

Envision San Jose 2040

Water Supply Summary



March 24, 2016

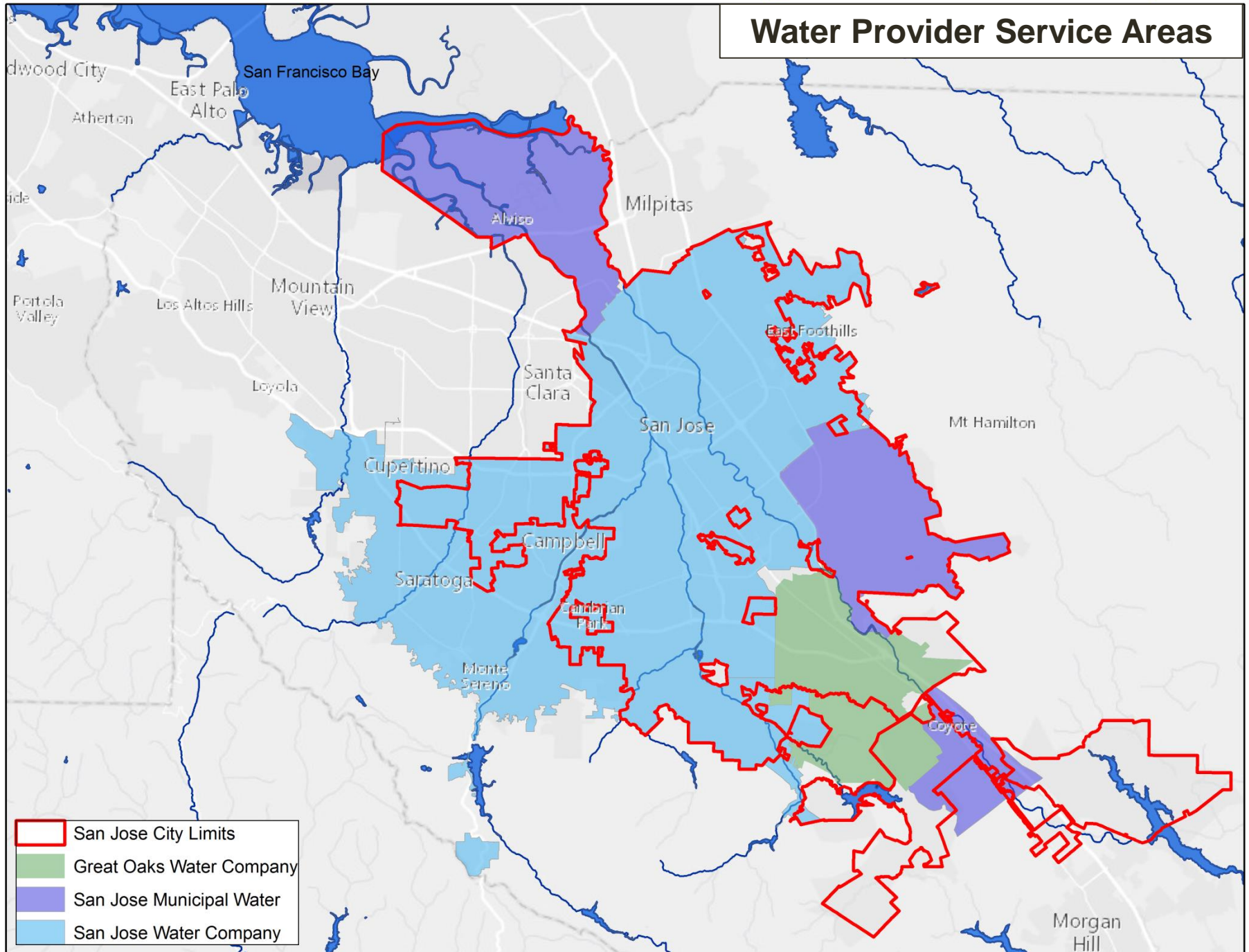
Schaaf & Wheeler
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
Water Providers

Supply Sources	Great Oaks Water Co.	San Jose Water Co.*	San Jose Municipal Water System
Santa Clara Valley Groundwater	✓	✓	✓
SCVWD Treated Water		✓	✓
SFPUC Treated Water			✓
Local Surface Water		✓	
Recycled Water		✓	✓

