17. CITY OF SUNNYVALE

AGENCY OVERVIEW

The City of Sunnyvale was incorporated on December 24, 1912, and became a charter city on May 18, 1949. Sunnyvale is a full service city providing a range of services including: community development (planning, building inspection and housing); redevelopment; public safety (police, fire and emergency medical services); public works (transportation planning, engineering, and streets,); and community services (recreation, parks, community theater and library). City services (including wastewater, solid waste, parks and recreation, storm water drainage, law enforcement, and library) were studied in the October 2007 Northwest Santa Clara County Service Review.

The City Manager recently reorganized city services by merging the Library and Community Services Departments; and by establishing an Environmental Services Department responsible for solid waste, water and wastewater operations, and recycling. These functions were formerly part of the Public Works Department. Water services were studied as part of the Countywide Water Service Review in June 2005.

Type and Extent of Services

Services Provided

The Water Division of the newly formed Environmental Services Department provides drinking water to residential, commercial, industrial, and institutional customers within the City. The Water Division oversees water quality, water conservation, system maintenance, backflow prevention, leak detection, and a recycled water program. Sunnyvale has also initiated a sustainability program which includes landscape education, has its own water conservation program, and is supported by the Santa Clara Valley Water District (SCVWD) water conservation program.

The City's water service area includes all water service customers within the City Limits. There are also a number of 'service area pockets within Sunnyvale that receive potable water from the California Water Service Company (Cal Water), a private water company.

The City of Sunnyvale has three different sources of potable water, and one recycled water source. Potable water is derived from eight 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 Sunnyvale Water Pollution Control Plant (WPCP).

Service Area

The City serves the entirety of the area within its bounds with the exception of the Cal Water service area pockets.

Services to Other Agencies

Sunnyvale provides recycled water to Moffett Field, and has future plans to have recycled water interconnections with the City of Santa Clara and the City of Mountain View.

Contracts for Water Services

The City contracts with SCVWD and SFPUC for treated potable water.

Collaboration

The City collaborates with the Bay Area Water Supply and Conservation Agency (BAWSCA), serves on several SCVWD Subcommittees, and participates in the 'Watershed Watch' program of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Boundaries

The Sunnyvale water service boundary is the same as the City Limits. The present bounds encompass approximately 22.7 square miles. Sunnyvale is located within the Santa Clara Groundwater Subbasin.

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.

Councilmembers are elected to numbered seats for four-year terms. The City Charter limits Councilmembers to serving no more than two consecutive terms. The Mayor and Vice Mayor are selected by the Council to serve one-year terms. Current member names, positions, and term expiration dates are shown in Figure 17-1.

Figure 17-1: City of Sunnyvale City Council

City of Sunnyvale				
Environmental Services Department Contact Information				
Contact:	John Stufflebean, Environmental Services Department Director			
Address:	221 Commercial Street (P.O. Box 3707), Sunnyvale, CA 94088			
Telephone:	408-730-7565			
E-mail/Website:	bmccarthy@ci.sunnyvale.ca.us/http://sunnyvale.ca.gov			
City Council				
Member Name	**Position**	**Term Expiration**	**Manner of Selection**	**Length of Term**
Anthony Spitaleri	Councilmember Seat No. 1	December 2013	Elected At-large	4 years
Christopher R. Moylan	Councilmember Seat No. 2	December 2013	Elected At-large	4 years
Jim Griffith	Vice Mayor Seat No. 3	December 2013	Elected At-large	4 years
David Whittum	Councilmember Seat No. 4	December 2011	Elected At-large	4 years
Otto Lee	Councilmember Seat No. 5	December 2011	Elected At-large	4 years
Vacant	Councilmember Seat No. 6	December 2011	Elected At-large	4 years
Melinda Hamilton	Mayor Seat No. 7	December 2011	Elected At-large	4 years
Meetings				
Date:	Tuesdays at 7:00 PM (Meets two to four times per month)			
Location:	Council Chambers, 456 W. Olive Avenue, Sunnyvale			
Agenda Distribution:	Posted on the City website, on the City hall bulletin board, and at the Senior Center, the Community Center, and the Public Safety lobby. Also available at the City Clerk's Office and the Library.			
Minutes Distribution:	Available on the 'Council Meeting' page of the City website, along with agendas and reports.			

