



SAN JOSE WATER

2025 Urban Water Management Plan and Water Shortage Contingency Plan

June 4, 2026

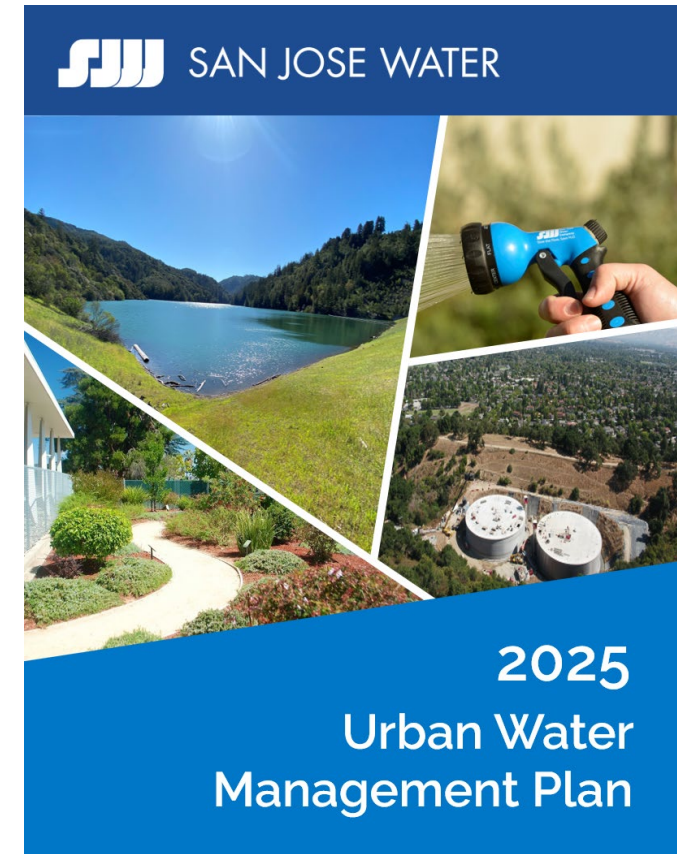


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For the past five years, Jessica has worked in Capital Planning at San Jose Water, where she focuses on water system planning, analysis, and regulatory reporting. She holds a Master of Science from San José State University and a Bachelor of Science from Georgia Institute of Technology, both in Civil Engineering.

Introduction and Overview

- Urban Water Management Planning Act of 1983
- UWMP prepared every five years, due by July 1st to the State
- Prepared per Water Code requirements and guidelines from Department of Water Resources (DWR)
- No major legislative updates since the 2020 UWMP
- Water resources planning document
 - Population/demand projections and water supply reliability analysis out to 2050
 - Water Shortage Contingency Plan
 - Water conservation measures



AGENDA

1

**Service Area and
Demand Projections**

2

**Sources of Supply and
Supply Projections**

3

**Water Supply Reliability
Assessment**

4

**Water Shortage
Contingency Plan**

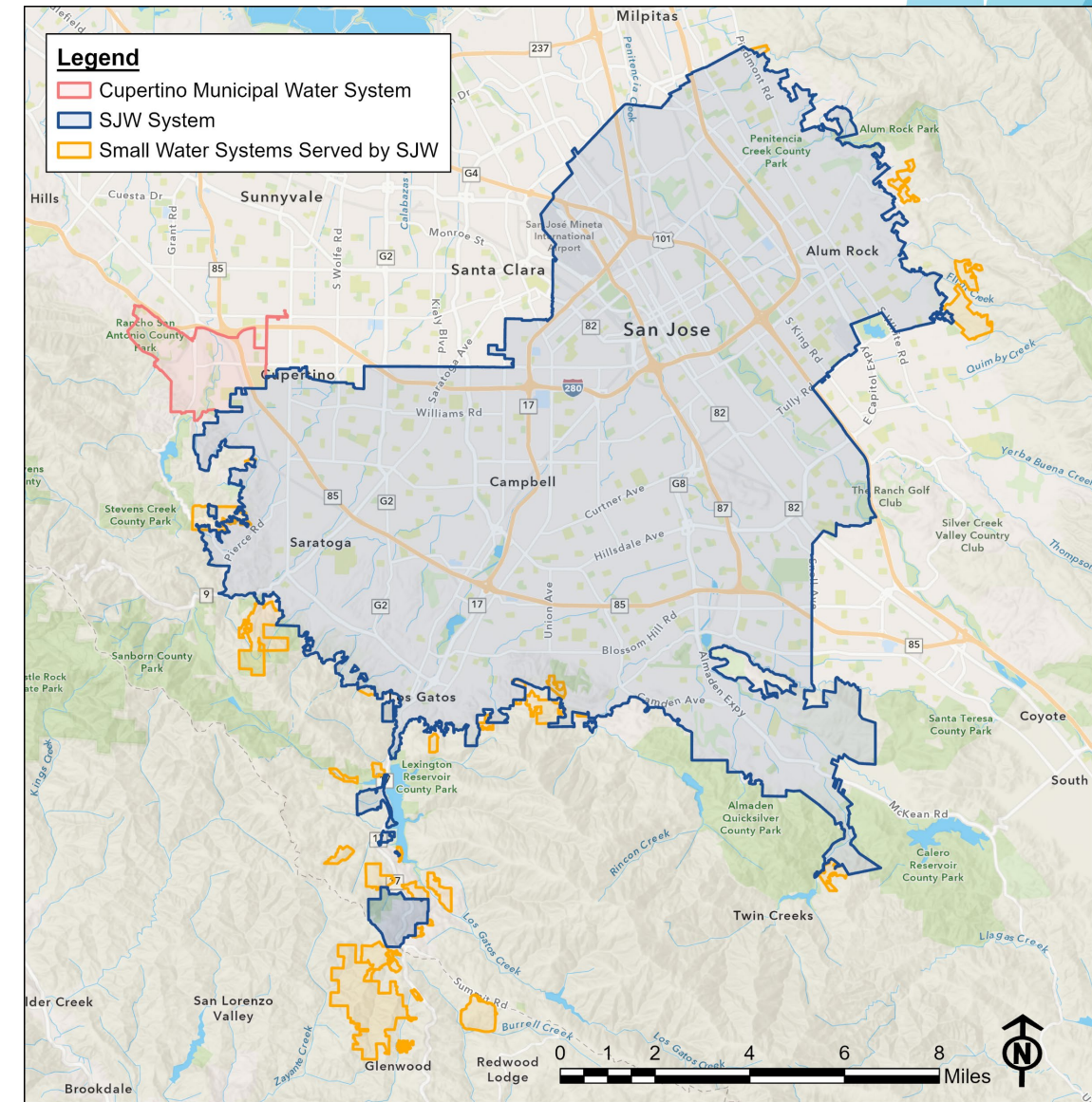
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Questions & Comments

