



December 2011

CVPIA Water Management Plan



San Luis Reservoir

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Acknowledgements

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Sections

1	Description of the Santa Clara Valley Water District
2	Inventory of Water Resources
3	Best Management Practices for Agricultural Contractors
4	Best Management Practices for Urban Contractors
5	Appendices

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The Santa Clara Valley Water District (District) entered its first contract with the United States Bureau of Reclamation (Reclamation) to purchase water service from the San Felipe Division of the Central Valley Project (CVP) in June, 1977. Ten years later, the first water deliveries were received. In 2006, the District renegotiated its CVP contract with Reclamation pursuant to Section 3404 of the Central Valley Project Improvement Act (CVPIA). Under the terms of a long-term renewal contract, the District will be required to submit a Water Conservation Plan that meets Reclamation criteria. This document was submitted for review in 2011 based on the 2008 criteria developed by Reclamation.

CVPIA Water Management Plan Content

The information presented in this Water Management Plan is based on the specific criteria developed by Reclamation. Section 1 describes the District in areas ranging from its jurisdictional formation and development; geography and natural resources; operating rules and regulations; and, water measurement, pricing, and billing methods. Section 2 focuses on water resource inventories. Section 3 pertains to Best Management Practices (BMPs) for agricultural contractors while Section 4 presents information on urban contractor BMPs. These four sections are followed by 10 appendices containing further technical information as required.

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Section 1. Description of the Santa Clara Valley Water District

A. District Demographics

A1. History

District Formation

The Santa Clara Valley Water District was established based on the principle of conjunctive ground and surface water management. It was initially founded as a Water Conservation District in 1929 to serve 350 square miles in the northern portion of Santa Clara County. The initial conservation district's founding purpose was to develop a reliable water supply, to build reservoirs to store water, and to halt land surface subsidence by recharging the underground aquifer. Within seven years of formation, six newly constructed reservoirs improved water reliability and facilitated groundwater recharge.

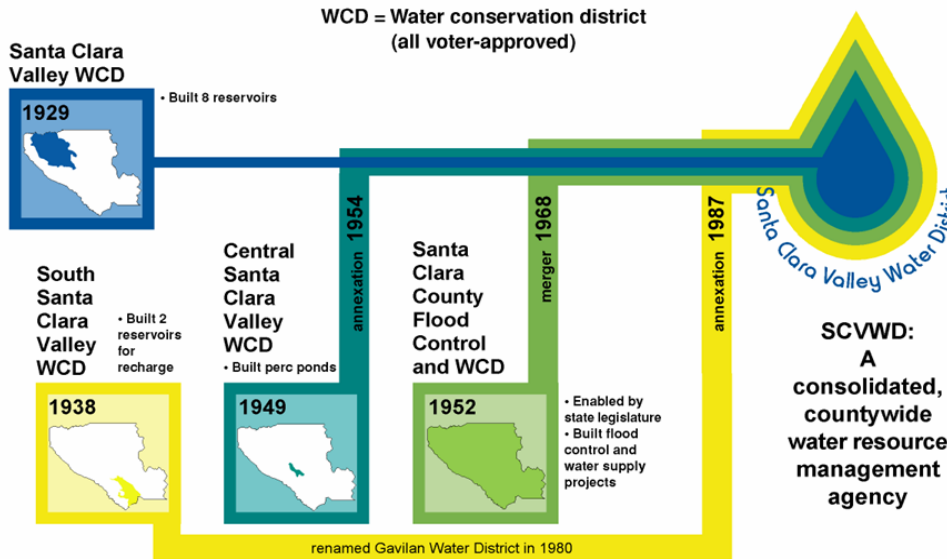
Urbanization in Santa Clara County escalated greatly after World War II. Accompanying this rapid growth was a shift from primarily agricultural to domestic/industrial water consumption throughout the county. In 1938, the South Santa Clara Valley Water Conservation District was formed followed by the Central Santa Clara Valley Water Conservation District in 1949. These two districts which served their respective parts of the county added four more reservoirs and percolation ponds to the inventory of water facilities located within the county. They also provided the water infrastructure for the population booms that followed.

Rapid urban growth also brought a growing demand for greater flood protection. In 1952, the Santa Clara County Flood Control and Water Conservation District was created by special act of the state legislature to provide flood control throughout the county. Over the next four decades, the water conservation and flood control districts merged to form the Santa Clara Valley Water District of today. Figure 1, entitled *Evolution of Santa Clara Valley Water District* describes the consolidations that took place to form the existing Santa Clara Valley Water District.

Section 1: District Description

Figure 1: Evolution of Santa Clara Valley Water District

Today's SCVWD consolidates four agencies



Board Governance

The Santa Clara Valley Water District is governed by a Board of Directors (Board) composed of seven elected members from equally divided geographical areas. Directors serve overlapping four-year terms pursuant to the District Act. Board adopted governance policies provide direction and vision for the District. The governance policies also set goals and executive limitations for the Chief Executive Officer (CEO). One category of governance policies is devoted to goals known as Ends Policies. These Ends Policies direct the CEO regarding intended results, organizational products, impacts, benefits, outcomes, recipients, and relative worth. The full text of the District's governance policies can all be viewed on the District's website at <http://www.valleywater.org/About/BoardPolicies.aspx>.

Section 1: District Description

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The following policy guides water supply activities.

Policy E-2	There is a reliable, clean water supply for current and future generations. Accordingly, the following goals and objectives are adopted:
2.1	Current and future water supply for municipalities, industries, agriculture and the environment is reliable
2.1.1.	Aggressively protect groundwater from the threat of contamination and maintain and develop groundwater to optimize reliability and to minimize land subsidence and salt water intrusion.
2.1.2.	Protect, maintain and develop local surface water.
2.1.3.	Manage, operate and maintain dams and reservoir assets to maximize reliability, to minimize life-cycle costs and to minimize impacts to the environment.
2.1.4.	Protect, maintain and develop imported water.
2.1.5.	Protect, maintain and develop recycled water.
2.1.6.	Maximize water use efficiency, water conservation and demand management opportunities.
2.2	Raw water transmission and distribution assets are managed to ensure efficiency and reliability
2.2.1	Manage, operate and maintain raw water transmission and distribution assets to maximize reliability, to minimize life-cycle costs and to minimize impacts to the environment.
2.3	Reliable high quality drinking water is delivered
2.3.1.	Meet or exceed all applicable water quality regulatory standards.
2.3.2.	Manage, operate, and maintain the water treatment plant and treated water pipeline assets to maximize reliability, to minimize life-cycle costs and to minimize impacts to the environment.
2.3.3.	Maintain effective relationships with the retailer and other stakeholders to ensure high quality, reliable drinking water.

District Mission

The District's role as steward of the local watersheds has become one of the driving forces behind its mission:

To provide a healthy, safe and enhanced quality of living in Santa Clara County through watershed stewardship and comprehensive management of water resources in a practical, cost-effective and environmentally sensitive manner for current and future generations.

Section 1: District Description

Water Retailers

The District is the wholesale water provider to 10 of the 13 retail water companies in Santa Clara County. Water “retailer” is the term used throughout this report to refer to the public and private retail water companies which sell water directly to the residents and businesses located within the county. Table 1A (1) identifies the 15 cities within Santa Clara County, the water retailers servicing each city, and the source of water for each retailer.

Table 1A (1) Santa Clara County Water Retailers

City	Water Retailer	Source of Water
Santa Clara Valley Water District Water Retailers		
Campbell	San Jose Water Company	SCVWD treated water blended with some well water
Cupertino	San Jose Water Company	SCVWD treated water
	California Water Service Company	SCVWD treated water
Gilroy	Gilroy Community Services Department	Well water
Los Altos	California Water Service Company	72% SCVWD treated water with remainder from wells
Los Altos Hills	California Water Service Company	72% SCVWD treated water with remainder from wells
Los Gatos	San Jose Water Company	20% SCVWD treated water / 80% from Los Gatos Creek
Milpitas	City of Milpitas Community Services	Hetch Hetchy, SCVWD
Monte Sereno	San Jose Water Company	20% SCVWD treated water / 80% from Los Gatos Creek
Morgan Hill	City of Morgan Hill Public Works Department	Well water
Mountain View	City of MV Public Services Department	Hetch Hetchy, SCVWD, and wells
	California Water Services Company	72% SCVWD, 28% wells
San Jose	San Jose Water Company	Well Water, Los Gatos Creek, SCVWD
	Great Oaks Water Company	Well Water
	San Jose Municipal Water Services	Hetch Hetchy, Well Water, SCVWD
Santa Clara	City of Santa Clara Water Department	Well Water, Hetch Hetchy and SCVWD
Saratoga	San Jose Water Company	Surface water from Los Gatos Creek and SCVWD
Sunnyvale	City of Sunnyvale Public Works Department	Hetch Hetchy, SCVWD, and wells
	California Water Service Company	72% SCVWD treated water with remainder from wells
Retailers that Purchase Water from Other Wholesalers		
Los Altos Hills	Purissima Hills Water District	Hetch Hetchy (100%)
Palo Alto	City of Palo Alto Utilities Department	Hetch Hetchy (100%)
Palo Alto	Stanford University	Hetch Hetchy (100%)

Well Owners

There are over 3,000 small-well owners located primarily in the southern portion of the county. The District charges well owners water management fees based on the quantity of water extracted for the groundwater recharge services managed by the District.

A2. District Size

The District encompasses the same geographical boundaries as Santa Clara County totaling approximately 1,300 square miles and home to more than 1.8 million residents. Table 1A (2)

Section 1: District Description

contains 2009 data on County size, population, and irrigated acres. The District's service territory includes the Santa Clara Valley from San Francisco Bay south to the Pajaro River and portions of the Diablo Range and Santa Cruz Mountains. Most of the development and water use occurs in the 350 square miles of valley floor.

Table 1A (2) Size, Population & Irrigated Acres

	2009
Size (sq. miles)	1,300
Population Served	1.8 million
Irrigated Acres	14,109

Notes: The first USBR contract was executed in 1977 and the first CVP deliveries were received in June of 1987. 2009 data is from the District Water Resources Information System (WRIS), which records Santa Clara County agricultural production utilizing groundwater and surface water supplies managed by SCVWD. Acreage listed may include double cropping. Agriculture outside of the water utility zones is included in record from the County Crop Report.