* San Jose Water Company also serves Campbell, Monte Sereno, Saratoga, Los Gatos, and portions of Cupertino and unincorporated Santa Clara County

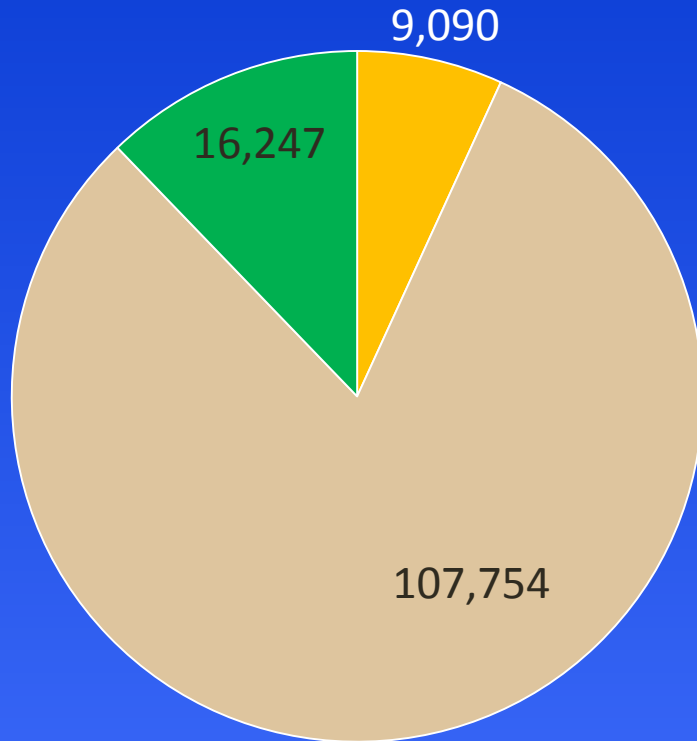
Water Provider Service Areas



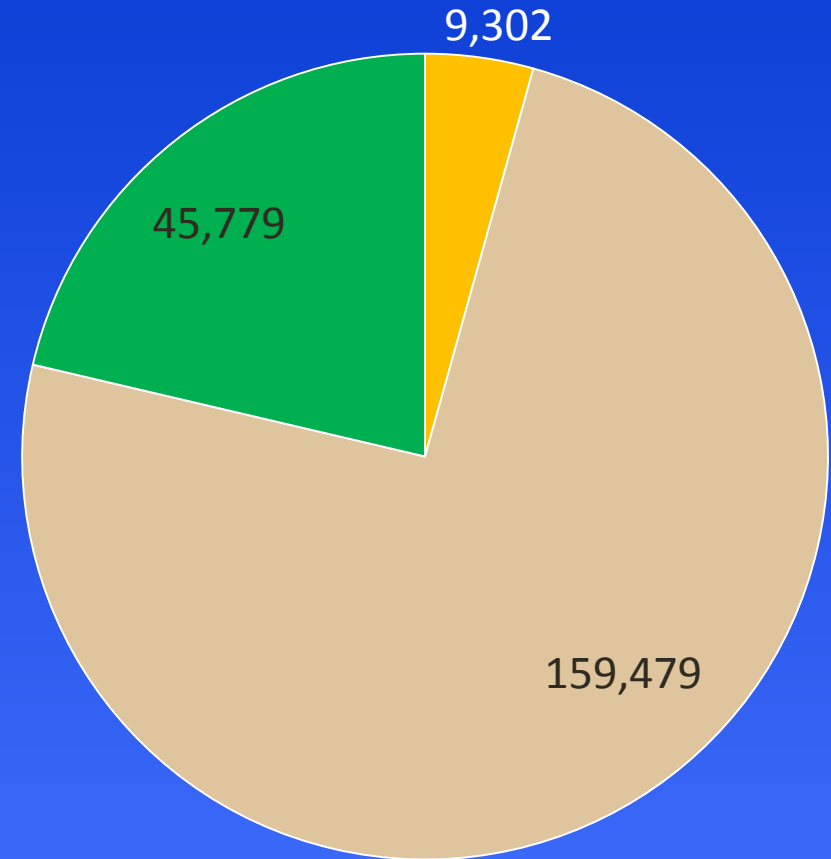
-  San Jose City Limits
-  Great Oaks Water Company
-  San Jose Municipal Water
-  San Jose Water Company

