

16. CITY OF SANTA CLARA

AGENCY OVERVIEW

The City of Santa Clara was incorporated on July 5, 1852, and became a charter city in 1862, and again in 1951. Santa Clara is a full service city providing a range of services including: planning and inspection (planning, building inspection and neighborhood improvement); redevelopment; housing; police protection; fire protection; public works (engineering and building maintenance); streets (sidewalks, storm drainage, street sweeping, street trees, median landscaping, and graffiti removal) electric service; libraries; and parks and recreation (recreation, parks, recreation center, performing arts center, senior center, teen center, and cemetery). City services (including wastewater, solid waste, parks and recreation, storm water drainage, law enforcement, and library) were studied in the August 2006 South Central Santa Clara County Service Review.

Water services to the City are provided through the Water and Sewer Utilities Department, which also includes sewer, recycled water, and solar water. Water services were studied as part of the Countywide Water Service Review in June 2005.

Type and Extent of Services

Services Provided

The Water Utilities Division has been providing drinking water to residential, commercial, industrial and institutional customers within the City since 1895. The Water Utilities Division oversees water project planning; design; engineering and construction; water quality; system maintenance and operation; backflow prevention; leak detection; and a recycled water program. Santa Clara also has a water conservation program, and is supported by the Santa Clara Valley Water District (SCVWD) water conservation program.

The Water Utilities Division also provides for the design, construction, distribution, metering, quality monitoring, and system maintenance for recycled water.

The City of Santa Clara has three different sources of potable water, and one recycled water source. Potable water is derived from 30 municipal wells; from imported water from the State Water Project (SWP) and the federal Central Valley Project (CVP) through the SCVWD; and from the San Francisco Public Utilities Commission (SFPUC) Regional Water System. Recycled (non-potable) water for irrigation purposes is produced at the San Jose-Santa Clara Water Pollution Control Plant (WPCP) and distributed by South Bay Water Recycling (SBWR).

Service Area

The City's water service area includes all water service customers within the city limits, consisting of approximately 18.4 square miles.

Services to Other Agencies

The City of Santa Clara does not provide services to other agencies.

Contracts for Water Services

The City contracts with SCVWD and SFPUC for treated potable water, and SBWR for distribution of recycled water. The San Jose-Santa Clara WPCP is jointly-owned with the City of San Jose.

Collaboration

The City collaborates with the Bay Area Water Supply and Conservation Agency (BAWSCA), is involved with the Water System Distribution Roundtable, and participates in the 'Watershed Watch' program of the Santa Clara Valley Urban Runoff Pollution Prevention Program. The City is also represented on the Recycled Water Policy Advisory Committee, the San Francisco Bay Area Regional Water System Financing Authority, and the Santa Clara Valley Water Commission.

Boundaries

The Santa Clara water service boundary is the same as the city limits. The present bounds encompass approximately 18.4 square miles. Santa Clara is located within the Santa Clara Groundwater Sub-basin.

ACCOUNTABILITY AND GOVERNANCE

The City operates under a city council-city manager form of government with a seven-member City Council elected at-large and a City Manager appointed by the City Council.

The Mayor is elected for a four-year term. Councilmembers are elected to numbered seats for overlapping four-year terms. The City Charter limits the Mayor and Councilmembers to serving no more than two consecutive terms. The Vice Mayor is selected by the Council to serve a one-year term. Current member names, positions, and term expiration dates are shown in Figure 16-1.

Figure 16-1: City of Santa Clara City Council

City of Santa Clara				
<i>Water and Sewer Utilities Department Contact Information</i>				
Contact:	Christopher de Groot, Director of Water and Sewer Utilities			
Address:	1500 Warburton Avenue, Santa Clara, CA 95050			
Telephone:	408-247-0784			
E-mail/Website:	cdegroot@santaclaraca.gov / http://santaclaraca.gov			
<i>City Council</i>				
Member Name	Position	Term Expiration	Manner of Selection	Length of Term
Jamie L. Matthews	Mayor	November 2014	Elected At-large	4 years
Pat Kolstad	Councilmember Seat No. 2	November 2014	Elected At-large	4 years
Will Kennedy	Councilmember Seat No. 3	November 2012	Elected At-large	4 years
Kevin Moore	Councilmember Seat No. 4	November 2012	Elected At-large	4 years
Patricia Mahan	Vice Mayor Seat No. 5	November 2014	Elected At-large	4 years
Lisa M. Gillmor	Councilmember Seat No. 6	November 2012	Elected At-large	4 years
Jamie McLeod	Councilmember Seat No. 7	November 2012	Elected At-large	4 years
<i>Meetings</i>				
Date:	Tuesdays at 7:00 PM (Meets at least two times per month.)			
Location:	Council Chambers, City Hall, 1500 Warburton Avenue, Santa Clara			
Agenda Distribution:	Posted on the City website, and available at the City Clerk's Office and other locations. Agendas can be faxed, mailed or e-mailed by request on the day they are posted.			
Minutes Distribution:	Available on the 'City Council Meetings on Line' page of the City website, along with agendas and reports. A Summary of Council Actions is available at the City Clerk's Office and online.			