A3. Water Supplies

Water supply sources within Santa Clara County include water imported via state and federal water projects, water purchased by retailers directly from the San Francisco Public Utilities Commission, local surface water, groundwater, and reclaimed water. The District's own supply sources are limited to imported federal and state water, transferred water (purchased directly from other federal and state water contractors), and surface water. These sources either are used to recharge groundwater supplies or treated for sale to retail water companies. A very limited amount of raw water also is sold to local farmers and individuals for landscaping.

Groundwater is considered a water retailer or private well owner source of supply. Similarly, reclaimed water is considered a supply source of the four agencies within the county which own and operate water pollution control plants. Further, with respect to water accounting, including these sources would result in a supply double count. For example, imported water used to recharge groundwater supplies would be counted once when it percolates to the aquifers and a second time when it is pumped out. Groundwater and recycled water sources, therefore, are generally not counted as District water sources. However, the District is engaged in a specific groundwater augmentation project that does provide supplemental supplies to the District. Construction of District-owned wells at the San Tomas Well Field (or Campbell Well Field) is nearly complete. These three wells will be used to provide emergency backup supply and increased operational flexibility for the District's treated water distribution system.

Section 1: District Description

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Table 1A (3): *Water Supplies Received* presents District water sources in acre-feet for 2009.

Table 1A (3) Water Supplies Received

Water Source	2009 AF
USBR M&I Water	69,870
USBR Irrigation Water	0
State Project Water	9,190
Local Surface Water	71,520
Prior Year carryover	30,980
Delta flood flows	0
Upslope Drain Water	0
District ground water	0
Banked Water	33,450
Transfer Water	19,320
Recycled Water	15,280
Other – From SFPUC via Intertie	320
TOTAL	249,930

A4. Water Contracts

Imported water is the District's primary water source. The District maintains long-term contracts with the federal government and the state of California to ensure reliable supply. Both Central Valley Project (CVP) and State Water Project (SWP) supplies are imported from the San Francisco Bay/Sacramento-San Joaquin Delta.

The District entered its first contract with the United States Bureau of Reclamation in 1977. The first deliveries of federal water from the San Felipe Division of the Central Valley Project were received in June of 1987. The maximum contract quantity is 152,500 acre-feet per year. The District's State Water Project contract is for 100,000 acre-feet per year delivered through the South Bay Aqueduct via the Harvey O. Banks Pumping Plant in the southern Delta.

The District participates in various programs, including development of the Bay Delta Conservation Plan, aimed at identifying operational measures, programs and facilities that would improve federal and state water supplies, quality, and reliability as well as to restore and enhance environmental conditions.

Section 1: District Description

Table 1A (4) Annual Contractual Amount under Each Right and/or Contract

Source	Contract Maximum (AF)	Annual Use (AF)		Contract No.
		M&I	Irrigation	
CVP	152,500	Up to 152,500*	Up to 33,100	7-07-20-W0023
CVP (joint assignment)	6,260		Up to 6,260 annually, but limited to 25% of total allocated supply over term of joint assignment	14-06-200-3365A-IR13-B
SWP	100,000	Up to 100,000		N/A

*The District's CVP Contract provides that the entire amount may be used for M&I, but pursuant to the 1997 "Water Reallocation Agreement among the United States, Santa Clara Valley Water District, and the San Luis & Delta-Mendota Water Authority" only 130,000 AF is provided for M&I reliability under Reclamation's Interim M&I Water Shortage Policy. Further, the total amount delivered to the District for both M&I and Irrigation purposes is limited to 152,500 AF.

In addition to District sources, several Santa Clara County water retailers have contracts with the San Francisco Public Utilities Commission for water from the Hetch-Hetchy project. Hetch-Hetchy imported deliveries originate in the Tuolumne River watershed high in the Sierra Nevada and are transported directly by closed conduit to the Bay Area. The District does not control or administer Hetch-Hetchy deliveries to the county; however, it is expected that many of the SFPUC retailers within Santa Clara County would pump additional groundwater if there were a shortfall in SFPUC deliveries.

In 1999, SCVWD entered into an agreement with Mercy Springs Water District (Mercy Springs), Westlands Water District, and Pajaro Valley Water Management Agency for the partial assignment of 6,260 AFY of Mercy Springs' CVP water for irrigation, municipal and industrial uses. The District receives a portion (approximately 25%) of the water made available under this contract over the term of the agreement.

Table 1A (4) summarizes key CVP and SWP Contracts.

A5. Anticipated Land Use Changes (i.e., Agricultural to Municipal, etc.)

Santa Clara County is home to a very dynamic economy and approximately 1.8 million people (U.S. Census Bureau, 2008 Census). Urbanization has replaced the orchards of the north county over the past several decades while agriculture remains an important part of the south county area.

Total county population in 2000 was 1,682,585 and the Association of Bay Area Governments (ABAG) projects population to grow to 2,431,400 by the year 2035 (nearly 45%) compared to the beginning of year 2010 population of 1,880,900. This increasing population and projected significant job growth will increase demand for water. Overall, countywide water demand is projected to increase by about 80,000 acre-feet or 20 percent over the next 25 years, compared

Section 1: District Description

to year 2007 water use taking into account implementation of planned water conservation programs.

Land use in Santa Clara County is anticipated to remain fairly stable in the near-term. Most new construction is anticipated to be infill within existing urban centers with continued moderate urbanization in the south county. There are no expected land use changes in the next five years that will impact future water demands.

Municipal and industrial (M&I) water use includes residential, commercial, industrial, and institutional water, and its use has grown as a result of the urbanization described above. This trend is expected to continue in general alignment with population growth projections. The significant decline in agricultural land use halted approximately 15 years ago. Continued stability in agricultural land use is expected. Environmental water demands, to meet downstream fishery needs for example, have been minimal in the past but may become more significant in the future.

A6. Cropping Patterns

The amount of land in agricultural production has remained fairly constant for the last 15 years. Based on District records shown below in Table 1A (5), the number of acres actually decreased slightly between 2002 and 2009 from 17,811 acres to 14,109 acres. The acreage listed in Table 1A (5) is located inside the water utility zones and generally covers the valley floor. (Figure 2 is a map of water utility zones.) Total acreage is expected to remain stable over the next 20 years, but the mix of crops may change to reflect market forces. For instance, more vineyards are expected to be planted in the county's hills.

Table 1A (5) Cropping Patterns - Crops with 5% or More of Total Acreage

1989		2002		2009	
District Data		District Data		District Data	
Crop Type	Acres	Crop Type	Acres	Crop Type	Acres
Beans (Bush)	1,140	Mixed Row	1,158	Beans (Bush)	0
Cherries	963	Cherries	1,016	Cherries	868
Corn (Sweet)	833	Corn (Sweet)	900	Corn (Sweet)	924
Grapes (Vineyards)	1,101	Grapes (Vineyards)	1,000	Grapes (Vineyards)	0
Walnuts	875			Other Field Crops	2,038
Peppers	1,382	Peppers	2,420	Peppers	2,019
Tomatoes, Bush	1,996	Tomatoes, Bush	958	Tomatoes, Bush	1,349
Other Field Crops	1,954	Lettuce	2,024	Lettuce	2,157
Prunes	861	Ornamental Plants	928	Alfalfa	894
Misc. (<5%)	7,526	Misc. (<5%)	7,407	Misc. (<5%)	3,860
Total	18,631	Total	17,811	Total	14,109

Section 1: District Description

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Note: 1989, 2002 and 2009 data are from the District Water Resources Information System (WRIS), which records Santa Clara County agricultural production utilizing groundwater and surface water supplies inside of the Water Utility Zones managed by SCVWD. Acreage listed may be double cropped.

A7. Major Irrigation Methods

There is an insignificant amount of acreage irrigated by other methods than drip or sprinkler. Growers switch back and forth between drip and sprinkler as they rotate between crops because typical harvest methods of some crops are destructive of drip systems.

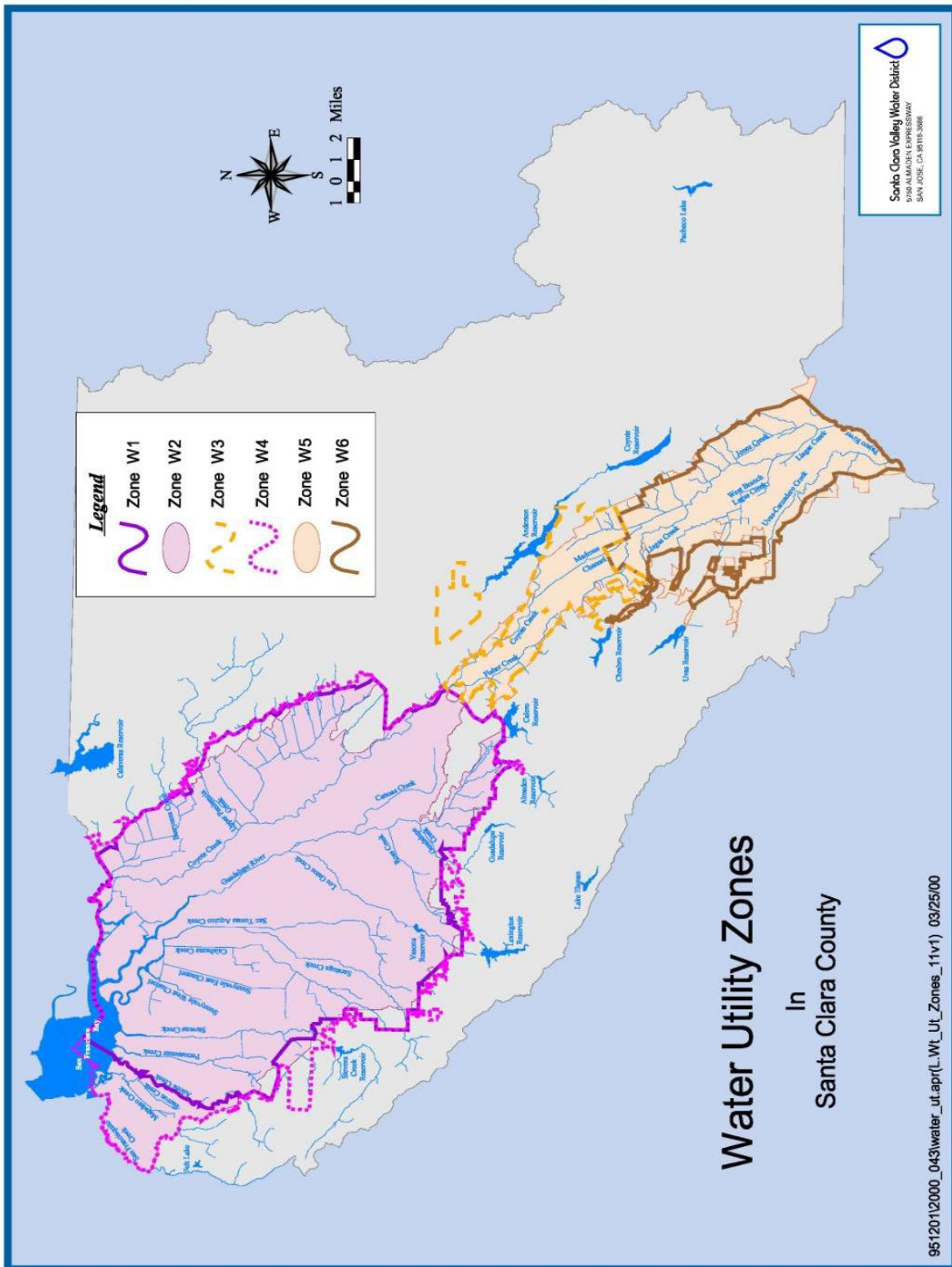
Table 1A (6) Major irrigation methods (by acreage) (Agricultural only)

