13. CITY OF MOUNTAIN VIEW

AGENCY OVERVIEW

The City of Mountain View was incorporated on November 7, 1902, and became a charter city on January 15, 1952. Mountain View is a full service city providing a range of services including: community development (planning and zoning, building inspection, economic development, and neighborhoods and housing); redevelopment; police protection, fire protection; public works (transportation, property management, engineering, environmental sustainability, water, wastewater, solid waste and streets); community services (performing arts center, recreation, parks and trails, senior programs and services, Shoreline golf links and regional wildlife area, youth and teen services, and community gardens); library services; and public art. City services (including wastewater, solid waste, parks and recreation, storm water drainage, law enforcement, and library) were studied in the October 2007 Northeast Santa Clara County Service Review.

Water service for the City is provided through the Public Services Division of the Public Works Department. This Division also includes Safety, Engineering and Environmental Compliance, Utilities Maintenance (water and wastewater systems) and Streets, and Landfill Maintenance. Water services were studied as part of the Countywide Water Service Review in June 2005.

Type and Extent of Services

Services Provided

The Water Operations Section of the Public Services Division provides drinking water to residential, commercial, industrial and institutional customers within the City. The Water Operations Section oversees water quality, water distribution, system maintenance including water meters, backflow prevention, leak detection, and a recycled water system. Mountain View also has its own water conservation program (including residential, business, landscape, and classroom materials and presentations), 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 except for isolated pockets in the southern portion of the City served by the California Water Service Company. There is one outside connection, an 8-inch meter service to the Shenandoah Housing complex used for military family housing, and located within a 19.3 acre unincorporated island surrounded by the City of Mountain View. Title to this property is held in the name of the United States. The City of Mountain View has informed LAFCO that they have deferred annexation of the island until such time as the property is converted to private ownership. Water service from the City began in 1987 and provides service to approximately 126 residential dwellings.

The City of Mountain View has three different sources of potable water, and one recycled water source. Potable water is derived from seven municipal wells; from imported water from the State Water Project (SWP) and the federal Central Valley Project (CVP) through SCVWD; and from the San Francisco Public Utilities Commission (SFPUC) Regional Water System. Recycled (non-potable) water for irrigation purposes is produced at the Palo Alto Regional Water Quality Control Plant (RWQCP).

Service Area

The City serves the entirety of the area within its bounds except for nine pockets (with approximately 600 service connections including Mountain View High School and Huff Elementary School and Park) served by the California Water Service Company (Cal Water). The City provides water to approximately 98 percent of the water customers in the city, with Cal Water providing service to the other 2 percent.

Services to Other Agencies

Mountain View does not provide water services to other agencies.

Contracts for Water Services

The City contracts with SCVWD and SFPUC for treated potable water, and purchases recycled water from the Palo Alto RWQCP.

Collaboration

The City is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA), participated in the development of the BAWSCA Water Conservation Implementation Plan, and participated in the SCVWD Integrated Water Resource Plan.

Boundaries

The Mountain View water service boundary is the same as the City Limits. The present bounds encompass approximately 12.3 square miles. Mountain View 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.

Councilmembers are elected to four-year overlapping 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 13-1.

The City Council meets on the second and fourth Tuesday of each month in the City Council Chamber. Agendas are posted on the City website, and are available at the City Clerk's Office and the Library. Agendas, minutes and reports are available on the City website. Council meetings are televised live and webcast on City Cable Channel 26. Meeting videos are also available for review on the City website. Meeting archives are available from March 2008. The City does not have a water-related advisory commission or committee.

Figure 13-1: City of Mountain View City Council

City of Mountain View				
Public Services Division Contact Information				
Contact:	Gregg Hosfeldt, Assistant Public Works Director			
Address:	231 N. Whisman Road, Mountain View, CA 94043			
Telephone:	650-903-6205			
E-mail/Website:	gregg.hosfeldt@mountainview.gov/www.mountainview.gov			
City Council				
Member Name	**Position**	**Term Expiration**	**Manner of Selection**	**Length of Term**
Margaret Abe-Koga	Councilmember	January 2015	Elected At-large	4 years
Ronit Bryant	Councilmember	January 2015	Elected At-large	4 years
John Inks	Councilmember	January 2013	Elected At-large	4 years
Mike Kasperzak	Vice Mayor	January 2013	Elected At-large	4 years
Laura Macias	Councilmember	January 2013	Elected At-large	4 years
Tom Means	Councilmember	January 2013	Elected At-large	4 years
Jac Siegel	Mayor	January 2015	Elected At-large	4 years
Meetings				
Date:	Second and Fourth Tuesday at 6:30 PM			
Location:	Council Chamber, City Hall, 500 Castro Street, Mountain View			
Agenda Distribution:	Posted on the City website, and available at the City Clerk's Office and the Mountain View Public Library. Subscriptions available my mail or e-mail.			
Minutes Distribution:	Available on the 'Council Agenda and Public Records' page of the City website, along with Agendas, Reports, Resolutions, and Ordinances.			