The City Council meets at least two Tuesdays per month at 7:00 PM in the City Council Chambers. Agendas are posted on the City website, as well as at the City Clerk's Office at City Hall, the Central and Mission Libraries, the Community Recreation Center, and the Senior Center. Agendas can be faxed, mailed or e-mailed to homes or businesses on the day they are posted. A summary of Council actions is available at the City Clerk's Office and online. Complete agenda packets are available for review at the City Clerk's Office and at both libraries. Agendas, minutes and reports are available on the City website.

Council meetings are broadcast live on Municipal Cable Channel 15. Meetings are also available for viewing on the City website. Agenda highlights and other municipal announcements appear weekly on Channel 15.

The City does not have a water-related advisory commission or committee.

The Water and Sewer Utilities Department webpage offers basic information on the Department's primary functions of water, sewer, recycled water, and solar water. More detailed information is provided on the Water Utility page, as well as a Fact Sheet on the Department's services. Links are readily accessible to the 2010 Urban Water Management Plan, Annual Water Quality Reports, Rates and Charges, and the Water Conservation program. A detailed contact list of personnel is not provided, but inquiries can be submitted to the generic e-mail comment form on the 'About Us' page of the web site, or by telephone to specific services listed on the Department website under 'Who to Call.'

If a customer is dissatisfied with the City's water services, that customer may write a letter to the Director of Water and Sewer Utilities, call the Water Utility Division office, or e-mail the City utilizing the electronic contact form. In calendar year 2010 there were a total of 25 water-related complaints; 10 for odor/taste, four for color, one for turbidity, 10 for pressure, and none for water outages. These complaints accounted for 0.10 percent of the 25,889 customers served.

The City of Santa Clara demonstrated full accountability and transparency in its disclosure of information and cooperation with Santa Clara LAFCO. The Water Utilities Division responded to the questionnaires and cooperated with all document requests.

MANAGEMENT AND STAFFING

Daily operations of the Water Utility Division are under the direction of the Director of Water and Sewer Utilities, who reports directly to the City Manager. As an integrated water-sewer-recycled water-solar water operation, the Water and Sewer Utilities Department has a total of 60.0 full time equivalent (FTE) positions organized into five major functions: Water Engineering; Water Construction, Maintenance and Operations; Sewer; Solar Construction and Maintenance; and Recycled Water Construction and Maintenance. The Water Division has a total of 43.7 FTE positions dedicated to the Water Enterprise Fund, as detailed in Figure 16-2. The Recycled Water Fund has 2.1 FTE positions.

Figure 16-2: Water Division Staff Allocation

Position	FTE	Position	FTE
Director of Water & Sewer Utilities	0.60	Water & Sewer Maintenance Worker I/II	11.70
Assistant Director of Water & Sewer Utilities	0.65	Senior Water Utility Engineer	0.90
Principal Engineer - Water	0.90	Water Utility Engineer	1.80
Water & Sewer Superintendent	0.75	Assistant Water Superintendent	1.80
Assistant Water & Sewer Superintendent	0.60	Utility Crew Supervisor	2.00
Compliance Manager	0.60	Utility Crew Supervisor - Water	3.00
Water Treatment Technician	1.00	Maintenance System Specialist	0.50
Pump Maintenance Tech - Solar	1.00	Senior Engineering Aide	2.00
Pump Maintenance Tech - Water	1.00	Time & Material Clerk	1.00
Equipment Operator	4.00	Code Enforcement Technician	0.15
Facilities Technician	1.00	Office Specialist II	1.00
Water Service Technician I/II	5.75	Total	43.7

Performance evaluations of all employees are conducted annually. The probation period for new employees is twelve months, with evaluations at six and twelve months. The agency tracks the employees' workload through work logs, service requests, and performance measures that are included in the annual budget. The Department will be

adding 'INFOR 10 Public Sector Enterprise' software to track workload, billings, permitting, and department activities on a single platform.

In FY 10-11, the Water and Sewer Utilities Department was reorganized to efficiently handle new regulatory requirements without additional staffing, and with some minimal budget savings. The Department initiated a pilot project to read the City's 687 utility meters every other month, thereby saving two to two and a half staff days per month. A 'Maintenance System Specialist' position was added to coordinate with other City Departments on street and utility-related construction.

