on water conservation through a variety of ways, including bill inserts, water conservation literature, website content, public outreach events, school education kits, demonstration gardens, and water checkup appointments for customers’ homes and businesses. Some of these programs and additional ones are implemented in collaboration with SJW’s wholesaler, Valley Water. SJW also practices conservation in its own operations through leak detection programs that help minimize water loss from the distribution system, replacement of pipelines that have a high risk of failing or leaking, and regular water loss tracking and reporting. In addition, SJW is in the process of installing Advanced Metering Infrastructure (AMI) throughout its service area with anticipated completion at the end of 2026. These AMI meters, or “smart water meters”, provide near real-time water use data and proactive leak notifications, to help SJW and its customers conserve water and reduce water waste.

9.1 California Water Efficiency Partnership

SJW became a signatory to the California Urban Water Conservation Council (CUWCC), now called the California Water Efficiency Partnership (CalWEP), in 2006 and has been an active member since that time. CalWEP’s mission is to maximize urban water efficiency and conservation throughout California by supporting and integrating innovative technologies and practices; encouraging effective public policies; advancing research, training, and public education; and building collaborative approaches and partnerships. SJW’s conservation program is closely linked to the Best Management Practices (BMPs) that were originally established by the CUWCC in their 2009 Memorandum of Understanding (MOU). The following table shows the BMPs that are currently being implemented by SJW, and which are run by SJW directly, operated in conjunction with the Valley Water, or as a combination of the two.

Best Management Practices (based on CUWCC 2009 MOU)			SJW Implemented	Executed By
Category	BMP	BMP Name		
Operations Practices	1.1.1	Conservation Coordinator	Yes	SJW
	1.1.2	Water Waste Prevention	Yes	SJW
	1.1.3	Wholesale Agency Assistance Programs	Yes	Valley Water
	1.2	Water Loss Control	Yes	SJW
	1.3	Metering w/Commodity Rates for All New Connections and Retrofit of Existing Connections	Yes	SJW
	1.4	Retail Conservation Pricing	Yes	SJW
Education Programs	2.1	Public Information Programs	Yes	SJW/Valley Water
	2.2	School Education Programs	Yes	SJW/Valley Water
Residential	3.1	Residential Assistance Program	Yes	SJW
	3.2	Landscape Water Survey	Yes	SJW/Valley Water
CII	4	CII	Yes	SJW
Landscape	5	Landscape	Yes	SJW/Valley Water

The BMPs listed above are still referenced by the CPUC which regulates privately owned water utilities like SJW. However, the *Making Conservation a California Way of Life* regulation⁴⁴ and its annual Urban Water Use Objective (UWUO) reporting lists these BMPs in an updated format as shown in the table below.

⁴⁴ AB 1668 and SB 606.

BMPs as Listed in UWUO Reports		
Category	Specific BMP	Executed By
Outreach, Technical Assistance, and Education	Informative or educational bill inserts	SJW
	Direct contacts via site visits or phone calls	SJW/Valley Water
	Conducting workshop or developing training videos	SJW/Valley Water
	Webpage portals to access information, tools, and rebates	SJW/Valley Water
	Commercials or advertisements	Valley Water
	Community-based social marketing	Valley Water
Incentive	Rebates and cost-sharing for replacing inefficient fixtures, equipment, irrigation systems or landscapes with water efficient ones	Valley Water
	Certification or branding programs that recognize customers as water efficient	Valley Water
Landscape	Irrigation system inspections, audits, or surveys	SJW/Valley Water
	Training or guidance on irrigation scheduling and maintenance	SJW/Valley Water
	Landscape and irrigation management practices to promote improved water use efficiency	Valley Water
	New development landscape inspection, workshops, and training	Valley Water
	Programs to remove turf and replace it with climate-ready vegetation	Valley Water
	Programs to decrease urban heat and reduce turf water use by planting trees	Valley Water
Collaboration and Coordination	Coordination with “green” building certification or recognition programs to promote water use efficiency	SJW
	Collaboration with non-governmental organizations on outreach and education	Valley Water

BMPs as Listed in UWUO Reports		
Category	Specific BMP	Executed By
	Collaboration with municipal arborist and tree planting organizations to expand and maintain urban forests	Valley Water
	Collaboration with stormwater agencies to install green infrastructure such as swales or rain gardens to also offset irrigation needs	Valley Water
Operational	Infrastructure changes (for example, smart meter replacement programs)	Valley Water
	Other operational best management practices to facilitate CII best management practices program implementation and evaluation	Valley Water

9.2 Required Demand Management Measures

The following subsections describe SJW’s various demand management measures.