Water Demands: 60% Increase

2015 Demands: 133,091 AFY



2035 Demands: 214,560 AFY



- Great Oaks Water Co
- San Jose Water Co
- San Jose Municipal

AFY = Acre-Feet/Year

2015 Demand from SWRCB Drought Reports

2035 Demand from 2010 UWMP Projections

Water Sources: Groundwater

- All three water providers operate groundwater wells. Great Oaks Water Company is exclusively supplied by well water.
- Nearly half of the water used in Santa Clara County is groundwater.
- SCVWD uses local and imported surface water to augment natural groundwater recharge using percolation ponds and creek beds.
- Imported water:
 - Central Valley Project
 - Tracy Pumping Plant
 - San Luis Reservoir
 - State Water project
 - South Bay Aqueduct

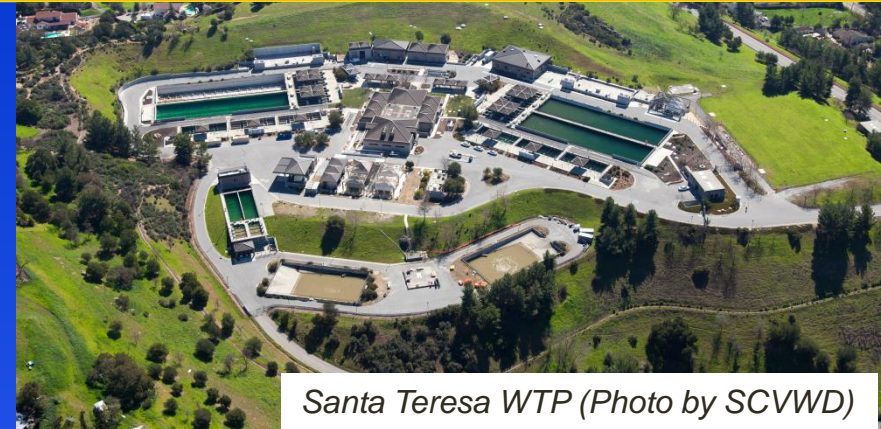
40% of County's water supply is from imported water sent directly to treatment facilities or percolation ponds.



Alamitos groundwater recharge pond (Photo by SCVWD)

Water Sources: SCVWD Treated Water

- SJWC and SJMWS purchase supply from the Santa Clara Valley Water District's three water treatment plants:
 - Rinconada (80 mgd, expanding to 100 mgd)
 - Penitencia (40 mgd)
 - Santa Teresa (100 mgd)
- Water supply is a mix of local water and imported supply.



Santa Teresa WTP (Photo by SCVWD)



Delta-Conveyed Water Supplies (Map by SCVWD)