The City adopted the 2010 Urban Water Management Plan on May 24, 2011. The City updated its Emergency Operations Plan in May of 2006, and Water Master Plan in 2002. A Groundwater Rule Site Sampling Plan is currently being prepared. Capital improvements are considered over a five-year planning period as part of the budget process.

POPULATION AND PROJECTED GROWTH

The 2010 United States Census population for the City of Santa Clara is 116,468, making it the third largest city in Santa Clara County behind San Jose and Sunnyvale. The average household size is 2.63 per the United States Census.

ABAG projects that the population of Santa Clara will increase to 157,200 by 2035, a 35.0 percent increase over the twenty-five year period

The City General Plan 2010-2035 was updated in November 2010. It contains three general water-related goals and 12 general water-related policies.

FINANCING

Financial Adequacy

The Water Utility Fund (Water Fund) is an enterprise fund in which charges for services generate the necessary funds to provide the services. No General Fund monies are utilized by the Fund. The FY 10-11 budget included a number of changes from previous years, with salary reductions negotiated with employee bargaining groups offset by higher benefit costs and rate increases for wholesale water supplies.

Revenue Sources

In FY 08-09, the Water Fund generated \$23.7 million, in FY 09-10 the Fund generated \$24.2 million, and in FY 10-11 the Fund was projected to generate \$26.6 million.

In FY 10-11, the Water Fund generated in excess of \$26.5 million in direct operating revenue from the following sources:

Interest Income	\$300,000	1.1%
Rents and Leases	\$83,200	0.3%
Customer Service Charges	\$25,642,505	96.5%
Solar Installation & Service Charge	\$146,000	0.6%
Miscellaneous Charges	\$390,000	1.5%
Total	\$26,561,705	100%

As indicated above, significant revenues are derived from water sales. These revenues are expected to increase each year as the City passes on the increased costs for wholesale water.

Rates

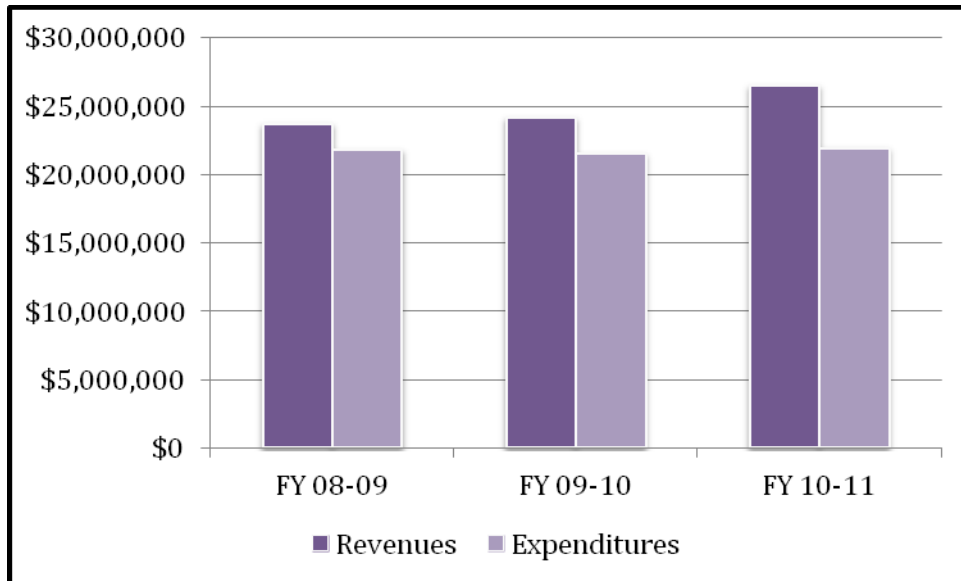
For FY 11-12, water rates have been raised by 9 percent for potable water and 6.5 percent for recycled water. These increases are due to the increase in wholesale costs for water from both of the City's wholesale water suppliers (SFPUC and SCVWD), plus the impact of reduced water sales and the escalating cost of infrastructure replacement. The rate increase (which went into effect on July 1, 2011) translates to an average increase of \$3.00 per month for a single-family residence using 12 CCF (hundred cubic feet) per month, where each CCF is equal to 748 gallons.

Expenditures

For FY 11-12, the Water Fund expenditure is expected to total over \$25.8 million, which is 5.2 percent of the City total expenditure (all funds) of \$495.6 million.

In FY 08-09, the Water Fund spent a total of \$21.9 million, in FY 09-10 the Fund spent \$21.6 million, and in FY 10-11 the Fund was projected to spend \$22.0 million. Increased expenditures for FY 10-11 and 11-12 are attributed to increased costs for wholesale water. Revenues and Expenditures of the Fund for the past three fiscal years are shown in Figure 16-3.