9.2.1 Water-Waste Prevention Ordinances

SJW is not a local government with the power to enforce ordinances. Rather, SJW operates in the jurisdiction of several cities, each of which has their own local water-waste provisions and ordinances.

Additionally, SJW has its own water-waste provisions that come into effect when there is a water shortage. The CPUC has set forth the rules regarding water waste and water shortages governing investor-owned utilities such as SJW. The CPUC rule relating to this is Rule 14.1 included as **Appendix X**. This rule states that when there is a low-level water shortage that prompts a call for voluntary conservation by customers, a list of water-waste provisions goes into effect. Rule 14.1 also has provisions for high-level water shortages when mandatory conservation measures are deemed necessary. More description of water shortage levels and associated actions can be found in the WSCP in **Appendix X**.

9.2.2 Metering

In accordance with sections 526 and 527 of the CWC, all SJW’s customer services are metered. SJW has regular testing and replacement programs for its water meters, driven by CPUC General Order 103-A requirements, which establish maximum periods of time that meters are allowed to remain in service without retesting. To ensure accuracy of meters, SJW replaces ¾-inch meters on a 20-year cycle and 1-inch meters on a 15-year cycle. Meters larger than 1-inch are planned to be replaced with ultrasonic meters resulting in a 10-year replacement cycle.

The majority of SJW’s meters are now advanced metering infrastructure (AMI) enabled, with 74% of meters convert to AMI as of May 2026 and full deployment across the service area anticipated by the end of 2026. In total, about 64,000 meters will be replaced through the program, with approximately 90% of installations utilizing ultrasonic meter technology. By collecting near real-time water

consumption data, AMI provides multiple benefits related to water conservation, including improved abilities to manage water consumption and detect water leaks, better capabilities to troubleshoot and investigate high use bills, and the ability to comply with conservation mandates. The AMI program also includes a customer-facing portal which was launched in July 2025. This platform enables customers to view hourly water usage, receive alerts for continuous or excessive consumption that may indicate leaks, and conveniently manage and pay their water bills. As of May 2026, approximately 143,000 customers have registered for the portal which will allow increased visibility into their usage and faster response to possible customer-side leaks. See Section 9.2.6.3 for additional information about AMI.

In addition, SJW recently completed its Compound Meter Replacement Program, under which 766 large dual-register compound meters were replaced with ultrasonic meters.

9.2.3 Conservation Pricing

SJW's water rates and pricing structures are set by the CPUC. SJW has several water rate schedules, depending on the type of service. For a general metered service, which applies to most customers, SJW has a tiered rate structure, where the price per unit of water delivered depends on the amount used, with a higher price charged for larger quantities. This tiered rate structure encourages conservation and is different from drought rate structures and surcharges, which only go into effect during water shortages, as described in the WSCP in [Appendix X](#).

9.2.4 Public Education and Outreach

SJW uses a variety of public education and outreach tools to promote water efficiency, including conservation brochures, bill inserts, advertising, public speaking engagements, and content on SJW's website. The goal of SJW's water conservation program is to increase customer awareness of habits or procedures that waste water, as well as awareness of water capacity, available sources, system capacity, and treatment and distribution issues. Public information campaigns are designed to promote understanding and dialogue in the community on water conservation topics as well as to motivate customers to conserve. Public information is provided directly by SJW and in conjunction with Valley Water.

Public information and education programs generally have positive social impacts on the community due to increased public awareness of and cooperation with water use issues. The major impact for customers who use water efficiently is a lower water bill. Environmental impacts include reduced demand on future water supplies and lower flows to the sewage treatment plant.

9.2.4.1 Bill Inserts

SJW annually distributes conservation bill inserts. An example of a bill insert includes the one commonly sent by SJW in the spring that promotes SJW's water checkup program for customers and the annual Water Awareness Night event that SJW sponsors. In the fall, SJW typically reminds customers to turn off their irrigation systems in the wet winter months.