Service Area and Demand Projections

Service Area

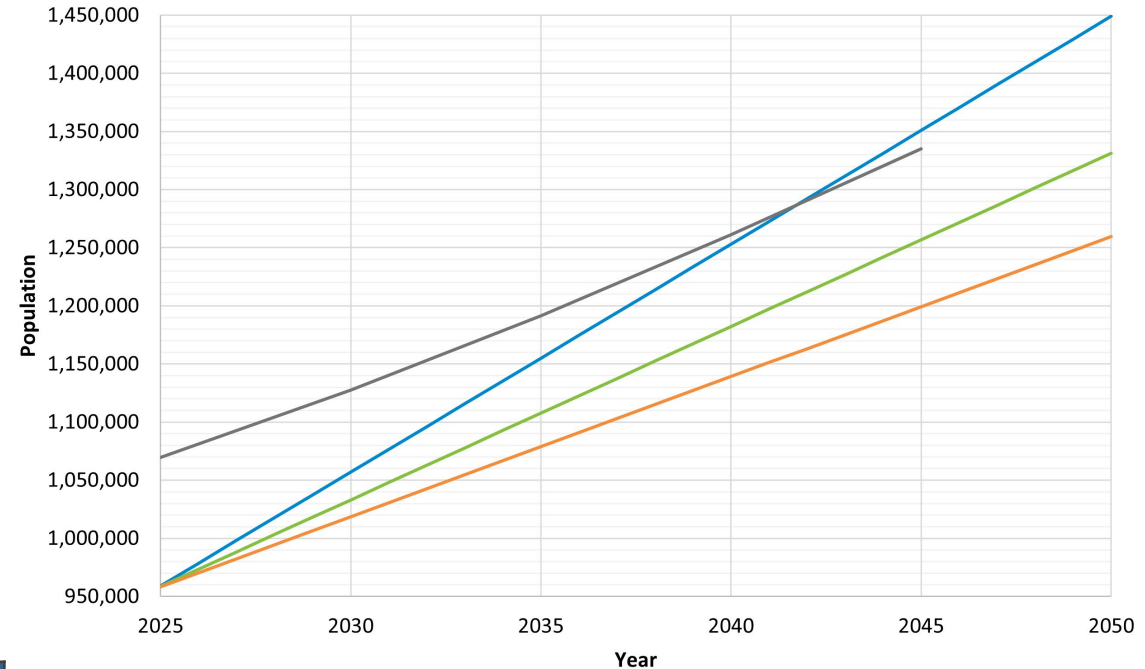
- Investor-owned utility regulated by the California Public Utilities Commission (CPUC)
- Service to approx. 1 million people (~230,000 active metered services)
- Lease agreement to operate the Cupertino Municipal Water System
- Service to other small water systems



Map of SJW Service Area

Population Projections

- 2025 Strategic Water Resources Plan
 - Based on the Association of Bay Area Governments (ABAG) Plan Bay Area (PBA) 2050 and 2050+



SJW Service Area Population Estimates – PBA 2050+

2025	2030	2035	2040	2045	2050
958,269	1,018,527	1,078,785	1,139,043	1,199,301	1,259,559

— PBA 2050 - County Share of Growth
 — PBA 2050 - Superdistrict Share of Growth
 — PBA 2050+
 — 2020 UWMP

Population Projections



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Conservation

- Senate Bill (SB) 606 and Assembly Bill (AB) 1668
 - “Making Conservation a California Way of Life”
 - Urban Water Use Objective:
 - Residential indoor use
 - Residential outdoor use (increasingly stringent efficiency requirements)
 - Real water losses (leaks)
 - Commercial, industrial, and institutional (CII) dedicated irrigation meters and best practices
- AB 1572
 - Prohibits use of potable water to irrigate nonfunctional turf (lawns which serve no recreational or community purpose) at CII properties, including common areas managed by HOAs
- SB x7-7
 - Required 20% reduction in per capita water use by 2020



Examples of low-water-use landscaping from SJW's GardenSoft website

Year	Indoor Residential Usage (gpcd)
2020-2024	55
2025-2029	47
2030 and future	42

gpcd = gallons per capita per day

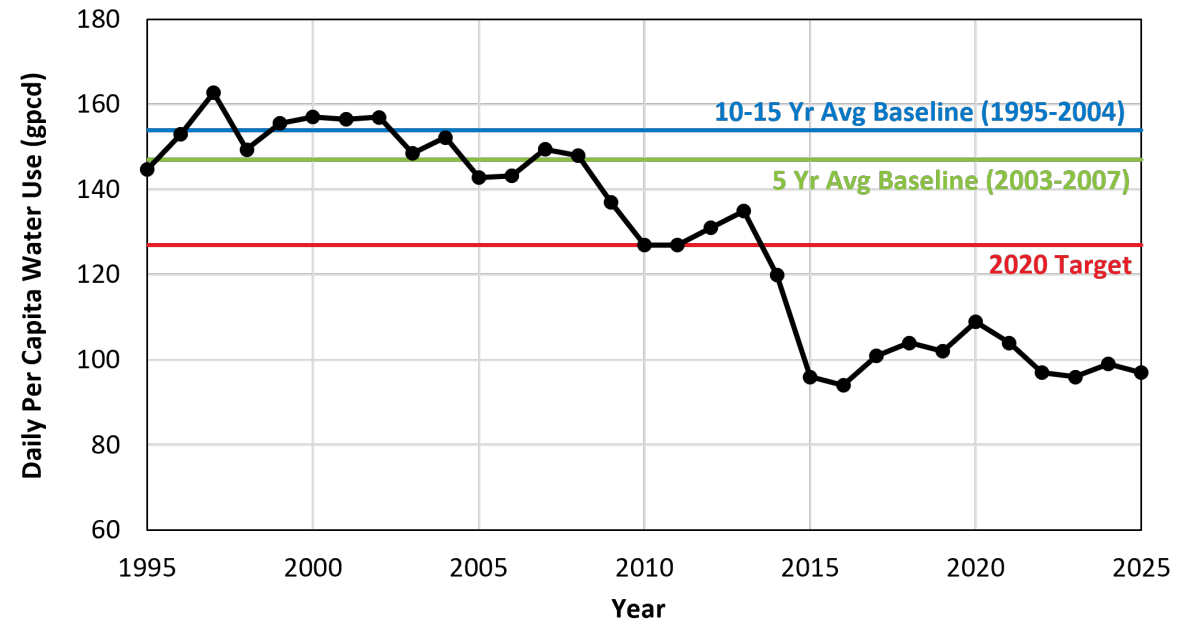
Property Type	Date Compliance Required
Public Properties	Jan. 1, 2027
CII	Jan. 1, 2028
HOA Common Areas	Jan. 1, 2029