The Public Services Division webpage offers a variety of information on the Division's primary functions of safety, engineering, water, wastewater, streets and landfill

maintenance. A basic explanation of water supply and distribution is provided on the Water Conservation webpage and in the Annual Water Quality Report, along with water service information through a 'frequently asked question' (FAQ) format on the Public Services Division webpage. Links are readily accessible to the 2010 Urban Water Management Plan, Annual Water Quality Reports, current projects, utility billings and rates, conservation programs, and recycled water. A detailed contact list of personnel is not provided, but inquiries can be phoned in to the Public Services Division. An electronic complaint form is available from the City website home page under 'Ask Mountain View.'

If a customer is dissatisfied with the City's water services, that customer may write a letter to the Assistant Public Works Director or call the Public Services Division. In calendar year 2010, there were a total of 71 water-related complaints; 10 for odor/taste, 11 for color, 19 for turbidity, zero for pressure, and 31 miscellaneous (hardness, fluoride, source, or compliance). These complaints accounted for 0.41 percent of the 17,365 customers served.

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

MANAGEMENT AND STAFFING

Daily operations of the Water Operations Section are under the direction of the Assistant Public Works Director for Public Services, who reports to the Public Works Director, who reports directly to the City Manager. As an integrated department, the Public Works Department has a total of 116.5 full time equivalent (FTE) positions organized into four major functions: Transportation and Business Services; Engineering; Fleet and Facilities; and Public Services. The Water Operations Section has a total of 38.15 FTE positions dedicated to the Water Enterprise Fund, as detailed in Figure 13-2.

Figure 13-2: Water Service Staffing

Position	FTE	Position	FTE
Public Services		Administration and Safety	
Assist Public Works Director	1.0	Safety & Training Administrator	1.5
		Senior Administrative Analyst	1.0
Engineering		Customer Service Technician	0.5
Principal Engineer	1.0	Secretary	1.0
Senior Civil Engineer	0.7	Office Assistant III	1.25
Junior/Asst/Assoc Engineer	0.5	Administrative Analyst I/II	0.4
Senior Public Works Inspector	0.15		
		Water Operations	
Engineering & Enviro Compliance		Water Meters Supervisor	1.0
Engineering Assistant II	0.1	Water Resources Technician	1.0
Systems Coordinator/Technician	0.3	Cross-Connection Control Specialist	1.0
		Meter Service Worker III	1.0
Utility Systems		Meter Service Worker I/II	1.0
Deputy Public Works Director	0.1	Water Utility Worker I/II	5.0
Utilities Services Manager	0.5	Water Supervisor	1.0
Street & Landfill Closure Manager	0.05	Water Conservation Coordinator	1.0
Transportation/Business Manager	0.1	Water Quality Technician	1.0
Utilities Systems Supervisor	0.7	Senior Water System Operator	2.0
Senior Utilities Systems Technician	1.7	Water System Operator	2.0
Street Supervisor	0.15	Utilities Inspector/Locator	0.45
Street Maintenance Worker III	0.3	Heavy Equipment Operator	0.65
Street Maintenance Worker I/II	0.45	Water Utility Worker III	2.0
		Wastewater Utility Worker I/II	0.15
		Warehouse Worker	0.25
		Senior Systems Analyst	1.0
		IT Analyst II	1.0
		Buyer	0.5
		Account Tech	1.0
		Total	**38.15**

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 construction management software.

Operational efficiencies are being improved by replacing water meters with AMR (automatic meter reading) water meters, allowing for more efficient recording of water use. Under this program, around 600 meters per year are being replaced.

The City adopted the 2010 Urban Water Management Plan on June 14, 2011, and updated its Water Master Plan in August 2010.

POPULATION AND PROJECTED GROWTH

The 2010 United States Census population for Mountain View is 74,066. The average household size is 2.31 per the United States Census.

ABAG projects that the population of Mountain View will increase to 90,600 by 2035, a 22.3 percent increase over the twenty-five year period.