9.2.4.2 Water Conservation Literature

SJW has developed a variety of water conservation literature. The literature is downloadable from SJW's website. The literature describes the various conservation programs and rebates that are available to customers. It also describes how to read one's water meter, how to fix basic leaking toilet issues, and has a section on water wise landscaping. SJW also distributes a flyer provided by Valley Water that describes their rebate programs that are available to all SJW customers.

9.2.4.3 Website Content

A variety of public information related to conservation is available on SJW's website, including conservation tips, blog posts on water conservation, and details on SJW's efforts in reducing water loss and promoting conservation. Customers can also download literature and request a water checkup appointment via e-mail. SJW's website also has information about water-wise landscaping, including links to a dedicated "Water Wise Gardening" website, which has a plant database and a virtual tour of SJW's public water-smart demonstration gardens.

9.2.4.4 Public Events

SJW also offers several public information events and services, some of which include:

- Water Awareness Night – SJW began sponsoring this annual event in 2002. Through a bill insert and a message on the bill, customers are invited to attend the event, which is part of a San Jose Giants baseball game at San Jose Municipal Stadium. SJW personnel set up various displays at the entrance to the stadium, including games for the children and conservation information for the adults.
- Speaker's Bureau – SJW receives requests to speak with local service and civic groups, homeowners associations and similar organizations. Requests are filled whenever possible.

9.2.4.5 School Education Kits

This program, implemented in 2015, provides a turn-key set of classroom activities and hands-on home projects for fifth grade students to increase their water conservation awareness. The program addresses the priorities of obtaining measurable water and energy savings results and cost effectiveness through a proven program format. Participating classroom teachers receive guides that lead them through the curriculum while students receive a Student Workbook for in-class instruction and a "WaterWise Kit" for the take-home portion of the program. The Teacher Guide and Student Workbook include information specific to the local community and include SJW-specific information such as water sources, drought history and storage facilities.

9.2.4.6 Demonstration Gardens

Since the 2012-2016 drought, SJW has increased its outreach and educational programs on outdoor water use. SJW continues to maintain Water Smart Demonstration Gardens at four different locations, one of which is complete with signage describing the plant types. Customers can visit these gardens in person or take a virtual tour on SJW's website. SJW has developed a dedicated "Water Wise Gardening" website⁴⁵

⁴⁵ SJW (2026.) "San Jose Water Company – Water-Wise Gardening." <http://www.sanjose.watersavingplants.com/>

where customers can access a plant information database that includes hundreds of low water use plants, a photographic database of water wise gardens in the San Jose-Santa Clara County area, fact sheets with topics such as Solving Runoff Problems and The Magic of Mulch, and numerous other garden resources.

9.2.4.7 CATCH Program

SJW has had a consumer water checkup program (also called “CATCH” program) in place since 1991. CATCH checkups are performed free of charge to all customers. The purpose of the checkup is to educate customers about the efficient use of water in order to make their homes and businesses as water efficient as possible. Checkups usually start with a SJW inspector demonstrating to the customer how to read the water meter for current use and for signs of leaks. This can help customers become better aware of their own use and to be proactive when a leak is detected.

Then the inspector performs an examination of any outdoor irrigation systems. SJW has developed the landscape component of the checkup program to provide an extensive evaluation of the customer’s landscape irrigation system. During this component of the checkup, customers are given recommendations for an irrigation schedule based on the plant materials and the irrigation system hardware. The inspector will check the irrigation system for leaks and efficiency, and offer to program the customer’s irrigation controller with the recommended schedule.

The following is a summary of the items performed during a typical checkup appointment:

- Thoroughly check the irrigation system including inspecting sprinkler heads for proper functioning. Note and describe any excessive runoff, broken sprinkler heads, or any other leaks in the irrigation system.
- Review the irrigation schedule with the customer and make recommendations for improving the schedule. If requested, the inspector will implement the new schedule by changing the customer’s irrigation controller.
- Check all outdoor hose bibs, pool pumps, and water softeners for leaks.