Figure 16-3: Expenditures and Revenues (FYs 08-09, 09-10 and 10-11)



Primary expenses in FY 10-11 were:

Salaries and Benefits	\$4,357,329	19.8%
Other Operating Expenditures	\$1,945,200	8.9%
Interfund Services	\$2,503,715	11.4%
Solar System Maintenance	\$202,340	0.9%
Resource and Production Costs	\$12,964,000	59.0%
Total	\$21,972,584	100%

Capital Outlays

The current budget includes 10 capital improvement projects scheduled over the five-year planning period, seven of which are funded for FY 11-12 as follows:

❖ Building and Grounds Maintenance	\$80,000
❖ Distribution System Replacement/Restoration	\$1,681,000
❖ Seismic Retrofit for Storage Tanks	\$200,000
❖ Service and Development Improvements	\$260,000
❖ Solar Pool Heating	\$50,000
❖ Water Utility Asset Management System	\$150,000
❖ Wells and Pumps	<u>\$468,000</u>
Total	\$2,889,000

Particular focus is being placed on water line replacement and well and pump rehabilitation and maintenance.

Long-term Debt

The Water Fund does not have any long-term debt.

Reserves

The City of Santa Clara maintains two city-wide reserve funds: the Working Capital (Emergency) Reserve; and the General Contingency Reserve for Capital Projects. Over the past nine years the City has utilized the Working Capital Reserve to meet its financial needs. Using the reserve helped sustain service levels, but depleted an important source of funding. The Working Capital Reserve stood at \$2.5 million in FY 09-10, down from the high of \$30.1 million in FY 01-02. The Capital Project Reserve has also been heavily utilized, going from \$69.1 million in FY 00-01 to \$2.5 million in FY 09-10.

The City does not maintain specific reserve funds for water operations or rate stabilization. Any surplus funds from the previous fiscal year are transferred to the General Contingency Reserve Fund, which are then allocated to the Working Capital Reserve and the General Contingency Reserve, and become available for emergencies and future capital project needs. At its current level of \$2.5 million, the Working Capital Reserve is \$31.8 million underfunded and would only sustain emergency water operations for 1.4 months if all of the Fund reserves were allocated to the Water Utility Fund.

WATER SUPPLY

The sources of water supply for the City of Santa Clara are groundwater; imported treated water from the San Francisco Public Utilities Commission (SFPUC) Hetch-Hetchy system; imported treated water from the Santa Clara Valley Water District (SCVWD); and recycled water from South Bay Water Recycling (SBWR). The local groundwater basin currently provides about two-thirds of the City's potable water supply. It has been the primary source of water for domestic, industrial, and agricultural use in the City since the area was first settled. Figure 16-4 shows the City's current and projected water supplies through 2035.

Figure 16-4: City of Santa Clara Water Supplies- Current and Projected (AFY)

Water Supply Sources	2010	2015	2020	2025	2030	2035
SCVWD	4,372	4,570	4,570	4,570	4,570	4,570
SFPUC	2,454	5,040	5,040	5,040	5,040	5,040
Supplier Produced GW	13,980	23,048	23,048	23,048	23,048	23,048
Supplier Produced Surface Water	0	0	0	0	0	0
Transfers or Exchanges	0	0	0	0	0	0
Recycled Water	2,409	4,000	4,300	4,500	4,500	4,500
Desalinated Water	0	0	0	0	0	0
Conservation	0	694	795	874	930	930
Total	23,214	37,352	37,753	38,032	38,088	38,088

Source: City of Santa Clara 2010 UWMP, May 2011, Table 19A - Water Supplies - Current and Projected, page 24.

SFPUC Water

The City of Santa Clara purchases treated water from the SFPUC system. As of 2010, SFPUC water made up approximately 11 percent of the City's source water supply. The business relationship between SFPUC and its wholesale customers is largely defined by the 2009 Master Agreement between SFPUC and 26 wholesale customers in Alameda, San Mateo and Santa Clara Counties. The agreement addresses the rate-making methodology used by SFPUC in setting wholesale water rates for its wholesale customers, in addition to addressing water supply and water shortages for the regional water system. The agreement has a 25-year term. The City of Santa Clara also has an individual agreement with SFPUC, which provides that the City will remain a temporary and interruptible customer with assurance of supply only until December 2018. The terms of the agreement state that the maximum amount SFPUC will deliver collectively to the City of Santa Clara and the City of San Jose is 9.0 million gallons per day (mgd) or 10,082 acre feet per year (AFY). The City's contract entitlement is for an expected average annual delivery of up to 5,040 acre feet per year (50 percent of the combined entitlement of the two cities). The current contract with SFPUC indicates that if certain conditions are met, Santa Clara may be required to reduce or eliminate its take from SFPUC. If the City was required to eliminate

the usage of water from SFPUC, the City would consider increasing groundwater utilization, increasing imported surface water supply (SCVWD), or a combination of the two water sources. As shown in Table 16-1, Santa Clara projects purchasing its full allocated amount from SFPUC in any given year between 2015 and 2035.