CII = commercial, industrial, and institutional

HOA = Homeowners Association

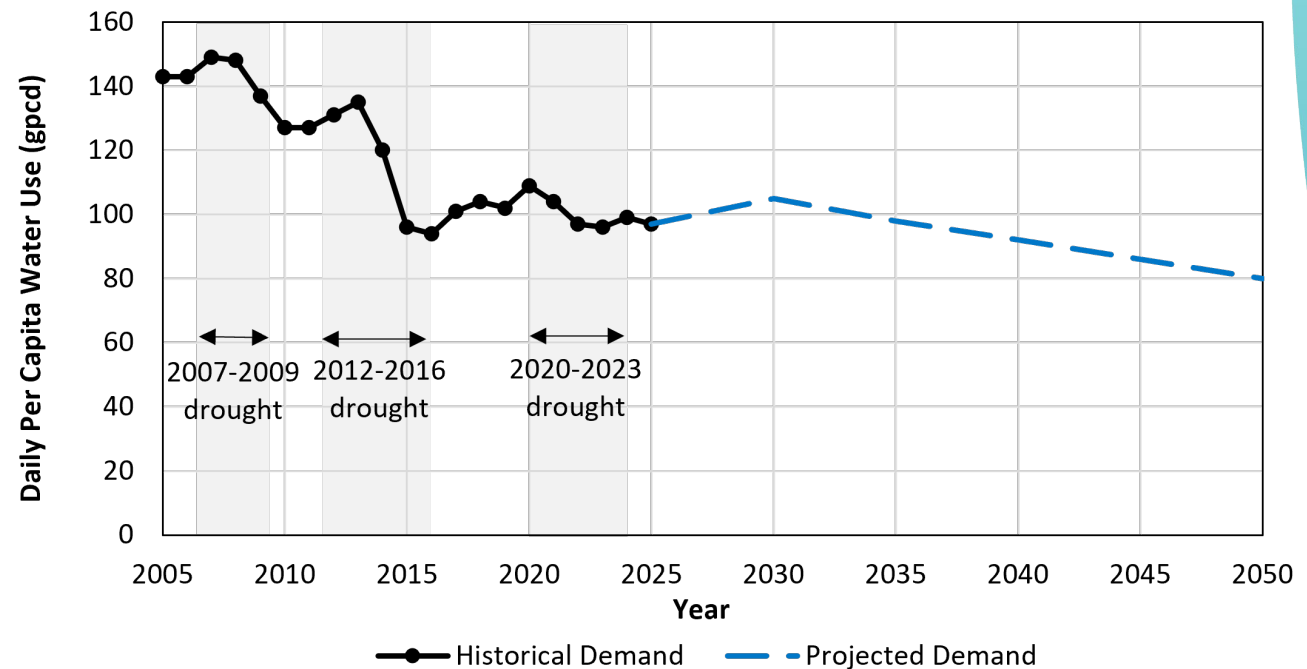
SB x7-7 Compliance

- SB x7-7 required 20% reduction from a baseline
- SJW's 2020 water use target was calculated in the 2015 UWMP
- SJW was in compliance with its 2020 water use target



Water Demand Projections

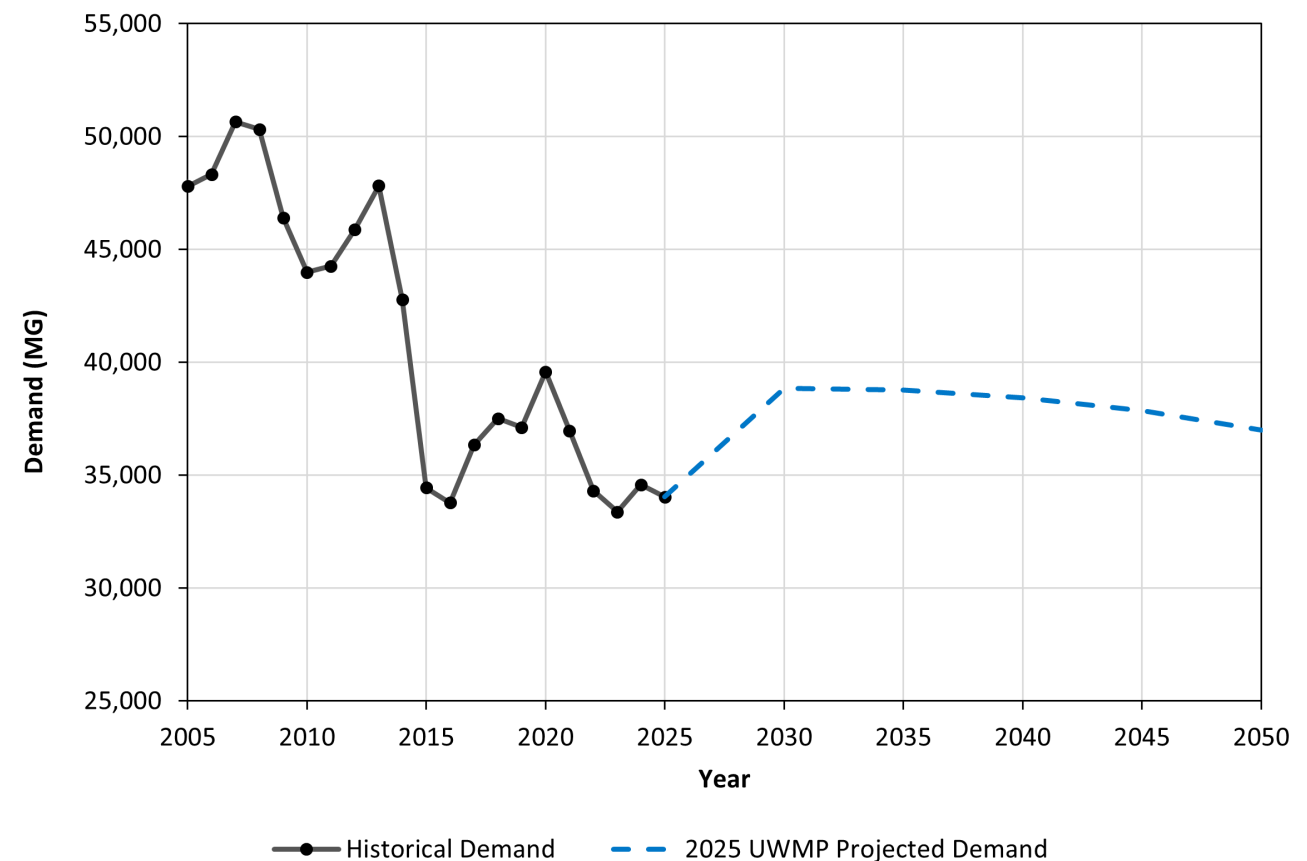
- Per capita water usage reflects drought responses and conservation efforts