The City Council meets at least two Tuesdays per month in the City Council Chambers. Agendas are posted on the City website, as well as the City bulletin board and other locations. Agendas, minutes and reports are available on the website.

Council meeting are televised live on KSUN-15, the City's government access cable television channel. Meetings are re-broadcast Wednesday evenings and Saturday afternoon. Meetings are also available online at webcast.insunnyvale.com, or on the City website.

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

Water-related information is currently available from the Public Works Department web page. There is extensive information related to water, including an explanation of water supply and distribution. Links are readily accessible to the 2010 Urban Water Management Plan, Annual Water Quality Reports, the Sustainability program, and the Water Conservation program. A detailed contact list of personnel is not provided, but inquiries/complaints/questions can be submitted to the generic City 'Contact Us' page of the web site.

If a customer is dissatisfied with the City's water services, that customer may write a letter to the Environmental Services Department Director, call the Water Division office, or e-mail the City utilizing the electronic contact form. In calendar year 2010 there were a

total of 60 water-related complaints; four for odor/taste, 16 for color, eight for turbidity, nine for pressure, and 23 for water outages. These complaints accounted for 0.20 percent of the 29,257 customers served.

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

MANAGEMENT AND STAFFING

Daily operations of the Water Division are under the direction of the newly appointed Environmental Services Department Director, who reports directly to the City Manager. A total of 23.7 full time equivalent (FTE) positions are dedicated to the Water Enterprise Fund, as detailed in Figure 17-2.

Figure 17-2: Water Service Staff Allocation

Position	FTE	Position	FTE
Environmental Services Department Director	0.3	Water Distribution Crew Leaders	4.0
Water/Sewer/Storm System Manager	0.4	Senior Water Distribution Workers	5.0
Water Operations Manager	1.0	Water Distribution Workers	7.0
Water System Operators	2.0	Office Assistants	2.0
Senior Water Distribution Crew Leaders	2.0	**Total**	**23.7**

Performance evaluations of all employees are conducted annually. The probation period for new employees is six months, with evaluations at three and six months. The agency tracks the employees' workload through work logs, service requests, and periodic reports.

Operational efficiencies are being improved by replacing water meters with 'radio read' meters, allowing for more efficient recording of water use. Over 35 percent of the 28,000 meters have been replaced. The Division has also added a 'Hydro-excavator' at a cost of $285,000 to enable the utility crews to more efficiently replace water lines. The Division will soon implement a Maintenance Management System (including training) to better track projects.

The City adopted the 2010 Urban Water Management Plan on June 28, 2011, and updated its Water Utility Master Plan in November of 2010. Work is underway in updating the Recycling Master Plan and the Water Shortage Contingency Plan. Capital improvements are considered over a 20-year planning period as part of the budget process

POPULATION AND PROJECTED GROWTH

The 2010 United States Census population for Sunnyvale is 140,081, making it the second largest city in Santa Clara County behind San Jose. The average household size is 2.61 per the United States Census.

ABAG projects that the population of Sunnyvale will increase to 163,300 by 2035, a 16.6 percent increase over the twenty-five year period.

The Water Resources Sub-element of the General Plan was updated in 2008. It contains goals, policies and action strategies to address water supply, water conservation, water distribution, and water quality.

FINANCING

Financial Adequacy

The Water Supply and Distribution 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 due to a restructuring of employee classifications in water distribution and new state requirements for maintaining, monitoring, sampling, and reporting water quality. These requirements will increase fire hydrant, water valve, and water blow-off flushing and maintenance. Three new positions were added to address these new service requirements.

Revenue Sources

In FY 08-09, the Water Fund generated $25.7 million, in FY 09-10 the Fund generated $25.4 million, and in FY 10-11 the Fund was projected to generate $38.4 million. Projected revenues for FY 11-12 will increase due to the recent rate hike. Revenues for the past three fiscal years are shown in Figure 15-3.