Previous Plan 2002		Current Plan 2009	
Irrigation Method	Acres	Irrigation Method	Acres
Trickle/Drip	7,434	Trickle/Drip	7,611
Level Basin	873	Level Basin	144
Sprinkler	8,193	Sprinkler	6,241
Contour	120	Contour	113
All Other			
Other		Other	
Total	16,620	Total	14,109

Section 1: District Description

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Figure 2 Water Utility Zones



Section 1: District Description

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B. Location and Facilities

B1. Incoming measurement methods and locations

Table 1B (1) Incoming flow locations and measurement methods

Location Name	Physical Location	Type of Measurement Device	Accuracy
Bifurcation	10021 Pacheco Pass Highway, Hollister, CA 95023	Transit Time Ultrasonic Camp On	Less than 5% error

B2. & B3. Agricultural and Urban Water Conveyances

The District's conveyance systems serve both agricultural and urban communities through groundwater recharge and water treatment. Figure 3 illustrates the location of the District's water conveyance, treatment, and distribution systems discussed below.

Conveyance systems generally refer to raw water transportation infrastructure used to import water to the county and transport water from local reservoirs to treatment plants or recharge facilities. Distribution systems generally refer to the pipelines used to transport water from the District's water treatment plants to the retail water companies that sell water directly to the public.

State and federal water projects provide the District with major sources of supply. The South Bay Aqueduct conveys water from the State Water Project (SWP), and the Santa Clara Conduit and Pacheco Conduit convey water from the federal San Felipe Division of the Central Valley Project (CVP). The District operates and maintains these federal facilities under agreement with the U.S. Bureau of Reclamation. Raw water conveyance also includes several minor canals including the Almaden, Coyote, Kirk, Chesbro/Uvas, and Page canals.

The District manages 10 local reservoirs with a total storage capacity of 169,000 acre-feet. Local pipelines transport raw water to treatment and recharge facilities. These conveyance systems include the Central Pipeline, the Rinconada Force Main, the Almaden Valley Pipeline, the Calero Pipeline, and the Cross Valley Pipeline. Another facility, the Stevens Creek Pipeline, taps off the Rinconada Force Main and conveys raw water to recharge facilities on the county's west side.

Additionally, construction of an Intertie that joins District facilities to the San Francisco Public Utilities Commission's Hetch-Hetchy system was completed in 2002. The Intertie enables limited treated water exchanges between both agencies enhancing operational alternatives during routine maintenance and augmenting shared resources during emergencies. A number of water retailers in Santa Clara County also purchase water directly from SFPUC's Hetch-Hetchy system.

Three pump stations are part of the District's conveyance system. The Pacheco and Coyote pumping plants belong to the CVP and are owned by the federal government. The District operates and maintains these two facilities per agreement with Reclamation. Their combined pumping capacity is 36,000 horsepower. The Vasona Pumping Plant is owned by the District and its pumping capacity is 1,200 horsepower.

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Water treatment and distribution systems include three treatment plants with total rated capacities of 217 million gallons per day, over 30 recharge facilities capable of annually percolating 137,000 acre-feet, and approximately 140 miles of distribution system pipeline. Treated water pipelines that distribute water from the treatment plants to retail water companies include the following:

Rinconada Water Treatment Plant

- West Pipeline
- Campbell Distributary
- Santa Clara Distributary
- Mountain View Distributary
- Sunnyvale Distributary

Santa Teresa Water Treatment Plant

- Snell Pipeline

Penitencia Water Treatment Plant

- East Pipeline
- Milpitas Pipeline
- Parallel East Pipeline

Table 1B (2&3) 2009 Urban and Agricultural Distribution System (Raw and Treated Water)

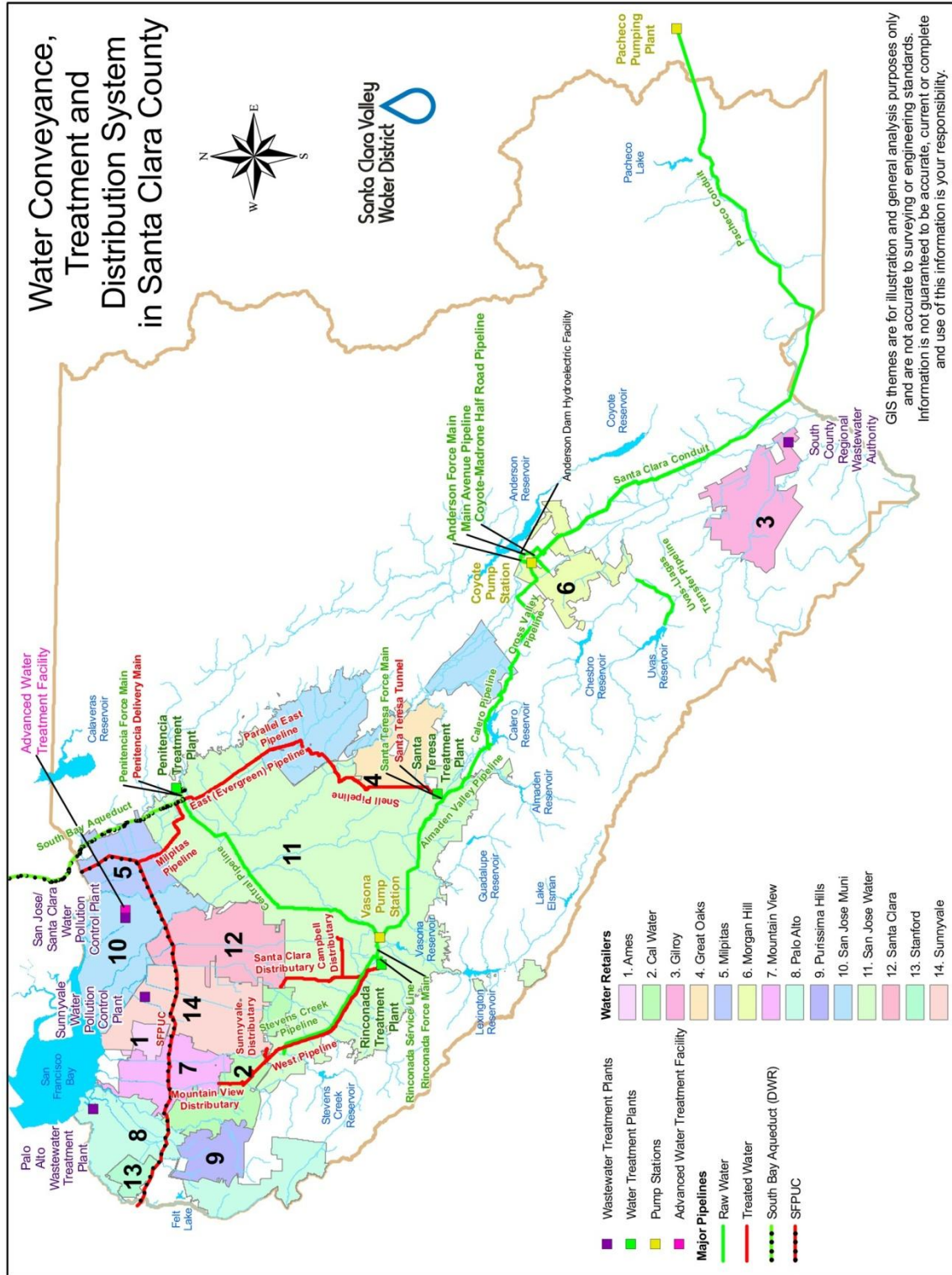
The District has one distribution system that delivers both M&I and Agricultural supplies.

Conveyance Method	Miles
AC pipe	8.1
Steel pipe	41.9
Pre-stressed concrete and steel pipe	78.4
Cast Iron Pipe	0.0
Lined Canal between reservoirs	4.4
Tunnel	5.9
Total:	138.7

The District does not own or operate any wastewater treatment facilities; however, four exist in Santa Clara County. They are the Palo Alto Regional Water Quality Control Plant, San Jose/Santa Clara Water Pollution Control Plant, and Sunnyvale Water Pollution Control Plant which together serve the north county and discharge to South San Francisco Bay; and, the South County Regional Wastewater Authority which discharges to percolation ponds.

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Figure 3: Water Conveyance, Treatment and Distribution System



GIS themes are for illustration and general analysis purposes only and are not accurate to surveying or engineering standards. Information is not guaranteed to be accurate, current or complete and use of this information is your responsibility.