By December 2018, SFPUC will make further decisions on future water supply beyond 2018, after completing necessary cost analyses and California Environmental Quality Act (CEQA) evaluation/documentation. The supply is interruptible before December 2018 if the SFPUC determines that aggregate use by all wholesale customers will exceed 184 mgd in 2018. The supply cannot be interrupted until five years after the City has received notice of SFPUC's intention to reduce or interrupt deliveries.

The SFPUC water supply is subject to reductions during drought conditions. As part of the water supply agreement, a water shortage allocation plan between SFPUC and its wholesale customers was adopted in 2009, and addresses shortages of up to 20 percent of system-wide use. The Tier 1 Shortage Plan allocates water from the regional water system between San Francisco Retail and the wholesale customers during system-wide shortages of 20 percent or less. The water supply agreement also includes a Tier 2 Shortage Plan, which allocates the available water among the SFPUC wholesale customers. A new Tier 2 plan was approved by the BAWSCA agencies in 2011, which provides the framework for allocating the wholesale Tier 1 water allocation between the different BAWSCA agencies. The new Tier 2 water shortage plan is in effect until 2018. For details, refer to the 'Drought Allocations' section of Chapter 23, San Francisco Public Utilities Commission.

SCVWD Water

Water from SCVWD makes up approximately 19 percent of the City's total water supply. SCVWD supplies the City of Santa Clara with treated surface water through an entitlement of imported Central Valley Project (CVP) water and the State Water Project (SWP), as well as surface water from local reservoirs. The current contractual agreement between the City and SCVWD sunsets in 2051, and allocations are established every year by the City submitting a three year delivery schedule that the District approves. The contract currently allocates 4,570 AFY to the City of Santa Clara. The City anticipates reaching its maximum allocation of 4,570 acre feet of SCVWD water in 2015, with no additional allocation through 2035.

In the future additional imported supply will likely be required from the imported treated water purchased from the SCVWD. The City is investigating an additional turnout from the SCVWD's wholesale supply of treated imported water. This would contribute approximately 4,800 acre feet of additional water to the City's portfolio. This additional turnout would also increase the flexibility of the water supply system, allowing the City the ability to increase treated surface water imports and decrease groundwater usage, if necessary.

Groundwater

Historically, the predominant source of water used to meet water demand in the City of Santa Clara has been groundwater. In 2010, groundwater represented approximately 60 percent of total water sales. Various areas within the City receive water from one or more sources depending on location. The zones of influence from the various water sources are dynamic and will change depending on changes in supply and the overall demands on the system.

As noted above, the local groundwater basin currently provides about two-thirds of the City's potable water supply through 27 production wells. The underlying Santa Clara Valley groundwater basin is not adjudicated and the most recent information from DWR indicates that neither the Santa Clara Valley Basin nor the Santa Clara Sub Basin are in over-draft.

The allowable withdrawal or safe yield of groundwater by the City of Santa Clara is dependent upon a number of factors including: withdrawals by other water agencies, quantity of water recharged and the carry over storage from the previous year. The City's wells are strategically distributed around the City. This distribution of wells adds to the reliability of the water system and minimizes the possibility of localized subsidence, due to localized over-drafting. To eliminate the possibility of long-term overdraft conditions, at all of the City's active production wells, the City monitors groundwater levels and meters the groundwater pumping.

The City plans to use groundwater to cover any shortfall in purchased surface water sources. The City anticipates using significantly (65 percent) more groundwater over the next five years. Projections show that the City anticipates groundwater use to plateau in 2015 at 23,048 acre feet per year, with no additional use anticipated through 2035.

Recycled Water

In 1998, the South Bay Water Recycling (SBWR) facility and pipeline was constructed to provide recycled water from the San Jose-Santa Clara Water Pollution Control Plan to wholesale water providers for irrigation, landscape and industrial uses. SBWR is a joint powers authority that consists of the Cities of San Jose, Milpitas and Santa Clara, West Valley Sanitation District, and Cupertino Sanitation District. SBWR was developed to protect the salt marsh habitat by reducing effluent flows from the plant into the wetlands of the South Bay. A further benefit of this program was the development of a drought-proof supply of water, which augments local and imported water supplies.

SBWR currently provides recycled water to Santa Clara customers, as well as customers in the City of Milpitas, the City of San Jose, and the San Jose Water Company. At the present time, the system has over 600 customers, with summer recycled water use in excess of 14 MGD.