SJW Per Capita Demand (in gallons per capita per day)

Water Demand Projections

SJW Water Demand (million gallons)

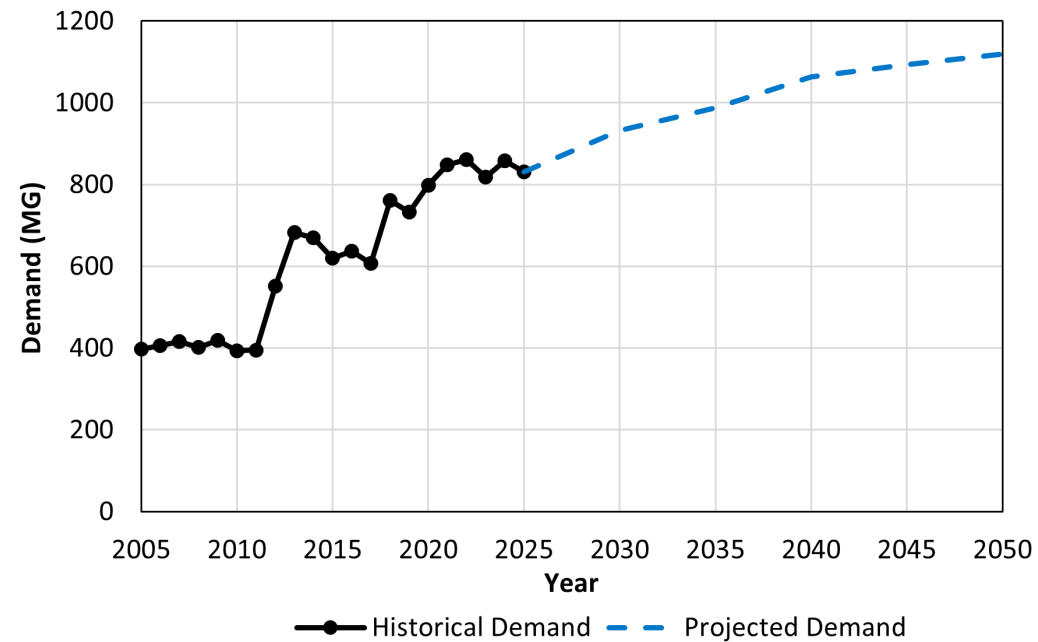


Recycled Water Projections

- Based on 2026 Recycled Water Master Plan
- Sign up new customers on existing recycled water main alignments
- Construct new recycled water main alignments



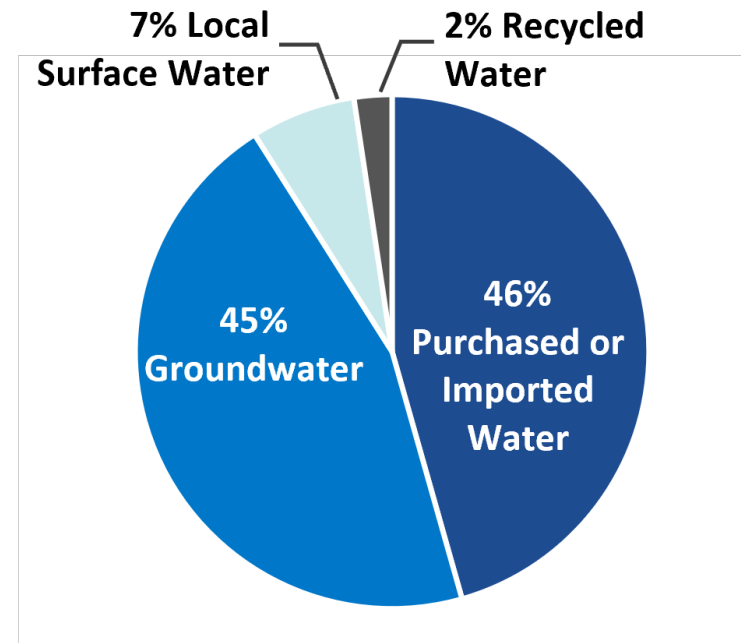
Purple pipes indicate recycled water infrastructure



Sources of Supply and Supply Projections

Sources of Supply

- Potable supplies
 - Purchased, or imported, treated surface water from Valley Water (wholesaler)
 - Groundwater from the Santa Clara Subbasin
 - Surface water from local watersheds
- Non-potable supplies
 - Recycled water from South Bay Water Recycling (wholesaler)