Figure 9-1 shows the number of CATCH checkups performed in recent years.

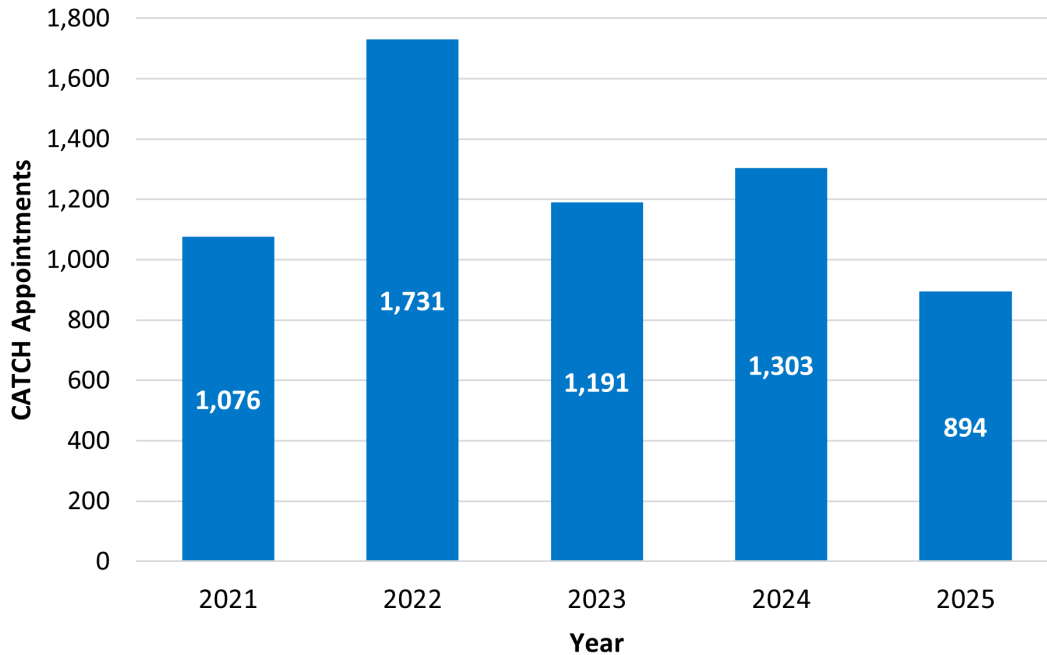


Figure 9-1. Count of CATCH Checkups Performed

9.2.4.8 CII Water Audits

In addition to the CATCH program, SJW implemented a comprehensive CII audit program in 2016 for large and complex CII customers. SJW conducts specialized CII audits which may include customers with commercial kitchen appliances, cooling towers, medical equipment, and other specialized water-using devices. Following the on-site audit, customers receive a tailored report that documents all water-using devices, quantity of water used by each device, and recommendations on efficiency upgrades based on total water savings potential and payback period.

9.2.4.9 Large Landscape Surveys

Starting in 2017, Valley Water launched a new program for large landscape irrigation sites at commercial and multi-family residential properties on SJW’s behalf. The program is a water budget and water survey program from the vendor Waterfluence. The program offers dedicated landscape and recycled water customers a customized water budget based on aerial imagery and site verification of the amount and type of irrigated area. Customers receive a monthly water budget report that shows actual water use compared to calculated water budget. The report is provided to inform customers of their water use and encourage conservation. For sites with special needs or deficiencies, a site irrigation survey is offered to the customers. Since the start of the program, over 90 large landscape surveys and 100,000 large landscape water budgets have been provided to SJW customers.

9.2.4.10 Valley Water Rebate Programs

Valley Water also offers many water conservation rebates. These include rebates for installation of qualifying submeters and water meters, CII water conservation projects, turf grass removal, high-efficiency irrigation equipment upgrades, rain barrel or cistern installations, and graywater laundry-to-

landscape systems. Additional details can be found on SJW’s website or Valley Water’s website and UWMP. Valley Water reports participation of SJW customers in Valley Water’s conservation programs annually on a fiscal year basis. The table below summarizes program implementation over the previous five years on a calendar year basis.