60271010.2011_042/conveyance.mxd, 06/27/2011

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B4. District Storage Facilities, Including Capacity & Location

The District manages 10 local reservoirs which capture local runoff and are used to store imported water. The total storage capacity of these reservoirs is 169,009 acre-feet. Table 1B (4) below lists individual reservoir capacities and Figure 3 identifies locations. Water is stored at these sites for later conveyance to groundwater recharge facilities or to treatment plants based on demand. Dam safety operating restrictions placed on Anderson, Coyote, Almaden, Calero and Guadalupe reservoirs have resulted in loss of about a third of the total surface storage capacity.

Table 1B (4) District Reservoir Capacities

Reservoir	Reservoir Capacity (acre-feet)	Restricted Capacity (acre-feet)
Almaden	1,586	1,260
Anderson	90,373	51,250
Calero	9,934	5,671
Chesbro	7,945	7,945
Coyote	23,244	12,382
Guadalupe	3,415	2,738
Lexington	19,044	19,044
Stevens Creek	3,138	3,138
Uvas	9,835	9,835
Vasona	495	495
Total	169,009	113,758

B5. Outflow locations and measurement methods (Agriculture only)

See Section 2 F1

B6. Spill Recovery System

Not applicable.

B7. Delivery System Operation

The District delivers treated water on a scheduled basis to retail water companies. The scheduling process, which is based on the water retailers' anticipated demand, is outlined in Article B of District treated water contracts. It is summarized as follows:

- Every three years written contracts for desired amounts of treated water for the next three fiscal years are submitted by the retailers and approved by the District. Retailers agree that their actual water delivery will not be less than 95% of the amount for the fiscal year containing the maximum amount in the then-current three year contract except under special circumstances.

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- A planning schedule is submitted by the retailers annually. The schedule is the anticipated monthly take for the next five years. Anticipated monthly and yearly peaks and allotments are calculated and communicated at that time. Retailers have agreed that, should water production warrant, those allotments will be adjusted accordingly.
- The anticipated monthly amounts are also used for monthly billing purposes. Billings are adjusted to actuals at year-end.

Agricultural water deliveries are on demand, whether water users pump water as necessary or take water from a raw water pipeline. Restrictions on surface water agricultural deliveries are subject to the needs of drinking water treatment plants during times of shortage.

B8. Restrictions on Water Sources

Table 1B (8) describes the types of restrictions on water sources, causes for the restrictions, and corresponding effect on District operations.

Table 1B (8) Restrictions on the District's Water Source(s).

Restriction	Cause of Restriction	Effect on District Operations
Ground surface subsidence	Over-pumping of groundwater.	Encourage retailers to limit their groundwater pumping and manage recharge operations.
Contract limitations	Drought and environmental conditions (water quality, fish migration and habitat).	Rely on stored water, encourage cities to adopt mandatory water conservation measures/rationing, purchase additional supplies, and develop an integrated water resource plan.
Low point in San Luis Reservoir	Drought and environmental conditions (water quality, fish migration and habitat).	Rely on locally stored water, if available, possible emergency water conservation measures or rationing, and reoperation as much as possible to minimize impacts.

B9. Proposed Changes or Additions to Facilities and Operations for the Next Five Years

District operations are continually adapted to meet changing regulatory requirements, water supply and water quality conditions, flood protection needs, fishery and environmental concerns, cost control, and stakeholder interests. Changes or additions to facilities or operations under District consideration for the next five years include:

Storage:

- Seismic evaluations of seven water district dams, and the resulting seismic retrofit of Anderson Dam

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- Rehabilitation of Almaden Dam outlet works

Transmission:

- Raw water canal rehabilitation
- Addition of line valves for added system reliability

Water Treatment Plants:

- Seismic evaluation of operations buildings and resulting seismic retrofits
- Improvements at Rinconada Water Treatment Plant to rehabilitate several critical treatment plant facilities and increase plant reliability

Recycled Water:

- Construction of an Advanced Water Treatment facility at the San Jose/Santa Clara Water Pollution Control Plant to improve recycled water quality and allow for expansion of use
- Implementation of the Recycled Water Master Plan including addition of recycled water pipelines and reservoirs in Gilroy

Implementation of the Fisheries and Aquatic Habitat Collaborative (FAHCE) Habitat Conservation Plan.

Implementation of interim measures and a long-term project to resolve the San Luis Reservoir low-point problem (San Luis Reservoir Low-Point Improvement Project).

C. Topography and Soils

C1. Topography of the District

The topography of the Santa Clara Valley consists of three main physiographic features: the Santa Clara Valley, the Santa Cruz Mountains, and the Diablo Range. In order to deliver water from San Luis Reservoir, pumping is required at Pacheco Pumping Plant to get the water over Diablo Range into Santa Clara County. In order to deliver water to the District service area, further pumping may be required at Coyote Pumping Plant.

Vegetation in non-urbanized areas of the county is diverse, ranging from redwood forests along the Santa Cruz Mountains to grasslands along the eastern foothills and Diablo Range.

C2. Soil Associations

The United States Department of Agriculture, Soil Conservation Service (now Natural Resource Conservation Service), has classified 11 major soil associations within the county in their 1974 report *Soil Survey of Eastern Santa Clara Area, California*. Appendix A includes the *General Soil Map for Eastern Santa Clara County*. This map provides the location of the major soil associations in the portion of the county currently dominated by agriculture. The approximate acreage for each association is listed in Table 1C (1).

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Table 1C (1) District Soil Associations

Soil Association*	Est. Acres	Effect on Water Operations
Yolo	25,964	None
Arbuckle-Pleasanton	25,964	None
Cropley-Rincon	5,193	None
Clear Lake-Pacheco-Sunnyvale	10,386	None
Hillgate-San Ysidro	15,578	None
Azule-Altamont	10,386	None
Los Osos-San Benito	5,193	None
Los Gatos-Gaviota-Vallecitos	192,134	None
Gaviota	160,977	None
Felton-Maymen	51,928	None
Montara-Inks-Henneke	15,578	None

*From US. Dept. of Agriculture Soil Conservation Service (now NRCS) report, *Soil Survey of Eastern Santa Clara Area, California*, issued September 1974. Survey area = 519,280 acres.

C3. Limitations Resulting from Soil Problems

Agricultural water management in the county is not limited by either topography or soils. Southern portions of the county near the Pajaro River, however, may be subject to naturally high water tables (Table 1C (2)). Santa Clara County Planning Office records indicate that over 47,000 acres in the county are classified as “Farmland of Local Importance,” “Prime Farmland,” “Farmland of Statewide Importance,” or “Unique Farmland.” Limits on agriculture within the District’s service area include urban encroachment, land costs, and operational costs.

Table 1C (2) Limitations Resulting from Soil Problems within the District.

Soil Problem	Est. Acres	Effect on Water Operations and Management
Portions of south Santa Clara County in the Gilroy area, near the Pajaro River, may at times be subject to naturally high water table.	N/A	The District does not operate an artificial groundwater recharge program in this area.

D. Climate

D1. General Climate of the District

The geography of the county can best be described as varied, ranging from the low lying Santa Clara Valley flanked by the Santa Cruz Mountains to the west and by the Diablo Range to the east. Elevations range from sea level along the southern shores of San Francisco Bay to 4,372 feet atop Copernicus Peak in the Diablo Range.

Most of the rainfall in the county is due to mid-latitude, cyclonic, and frontal systems which approach the California coast during the winter months. As such, the overall climate can be classified as Mediterranean with warm dry summers and cool rainy winters.

Table 1D below provides historical averages for precipitation, temperature, minimum and maximum temperature, and average wind velocity and direction.

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Table 1D Weather Statistics from National Weather Service

Source: National Weather Service, SAN JOSE, CALIFORNIA
(Station # 047821) 1948-2005

	Jan	Feb	Mar	Apr	May	Jun	Jul
Avg Precip.	2.96	2.57	2.25	1.10	.42	.09	.03
Mean Avg Temp.	49.8	53.2	55.7	58.7	62.8	67.0	69.5
Avg Max Temp.	58.0	62.1	65.6	69.8	74.4	79.2	82.2
Avg Min Temp.	41.5	44.2	45.8	47.6	51.3	54.8	56.9
	Aug	Sep	Oct	Nov	Dec	Annual	
Avg Precip.	.08	.19	.73	1.71	2.53	14.66	
Mean Avg Temp.	69.4	68.4	63.3	55.6	50.0	60.3	
Avg Max Temp.	81.8	80.6	74.6	65.1	58.2	71.0	
Avg Min Temp.	57.1	56.2	51.9	46.0	41.8	49.6	
Percent of possible observations for period of record:							
Max. Temp.:	98.2%						
Min. Temp.:	98.0%						
Precipitation:	98.5%						
Snowfall:	98.6%						
Snow Depth:	98.6%						
Average wind velocity: Not available							
Average annual frost-free days: 348							

D2. Impact of any Microclimates on Water Management within the District.

The topographical variations mentioned above also create variations in weather or microclimates. In addition to the normal amount of precipitation that is generated by these midlatitude systems, the orographic lift, due to the Santa Cruz and Diablo Ranges, significantly enhances rainfall amounts in the north county. Mean annual precipitation ranges from 53 inches in the Santa Cruz Mountains and 31 inches in the Diablo Range to 14 inches in San Jose. In general, the predominantly agricultural south county has higher temperatures and receives less rainfall than the urban north county due to the orographic lift.

The microclimates' effect on water management is reflected in the orientation of District reservoirs and in potential reductions in water needed for landscaping and irrigation in the mountains.

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E. Natural and Cultural Resources

E1. Natural Resources

Santa Clara County has an exceptionally diverse inventory of environmental resources including grasslands, oak woodlands, redwood forests, salt marshes, seasonal wetlands, and extensive riparian habitat. The county is located at the southern end of San Francisco Bay and is located within the Pacific Flyway.

Water related environmental and recreational resources include approximately 640 miles of rivers, streams, creeks, 10 reservoirs, and several recharge facilities which are operated as joint-use recreational facilities. In addition, a number of the District's reservoirs are also operated as joint-use recreational facilities under agreement with the County. An extensive network of walking and biking trails criss-cross the county. City parks such as the Palo Alto Baylands, Shoreline Park and the Sunnyvale Baylands Park provide access from Santa Clara Valley to the south end of San Francisco Bay. These are illustrated on Figure 4, *Natural Resources Map*.

Endangered or threatened species located within the county include the California Clapper Rail, Salt Marsh Harvest Mouse, California Red-Legged Frog, Western Pond Turtle, the Tiger Salamander, and Steelhead Trout.