The City's 1992 General Plan is currently being updated with approval expected in the Spring of 2012. The 2030 General Plan Strategy contemplates growth to occur in four areas: North Bayshore; East Whisman; San Antonio, and El Camino Real. These areas will provide a mix of commercial and residential uses including increased density for office buildings, 'village centers' with retail, office and residential uses, and entertainment facilities, hotels and/or conference centers.

The Environmental Management Element of the 1992 General Plan contains policies and action items 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. The Water Enterprise Fund accounts for the revenues and expenditures associated with the provision of retail water service to water customers within the city limits except for Cal Water customers. No General Fund monies are utilized by the Fund. The primary costs associated with the water service include purchase of water, staffing to operate and maintain the water distribution system, ongoing maintenance and major capital replacement and improvement projects, and an adequate reserve.

Revenue Sources

In FY 08-09, the Water Fund generated $19.8 million, in FY 09-10 the Fund generated $20.7 million, and in FY 10-11 the Fund was projected to generate $20.3 million.

In FY 10-11, the Water Fund generated in excess of $20 million in revenues from the following sources:

Investment Earnings	$530,000	2.6%
Water Sales	$18,182,000	89.7%
Recycled Water Sales	$633,000	3.1%
Other	$936,000	4.6%
Total	$20,281,000	100%

As detailed above, significant revenues are derived from water sales. However, in FY 10-11, water purchases were $865,000 below the budget estimate, requiring a reduction in expenditures of $498,000. (Refer to Figure 13-3.) Water sales for FY 11-12 are estimated to be $1.1 million below budget, while recycled water revenue is expected to be $173,000 higher than budget. The City's water capital improvement program also comprises $1.7 million of funding. 'Other' revenues are associated with 'development costs' for new construction.

Rates

A significant portion of the Water Fund's total costs are related to the cost of purchased water. With the SFPUC rate increase of 38.4 percent for FY 11-12, and the SCVWD rate increase of 7.9 percent for treated water and 9.4 percent for a well water pumping fee, the City has implemented an overall 20 percent rate adjustment effective July 1, 2011. Based on wholesale water rate projections by SFPUC, costs will increase an average of 10 percent per year over the next 10 years. SCVWD is projecting an 8 percent annual increase over the next 10 years. The City plans to conduct a rate study during FY 11-12 to review the costs associated with maintaining the water system and possible update of the rate structure.

As part of its current rate structure, the City charges an 'inclining block tier' rate which charges proportionally higher water rates for higher water users. One objective of this rate structure is to promote the reduction in water use. New rates adopted by the City Council, and the percentage change from FY 10-11 for residential customers are as follows:

Water Use per Month	Cost per Unit[106]	Percent Change
Tier 1 (up to 3 units per month)	$1.98	19.7%
Tier 2 (3 to 25 units per month)	$4.09	20.0%
Tier 3 (Over 25 units per month)	$8.12	19.7%

[106] One unit = 25 gallons per day.

Based on the anticipated costs for wholesale water, it is expected that monthly water bills for Mountain View will continue to increase in the foreseeable future.

Expenditures

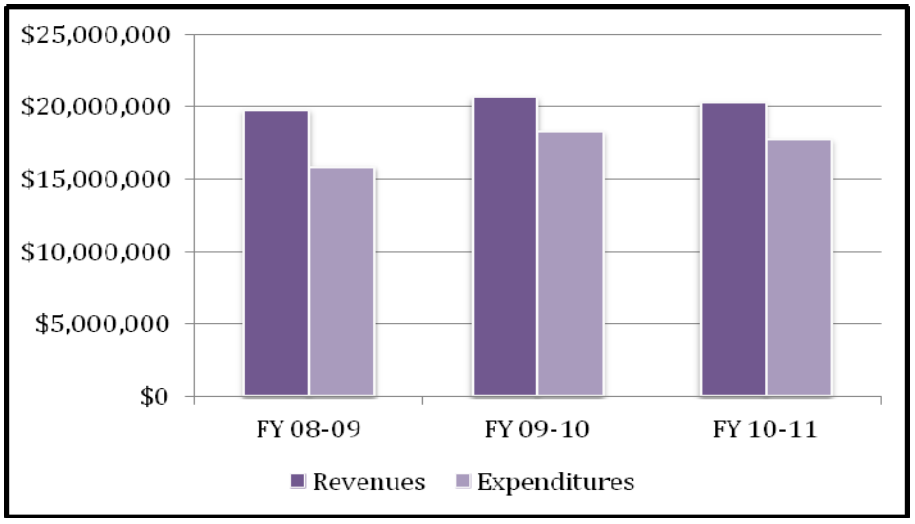
For FY 11-12, the Water Fund expenditure is expected to total $22.9 million which is 11.9 percent of the City total expenditure (all funds) of $191.7 million.