In FY 10-11, the Water Fund generated in excess of $38 million in revenues from the following sources:

Late Payment Penalties	**$68,391**	**0.2%**
Water Connection Fees	$122,692	0.3%
Water Meter Sales	$67,225	0.2%
Water Meter Use Fees	$3,631,489	9.5%
Water Sales - Metered	$22,480,452	58.5%
Water Turn-on Fees	$168,684	0.4%
Water Recycled	$1,085,992	2.8%
Interest Income	$115,008	0.3%
Miscellaneous	$68,502	0.2%
Bond Proceeds	$10,622,782	27.6%
Total	$38,431,217	100%

As detailed above, significant revenues are derived from water sales and bond proceeds for capital improvements. Those revenues listed as fees are associated with 'development costs' for new construction.

Rates

A significant portion of the Water Supply and Distribution Fund's total costs are related to the cost of purchased water. In FY 10-11, SFPUC charged the City $836 per acre foot plus meter charges of $275,268. For FY 11-12, costs increased to $1,146 per acre foot plus meter charges, a 38.4 percent increase in one year. Based on wholesale water rate projections by SFPUC, costs will increase an average of 10 percent per year over the next 10 years. SCVWD currently charges $520 per acre foot plus a $100 per acre foot treated water charge. These costs will rise to $669 per acre foot, a 9.4 percent increase. SCVWD is projecting an 8 percent annual increase over the next 10 years. In addition, SCVWD charges the City a pumping fee for water extracted from the City's municipal wells. The projected well water unit cost (fee plus electrical costs) is expected to increase by 7.4 percent from $710 per acre foot to $763 per acre foot.

As a result of these wholesale price increases, the City has raised its overall water rate charge to its customers by 7.5 percent in FY 10-11 and 18 percent in FY 11-12. Since the early 1980's, the City has encouraged the prudent use of water through an 'inclining block tier' rate structure which charges proportionally higher water rates for higher water users.

In conjunction with the FY 11-12 rate increase, the City made cost of service adjustments to that rate structure to more accurately reflect the cost of providing service.

Current rates adopted by the City Council on June 14, 2011 increased the cost of water for residential customers as follows:

Monthly Water Bill Examples in hundred cubic feet (CCF)[112]	**New Rate**	**Percent Change**
4 CCF (minimal indoor use)	$14.44	18.0%
15 CCF (average Summer use)	$52.39	20.0%
25 CCF (twice the monthly average)	$101.89	35.5%

Based on the anticipated costs for wholesale water, it is expected that monthly water bills will continue to increase in the foreseeable future. The City is evaluating its options with respect to purchases of wholesale water.