E2. Management of Natural Resources

The Board of Directors has adopted an "Ends Policy" related to management of natural resources.

Policy E-4	There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County. Accordingly, the following goals and objectives are adopted:
4.1	Healthy creek, bay and other aquatic ecosystems
4.2	Clean, safe water in creeks and bays
4.3	Improved quality of life in Santa Clara County through trails, open space and water resources management.

The District is working in coordination with the City of San Jose, County of Santa Clara, Valley Transportation Authority, U.S. Fish and Wildlife Service and California Department of Fish and Game on the south county phase of a county-wide Habitat Conservation Plan (HCP). The settlement reached by the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE Project) to protect steelhead and salmon required the development of an HCP for issues related to the settlement. Both of these efforts will be integrated to maximize the protection to endangered species which live in Santa Clara County.

These efforts could result in additional water needs to appropriately manage District natural and cultural resources in the future.

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E3. Recreational and Cultural Resources

The county of Santa Clara, the 15 municipalities within the county, and various private enterprises offer numerous recreational and cultural resources within the District's boundaries. Information on many of these is readily available on the County and cities' websites.

F. Operating Rules and Regulations

F1. District's Rules and Regulations

District rules and regulations are based on the authority granted in the District Act and take the form of ordinances and resolutions adopted by the Board of Directors. These rules and regulations include the following:

Groundwater rules and regulations are governed by Section 26 of the District Act and Ordinance 70-1, *Enacting Rules and Regulations Governing the Recording of Ground Water Production within a Zone of Santa Clara Valley Water District in which a Ground Water Extraction is Levied*. See Appendix B for full text of each. These rules are distributed to all private well owners.

Surface water rules and regulations are governed by resolution 70-28 as amended. The District's highest surface water priority is to ensure sufficient supplies to the District's treatment plants. Raw water is used for groundwater recharge and agriculture.

F2. District's Agricultural Water Allocation Policy

Approximately 97 percent of water used by farmers is independently pumped from groundwater. The groundwater basins that underlie the District are not adjudicated, thus individual pumping is not limited. However, the amount of water extraction is influenced by the rate structure in which well users pay a flat rate for each additional acre-foot of water pumped. Agricultural surface water deliveries are on demand subject only to the needs of the water treatment plants during times of shortage. Per the District's standard treated water contract, in times of water shortage, the District will reduce the total amount of agricultural water released to others for surface delivery before reducing deliveries of treated water.

F3. Official and Actual Lead Times Necessary for Water Orders and Shut-Off

Not applicable. Agricultural surface water is provided on demand, subject to the needs of the treatment plants in times of shortage.

F4. District's Policies Regarding Surface and Subsurface Drainage from Farms

Not applicable. There is no surface or subsurface drainage from farms.

F5. District's Policies on Water Transfers by the District and Its Customers

District's policies include the following:

Policy E-2.1: Current and future water supply for municipalities, industries, agriculture and the environment is reliable, and

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Policy E-2.1.4: Protect, maintain and develop imported water.

The District has routinely engaged in water transfers and exchanges to help meet these policies. Water transfers and exchanges have also been identified in the District's Integrated Water Resources Plan as a way to increase water supply reliability. Short-term or spot market, water transfers usually involve an agreement to purchase water within a one-to-two year period. The District routinely uses short-term water transfers to increase water supplies in times of shortage. Per District Policy EL-5.2.6, the District's Board of Directors has authorized the District's Chief Executive Officer to execute imported water agreements.

G. Water Measurement, Pricing and Billing

The District is a water wholesaler charged with treating water primarily sold to retail water companies and for recharging the groundwater aquifers to mitigate surface land subsidence. To most meaningfully describe the District's Water Measurement, Pricing and Billing practices, the information presented for Subsection G is by supply type (i.e., treated, raw surface, and groundwater). Distinctions between agricultural and urban users are highlighted for each supply type as appropriate.

G1. Water Measurement

The District operates an aggressive water measurement program for treated water deliveries, raw water deliveries and groundwater wells utilizing methodologies that are appropriate for each delivery type. All District water deliveries are measured and most are metered. The current water measurement program directly measures 100 percent of all treated water deliveries to District retailers using meters and 94 percent of all groundwater used. Table 1G (1) summarizes water measurement methods by type of water supply. This table is followed by discussion and additional tables for each type of water supply.

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Table 1G (1): Summary of Water Measurement Methods Used by SCVWD – 2009

Water Supply	No. of Accounts	Percent of Total	Water Quantity	Percent of Total
Treated Water				
Metered	28	100%	110,756	100%
Un-metered	0	0%	0	0%
Total	28	100%	110,756	100%
Raw Surface Water*				
Metered	26	46%	1,593	95%
Un-metered	30	54%	89	5%
Total	56	100%	1,682	100%
Groundwater				
Metered	1,067	19%	147,388	94%
Un-metered	4,607	81%	8,902	6%
Total	5,674	100%	156,290	100%
Total				
Metered	1,121	19%	259,737	97%
Un-metered	4,637	81%	8,991	3%
Total	5,758	100%	268,728	100%

Treated Water Measurement

All treated water accounts are measured. The type of measurement, number of accounts, and measurement frequency are identified in Table 1G (2).

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Table 1G (2): Water Measurement Methods Used by SCVWD - Treated Water

Water Supply	Type of Measurement Method	No. of Accounts	Accuracy (+/- %)	Reading Frequency Days	Calibration Frequency (Months)	Maintenance Frequency (Months)
Retailers- 8 retailers with 28 metered turnouts	2" mag meter	1	+/- 2%	7	12	Corrective Maintenance Only
	10" turbine	1	+/- 2%	7	12	24
	10" mag meter	1	+/- 2%	7	12	Corrective Maintenance Only
	12" mag meter	4	+/- 2%	7	12	Corrective Maintenance Only
	12" ultrasonic	2	+/- 2%	7	12	Corrective Maintenance Only
	16" mag meter	4	+/- 2%	7	12	Corrective Maintenance Only
	18" mag meter	3	+/- 2%	7	12	Corrective Maintenance Only
	20" mag meter	5	+/- 2%	7	12	Corrective Maintenance Only
	24" mag meter	3	+/- 2%	7	12	Corrective Maintenance Only
	30" mag meter	1	+/- 2%	7	12	Corrective Maintenance Only
	33" mag meter	1	+/- 2%	7	12	Corrective Maintenance Only
	36" mag meter	2	+/- 2%	7	12	Corrective Maintenance Only
Total		28				

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Raw Surface Water

As shown in Table 1G (3), there are 56 raw surface water accounts using Federal water in FY2009. Of the 56 accounts, 30 accounts are not individually metered. The 26 metered accounts represent 95% of the total Federal raw surface water volume.

Table 1G (3): Water Measurement Methods Used by SCVWD - Raw Surface Water using Bureau Water FY2009

Water Supply	Type of Measurement Method (Current)	No. of Accounts	Reading Frequency	Water Quantity
Agricultural	Meter	17	Monthly	1,124
Agricultural	Crop Factor Table	3	N/A	36
Subtotal Agricultural Only		20		1,160
Non-agricultural	Meter	9	Monthly	469
Non-agricultural	Table of Average Uses	27	N/A	53
Subtotal Non-agricultural		36		522
Total		56		1,682

There are three types of meters used on Raw Surface Water Accounts

Type	Size	Manufacturer
Propeller	4" – 10"	Water Specialties
Turbine	1.5" – 4"	Sensus
Multi-jet	1.5" – 2"	MasterMeter

Proposed Surface Water Measurement Program

Twenty four of the unmetered accounts are on a privately owned pipeline referred to as Half Road Lateral. As discussed with Reclamation's consultant, the District proposes using the Community Ditch concept in metering these accounts as follows:

1. Verify that the Half Road Lateral master meter is within the +/- 2% accuracy requirement within one year
2. Use the master meter as the volumetric device and work with the landowners to implement volumetric billing off the master meter.

The six remaining unmetered accounts will be evaluated over the next five years to determine the outlook for continuation of these accounts given that some have not used surface water in recent years. If the District determines that some accounts will continue, these accounts will be metered as available resources permit before the next 5 year plan update.

Groundwater Measurement

Groundwater usage represents approximately 54 percent of the District's total water supply and

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measuring by volume, 94 percent of groundwater use is metered as identified previously in Table 1G (1).

Table 1G (4) below provides data on groundwater pumping methods, accounts, reading frequency, and quantity. For un-metered groundwater accounts, a calculation of water usage is made and the well owner is billed. The un-metered residential well owners complete a worksheet to compute their water usage based on water usage factors supplied by the District. This process and recent improvements are described in Table 1G (5) and a copy of the worksheet is found in Appendix C. Metering small users is not considered to be cost effective per District Board of Directors resolution No. 91-53 (Setting Requirements for Metering of Well Production in Groundwater Production Zones of Santa Clara Valley Water District). Well owners may request a meter and the District will conduct an audit to determine whether it would be cost effective. If it is found to be cost effective, the District installs the meter.

Table 1G (4): Water Measurement Methods Used by SCVWD - Groundwater Pumping - FY2009

Water Supply	Type of Measurement Method	No. of Accounts/ Wells	Reading Frequency	Water Quantity***
Agricultural**	Meter	244	Semi-annually	17,919
Agricultural**	Table of Average Uses	473	Semi-annually	4,885
Non-Agricultural*	Meter	437	Monthly	126,207
Non-Agricultural	Not Metered	123	Monthly	0
Non-Agricultural***	Meter	386	Semi-annually	3,262
Non-Agricultural***	Table of Average Uses	655	Semi-annually	586
Non-Agricultural	Table of Average Uses	3,356	Annually	3,431
Total		5,674		156,290

*some of the monthly accounts claim agricultural usage

**may have some non-agricultural

***may have some agricultural

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Table 1G (5): New Water Production Auditing Tool Implemented

For more than 4,000 domestic and agricultural groundwater producing facilities, groundwater production is un-metered and is determined by means of worksheets included with annual and semi-annual water production statements (statements).

Using the worksheets, customers self-report the number of people using the well, the amount of land irrigated, the type of crop, the number of livestock, etc. Customers summarize the worksheet information on the statements and calculate their groundwater production charge.