In FY 08-09, the Water Fund spent a total of $15.9 million, in FY 09-10 the Fund spent $18.3 million, and in FY 10-11 the fund was projected to spend $17.8 million. Reduced costs are attributed to reduced water purchases and lower operating costs. Revenues and Expenditures of the Fund for the past three fiscal years are shown in Figure 13-2.

Primary expenses in FY 10-11 were:

Operations	$7,700,000	43.3%
Purchased Water	$9,200,000	51.6%
Debt Service	$600,000	3.4%
Loan Payment	$300,000	1.7%
Total	$17,800,000	100%

Figure 13-3: Expenditures and Revenues (FYs 08-09, 09-10 and 10-11)



Capital Outlays

Annual capital project funding is included in the annual rate calculation and is reflected in the City's five-year Capital Improvement Program (CIP). Water-related projects are budgeted based on a three-year rolling average of available funds and have been increased approximately $100,000 each year. For FY 10-11, $1.53 million was budgeted, and increased to $2.07 million for FY 11-12. The current budget includes two capital improvement projects: Water Main and Service Line Replacement at $1,415,000; and Annual Water System Improvements at $314,000.

On-going projects include replacing current water meters with remote-read capable meters and the water line replacement program. Consideration is being given to accelerate the water line replacement program by $1.0 million per year.

Long-term Debt

Annual payments of $634,000 pay down debt service for the Water Fund (loan for start-up costs for the water recycling program). The total long-term obligation for the Water Fund is $7.7 million, which is repaid with future revenue.

Reserves

Estimated reserves for the Water Fund were $6,177,000 as of July 1, 2011. Of this amount, 10 percent is designated for emergencies, 5 percent for contingencies, and 10 percent for rate stabilization. This provides 75 percent (or $4,632,750) for operational reserves, which at the current reserve level would be sufficient to fund water operations for 3.1 months.

WATER SUPPLY

The City of Mountain View purchases the majority of its drinking water from SFPUC and SCVWD. These sources are supplemented by water pumped from seven active groundwater wells owned and operated by the City. Beginning in 2009, Mountain View also began receiving non-potable recycled water from the RWQCP to help meet irrigation needs, saving potable water for domestic use and offsetting groundwater pumped by a local irrigation well. In 2010, water supplies used by the City (both potable and non-potable) included 84 percent SFPUC water, nine percent SCVWD treated water, four percent groundwater and three percent recycled water.

SFPUC

The City of Mountain View receives water from the City and County of San Francisco's Regional Water System, operated by SFPUC. Approximately 85 percent of the regional system supply comes from the Tuolumne River through Hetch Hetchy Reservoir. The remaining 15 percent comes from local watersheds through the San Antonio, Calaveras, Crystal Springs, Pilarcitos, and San Andreas Reservoirs.

In 2010, SFPUC water comprised 84 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 Mountain View'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. Mountain View's individual supply guarantee is 13.46 million gallons per day (or approximately 15,077 acre feet per year (AFY)). The Mountain View contract also includes a minimum purchase amount of 8.93 million gallons per day (10,003 AFY), which the City of Mountain View agrees to buy, regardless of whether sales drop below this level. The City met this minimum purchase amount in 2010, and anticipates continued growth in its SFPUC purchases through 2035, as shown in Figure 13-3.

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

SCVWD supplies the City of Mountain View with treated surface water through an entitlement of imported Central Valley Project water and the State Water Project, as well as surface water from local reservoirs. The current contractual agreement between the City and SCVWD sunsets in 2054, and allocates 1.2 mgd annual use (or 1,325 acre feet per year) and 2.46 mgd maximum daily use. The City anticipates making use of the entire SCVWD contractual amount through 2035.

Groundwater

Figure 13-4: City of Mountain View Potable Water Supplies

Supply Source	Total Water Supplies (MGD)
SFPUC (58%)	13.46
SCVWD (5%)	1.2
Groundwater (37%)	8.5*
Total	23.16

Source: 2010 City of Mountain View, Water System Master Plan, Table 8-6, Existing Groundwater Well Data
Notes: *From individual maximum pumping rates from 7 active wells.