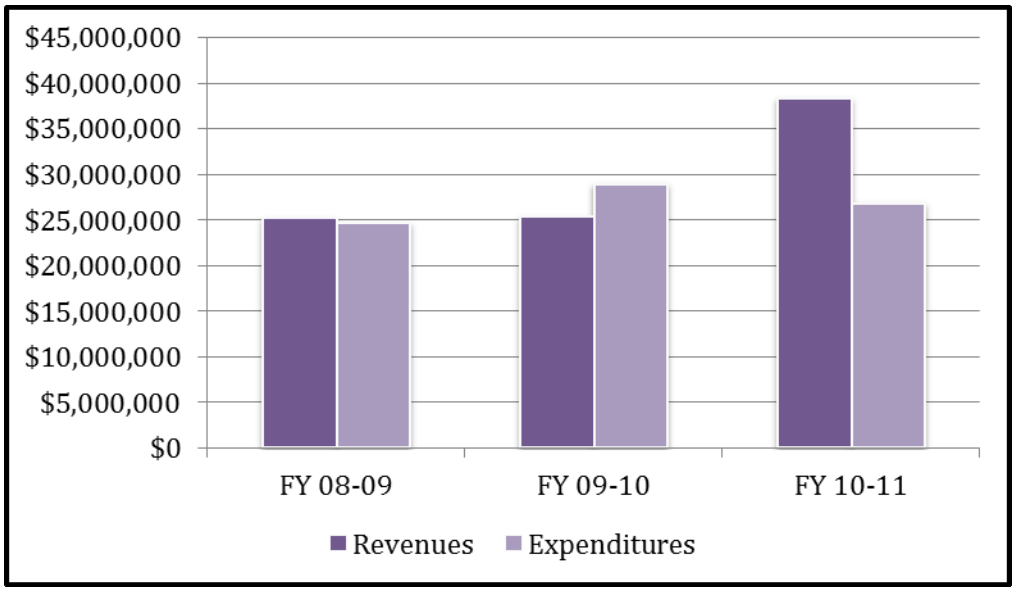
Expenditures

For FY 11-12, the Water Supply and Distribution Fund expenditure is expected to total $32.2 million, which is 12.1 percent of the City total expenditure of $265.9 million.

In FY 08-09, the Water Fund spent a total of $24.7 million, in FY 09-10 the Fund spent $29.0 million, and in FY 10-11 the Fund was projected to spend $28.8 million. Increased expenditures are attributed to increased costs for wholesale water and infrastructure projects. Revenues and Expenditures of the Fund for the past three fiscal years are shown in Figure 17-3.

[112] One hundred cubic feet (CCF) equals 748 gallons.

Figure 17-3: Expenditures and Revenues (FYs 08-09, 09-10 and 10-11)



Capital Outlays

The current budget includes 24 capital improvement projects scheduled over the 20-year planning period. Particular focus is being placed on rehabilitation and maintenance of water tanks, and replacement of water lines.

Over $13 million has been budgeted for water tank renovation including refurbishing, cleaning, interior coating, and exterior painting. Over 35 percent in funding is provided to replace the City's aging water lines. The project focuses on areas of the City where soil conditions are most corrosive. The project schedule calls for replacement of approximately two miles of pipe per year.

In FY 11-12, the Environmental Services Department will also complete replacement of the Water-Sewer Supervisory Control and Data (SCADA) System at a total cost of $1.5 million.

Long-term Debt

A $24 million water revenue bond was issued on June 29, 2010. This revenue bond refunded the City's 2001 Water and Wastewater Revenue Bonds, and provided $18 million in proceeds to will finance infrastructure improvements. Interest ranges from 4 percent to 5.25 percent, with annual payments ranging from $1.4 million to $1.9 million. Repayment will be made from net revenues of the Water Supply and Distribution Enterprise Fund and will be retired in 2040.

The Water Fund also carries a loan that was advanced from the General Fund in FY 02-03 in the amount of $1.6 million to purchase additional property for the City Corporation

Yard. This annual loan payment is $351,700, and is included in the Water Fund budget for repayment through FY 14-15.

Reserves

The City's fiscal policy calls for the Water Fund to maintain a contingency reserve of 25 percent of direct operating costs. This contingency fund is to be used only in the event of disasters or other emergencies. For FY 11-12, this fund is budgeted for $5,650,457, which is 23.6 percent of FY 10-11 direct operating costs and would be sufficient to fund water operations for 2.4 months.

The City also maintains a Rate Stabilization Reserve ($475,000) to smooth utility rates from year to year, normalize economic cycles, and plan for project-related expenditures. The City also maintains a Debt Service Reserve at $1.0 million, and a Capital and Infrastructure Projects Reserve at $700,000.

WATER SUPPLY

The City has three sources of potable water supply: purchased surface water from SFPUC; purchased treated surface water from SCVWD; and groundwater from seven City-owned and operated wells. One additional well remains on stand-by for emergencies. An additional source of non-potable water comes from the City's Water Pollution Control Plant in the form of recycled water. The City also has distribution system interties with the cities of Cupertino, Mountain View, and Santa Clara, as well as the California Water Service Company through service connections located within city boundaries that are reserved for use in case of an emergency. The City's current and projected future water supplies for normal water years are shown in Figure 17-4.