SJW Sources of Supply in 2025

Purchased Water

- On average, makes up over half of SJW's total annual water supply
- SJW has a master contract with Valley Water for purchased water (rolling three-year delivery schedule)
- Originates from several sources
 - Valley Water's local reservoirs
 - From the Sacramento-San Joaquin Delta (Delta) through the State Water Project (SWP) and the Central Valley Project (CVP)
- Treated at Valley Water's water treatment plants (WTPs)
 - Rinconada, Penitencia, and Santa Teresa
- Water is piped into SJW's system at 14 turnout locations



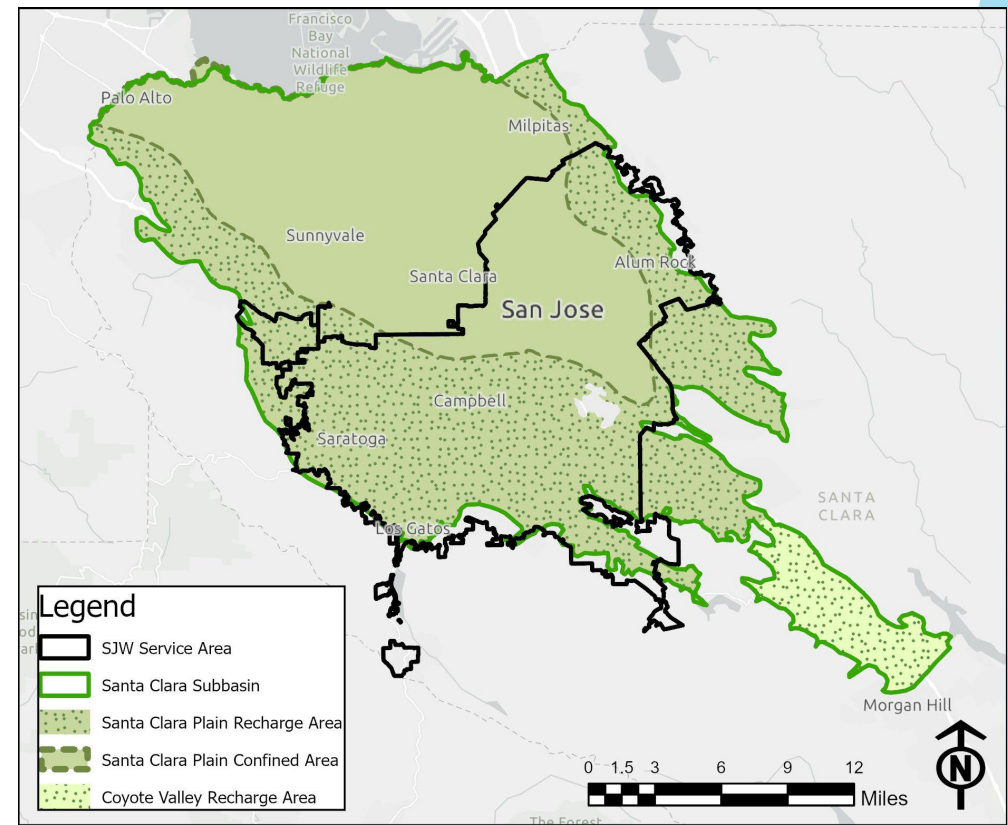
Penitencia WTP



Stevens Creek Reservoir

Groundwater

- On average, makes up 30% - 40% of SJW's total annual water supply
- SJW draws water from the Santa Clara Subbasin
- Valley Water is the designated Groundwater Sustainability Agency
 - Recharges aquifers through recharge ponds
- SJW coordinates with Valley Water and other basin stakeholders on pumping operations



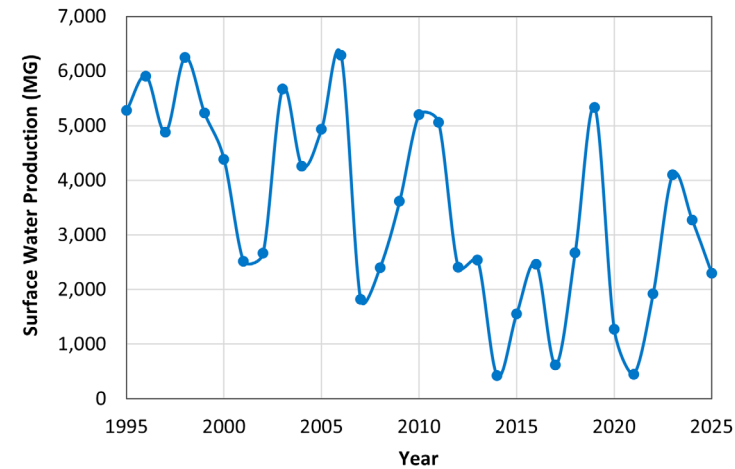
Santa Clara Subbasin Map



SJW McLaughlin Groundwater Well

Surface Water

- On average, makes up less than 10% of SJW's total annual water supply
- SJW has water rights in Saratoga Creek, Los Gatos Creek, and associated watersheds
- SJW diverts streamflow through intakes and also stores water in surface water reservoirs to be released in drier months



Historical Surface Water Production



Lake Elsmar Reservoir



Montevina Water Treatment Plant

Recycled Water

- Wastewater is treated at San Jose/Santa Clara Regional Wastewater Facility (SJ/SC RWF)
 - Used by South Bay Water Recycling (SBWR) to produce recycled water
- Blended with advanced-treated water from Valley Water's Silicon Valley Advanced Water Purification Center (SVAWPC)
 - Blending improves the quality of recycled water