Water Sources: SFPUC Hetch Hetchy

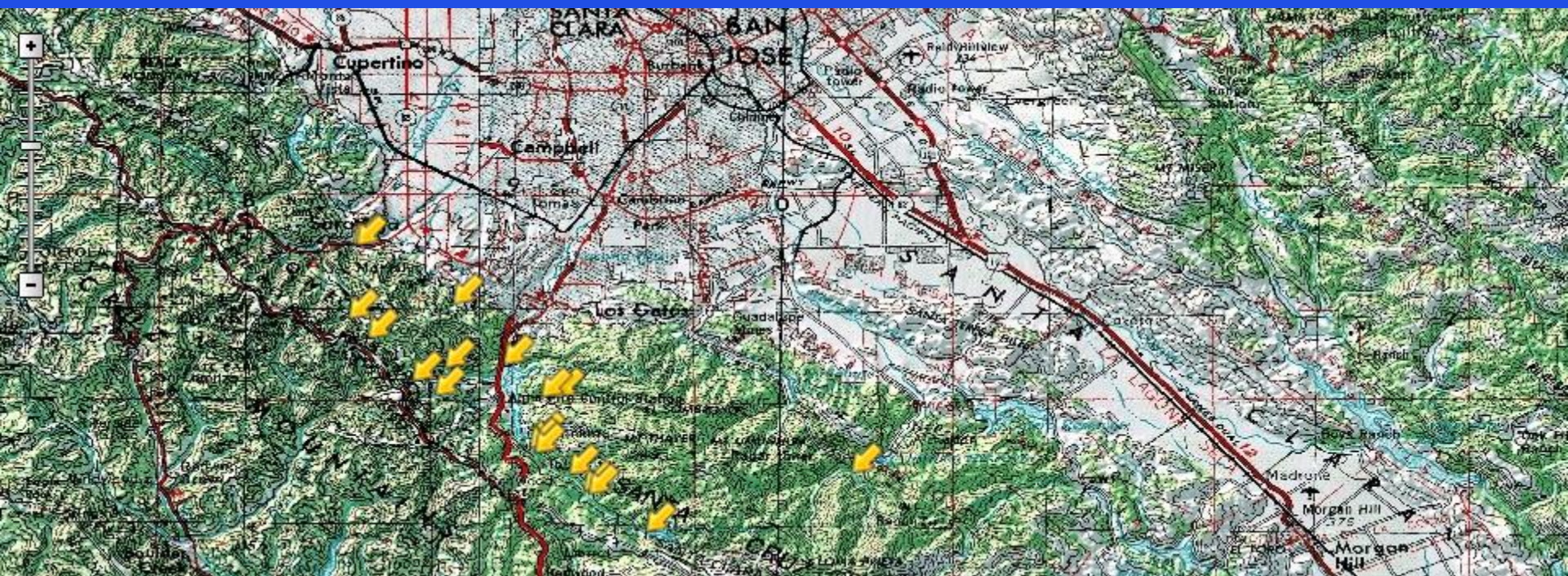
- San Jose Municipal System purchases water from the SFPUC for the North San Jose service area.
- Sources include the Tuolumne River/Hetch Hetchy