Figure 17-4: City of Sunnyvale Current and Projected Water Supplies- Normal Year (AFY)

Source	2010	2015	2020	2025	2030
SFPUC	8,982	10,003	10,003	10,003	10,003
SCVWD	9,331	9,570	9,999	11,023	12,728
Groundwater	1,629	1,000	1,000	1,000	1,000
Recycled Water	1,523	1,400	1,525	1,765	1,775
Supply Total	21,465	21,973	22,527	23,791	25,506

Source: City of Sunnyvale 2010 UWMP, June 2011, Table 4-1: Water Supplies - Current and Projected in a Normal Year (AFY), page 4-2.

SFPUC Water

The City receives water from the City and County of San Francisco's Regional Water System, operated by SFPUC. In 2010, SFPUC water comprised 42 percent of the City's total water supply. The agreement between the City and SFPUC was negotiated by the Bay Area Water Supply and Conservation Agency (BAWSCA). Per the agreement, the 26 SFPUC wholesale customers have a combined supply assurance of 184 million gallons per day.

The City of Sunnyvale's guaranteed portion of the supply assurance is referred to as the individual supply guarantee. Although the supply agreement and contract expire in 2034, the individual supply guarantee (which quantifies San Francisco's obligation to supply water to its individual wholesale customers) survives their expiration and continues indefinitely. Sunnyvale's individual supply guarantee is 12.58 million gallons per day (or approximately 14,100 acre feet per year (AFY). The Sunnyvale contract also includes a minimum purchase amount of 8.93 million gallons per day (10,003 AFY), which the City of Sunnyvale agrees to buy, regardless of whether water sales drop below this level. As shown in Figure 17-4, the City anticipates just meeting its minimum purchase amount each year from 2015 through 2030.

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

SCVWD supplies the City of Sunnyvale 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 currently allocates 10,988 AFY, adjustable by up to five percent every three years. In 2010, the City purchased 9,331 acre feet, or 85 percent of its current total allocated amount from SCVWD. Over the next 20 years, the City anticipates increasing it purchases from SCVWD by 36 percent.

Groundwater

In 2010, groundwater comprised eight percent of the City's total water supply. The City's groundwater comes from the Santa Clara Plain subarea of the Santa Clara Subbasin. Groundwater is extracted by way of wells, either owned or operated by area retailers or private property owners. The allowable withdrawal of groundwater by the City depends on a number of factors, including withdrawals by other water agencies, the quantity of water recharged and carry-over storage from the previous year. Figure 17-5 shows the historic metered groundwater pumping data for the City from 2006 to 2010.

Figure 17-5: City of Sunnyvale Historic Groundwater Pumping (AFY)

Source	2006	2007	2008	2009	2010
Santa Clara Plain Subarea	1,113	2,696	1,006	1,231	1,629
Percent of Total Water Supply	5%	11%	4%	5%	8%

Source: City of Sunnyvale 2010 UWMP, June 2011, Table 4-3:Groundwater Pumped Volume (AFY), page 4-5

The City of Sunnyvale has eight municipal wells, of which seven are operational and part of the water supply system for the City. The eighth well is available for emergency purposes. The seven production wells combined have an average flow rate of 6,550 gallons per minute (gpm). As shown in Figure 17-4, the City anticipates reducing its use of groundwater through 2035, in response to the need to increase its SFPUC purchase to the minimum contract amount.

Recycled Water

The City of Sunnyvale has developed a recycled water program which today serves parks, golf courses and the landscaping needs of diverse industries. A wastewater reclamation program was developed in 1991 when the City first identified a short-term goal of recycling from 20 to 30 percent of high-quality effluent from the Sunnyvale Water Pollution Control Plant (WPCP). The long-term goal of the City is to reuse 100 percent of all wastewater (15 mgd) generated from the WPCP to reduce all flows to the bay, as stated in the 2000 Recycled Water Master Plan. This goal, if attained, would involve the export of water to locations or agencies outside the City limits. The City has completed Phases I and II of the 2000 Recycled Water Master Plan, which now serves Baylands Park, Lockheed/Martin Area, the Sunnyvale Municipal Golf Course, and other parks and industrial areas in the northern part of the City. A storage tank was built in the Year 2000 to allow for more recycled water to be developed and stored in order to keep up with demand on the system once the area is built out. Possible extensions to serve the south end of the City and also Cupertino and Los Altos may be evaluated in the future. Refer to Chapter 26 for more information on the Sunnyvale WPCP.