SJW Customer Participation in Valley Water Conservation Programs					
Rebate/Program	2021	2022	2023	2024	2025*
Square feet of turf grass removed / replaced with low water-using plants	297,154	821,686	1,052,758	668,612	161,482
Efficient irrigation hardware installed	1,204	1,530	1,250	795	1,869
Weather Based Irrigation Controllers installed	288	353	217	189	73
Square feet of shrub areas (non-turf) converted from spray sprinklers to in-line drip irrigation	53,388	71,316	53,492	28,227	16,625
Square feet of roof space diverted to a rain garden	6,902	10,484	4,639	5,422	1,745
Rain barrels installed	42	52	52	31	17
Gallons of cistern space installed	0	3,880	2,100	3,600	0
Graywater laundry-to-landscape	5	7	2	3	0

SJW Customer Participation in Valley Water Conservation Programs					
Rebate/Program	2021	2022	2023	2024	2025*
systems installed					
Low-flow showerheads distributed	32	2,844	699	361	165
Low-flow faucet aerators distributed	3,923	1,7939	1,102	705	395
DIY Kit Distribution	599	639	94	307	77
Large landscape (Waterfluence) surveys completed	6	9	9	6	0
Large landscape (Waterfluence) water budgets provided	12,852	15,348	15,348	17,940	9,366
Pre-Rinse Sprayers (CII)	0	8	1	0	0
Commercial Rebates (CII)	0	315	4	2	0
Direct Install Toilets (CII)	50	1,217	833	368	321

*Counts for 2025 represent the count through June 2025. Valley Water reports those metrics on a fiscal year basis. Metrics for fiscal year 2026 are not available yet.

9.2.5 Water Conservation Program Coordination and Staffing Support

Water conservation programs at SJW are executed by a group of approximately ten staff members in the Field Service department. In addition, SJW staff from the Regulatory Affairs and Communications department assist with public outreach events, managing website content, and distributing other educational material.

9.2.6 Programs to Assess and Manage Distribution System Real Loss

In addition to having customer-facing water conservation programs, SJW also engages in other activities that contribute to the overall goal of reducing water waste. SJW uses a combination of advanced water loss detection technology, proactive water loss prevention planning, and prompt response to suspected or reported leaks, to minimize water losses from water mains in the distribution system. Per the USEPA,

national studies indicate that, on average, 14% of water treated by water systems is lost to leaks, with some water systems reporting water losses exceeding 60%.⁴⁶ In comparison, SJW's average annual water loss rate is approximately 7% (see Section 4.3 for more details about SJW's water loss).

9.2.6.1 Acoustic Leak Detection Sensors

Beginning in 2017, SJW has deployed acoustic leak detection sensors throughout the service area. At night, these sensors listen for acoustic anomalies, which are indicative of a potential leak. When anomalies are identified, an automated procedure correlates and maps the location of each suspected leak. Field staff then use this information to investigate and make repairs. Acoustic leak detection sensors are particularly useful for pinpointing non-surfacing leaks that would otherwise be hidden. Currently, SJW has over 13,900 sensors deployed and is planning to deploy additional sensors over the next few years. In 2025, about 450 leaks were found as a result of this program, saving approximately 380 MG of water.

9.2.6.2 Main Replacement Program

Since 2008, SJW has consistently replaced about 1% of its water main distribution system annually, which is equivalent to about 24 miles of pipeline each year. This sustained investment reflects a long-term commitment to infrastructure reliability and proactive asset stewardship.

At the core of this effort is SJW's comprehensive Pipeline Asset Management Plan, which strategically prioritizes mains for replacement or rehabilitation based on risk and performance. The plan is enhanced by advanced analytics, including an artificial intelligence model that evaluates the likelihood of failure or leakage for each segment of water main. In addition, SJW assesses the potential consequences of failure, such as service disruption, public safety impacts, and critical customer needs, to ensure that the most vital assets are addressed first.

Through this data-driven, risk-based approach, SJW has determined that maintaining a 1% annual replacement rate is essential for long-term system health. This level of reinvestment stabilizes leak frequency, minimizes unplanned outages, and supports the delivery of reliable water service. Ultimately, the program enables SJW to manage its infrastructure sustainably while reducing disruptions and maintaining high service standards for its customers.