Over the last 15 years, the amount of recycled water used within the City has risen dramatically. In 2010, recycled water comprised 10 percent of Santa Clara's total water sources. The City anticipates making greater use of recycled water in the future with projected use increasing by 87 percent between 2010 and 2035.

Emergency Preparedness

Water Supply Hazards

The City of Santa Clara is dependent on three sources of potable water and one of recycled water; all of these supplies have some possibility of interruption and differing degrees of reliability. A major seismic event for example, could interrupt the delivery of water from the San Francisco Hetch-Hetchy system for up to 2 months. SCVWD's potable and raw water delivery systems could also be interrupted for up to two weeks. Current proposals include major capital improvements to both regional water systems for increased reliability. The long-term reliability of SCVWD's imported supplies (State and Federal water projects) is also threatened by possible failure of the Sacramento delta's levee systems, with interruptions possible for several months, or by depleted yield availability through ongoing litigation regarding CVP/SWP exports. Regional power supplies could also be interrupted; however, the City has sufficient back-up power generation capacity to provide the expected potable water demand from City-owned wells and water storage tanks. This groundwater source can sustain the entire City's water demand for a limited period of time: that is for months, but not years.

The Water Division is on call 24/7 and is prepared to respond to any leaks or breaks in a timely manner, and is able to be on site within 30-minutes of dispatch.

The City completed a seismic capital improvement program that increased the reliability of the City's water system in the event of an earthquake. All existing pipe connections to the City's water storage systems were retrofitted to allow for greater flexibility for movement. One elevated storage tank still needs to be removed from the system and replaced or an alternative needs to be implemented.

Emergency Water Supply

An emergency backup water supply is provided by above-ground water storage tanks, with an effective capacity of 27.3 million gallons. This storage capacity can provide approximately 24 hours of emergency water under a maximum daily demand scenario. In addition to the tank storage, the City has emergency generators or stationary engines on eight wells to provide back-up water supply in the event of a power failure.

Interties and Back-up Supply

Regarding transfer opportunities, the City is currently connected to the cities of San Jose, Cupertino, and Sunnyvale through service connections located within Santa Clara for use during emergency situations.

WATER DEMAND

The City of Santa Clara projected water demands to 2035 are set out in Figure 16-5. As shown in the table, without the SFPUC supply beyond 2018, the City anticipates a supply shortfall by 2020 with the cumulative shortfall reaching as much as 4,385 acre feet by 2035. However, if the total projected water supply includes SFPUC imported water beyond 2018, Santa Clara projects that it will be able to meet its anticipated demands to 2035.

Figure 16-5: City of Santa Clara Supply and Demand Comparison- Normal Year without SFPUC Supply Beyond 2018 (AFY)

	2015	2020	2025	2030	2035
Total Supply	37,352	32,713	32,992	33,048	33,048
Total Demand	31,259	33,053	34,605	36,071	37,433
Difference	6,093	(340)	(1,613)	(3,023)	(4,385)
Difference as % of Supply	16.3	-1.0	-4.9	-9.1	-13.3
Difference as % of Demand	19.5	-1.0	-4.7	-8.4	-11.7
<i>Source: Adapted from City of Santa Clara 2010 UWMP, May 2011, Table 43B - Supply and Demand Comparison - Normal Water Year, page 83.</i>					

The sources of water supply for the City are susceptible to seasonal or climatic shortages due to droughts. Under a variety of single dry-year and multiple dry-year sequences, the ability to meet anticipated demands through 2035 changes significantly. Figure 16-6 reflects these limitations during a single dry year scenario. Based on the information provided by the City's water wholesalers regarding the availability of water supply during normal, single dry year, and multiple dry year scenarios, the City has projected shortages after 2020. The City has planned for several future water supply projects that are expected to provide between 5,000 and 6,000 acre-feet per year of additional supply. This additional supply will help to cover most expected water shortages except after 2030 in the third year of a multi-year drought if the City loses the current SFPUC contracted Hetch-Hetchy water.

Figure 16-6: City of Santa Clara - Supply and Demand Comparison - Single Dry Year without SFPUC Supply Beyond 2018 (AFY)

	2015	2020	2025	2030	2035
Total Supply	34,313	32,713	32,992	29,392	29,392
Total Demand	31,259	33,053	34,605	36,071	37,433
Difference	3,054	(340)	(1,613)	(6,679)	(8,041)
Difference as % of Supply	8.9	-1.0	-4.9	-22.7	-27.4
Difference as % of Demand	9.8	-1.0	-4.7	-18.5	-21.5

Source: Adapted from City of Santa Clara 2010 UWMP, Table 43B - Supply and Demand Comparison - Normal Water Year, page 83.