Groundwater pumping provides up to half of the County's water supply during normal years. Total groundwater pumping from the Santa Clara Subbasin in 2009 was approximately 113,000 acre feet. Of this, the City of Mountain View extracted approximately 436 acre feet, or less than one percent.

The City of Mountain View has seven active municipal wells and one inactive well. The seven production wells have an average flow rate of 3,100 gallons per minute.

Combined with existing groundwater pumping capabilities, Figure 13-4 shows the City's total available water supplies.

Figure 13-5 shows the City's water supply production over the past three years, along with the last five-year average.

Figure 13-5: Historical Water Supply Production

Year	Supply Source (AFY)					
	SFPUC	SCVWD Treated	Total Imported	Groundwater	Recycled Water	Total
2010	9,476	1,007	10,484	476	389	11,348
2009	10,696	1,190	11,886	436	134	12,456
2008	11,505	1,330	12,635	569	0	13,404
5-Year Average	10,950	1,227	12,117	479	NA	12,656

Source: From 2010 City of Mountain View, UWMP, Table 5-4, Historical Water Supply Production, page 5-20.

In the future, based on numerous factors including contractual limits, natural hydrology, anticipated demands, etc., the City's anticipated or projected water supply production is provided in Figure 13-6.

Figure 13-6: Projected Water Supply Production

	Projected Water Supply Production (AFY)				
	2015	2020	2025	2030	2035
SFPUC Treated	11,036	11,097	11,581	12,105	12,645
SCVWD Treated	1,325	1,325	1,325	1,325	1,325
Groundwater	252	254	263	274	285
Potable Supply	12,613	12,675	13,169	13,704	14,255
Recycled Supply	1,026	1,610	1,610	1,610	1,610
Total	13,639	14,285	14,779	15,314	15,865

Source: From 2010 City of Mountain View, UWMP, Table 5-6, Projected Water Supply Production, page 5-22.

Recycled Water

The City of Mountain View uses recycled water from the Palo Alto RWQCP for irrigation of public and private landscapes in the North Bayshore Area (currently 389 AFY). For more information on the Palo Alto Regional Water Quality Control Plan, refer to Chapter 26.

The "Regional Water Recycling Facility Planning Study for the Mountain View/Moffett Field Area Water Reuse Project" included a market assessment to estimate potential recycled water use within the project area (considered 'near-term' customers) and potential recycled water use in an expanded feasibility plan service area (considered 'long-term' customers). The market assessment estimated that 1,480 to 1,860 AFY of recycled water could be used within the Mountain View/Moffett Field area near-term, and that an additional 1,830 to 3,970 AFY of recycled water could be used in other areas of Mountain View, Palo Alto, East Palo Alto and Los Altos long-term. The potential demand for the near-term uses within the City of Mountain View's water service area represents approximately 10 percent of the City's total water demand.

Emergency Preparedness

Water Supply Hazards

The Public Services Division is prepared to respond to any leaks or breaks in a timely manner, and is able be on site within 30 minutes of dispatch.

In 2010, a seismic vulnerability assessment of Mountain View's water system was prepared. Recommendations from the study include restraining emergency generators, upgrading of the Whistman and Miramonte Reservoirs roofs, valve vault improvements, and upgrading the interconnections with Sunnyvale, Palo Alto, SFPUC, and SCVWD.

As part of its 2010 Urban Water Management Plan, the City has prepared a Water Shortage Contingency Plan and a Catastrophic Supply Interruption Plan.

Emergency Water Supply

An emergency backup water supply is provided by above-ground water storage tanks, with an effective capacity of 17.3 million gallons (MG). This storage capacity can provide 22 hours 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 Palo Alto and Sunnyvale for use during emergency situations.

WATER DEMAND

The City of Mountain View's water system is expected to be able to meet projected water demand during normal and single dry-year scenarios. Anticipated future demands will be met through a combination of potable supply sources, recycled water, water conservation, and water shortage contingency measures. During multiple dry year periods, however, Mountain View anticipates potable supply shortfalls (see Figure 13-7). Projected shortfalls are expected to increase during the later years of a drought, and reach 14 and 18 percent during the fifth successive dry year in 2015 and 2025, respectively.