Emergency Preparedness

Water Supply Hazards

The aging water distribution system is prone to breaks and leaks, especially during the winter months. While the water line replacement project is on-going, it will be a number of years before new water lines are in place. The Water Division 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.

In 2004, a seismic vulnerability study of Sunnyvale's water system was conducted. According to the study, a magnitude 7.9 earthquake on the San Andreas Fault would cause

a prolonged loss of water service in the City. To mitigate for such an event, two of the 5.0-million gallon storage tanks on Wright Avenue have been seismically retrofitted. The City is also planning to retrofit other key water infrastructure components that may be at risk.

Emergency Water Supply

An emergency backup water supply is provided by above-ground water storage tanks, with an effective capacity of 19.7 million gallons. This storage capacity can provide approximately one day of emergency water under a maximum daily demand scenario.

Interties and Back-up Supply

Regarding transfer opportunities, the City is currently connected to the cities of Cupertino, Mountain View and Santa Clara and to California Water Service Company through service connections located within Sunnyvale for use during emergency situations.

WATER DEMAND

The City of Sunnyvale projected water demands for a single dry year to 2035 are shown in Figure 17-6. The single dry year scenario is shown, as it represents the worst case scenario for the City regarding available water supply.

Figure 17-6 shows that no differences between projected supply and demand would occur under a single future dry year (i.e., 1977). Similar results were developed for multiple (three-year dry year) sequences through year 2035, where demand would also equal supply. In the event of a decrease of local supplies, the City would respond by pursuing demand reduction programs in accordance with the severity of the supply shortage.

Figure 17-6: City of Sunnyvale Supply and Demand Comparison- Single Dry Year (AFY)

	2010	2015	2020	2025	2030	2035
Total Supply	21,465*	21,973	22,527	23,676	25,506	25,506
Total Demand	21,464**	21,973	22,527	23,676	25,506	25,506
Difference	1	0	0	0	0	0
Difference as % of Supply	0	0	0	0	0	0
Difference as % of Demand	0	0	0	0	0	0

Source: Adapted from City of Sunnyvale 2010 UWMP, June 2011, Table 5-9: Supply and Demand Comparison - Single Dry Year (AFY), page 5-17.
*From Table 4-1: Water Supplies - Current and Projected in a Normal Year (AFY), City of Sunnyvale 2010 UWMP, June 2011.
**From Table 3-7: Projected Demand by Source (AFY), City of Sunnyvale 2010 UWMP, June 2011.

The City of Sunnyvale would be able to increase the amount of groundwater pumped to meet reasonably anticipated deficiencies from other sources, thus supply is projected to be sufficient to meet demand out to 2035. The City of Sunnyvale groundwater basin is not adjudicated, which means the right to pump groundwater from the basin has not been given by judgment of a court or board. For each of the five-year increments presented, the

three-year dry period indicates that supplies will be able to meet demands through increased groundwater pumping and implementation of drought conservation programs. The City will be able to address the projected demands without rationing.

WATER INFRASTRUCTURE AND FACILITIES

The Sunnyvale water system is a comprehensive water storage and delivery system. The City is divided into three pressure zones. Zone 1 comprises the northerly two-thirds of the City and is supplied by six SFPUC turnouts (Mary, Palomar, Lockheed, Borregas, Fair Oaks, and Lawrence) and by the Central well. Zones 2 and three comprise the southerly one-third of the City and are supplied by two SCVWD turnouts (Barranca and Wright), and by seven wells (Raynor, Ortega, Westmoor, Serra, Hamilton No. 2 and 3, and Losse).

Water Treatment Facilities

Sunnyvale does not have any water treatment facilities.

Water Storage Facilities

The City has five active 5.0 million gallon (mg) storage tanks with a combined capacity of 25.0 MG. These tanks are in the process of being seismically retrofitted, which will reduce their combined capacity to 19.7 mg. The City also has five 0.5 mg storage tanks with a combined capacity of 2.5 mg. Three of these tanks have been retrofitted, which will reduce their combined capacity to 1.2 mg. The other two tanks are not currently utilized, but are available for emergency purposes.