When statements are received by Revenue Management Unit staff, each one is audited for accuracy. In the past, staff had to complete the audit based on the size and use of the parcel and historical production. When questionable production was reported, staff had to go to the well site to determine the correct production.

Beginning in 2004 and updated again in 2006, high resolution ortho-photographs were added to the District's Geographic Information System (GIS). This gave staff a new method to confirm what was reported on each statement. Staff now search GIS for a particular property or well, open the ortho-photograph showing an aerial view of the property and use GIS tools to calculate irrigated land areas. Using this new tool, staff is finding numerous errors in reported production. The detected errors result in invoices for under-reported production or refunds for over-reported production. Staff anticipates that as further work is done with customers to correct these reporting errors, the future number of errors in reporting by customers will be reduced.

Table 1G (6) below provides data as required for this CVPIA Water Conservation Plan on the specific measurement devices employed.

Table 1G (6): SCVWD Water Measurement Devices Used for Wells

Type Maintenance	Accuracy (%)	Reading (days)	Calibration (months)	Inspection (months)	No. of Meters
<u>Propeller Meters</u>					
Sparling LP Mainline					0
Water Specialties-Mainline LPS	+/-2%	30/180	8/10 years of production	2 years of production	429
McCrometer – Mainline LPS	+/-2%	30/180	5 years of production	1 year of production	1
Master Meter Multijet	+/-2%	30/180	10 years of production	none	65
<u>Turbine Meters</u>					
Badger Turbine	+/-2%	30/180	10 years of production	2 years of production	1
Sensus Turbine	+/-2%	30/180	10 years of production	2 years of production	165
<u>Electronic Meters</u>					
Sparling Tigermag					0
Eastec - Vortex Shutter					0
Nusonic - Ultra Sonic					0

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Type Maintenance	Accuracy (%)	Reading (days)	Calibration (months)	Inspection (months)	No. of Meters
Mapco - Ultra Sonic					0

G2. Water Pricing and Billing

Water Rate Schedules and Billing

The District's Water Utility is operated on an Enterprise Fund basis. The majority of revenue comes from sales of treated water to retail water agencies and from groundwater charges levied on retailers and on private well owners. Other revenue comes from charges for surface water diversions and from sales of recycled water in the Gilroy area. In addition, the District receives money from ad valorem taxes collected by the County.

Rate Structure for Water Deliveries that are Billed by Quantity

The District's current rates are based on uniform, quantity charges for the various sources of water and type of use. Charges are based on type of use (agricultural or M&I), zone of benefit, and quantity of water used. There are two water charge zones of benefit. Zone W-2 encompasses the Santa Clara Valley groundwater subbasin north of Metcalf Road. Zone W-5 consists of the Coyote and Llagas groundwater subbasins from Metcalf Road south to the Pajaro River (see Figure 2 in Section 1A). Within each zone, specific uniform rates are charged for each type of use depending on the source of the water/location and quantity used as presented in Table 1G (7). Treated water is available only in Zone W-2.

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Table 1G (7): Adopted Water Charges for Fiscal Year 2009-10

Type of Charge	AG Water (\$/AF)	M&I Water (\$/AF)
<i>Groundwater</i>		
Zone W-2	16.50	520.00
Zone W-5	16.50	275.00
<i>Surface Water</i> ¹		
Other Zone W-5 Deliveries ²	28.25	286.75
Other Zone W-2 Deliveries ³	28.25	531.75
Minimum Charge Zone W-5 ⁴	206.25	206.25
Minimum Charge Zone W-2 ⁵	390.00	390.00
<i>Stored Water</i>		
Zone W-2	16.50	520.00
Zone W-5	16.50	275.00
<i>Treated Water</i>		
Contract ⁶	N/A	620.00
Noncontract ⁷	N/A	670.00
<i>Recycled Water</i>		
Gilroy	41.50	275.00

¹ Surface water charge is the sum of the basic user charge plus the water master charge. It also includes the capital cost and power, wherever applicable.

² Other Zone W-5 Deliveries = Basic user (AG or M&I @ \$16.50/AF or \$275/AF) + Water Master (\$11.75/AF)

³ Other Zone W-2 Deliveries = Basic user (AG or M&I @ \$16.50/AF or \$520/AF) + Water Master (\$11.75/AF)

⁴ Minimum Charge W-5 = 0.75 X Basic User W-5 (M&I @ \$275.00/AF).

⁵ Minimum Charge W-2 = 0.75 X Basic User W-2 (M&I @ \$520.00/AF).

⁶ Treated Water Charge is the sum of Basic User (\$520.00/AF) and Treated Water Surcharge (\$100.00/AF).

⁷ Treated Water charge for noncontract deliveries is offered to all treated water retailers in the Rinconada Water Treatment Plant service area for deliveries from that facility. The charge for non-contract deliveries is the sum of the basic user charge (\$520.00/AF) and the treated water surcharge for non-contract water (\$150.00/AF).

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2009 Agriculture Water Charges

Agricultural users report their groundwater use semiannually based on metered usage. Groundwater used for agriculture is metered if a well's production exceeds 4 acre-feet per year in Zone W-2 or 20 acre-feet per year in Zone W-5 (as per Board Resolution No. 91-53). Water usage is calculated in accordance with Section 2.d of Ordinance 70-1 for wells without meters (due to their low production) based on crop consumption factors approved for different agricultural activities. Individual well owners can request a meter if they feel the calculation method is unfavorable.

2009 Urban Water Charges

The county's major water retailers and several large individual non-agricultural users (over 100 acre-feet annually) are billed for their groundwater use monthly based on metered usage. Users of less than 100 acre-feet of non-agricultural groundwater are billed semiannually. Groundwater used for non-agricultural purposes is metered if a well's production exceeds 1 acre-foot per year in Zone W-2 or 2 acre-feet per year in Zone W-5 (as per Board Resolution No. 91-53). Water usage is calculated for wells without meters (due to their very low production) based on consumption factors approved for different non-agricultural activities. Approximately 5,000 well owners in the District fall into this category, and are charged based on their calculated semi-annual or annual groundwater usage.

Table 1G (8): Annual Charges Collected from Customers FY2009

Fixed Charges			
Charges (\$ unit)	Charge units (\$/acre), (\$/customer) etc.	Units billed during year (acres, customer) etc.	\$ collected (\$ times units)
N/A	N/A	N/A	N/A

Volumetric charges			
Average Charges (\$ unit)	Charge units (\$/AF), (\$/HCF), etc.	Units billed during year (AF, HCF) etc.	\$ collected (\$ times units)
\$679/AF	\$/AF – Treated Water	108,885	\$74.012M
\$376/AF	\$/AF - Groundwater	162,209	\$61.104M
\$366/AF	\$/AF – Surface Water	3,014	\$1.106M
\$173/AF	\$/AF – Recycled Water	780	\$0.135M

See Attachment D, District Sample Bills

Ad Valorem Taxes

In addition to the water charges described above, activities of the Water Utility Enterprise are also financed by ad valorem taxes. The District receives a portion of the 1 percent countywide

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tax revenues as allocated by the County assessor. The District also levies additional ad valorem taxes under Article XIII A of the State Constitution to meet: (a) prior approved general obligation bond debt service and (b) part of the contractual obligations for State Water Project water.

Water-use Accounting Procedures

The District maintains records of water usage on computer files, microfiche, and printed files. For the north county, records go back to 1967. For the south county, records extend back to 1987, when the District merged with the Gavilan Water Conservation District. Upon written request, the District will provide a customer with a record of the water use for his/her account. Copies of current year bills that were provided to one agricultural and one urban customer are attached in Appendix C.

H. Water Shortage Allocation Policies

H1. Current Water Shortage Policies

The District's Board of Directors has adopted Governance Policies that direct "Current and future water supply for municipalities, industries, agriculture and environment is reliable" (E-2.1)". The CEO has interpreted these policies to mean that District should be able to manage a repeat of historical hydrology without significant customer impact. This is the District's water supply planning goal. As part of the IWRP process, a portfolio of potential water supply projects and programs were identified to address future water shortages. Components include additional development of local conjunctive use, additional surface storage or groundwater banking, recycled water, conservation, and water transfers. It is possible that more extreme hydrologic events could occur, or implementation of IWRP components could be slower or less effective than planned. Chapter 6 of the District's Urban Water Conservation Plan (UWMP) describes how the District might respond to drought, starting with increased public education and progressing to more stringent methods based on the most appropriate response to specific circumstances.

Water Shortage Contingency Plan from District 2010 Urban Water Management Plan

Stage	Stage Title	Projected GW Reserves	Response	Suggested Reduction in Water Use ⁽¹⁾	Communication and outreach effort
Stage 1	Normal	Above 300,000 AF	Continue regular outreach activities in this stage to promote ongoing implementation of conservation and implementation of BMPs.		<ul style="list-style-type: none"> • Maintain public information and outreach focused on long term, ongoing conservation actions (e.g., water saving appliances, repairing leaks, and low-water use landscaping).
Stage 2	Alert	250,000 to 300,000 AF	This stage is meant to warn customers that current water use is tapping into groundwater reserves – a signal that groundwater levels are dropping to meet demands. Communications are needed to set the tone for the onset of shortages.	0-10% demand reduction	<ul style="list-style-type: none"> • Expand on Stage 1 efforts • Intensify public information and advertising campaign • Focus messages on shortage situation and immediate behavioral changes

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Stage	Stage Title	Projected GW Reserves	Response	Suggested Reduction in Water Use ⁽¹⁾	Communication and outreach effort
			Request water users to reduce water use by as much as 10%. Coordinate ordinances with cities and warn and prepare for a stage 3 situation.		
Stage 3	Severe	200,000 to 250,000 AF	Shortage conditions are worsening, requiring close coordination with retailers and cities to enact ordinances and water use restrictions. Requires significant effort and behavioral change by water users. Increase outreach campaign to save water.	10-20% demand reduction	<ul style="list-style-type: none"> • Expand and intensify Stage 2 activities • Further expand outreach efforts • Modify messages to reflect more severe shortage condition and need for immediate behavioral changes
Stage 4	Critical	150,000 to 200,000 AF	This is the most severe stage in a multiyear drought. Encourage retailers and cities to enforce their plans which could include fines for repeated violations.	20-40% demand reduction	<ul style="list-style-type: none"> • Strengthen and expand Stage 3 activities • Further expand outreach efforts • Open drought information center
Stage 5	Emergency	Below 150,000 AF	This last stage is meant to address a more immediate crisis such as a major infrastructure failure. Water supply would be available only to meet health and safety needs.	Up to 50% demand reduction	<ul style="list-style-type: none"> • Daily updates on water shortage emergency (media briefings, web update, social media outlets) • Activate EOC
<p>Notes:</p> <p>(1) When the District Board calls for short-term water conservation, the cities and water retailers implement their water contingency plan actions identified in their Urban Water Management Plans in order to achieve the necessary shortage response. The District works with the water retailers and cities to help coordinate these activities.</p>					

Table 1H provides language included in the District’s Treated Water Contracts regarding water shortage allocations.