Figure 13-7: Multiple Dry-Year Supply and Demand Comparisons

Supply Source	Projected Water Supply and Demand through 2025 (AFY)								
	2015			2020			2025		
	Years 1 & 2	Years 3 & 4	Year 5	Years 1 & 2	Years 3 & 4	Year 5	Years 1 & 2	Years 3 & 4	Year 5
SPFUC	11,036	10,938	9,498	11,097	10,938	9,498	11,581	10,938	9,498
SCVWD Treated	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,060
Groundwater	252	252	252	254	254	254	254	263	263
Potable Supply	12,348	12,251	10,810	12,410	12.252	10,811	12,904	12,262	10,821
Potable Demand	12,613	12,613	12,613	12,675	12,675	12,675	13,169	13,169	13,169
Surplus/ Deficit	-2%	-3%	-14%	-2%	-3%	-15%	-2%	-7%	-18%

Source: From 2010 City of Mountain View, UWMP, Table 6-4, Multiple Dry Year Supply and Demand Comparison, page 6-15.

WATER INFRASTRUCTURE AND FACILITIES

The Mountain View water system is a comprehensive water storage and delivery system. The City is divided into three pressure zones. Zones 1 and 2 comprise the northerly three-fourths of the City and are supplied by three SFPUC turnouts (No. 5, 7 and 14) along the Bay Division Pipelines No. 3 and 4. Zone 3 comprises the southerly one-fourth of the City and are supplied by one SCVWD turnout (Miramonte Road). The City's seven production wells are located in the southerly half of the City.

Water Treatment Facilities

Mountain View does not have any water treatment facilities. Fluoride treatment is added to the wells, and to the SCVWD treated water. SFPUC fluoridates its water before delivery to the City.

Water Storage Facilities

The City has four active storage reservoirs (Graham, Miramonte No. 1, Miramonte No. 2, and Whisman), with a combined capacity of 17.3 MG. Graham and Wishman have an associate pump station; the Miramonte reservoirs are gravity fed.

Conveyance and Distribution Facilities

The water distribution system is composed of approximately 172 miles of pipe. Over 63 percent of the distribution pipes were installed in the 1950's and 1960's. The City utilizes cast iron pipe (CIP), with asbestos concrete pipe (ACP) used north of Middlefield Road due to its resistance to corrosive soils. Replacement pipes are polyvinyl chloride. The Water Master Plan estimates that 28,844 lineal feet of pipe will need to be replaced, primarily because of deficiencies in fire flow demands.

The system only requires 13 pressure reducing valves because the overall operating pressure is well below 100 pounds per square inch (psi). The City has 1,993 fire hydrants, 2,512 backflow prevention devices, and 17,365 water service connections. The system also includes the automated Supervisory Control and Data Acquisition (SCADA) System that controls distribution of water throughout the system.

Infrastructure Needs & Capital Improvement Program

The current capital improvement program identifies two capital improvement projects scheduled over the five-year planning period. Particular focus is being placed on replacement of water lines and water meter upgrades. 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 Mountain View does not treat water derived from the City's municipal wells, but does provide fluoride treatment. 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 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 Mountain View 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 July of 2011 identified three deficiencies: cleaning the interior walls of the Miramonte reservoir; screening the air release valves on pumps at Graham Station; and adjusting and screening air release valves on the SFPUC No. 5 and 7 turnouts. Reservoir cleaning will occur during the winter months; all other deficiencies have been addressed.

CITY OF MOUNTAIN VIEW
SERVICE REVIEW DETERMINATIONS

Growth and Population Projections

- The current 2010 population of Mountain View is 74,066.
- ABAG estimates that Mountain View will grow by 22.3 percent over the next 25 years to an estimated population of 90,600.

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.
- Minor supply deficiencies may occur beginning in 2015, and will be exacerbated should drought conditions occur. The City would be able to increase the amount of groundwater pumped to meet this deficiency, thus supply is projected to be sufficient to meet demand out to 2035.
- The Mountain View water supply and distribution system has sufficient capacity to serve all water customers within its service area, and has planned for eventually serving the Cal Water parcels should that be necessary.
- Continued emphasis on water conservation, use of recycled water, and higher water rates are expected to lessen the City's demand for water.
- The City anticipates utilizing recycled water to make up about ten percent of its total water supply between 2010 and 2035.
- An emergency backup water supply is provided by existing storage reservoirs, with an effective capacity of 17.3 million gallons (MG). This storage capacity can provide approximately 12 hours 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 one mile of pipe per year. Consideration is being given to accelerate the water line replacement program by an additional $1.0 million per year and as a result increasing the length of piping replaced each year.

- 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.

- 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 Mountain View 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, including the replacement of substandard water lines.

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 Palo Alto and Sunnyvale 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.

- 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 AMR (automatic meter reading) water meters, allowing for more efficient recording of water use. Under this program, around 600 meters per year are being replaced.

- No government structure options have been identified for Mountain View.