City of Santa Clara
The Center of What's Possible

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY



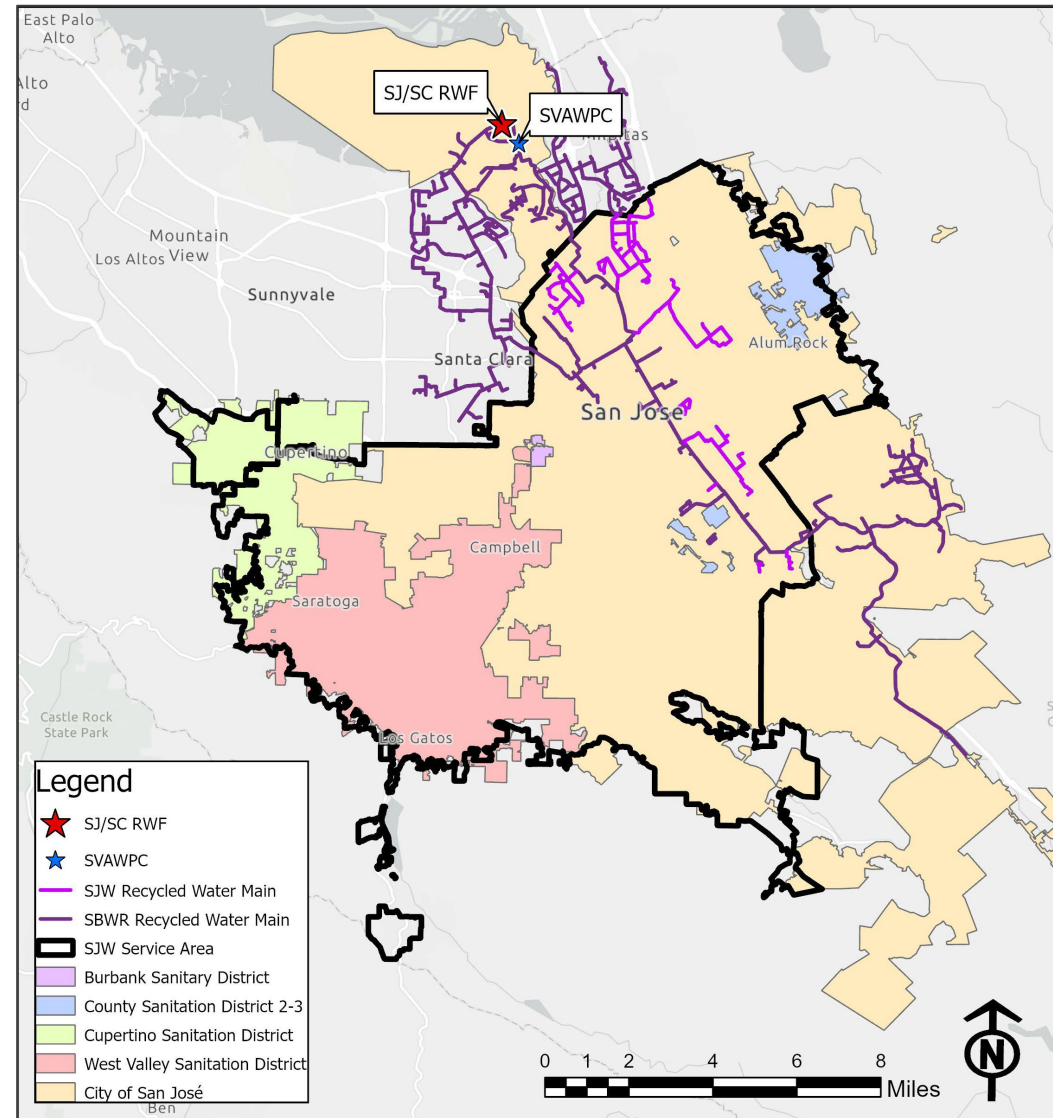
SOUTH BAY
WATER RECYCLING



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Recycled Water

- Majority of SJW's recycled water is used for landscape irrigation
- Other uses:
 - Agricultural irrigation
 - Golf course irrigation
 - Commercial use (toilet/urinal flushing)
 - Industrial use (cooling towers)