Table 1H: Language included in Treated Water Contracts in Case Water Shortage Allocations are Required

Availability of Water	
1.	In any year in which there may occur a water shortage by reason of drought or other temporary cause in the supply of water available for delivery to all users, District shall, before reducing other deliveries of water, reduce, or if necessary cease, to the extent permitted by the operation of District's facilities consistent with its obligations to receive water pursuant to the State and/or Federal contract, all deliveries of untreated water for recharge of groundwater.

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2.	If, despite such reduction or cessation of such deliveries of untreated water for groundwater recharge pursuant to the provisions of the preceding Section 1, a further reduction in deliveries shall become necessary if the treated water requirements set forth on the approved delivery schedule of District and Other Districts are to be met, District shall, before reducing deliveries to retailers and other districts, reduce the total amount of agricultural water (as defined in the Act) released to others for surface delivery during such fiscal year by an amount equal to the following: namely, the average of the releases of such surface-delivered agricultural water during the preceding 3 fiscal years multiplied by the percentage by which District's total receipt of water from State and Federal sources for agricultural use (as such use is defined in the State and Federal Contracts) is reduced in such year pursuant to provisions of said contracts.
3.	If any reduction in deliveries of treated water shall become necessary following reductions in untreated water pursuant to the provisions of the preceding Sections 1 and 2, District shall reduce deliveries of treated water to retailers and other districts in an amount which bears the same proportion to the total amount of such reduction that the amount included in such treated water user's approved delivery schedule bears to the total of the amount included in the approved delivery schedule of retailers and other districts for that fiscal year, all as determined by District; provided that District may apportion on some other basis if such is required to meet minimum demands for domestic supply, fire protection, or sanitation during the year. District agrees to notify retailers in writing promptly in the event any such reduction in deliveries to District and Other Districts shall be decided upon and concurrently of the amount of such reduction and of any changes in District's approved delivery schedule.
4.	District shall not be liable for failure to deliver water to retailer hereunder in the amounts herein above provided if such failure shall be caused by drought or any other reason beyond the reasonable control of District.
5.	District shall give retailers written notice as far in advance as possible of any reduction in deliveries of treated water which may be necessary because of a shortage in water supply.

H2. District's Current Year Policies that Address Wasteful Use of Water

The California Constitution (Art. X Sect. 2) prohibits the waste of water in California. The District's approach to reducing the wasteful use of water is to promote conservation. As described in Sections 3 and 4, the District has been very successful at encouraging local water users to conserve water. The District has developed model water use prohibitions and restrictions, and has worked closely with local retail agencies and cities to encourage their adoption and enforcement.

Reclamation staff recommended that the District develop an ordinance prohibiting water waste for the groundwater pumpers that are outside the boundaries of the 13 water retailers, and pay water management fees for the water they pump. In 2009, the District sought to include provision prohibiting waste of groundwater in a revision to the District Act. However, the District did not succeed in implementing the revision. Although an ordinance that gives the District authority to prohibit others from wasting groundwater has not yet been officially adopted by the District, the District's retailers implement measures that achieve similar objectives. Unlike its water retailers, the District has no authority to enforce an ordinance prohibiting groundwater

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waste. Therefore, a reasonable approach is to rely on water retailers to enforce similar measures. Water waste prohibitions are described by retailer in Appendix K.

As a wholesaler, the District works with local retail water suppliers to establish water use reduction targets. By working closely with its retail water agencies, the District has effectively set and achieved up to 25 percent mandatory reduction levels in the past.

Following the 1991 drought, the District Act was amended to allow the District to develop overproduction charges for groundwater pumping. This provision, Section 26.7, allows the District to establish tiered pricing during drought and water shortage conditions to minimize impacts to groundwater basin levels.

SCVWD District Act

§ 26.7. Levy and collection of groundwater charges; rates; new or adjusted charges, reports; notice; hearing; errors. (C) The rate or rates, as applied to operators who produce groundwater above a specified annual amount, may, except in the case of any person extracting groundwater in compliance with a government-ordered program of cleanup of hazardous waste contamination, be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board, upon a finding by the board that conditions of drought and water shortage require the increases. The increases shall be related directly to the reduction in the affected zone groundwater levels in the same base period.

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Section 2. Inventory of Water Resources

A. Surface Water Supply

The District manages surface water from both local and imported sources. In addition to local surface water, the District receives imported water from both the State Water Project and from the San Felipe Division of the federal Central Valley Project.

A1. Local Surface Water Supply

Information can be found in Appendix D which shows year 2009 actual surface supply by month and source in Table 1, and actual annual surface water deliveries by source from 2000 to 2009 in Table 8.

Annual supplies of local surface water are highly variable and have ranged from a low of less than 5,000 acre-feet to a high of over 500,000 acre-feet. The District holds local surface water rights for approximately 226,000 acre-feet per year. Through the District's reservoirs diversions and percolation facilities, about 86,100 acre-feet (41% of the average surface flows) are developed into local water supply with substantially more diversions in wet years and less in dry years, depending on hydrology. The balance of surface flows are conveyed by streams and rivers to Monterey or San Francisco Bay.

Water supply yield from the county's watersheds is limited by the capacity of the District's storage, recharge, and conveyance facilities and by operating strategies. Some reservoirs are not large enough to capture all of the inflows. During wetter years reservoirs fill and spill and inflows in excess of available storage cannot be utilized for water supply. Available storage in reservoirs for any given year depends on the amount of water carried over from the previous year and on strategies to provide minimum fish pools, emergency storage pools, flood management strategies, dam safety requirements and other criteria. Recharge capacity in ponds and streams below reservoirs and hydraulic constraints of conveyance facilities also limit utilization. The maximum volume the District's systems can recharge is about 140,000 acre-feet per year. Inflow to streams without reservoirs and to streams below reservoirs contribute to water supply to the extent that stream percolation recharges the aquifers used for water supply. When stream flows exceed the percolation capacity of the streambed, flow in excess of the percolation rate will not contribute to water supply.

A2. Imported Water Contracts

Both Central Valley Project and State Water Project supplies are imported from the San Francisco Bay/Sacramento-San Joaquin Delta. In recent years these supplies have been subject to increasing regulatory restrictions to protect environmental resources. The District has participated in ongoing processes, including the Bay Delta Conservation Program, to identify operational measures, programs and facilities that would improve water quality, water supply, and environmental conditions related to these imported water supplies.

State Water Project

The District contracted with the State Water Project (SWP) in 1961 for a maximum of 100,000 acre-feet per year. Deliveries began in 1965. Since 1991, regulatory conditions have reduced

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SWP deliveries. Staff analysis of anticipated Environmental Species Act impacts and other requirements indicates that SWP deliveries may be reduced to an average delivery of 60,000 acre-feet per year in normal years and 35,000 acre-feet per year in a critical dry period.

San Felipe Project

In 1977, the District entered into a contract with the United States Bureau of Reclamation for a maximum of 152,500 acre-feet per year from the San Felipe Division of the Central Valley Project. The first deliveries occurred in 1987. During the period between 1987 and 1991, drought conditions and regulatory restrictions impacted deliveries of CVP water. During this period, deliveries averaged 72,000 acre-feet per year, and were as low as 48,375 acre-feet per year in 1991. After the drought, Reclamation established an Interim M&I Water Reliability Policy which provides some protection to Central Valley Project M&I supplies. In addition, a Water Reallocation Agreement was executed in 1997 by the District, Reclamation, and certain agricultural Districts who are members of the San Luis & Delta-Mendota Water Authority, which further resolved issues related to the District's M&I water supplies from the Central Valley Project. As a result, the District's long-term average Central Valley Project water allocation for M&I and agricultural purposes is about 113,000 acre-feet per year.

B. Groundwater Supply

B1. Acre-foot amounts of ground water pumped and delivered by the District

The District does not currently operate any water supply wells and has not pumped and delivered groundwater historically. The Campbell Wellfield, which is anticipated to be completed in 2012, will allow the District to pump groundwater if necessary as an emergency backup to its treated surface water system. Once complete, the wells will be run periodically to keep them exercised. Otherwise, it is not anticipated that water will be pumped and delivered on a regular basis.

B2. Groundwater Basins that Underlie the District

The groundwater subbasins in Santa Clara County provide about half of the county's water supply for potable use, through pumping by retail water agencies or individual well owners. The District has identified three subbasins: the Santa Clara Subbasin in the north county and the Coyote and Llagas Subbasins in the south county. The Santa Clara Plain and Coyote Valley Subbasins together comprise the subbasin recognized as the Santa Clara Subbasin (Basin 2-9.02) by the Department of Water Resources Bulletin 118, while the Llagas Subbasin is equivalent to DWR's Llagas Subbasin (Basin 3-3.01). Table 2B(1) lists the approximate size and operational storage capacity of each subbasin. The operational storage capacity is the volume of groundwater between the operational minimum and maximum groundwater elevations. Groundwater elevations outside this range would lead to unacceptable adverse impacts, such as land subsidence. A description of each subbasin follows the table, and a map of District subbasins and recharge areas is provided thereafter in Figure 5.