Conveyance and Distribution Facilities

The water distribution system is composed of approximately 10 miles of 16-inch to 30-inch diameter transmission lines and over 280 miles of 6-inch to 14-inch diameter distribution mains. There are still remaining some 4-inch diameter pipes, which are being replaced with 8-inch diameter lines, which is the City's current minimum standard.

The distribution system also consists of three booster pump plants (Mary-Carson, Wolfe-Evelyn, and Wright Avenue), each with four pumps, one of which is on standby for emergency purposes. The system also features 49 pressure reducing valves, 3,380 fire hydrants, 250 City-owned backflow prevention devices (with 3,104 backflow prevention devices total), and 29,257 water service connections. The system also includes the automated Supervisory Control and Data Acquisition (SCADA) System that control distribution of water throughout the system.

Approximately 80 percent of the water main pipelines were constructed in the 1960's, and the remainder in the 1980's. The 1960's vintage pipes are approaching their estimated 50-year useful service life and are in need of replacement.

The City reported that in calendar year 2010 there were 14 main line breaks or leaks, and 168 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 24 capital improvement projects scheduled over the 20-year planning period. Particular focus is being placed on rehabilitation and maintenance of water tanks, replacement of water lines, and replacement of the SCADA system. 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 CDPH as prioritized health concerns.

The City of Sunnyvale does not treat water derived from the City's municipal wells. Treated water is received from the SFPUC Regional Water System and the SCVWD water treatment plants. The City's water wholesalers, SFPUC and SCVWD, conduct their own testing. Of the parameters tested, none were found to be higher than CDPH allows.

According to the federal Environmental Protection Agency (EPA) through its Safe Drinking Water Information System (SDWIS), the City of Sunnyvale 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.

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 SUNNYVALE
SERVICE REVIEW DETERMINATIONS

Growth and Population Projections

- The current 2010 United States Census population for Sunnyvale is 140,081.
- ABAG projects that the population of Sunnyvale will increase to 163,300 by 2035, a 16.6 percent increase over the twenty-five year period.

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

- The City anticipates being able to purchase sufficient water to meet its needs under its current contracts with the San Francisco Public Utilities Commission and the Santa Clara Valley Water District.
- The Sunnyvale water supply and distribution system 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 anticipates utilizing recycled water to make up about seven percent of its total water supply between 2010 and 2035.
- An emergency backup water supply is provided by above-ground water storage tanks, with an effective capacity of 19.7 million gallons (MG). This storage capacity can provide approximately one day of emergency water under a maximum daily demand scenario.
- Capital improvement funding is provided for an aggressive program to replace the City's aging water lines. The project schedule calls for replacement of approximately two miles of pipe per year.
- Over $13 million has been budgeted for water tank renovation including refurbishing, cleaning, interior coating, and exterior painting.
- The City provides high quality water based on city 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.

- 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 Sunnyvale water system has sufficient financial resources to provide an adequate level of service. The Fund has been able to generate sufficient revenues to stay ahead of the rising expenditure curve.

- Water rate increases will be required over the next several years to finance SFPUC Regional 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 Cupertino, Mountain View and Santa Clara, and with California Water Service Company for use during emergency situations.

- The City collaborates with the Bay Area Water Supply and Conservation Agency (BAWSCA), serves on several Santa Clara Valley Water District Subcommittees, and participates in the 'Watershed Watch' program of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

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 City has indicated that future opportunities may present themselves with respect to the City serving the water service pockets currently served by the California Water Service Company.

- Operational efficiencies are being improved by replacing water meters with 'radio read' meters, allowing for more efficient recording of water use. Over-35 percent of the 28,000 meters have been replaced. The Division has also added a 'Hydro-excavator' to enable the utility crews to more efficiently replace water lines. The Division will soon implement a Maintenance Management System (including training) to better track projects.

- No alternative government structure options have been identified for Sunnyvale.