Wastewater/Recycled Water System for SJW

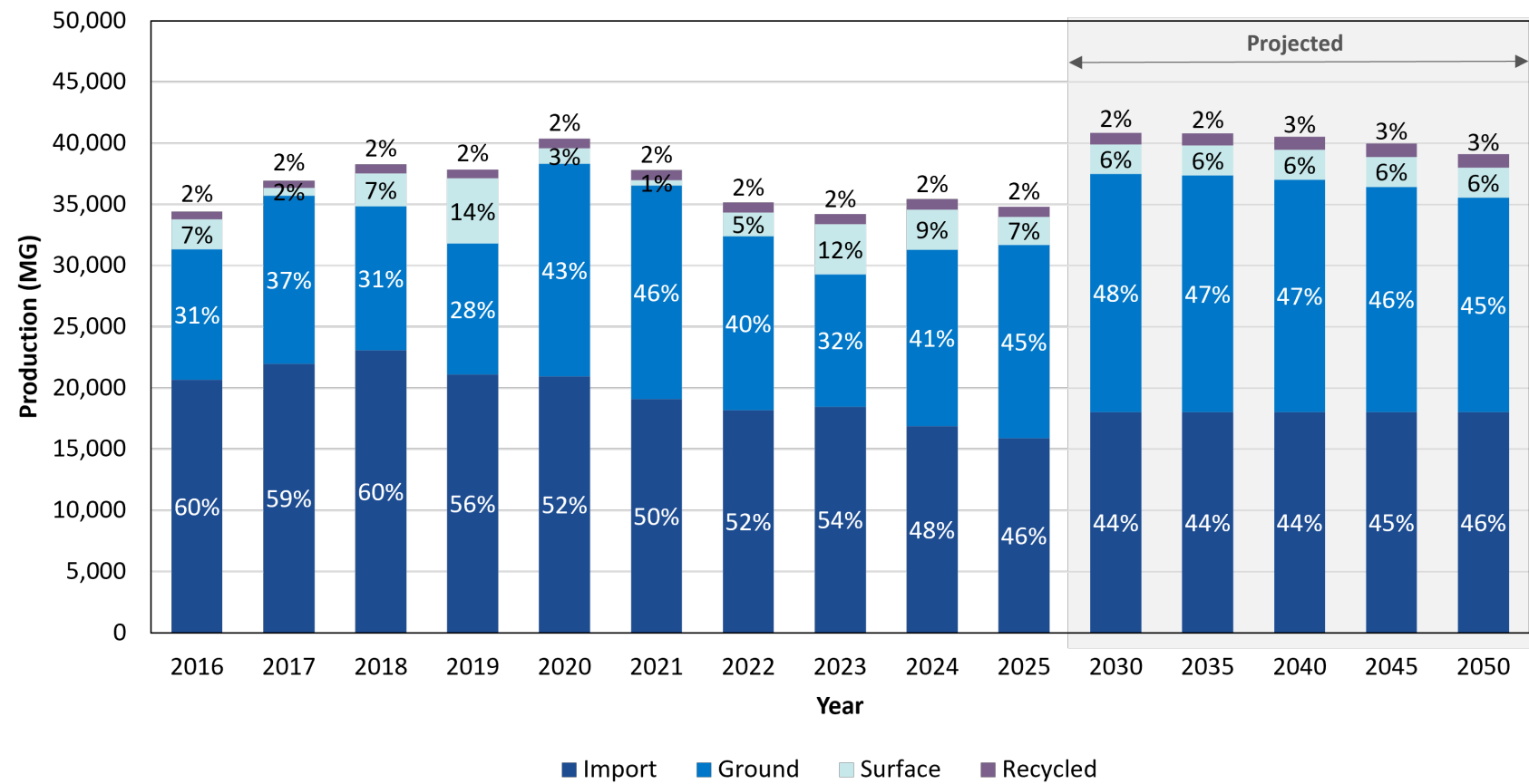
Direct Potable Reuse Pilot

- 2025 Strategic Water Resources Plan
- Direct potable reuse (DPR) is a potential source of long-term reliable and sustainable water
 - DPR is an advanced treatment process that purifies recycled wastewater into high-quality drinking water and aligns with California's DPR regulations
- Pilot demonstration facility will be a mobile treatment unit
 - Expected to be operational in 2027



Conceptual Design of DPR Demonstration Facility

System Supply Projections



Water Supply Reliability Assessment

Water Supply Reliability Assessment



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If supply exceeds demand, there will be a **surplus**



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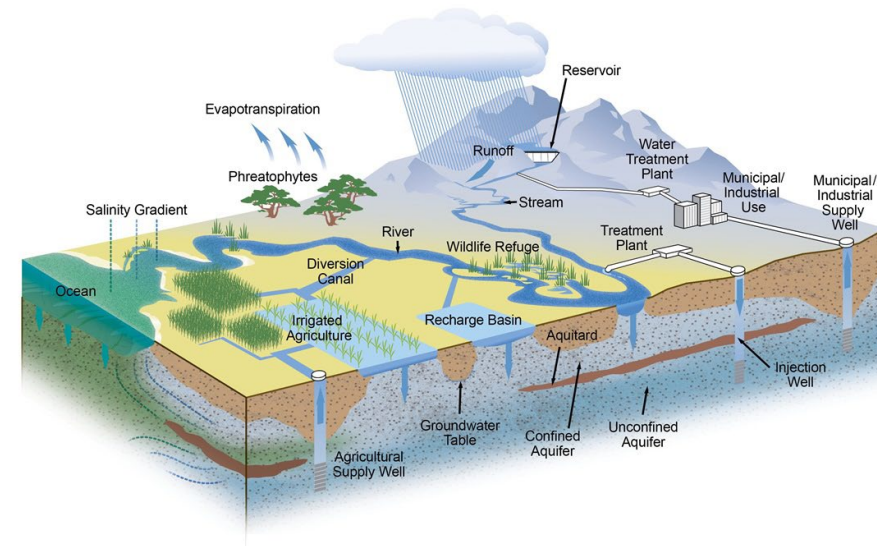
If supply is less than demand, there will be a **shortage**

Water Supply Reliability Assessment

- Long-term reliability over 2030-2050
 - **Scenario 1**: Average Year
 - **Scenario 2**: Single Dry Year
 - **Scenario 3**: 5 Consecutive Dry Years
- Short-term reliability
 - **Scenario 4**: Drought Risk Assessment (2026-2030)
- Valley Water models the water supply for the county under these scenarios

Assumptions of the Analysis

- Actual availability of each supply varies depending on hydrology, groundwater recharge operations and conditions, imported water allocations, and climate change
- Model results can help make informed decisions about how to manage complex water systems
- The analysis assumed that recommended projects from Valley Water's Water Supply Master Plan 2050 are implemented
- SJW's projected portion of Valley Water's supply assumed to be the same as the historical average based on 2015, 2020, and 2025 UWMPs



*Conceptual Water System Modeling from
the Department of Water Resources*

Water Supply Reliability Assessment

Long-Term Reliability Scenarios

- Valley Water projects a shortage in the last 2 years of a 5-year drought for 2030, 2045, and 2050 demands
 - This meets their level of service goal to provide 80% of annual water demand in drought years
 - Shortage met with actions from WSCP
- SJW projects adequate supplies for all long-term scenarios:
 - Average Year
 - Single Dry Year
 - Five Consecutive Dry Years

Legend	
✓	Surplus, supply exceeds demand
✗	Shortage, supply is less than demand

Scenario 1	2030	2035	2040	2045	2050
Average Year	✓	✓	✓	✓	✓

Scenario 2	2030	2035	2040	2045	2050
Single Dry Year	✓	✓	✓	✓	✓

Scenario 3: 5 Consecutive Dry Years	2030	2035	2040	2045	2050
1 st Year	✓	✓	✓	✓	✓
2 nd Year	✓	✓	✓	✓	✓
3 rd Year	✓	✓	✓	✓	✓
4 th Year	✓	✓	✓	✓	✓
5 th Year	✓	✓	✓	✓	✓

Drought Risk Assessment

Short-Term Reliability Scenario

- Valley Water projects a shortage in the last 2 years of a near-term drought
- SJW projects a 0.2% shortage in the 5th year of a 5-year drought starting this year
 - This small shortage would be addressed through a combination of conservation actions and Valley Water's supply augmentation