WATER INFRASTRUCTURE AND FACILITIES

The Santa Clara water system is a comprehensive water storage and delivery system. The City is divided into three pressure zones. Zone 1 comprises the northerly three-fourths of the City and is supplied by two SFPUC turnouts and has 22 of the City's municipal wells. Zone 2 comprises the southerly one-fourth of the City except for a small area in the southwest corner of the City which is Zone 3. Zone 2 contains 10 municipal wells, while Zone 3 is supplied by one SCVWD turnout.

Water Treatment Facilities

Santa Clara does not have any water treatment facilities.

Water Storage Facilities

The City has six active storage tanks (Downtown, Northside No. 1, Northside No. 2, Serra No. 1, Serra No. 2, Serra No. 3, and Walsh) with a combined storage capacity of 27.3 MG. The Walsh Tank (0.5 MG) is scheduled to be replaced.

Conveyance and Distribution Facilities

The water distribution system is composed of approximately 334 miles of distribution lines. The distribution system also consists of 3 booster pump plants, each with 3 pumps, one of which is on standby for emergency purposes. The system also features 20 pressure reducing valves, 3,300 fire hydrants, 3,410 backflow prevention devices, and 26,985 water service connections. The system also includes an automated Supervisory Control and Data Acquisition (SCADA) System that control distribution of water throughout the system.

The City reported that in calendar year 2010 there were 35 main line breaks or leaks, and 32 service connection breaks or leaks. The City did not issue any 'boil water' orders or report any water outages.

Infrastructure Needs & Capital Improvement Program

The current capital improvement program identifies 10 capital improvement projects scheduled over the five-year planning period. Particular focus is being placed on replacement of water lines and rehabilitation of hydrants and pumps. Refer to the Financing Section for details.

Shared Facilities

The City does not share any facilities with any other agencies or organizations.

WATER QUALITY

Source Water

For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine water source is located in the well-protected Sierra region and meets all Federal and State criteria for watershed protection. DPH and the EPA have granted the Hetch Hetchy water source a filtration exemption, based on the SFPUC's disinfection treatment practice, extensive bacteriological-quality monitoring, and high operational standards. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir. Water from the Hetch Hetchy is supplemented by run-off collected in the Alameda and Peninsula Watersheds. This water is treated at two water treatment plants prior to distribution.

Overall groundwater quality in Santa Clara County is very good and water quality objectives are achieved in most wells. Public water supply wells throughout the County deliver high quality water to consumers, almost always without need for treatment. The most significant exceptions are nitrate and perchlorate, which have impacted groundwater quality predominately in South County. In the future, new and more stringent drinking water quality standards could also affect the amount of groundwater pumped from the basin.

According to the California Department of Public Health (CDPH) Drinking Water Source Assessment, which evaluates the vulnerability of water sources to contamination, the SVCWD's surface source waters are susceptible to potential contamination from sea water intrusion and organic matter in the Delta and from a variety of land use practices, such as agricultural and urban runoff, recreation activities, livestock grazing, and residential and

industrial development. Local sources are also vulnerable to potential contamination from commercial stables and historic mining practices.

Treated Water

Quality of treated water can be evaluated according to several measures. For the purposes of this report, the following indicators are used: the number of violations as reported by the EPA since 2000, the number of days in full compliance with Primary Drinking Water Regulations in 2010, and any deficiencies identified by DPH as prioritized health concerns.

The City of Santa Clara does not treat water derived from the City's municipal wells. Treated water is received from the SFPUC Hetch Hetchy system and the SCVWD water treatment plants. According to the EPA Safe Drinking Water Information System, neither SFPUC nor SCVWD had health or monitoring violations within the last 10 years with regard to its treatment systems. The City's water wholesalers, SFPUC and SCVWD, conduct their own testing. Of the parameters tested, none were found to be higher than the California Department of Public Health (CDPH) allows.

According to the federal Environmental Protection Agency (EPA) through its Safe Drinking Water Information System (SDWIS), the City of Santa Clara did not have any health based violations or monitoring and reporting violations during the 2000-2010 period.

The City's 2010 Water Quality Report indicates that the City's potable water supply from all sources met all state and federal drinking water health standards. In order to insure that water quality standards are met, drinking water samples are collected daily throughout the City and analyzed for a variety of regulated and unregulated contaminants. Samples are tested by the City's certified laboratory and an independent laboratory using the latest testing procedures and equipment.

According to CDPH's Drinking Water Source Assessment, which evaluates the vulnerability of water sources to contamination, Well No. 24 is susceptible to a known contaminant plume. Monitoring of this well shows persistent contamination at a trace level which is attributed to the Siemens-Intersil CERCLA (Superfund) site. Well No. 24 is monitored for contaminants on a quarterly basis and will continue to be monitored indefinitely.