Reservoir, and local surface water captured in Calaveras and San Antonio Reservoirs.
- Hetch Hetchy provides approximately 15% of the County's water supply.



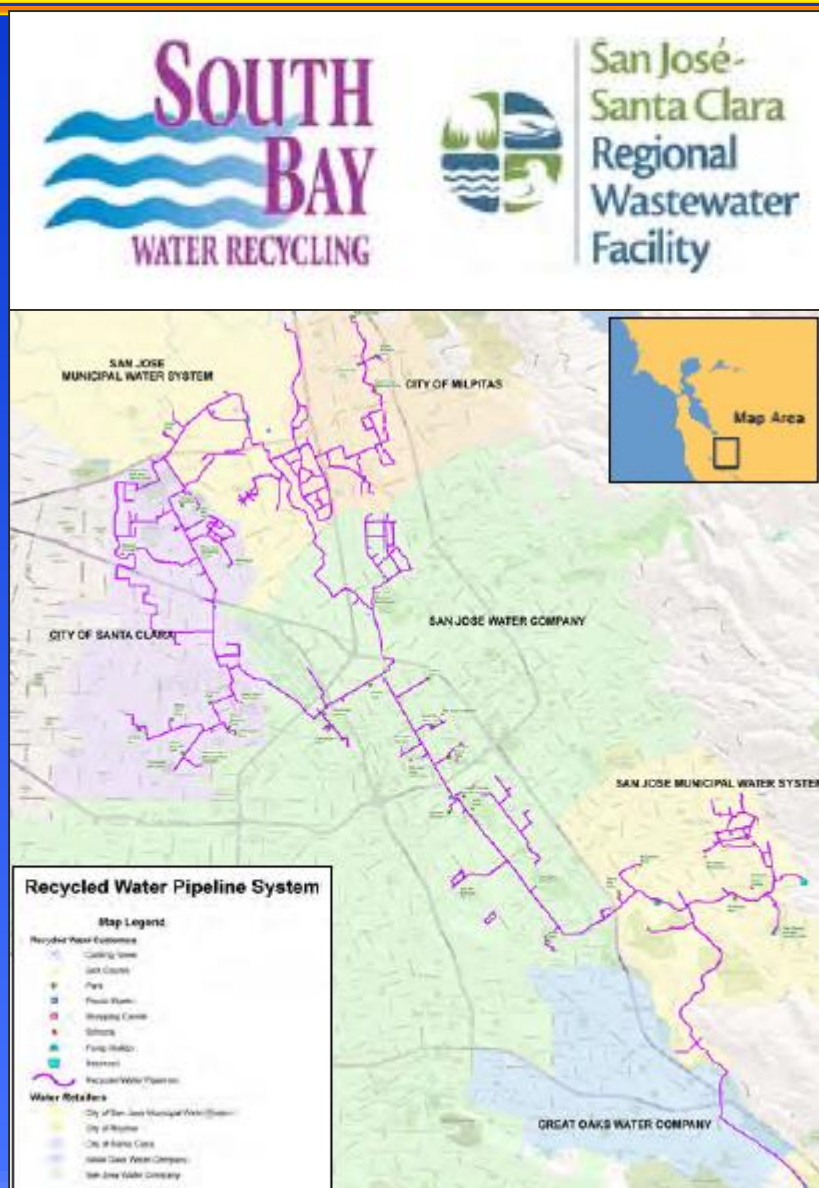
(Map by SFPUC)