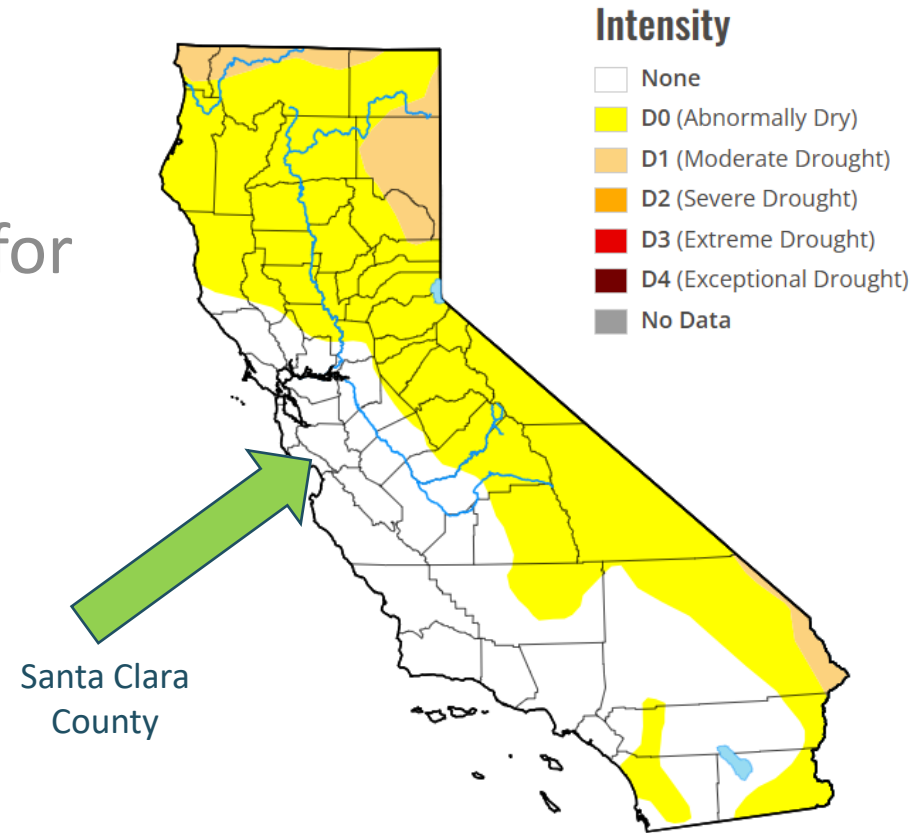
Legend	
✓	Surplus, supply exceeds demand
✗	Shortage, supply is less than demand

Scenario 4: Drought Risk Analysis	
2026	✓
2027	✓
2028	✓
2029	✓
2030	✗
2030 with WSCP Actions	✓

Water Shortage Contingency Plan

Water Shortage Contingency Plan

- Water Shortage Contingency Plan (WSCP) provides a structured plan for dealing with water shortage
- Schedule 14.1 and Rule 14.1 documents filed with the CPUC



U.S. Drought Monitor as of May 28, 2026

Water Shortage Stages

- SJW is adopting the six Department of Water Resources (DWR) standard water shortage levels
 - Consistent with Valley Water

Current

2020 SJW WSCP Water Shortage Levels		
Stage	Water Supply Condition	Water Shortage Levels
1	Normal	Up to 10%
2	Alert	10 to 20%
3	Severe	20 to 30%
4	Critical	30 to 40%
5	Emergency	40 to 50%

Revised

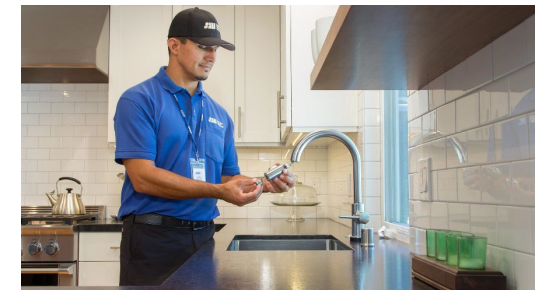
2025 SJW WSCP Water Shortage Levels		
Stage	Stage Title	Water Shortage Levels
1	Alert	Up to 10%
2	Warning	10 to 20%
3	Severe	20 to 30%
4	Critical	30 to 40%
5	Extreme	40 to 50%
6	Emergency	Greater than 50%

Water Shortage Response Actions

2025 SJW WSCP Water Shortage Levels		
Stage	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Voluntary conservation. Outdoor irrigation limits and non-essential or unauthorized uses of water may be declared wasteful uses of water. Commercial, industrial, and institutional customers may not use potable water to irrigate nonfunctional turf.
2	10 to 20%	Voluntary conservation. Watering days limited to 3 days per week. Drought rate structures and surcharges for residential and irrigation customers may go into effect if required and authorized by the CPUC.
3	20 to 30%	Mandatory conservation. Watering days limited to 2 days per week.
4	30 to 40%	Mandatory conservation. Watering days limited to 1 day per week.
5	40 to 50%	Mandatory conservation. No watering days. Flow restrictor devices may be installed to ensure compliance.
6	Greater than 50%	Mandatory conservation. Drought rate structures and surcharges for commercial, industrial, and institutional customers may go into effect if required and authorized by the CPUC.

Water Conservation Programs

- Bill Inserts
- Water Conservation Literature
- Website Content
- Public Events
- School Education Kits
- Demonstration Gardens
- CATCH Program: water checkup
- CII Water Audits
- Large Landscape Surveys
- Valley Water Rebate Programs
 - CII water conservation projects
 - Turf grass removal
 - High-efficiency irrigation equipment upgrades
 - Rain barrel/cistern installations
 - Graywater laundry-to-landscape systems



Water Loss Reduction Programs

- SJW's average annual water loss rate is approx. 7%
 - National average is 14% (per US Environmental Protection Agency)
- Acoustic leak detection sensors
 - Listen for potential leaks on water mains
- Main replacement program
 - Annual replacement of approx. 1% water mains
- Advanced metering infrastructure (AMI)
 - Provide near real-time water use data and leak detection capabilities
 - Customers can access their usage data and billing on the portal
 - 74% of SJW customers now have AMI enabled and installation will be complete by the end of 2026



Leak Detection at SJW


SJWaterHUB

 SAN JOSE WATER

Next Steps

- Finalize plans
- Obtain Board approval/adoption of plans
- Submit plans to DWR by July 1 deadline
- Final plans will be made available on SJW website





Questions? Comments?

UWMP@sjwater.com

Submit Your Comments via Email

If you think of a comment or question on the UWMP or WSCP after this presentation, reach out to us at UWMP@sjwater.com.

Questions and comments must be received by June 11 to be considered before finalization of the 2025 UWMP and WSCP.