The CDPH Annual Water System Sanitary Survey conducted in December of 2010 indicated that permitting for Well No. 32 and its associated iron and manganese filter treatment system is still pending. The City is pursuing this permit in order to utilize Well No. 32 for emergency conditions. The survey also identified minor deficiencies related to tank vent screens and corrosion and peeling paint on the interior of Serra Tanks No. 1 and No. 3. These deficiencies have been remedied by the City.

CITY OF SANTA CLARA SERVICE REVIEW DETERMINATIONS

Growth and Population Projections

- ❖ The current 2010 population of Santa Clara is 116,468.
- ❖ ABAG estimates that Santa Clara will grow by 35 percent over the next 25 years to an estimated population of 157,200.

Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies

- ❖ Based on information provided by the City's water wholesalers regarding the availability of water supply during normal, single dry year, and multiple dry year scenarios, the City has conservatively projected shortages after 2020 as the City is considered a temporary and interruptible customer of SFPUC with assurance of supply only through 2018.
- ❖ The City has planned for several future water supply projects that are expected to provide between 5,000 and 6,000 acre-feet per year of additional supply. This additional supply will help to cover most expected water shortages.
- ❖ The Santa Clara water supply and distribution system currently has sufficient capacity to serve all water customers within its service area.
- ❖ Continued emphasis on water conservation, use of recycled water, and higher water rates are expected to curtail the City's demand for water.
- ❖ The City is placing increased emphasis on utilizing recycled water for landscape irrigation. Recycled water currently makes up 10 percent of the City's total water sources. The City anticipates making greater use of recycled water in the future with projected use increasing by 87 percent between 2010 and 2035.
- ❖ An emergency backup water supply is provided by above-ground water storage tanks, with an effective capacity of 27.3 million gallons. This storage capacity can provide approximately 24 hours of emergency water under a maximum daily demand scenario.
- ❖ The Water Utilities Division has an ongoing program for replacement and rehabilitation of its water distribution system and to seismically retrofit water storage tanks.

- ❖ The City provides high quality water based on district compliance with drinking water regulations, a lack of health and monitoring violations since 2000, and timely thorough district response to California Department of Public Health infrastructure and operational concerns.
- ❖ Well No. 24 is susceptible to a known contaminant plume. Monitoring of this well shows persistent contamination at a trace level which is attributed to the Siemens-Intersil CERCLA (Superfund) site. Well No. 24 is monitored for contaminants on a quarterly basis.
- ❖ City management methods appear to generally meet accepted best management practices. The City prepares a budget before the beginning of each fiscal year, has a detailed Capital Improvement Program, conducts periodic financial audits, maintains relatively current transparent financial records, regularly evaluates rates and fees, tracks employee and department workload, and has established a process to address complaints.

Financial Ability of Agency to Provide Services

- ❖ As an Enterprise Fund, the Santa Clara water system has sufficient financial resources to provide an adequate level of service. Rate increases that went into effect on July 1, 2011 will generate sufficient revenues to allow revenues to continue to exceed expenditures.
- ❖ Water rate increases will be required over the next several years to finance SFPUC Hetch Hetchy water system seismic improvements, increased pumping fees from SCVWD, and reduced retail water sales.
- ❖ The City has an ongoing multi-year capital improvement program that includes repair, replacement and rehabilitation projects that are designed to improve the overall water storage and distribution system.

Status and Opportunities for Shared Facilities

- ❖ The City practices facility sharing by receiving potable water through the SFPUC distribution system and the SCVWD distribution system. The City shares emergency water line interties with San Jose, Cupertino and Sunnyvale. The City utilizes recycled water distributed by South Bay Water Recycling.
- ❖ The City collaborates with the Bay Area Water Supply and Conservation Agency (BAWSCA), is involved with the Water System Distribution Roundtable, and participates in the 'Watershed Watch' program of the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- ❖ The City has not identified further opportunities for facility sharing.

Accountability for Community Services, Including Governmental Structure and Operational Efficiencies

- ❖ Accountability is best ensured when contested elections are held for governing body seats, constituent outreach is conducted to promote accountability and ensure that constituents are informed and not disenfranchised, and public agency operations and management are transparent to the public. The City demonstrated accountability with respect to all of these factors.
- ❖ The City does not have a water-related advisory commission or committee.
- ❖ The Utilities Department webpage provides sufficient information about the water system.
- ❖ Operational efficiencies are being improved through a pilot project to read the City's 687 utility meters every other month, thereby saving two to two and a half staff days per month. A 'Maintenance System Specialist' position was added to coordinate with other City Departments on street and utility-related construction.
- ❖ No government structure options have been identified for Santa Clara.