9.2.6.3 Advanced Metering Infrastructure

SJW's Advanced Metering Infrastructure (AMI) program, approved by the CPUC, is now in its final stages of field deployment, with full system implementation expected to be completed this year. The AMI system is transforming how SJW monitors and manages its distribution network by providing near real-time visibility into water use across the service area.

A primary benefit of AMI is its ability to help customers detect leaks early, often before they become costly or cause significant property damage. By identifying unusual usage patterns quickly and providing timely information, AMI empowers customers to take prompt action, reducing water waste and helping to manage bills. This early detection capability directly supports affordability by minimizing the risk of

⁴⁶ US EPA. (2026, March 9.) "Water Efficiency for Water Suppliers." Sustainable Water Infrastructure. <https://www.epa.gov/sustainable-water-infrastructure/water-efficiency-water-suppliers>

high, unexpected charges associated with undetected leaks. As of May 2026, the system has helped identify approximately 558,904 CCF (3.59 MG) of water loss and an additional 14,501 CCF (0.09 MG) in potential water savings.

In addition to customer-facing benefits, AMI enhances SJW’s ability to manage the distribution system more proactively. The system enables the creation of District Metered Areas (DMAs), allowing SJW to compare production and consumption data during low-demand periods to identify potential system leaks. These insights, combined with ongoing monitoring of distribution system pressures, support more targeted leak detection efforts and faster, more efficient deployment of field resources.

9.3 Urban Water Use Objective

California passed two water conservation bills in 2018 that will ultimately restrict water use: SB 606 and AB 1668. Under this *Making Conservation a California Way of Life* regulation, each urban water supplier has a unique Urban Water Use Objective (UWUO) which is defined by the state.⁴⁷ The objective includes residential indoor water use; real water loss; residential outdoor use; and commercial, industrial, and institutional (CII) landscapes with dedicated irrigation meters (DIMs). Over time, the objective becomes more stringent. SJW has filed annual reports on their UWUO since 2024 and has met its UWUO each year.⁴⁸ The enforcement of the conservation mandates begins in 2027.

As of 2025, the residential indoor water use standard is 47 gallons per capita per day (gpcd). In 2030, that will decrease to the final standard of 42 gpcd. The residential outdoor water use standard is calculated based on the irrigable irrigated⁴⁹ land area in SJW’s service area, climate data, and the Landscape Efficiency Factor (LEF). The LEF for outdoor residential use is currently 0.80 but will decrease to 0.63 in 2035 and then to 0.55 in 2040. CII water use has a specified standard for landscape usage with a dedicated irrigation meter (DIM) but the majority of CII usage is evaluated based on performance measures. With the most stringent standards of 42 gpcd for indoor use and an LEF of 0.55, currently scheduled for implementation in 2040, the budget for total residential usage will be approximately 63 gpcd. SJW is well-positioned to be in compliance with the final residential objective set out in this conservation legislation.

In SJW’s 2026 UWUO annual report, based on the 2025 calendar year, the budget for total residential usage per capita is 81 gpcd and the actual usage was 65 gpcd. While there is no water use objective set across all water sectors, assuming that residential demands make up 78% of all water demands, SJW’s all-sector objective for 2025 would be 104 gpcd. Across all water sectors, daily per capita water use for SJW’s

⁴⁷ State Water Resources Control Board. (2026, April). *Making Conservation a California Way of Life Regulation*. Water Conservation Portal. https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/regs/water_efficiency_legislation.html

⁴⁸ Submitted UWUO reports are publicly available on DWR’s website: https://wuedata.water.ca.gov/uwuo_plans

⁴⁹ The outdoor residential water use standard separates irrigable irrigated land from irrigable not irrigated land. Irrigable irrigated land is land that is currently being irrigated such as lawns and other landscaped areas. Irrigable not irrigated land could be irrigated but is not currently. This could be bare soil or an area where turf was removed, but in either case irrigation is possible in the future.

service area in 2025 was 97 gpcd. Using the final 2040 residential standard and an assumed 78% residential demands, SJW's all-sector final objective would be approximately 80 gpcd.