Water Sources: SJWC Treated Water

- San Jose Water Company has 18 water rights in the Santa Cruz Mountains, providing up to 16,000 AFY.
- Water is treated at the Montevina Filter Plant and the Saratoga Treatment Plant.
- Approximately 5% of SJWC's supply comes from its own sources.



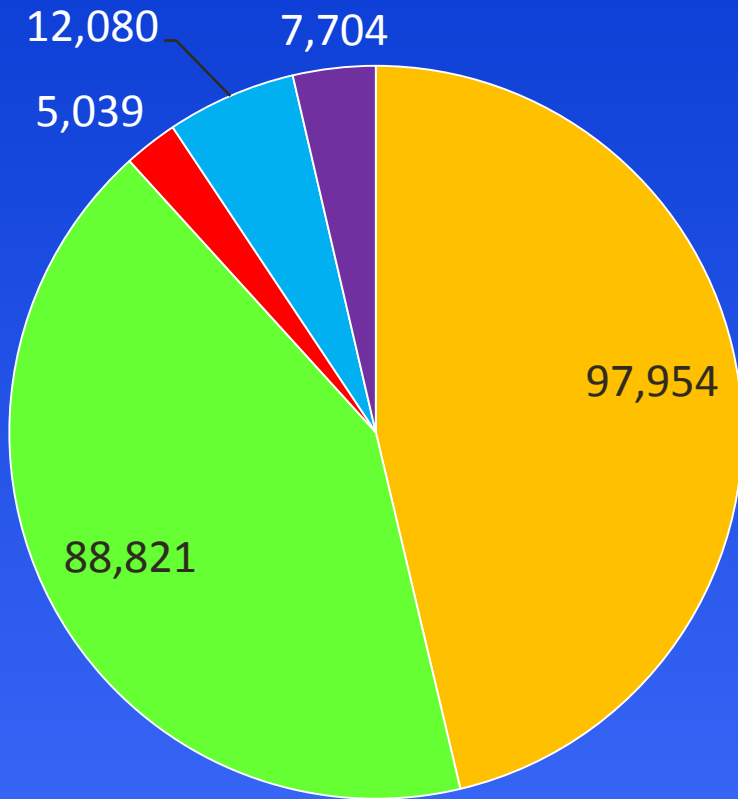
Water Sources: Recycled Water



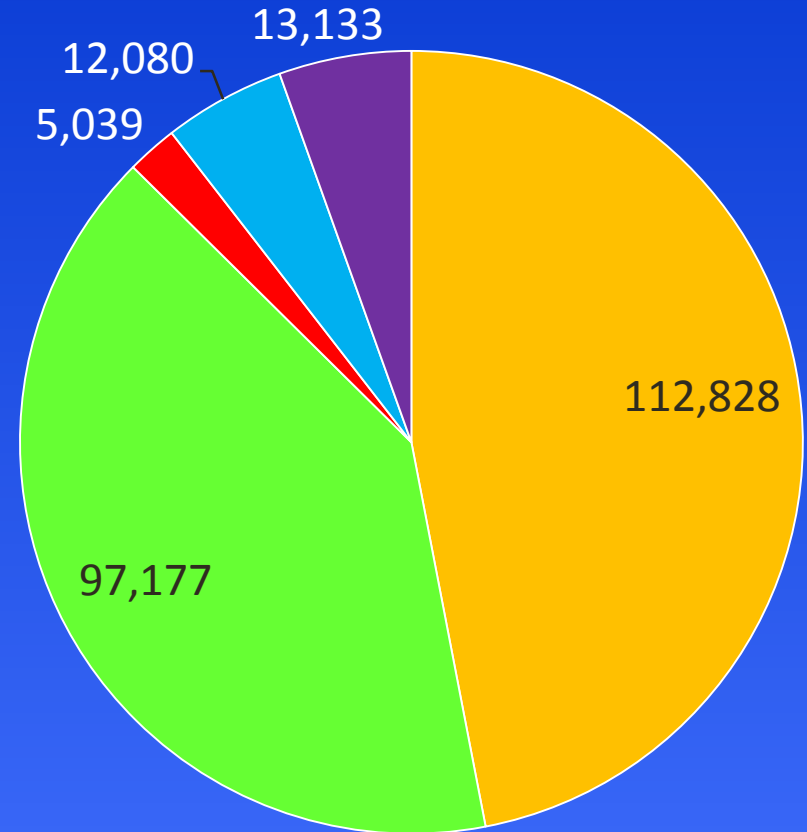
- The South Bay Water Recycling Program currently provides 14 MGD of tertiary-treated and disinfected water to customers in San Jose, Santa Clara and Milpitas.
- Use is projected to more than double in the next 20 years.
- Silicon Valley Advanced Water Purification Center.
 - New 8 MGD advanced treatment facility.
 - Initially planned to blend with tertiary-treated supply.
 - May become a source for direct or indirect potable reuse.