In addition to the use objective, this legislation requires additional conservation measures including classifying CII users, identifying large CII users for conservation program BMPs, and ensuring CII customers with large landscapes have DIMs or an in-lieu technology. For SJW, the AMI system is an in-lieu technology, allowing outdoor irrigation usage to be inferred using hourly interval data and algorithms. SJW is preparing for future compliance deadlines for this conservation regulation.

Chapter 10

Plan Adoption, Submittal and Implementation

This chapter describes the notification that was made to jurisdictions on SJW’s UWMP preparation, the public hearing that was held for the UWMP and WSCP, and steps taken by SJW to adopt, submit, make publicly available, and amend the UWMP and WSCP.

SJW invited Valley Water and local jurisdictions to participate in the development of the UWMP and provided over 60 days of notice prior to the public hearing. A public hearing was hosted on June 4, 2026 at 12:00 p.m. to present the plans and collect public input. The draft plans were made available for public review on SJW’s website **TIME** prior to the public hearing, and notice of the public hearing was posted in the San Jose Mercury News on May 15, 2026 and May 21, 2026. The plans were adopted by SJW’s Board of Directors on **June XX, 2026**, and submitted to DWR within 30 days of adoption and by the July 1, 2026 deadline. The final UWMP and WSCP will be made publicly available on SJW’s website within 30 days of adoption.

10.1 Inclusion of all 2025 Data

Data provided in this UWMP is provided on a calendar year basis through December 31, 2025.

10.2 Notice of Public Hearing

10.2.1 Notice to Cities and Counties

SJW invited Valley Water and local city and county jurisdictions to participate in the development of the UWMP and provided over 60 days of notice prior to the public hearing. Copies of the notification letters are provided in **Appendix X**. A list of the notified entities is provided in Table 10-1. The same entities were notified of the public hearing at least two weeks in advance.

Submittal Table 10-1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Campbell	Yes	Yes
Cupertino	Yes	Yes
Milpitas	Yes	Yes
Monte Sereno	Yes	Yes
San Jose	Yes	Yes
Santa Clara	Yes	Yes
Saratoga	Yes	Yes
Sunnyvale	Yes	Yes
Town of Los Gatos	Yes	Yes
County Name Drop Down List	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Santa Clara County	Yes	Yes

10.2.2 Notice to the Public

Notice to the public of the time and location of the hearing was published in the *San Jose Mercury News* on May 15, 2026 and May 21, 2026, and a copy of this notice is attached in **Appendix X**.

10.3 Public Hearing and Adoption

The California Urban Water Management Planning Act requires each water agency to encourage the active involvement of the public in the development of the UWMP. SJW sought public participation by allowing any interested member of the general community in the service area to have access to the Draft 2025 UWMP starting **May XX, 2026**. The draft 2025 UWMP was made available for public inspection online on the company website www.sjwater.com for public inspection one week in advance of the public hearing. Members of the public were able to submit written questions or comments through email. The public hearing was held on June 4, 2026 at 12:00 p.m. virtually through webinar. Questions and comments were also collected at the public hearing.

Following the public hearing and incorporation of public feedback, the final UWMP and WSCP were approved by SJW’s Board of Directors on **June XX, 2026**. The resolution documenting adoption is included in **Appendix X**.

10.4 Plan Submittal

This 2025 UWMP and WSCP, along with the required data tables, was electronically submitted to DWR in accordance with its requirements before the July 1 deadline and no later than 30 days after adoption. The DWR checklist arranged by subject is included as **Appendix X**, demonstrating that SJW has met the requirements of the CWC. No later than 30 days after adoption, a CD or hardcopy of the adopted UWMP and WSCP will be sent to the California State Library and electronic copies will be sent to all jurisdictions identified in Table 10-1.

10.5 Public Availability

Within 30 days after filing the 2025 UWMP to DWR, SJW will make the final UWMP and WSCP available for public review on SJW's website.

10.6 Notification to Public Utilities Commission

As an investor-owned utility regulated by the CPUC, SJW will submit its 2025 UWMP and WSCP to the CPUC as part of its general rate case filings.

10.7 Amending an Adopted UWMP or WSCP

Should SJW amend this 2025 UWMP or WSCP, the required notification, public hearing, adoption, and submittal processes as defined by DWR will be followed.



SAN JOSE WATER

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