Projected Water Supplies: 14% Increase

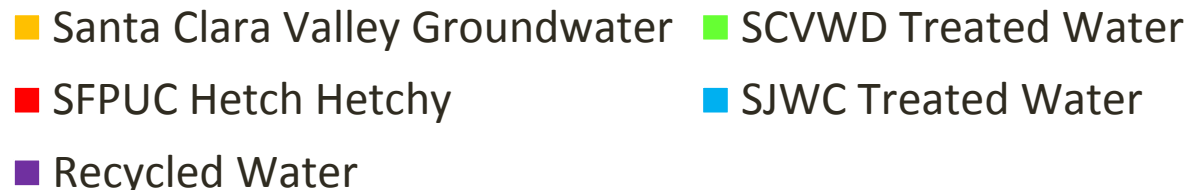
Sources in 2015: 211,598 AFY



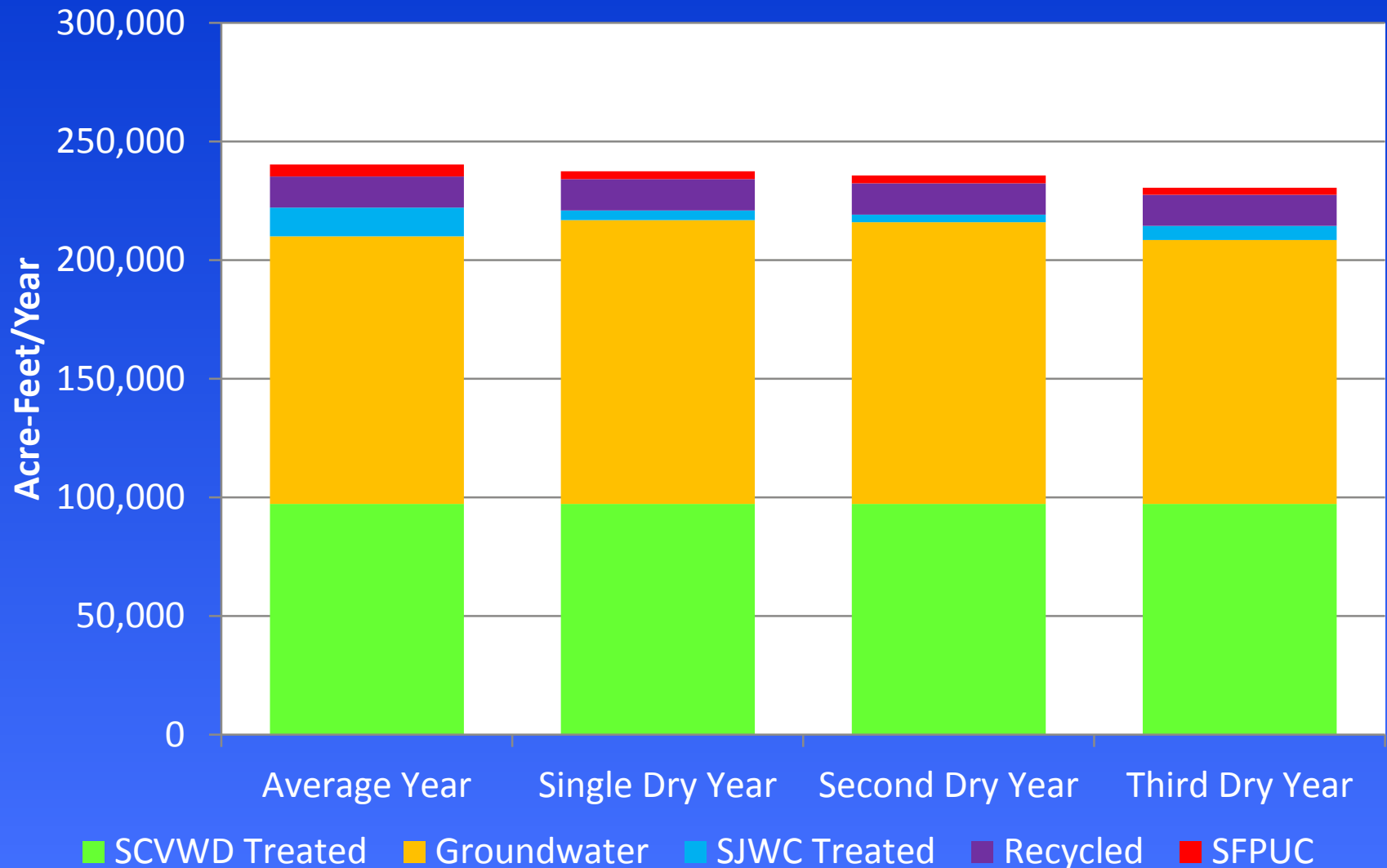
Sources in 2035: 240,257 AFY



AFY = acre-feet/year
Supply estimates from Suppliers'
2010 UWMPs



Projected Drought Year Supply (2035)



Strategies to Meet Future Water Demand

- Water conservation.
- Increased use of recycled water.
- SCVWD does not expect to increase imported water supplies.



Water Conservation

- The 20x2020 Water Conservation Plan was adopted by the State in 2009. (Senate Bill X7-7)
- Each water supplier established long-term conservation goal.
- Under the current drought restrictions, all three water providers have met their targets.
- Per capita water demand may rebound when the drought ends.
- Long-term water management planning at the State level is underway.

Water Retailer	10-year Baseline	2020 Goal	2015 actual
Great Oaks	121	97	82
SJWC	144	111	95
SJMWS	180	144	107

Values in gallons per person per day

Drought Response

- 2012 was the start of the drought of record.
- In 2014, the State mandated conservation requirements, targeting a 25% reduction in urban water use statewide, compared to water use in 2013.
- SCVWD, the three retail water providers and the City of San Jose called for a 30% water use reduction from 2013 levels.



Conclusions

- The Water Supply Assessment completed for Envision San Jose in 2010 showed there is enough water to serve planned growth, although supply projections in drought years indicate shortfalls.
- Water conservation and recycling are the primary strategies for meeting future water demands.
- Under the mandatory water user restrictions established due to the recent and severe multi-year drought, water customers have achieved >20% reductions.
- The three retail water providers are completing their 2015 Urban Water Management Plans, extending their projections to 2035.
- There is not an identified need at this time for the City to update its policies related to water supply and conservation. While no new policies are proposed, General Plan policy and City ordinances have and will continue to steer conservation efforts.
- New policies and ordinances could be developed at the State, regional and/or local level outside of the 4-year review.

Questions