Table 2B : Groundwater Subbasins that Underlie the District

Name	Size (Sq Mile)	Operational Storage Capacity (AF)
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Name	Size (Sq Mile)	Operational Storage Capacity (AF)
Santa Clara Subbasin	225	Currently estimated at 350,000 AF
Coyote Subbasin	15	Currently estimated at 25,000 AF
Llagas Subbasin	74	Currently estimated at 150,000 AF

Santa Clara Valley Subbasin

The Santa Clara Valley Subbasin extends from the Coyote Narrows at Metcalf Road to the county's northern boundary. It is bounded on the west and southwest by the Santa Cruz Mountains and on the east by the Diablo Range; these two ranges converge at the Coyote Narrows to form the southern limit of the subbasin. The subbasin is 22 miles long and 15 miles wide, with a surface area of 225 square miles. A confined area within the northern portion of the subbasin maintains pressure in the deeper aquifers. The confining zones consist of low permeability, interbedded clay-rich deposits that begin about 50 feet below ground surface and occur discontinuously in an overlapping fashion to about 200 feet below ground surface. The southern portion of the subbasin and around the base of the mountains is the unconfined area or forebay comprised primarily of permeable materials and the clay-rich deposits that do occur form small discontinuous areas that are not overlapping. The forebay is the effective recharge area of the groundwater subbasins. DWR Bulletin No. 7 estimated the storage volume to be 1,770,000 acre-feet, but this estimate does not account for any operational constraints such as land subsidence. The volume of groundwater storage between operational maximum and subsidence threshold (the operational storage capacity) is currently estimated to be 350,000 acre-feet.

Coyote Groundwater Subbasin

The Coyote Subbasin extends from Metcalf Road south to near Cochrane Road, and drains into the Santa Clara Subbasin. This subbasin is approximately 7 miles long and 2 miles wide and has a surface area of approximately 15 square miles. The entire subbasin is unconfined and has no significant clay deposits. DWR Bulletin No. 7 lists the subbasin storage capacity at 76,000 acre-feet. District staff currently estimates the operational storage capacity is 25,000 acre-feet, accounting for constraints.

Llagas Groundwater Subbasin

The Llagas Subbasin extends from near Cochrane Road in Morgan Hill, south to the county's southern boundary. It is part of the Gilroy-Hollister Groundwater Basin, and is connected to the Bolsa Subbasin with a political boundary at the Pajaro River (the Santa Clara-San Benito County line). The Llagas Subbasin is approximately 15 miles long, 3 miles wide along its northern boundary, and 6 miles wide along the Pajaro River. The subbasin surface area is approximately 74 square miles. The confined area in the southern portion of the Llagas Subbasin is analogous to the confined area in the Santa Clara Subbasin and can maintain pressure in the deeper aquifers. The confining zones consist of low permeability, discontinuous, interbedded, and overlapping clay-rich deposits beginning about 50 feet below ground surface to a depth of about 150 feet below ground surface. DWR Bulletin No. 7 estimates the storage volume of this subbasin at 475,000 acre-feet. District staff currently estimates the operational storage capacity as 150,000 acre-feet.

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Groundwater Basins and Recharge Areas
Figure 4:

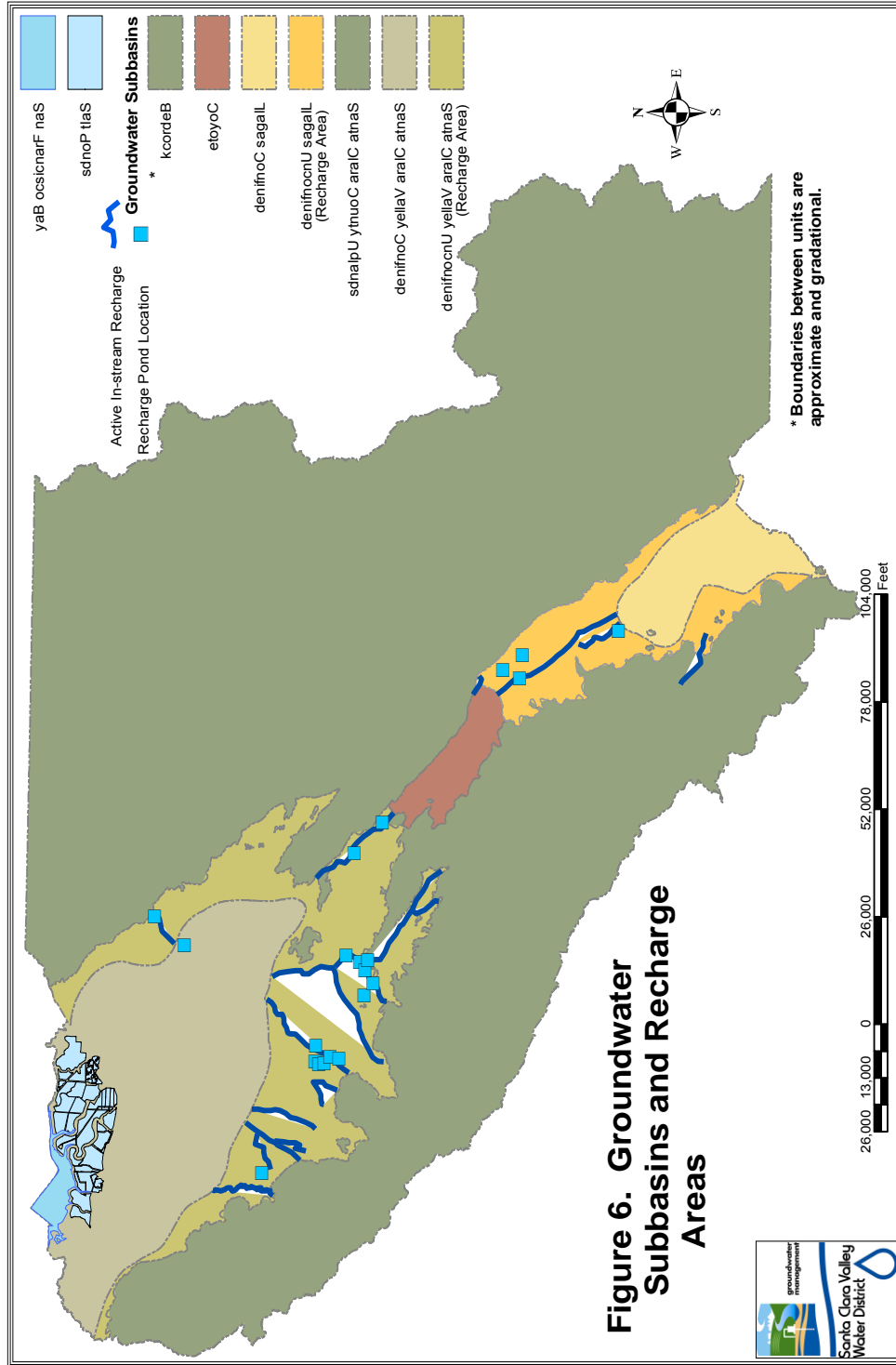


Figure 6. Groundwater Subbasins and Recharge Areas

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B3. District-Operated Wells and Managed Groundwater Recharge Areas

The District owns many monitoring wells and a few wells that are used to irrigate District mitigation projects. None of the District owned wells are operated to provide water for agricultural or M&I use. Figure 5 (above) is a map of groundwater subbasins and recharge areas.

B4. Conjunctive Use of Surface and Groundwater

The District operates and maintains 18 major recharge ponds, with a combined surface area of approximately 390 acres, and over 22 local creeks for artificial recharge to replenish the groundwater basin. Runoff is captured in the District's reservoirs and released into both instream and offstream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds for groundwater recharge.

The District's system can recharge about 110,000 acre-feet per year, assuming water is available, all ponds are regularly cleaned, and other conditions are met. Environmental concerns have limited the use of instream facilities, and actual operations may vary from year to year. On average about 91,000 acre-feet per year can be captured and recharged into the groundwater subbasin. The 2010 controlled recharge of the various systems was 101,778 acre-feet as shown in Section 2E (5).

B5. Management Plan for Groundwater Subbasins

The Groundwater Management Plan can be found on the District website at <http://www.valleywater.org/Services/Groundwater.aspx>

B6. Description of the SCVWD Groundwater Banking

In May 1996, the District took the first step in implementing its banking strategy when it approved an agreement with Semitropic Water Storage District (Semitropic) to store 45,000 AF of SWP water in Semitropic's groundwater basin on behalf of the District. In 1997, the District approved a long-term agreement with Semitropic. Operating under this agreement, the District has banked water in eleven years since 1997, and withdrawn water in four years. The total storage capacity available to the District in Semitropic Water Bank is 350,000 AF, and the current storage balance (January 2011) is 264,837 AF.

C. Other Water Supplies

Long-term water supplies not described above include those identified below.

Hetch Hetchy

Although the District does not contract with the San Francisco Water Department to receive water from the Hetch Hetchy Project, seven water retailers in Santa Clara County have independent contracts for Hetch Hetchy supplies. The county normally receives about 70,000 acre-feet per year from this source, but these contracts are interruptible. When the Hetch Hetchy supplies are reduced, the District would most likely need to meet the resulting water

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demands in order to protect the groundwater basin. Demand is met primarily through the retailers' increasing their groundwater pumping, since few District facilities are in place in the areas with Hetch Hetchy contracts. Reported 2009 Hetch Hetchy deliveries totaled 54,746 acre-feet. Deliveries are made directly to eight retail water agencies serving the cities of Palo Alto, Sunnyvale, Mountain View, Los Altos Hills, Santa Clara, San Jose, and Milpitas. Stanford University and Moffett Field also buy water from the Hetch Hetchy system.

Long-Term Transfers

The District has entered into an innovative long-term agreement to improve dry-year reliability. In April 1999, the District entered into an agreement with Pajaro Valley Water Management Agency and Westlands Water District to transfer up to 6,260 acre-feet per year of Central Valley Project agricultural water from Mercy Springs Water District. The District's share of the agreement consists of an option for dry year water totaling 20,000 acre-feet over the next 20 years. After 20 years, Pajaro Valley Water Management Agency has the option of buying out the District's interests in the agreement.

Short Term Transfers and Exchanges

The District participates in short-term water transfers and exchanges on a routine basis. For example, in 2009 when CVP and SWP allocations initially were low, the District purchased about 16,000 acre-feet through seven separate transactions. SCVWD relies on dry-year water purchase programs established by the State Water Contractors and the San Luis & Delta Mendota Water Authority, including water available under the Yuba River Settlement Agreement. The District also routinely exchanges water with other CVP contractors to manage supplies from one contract year to the next.

The District will continue to use short-term water transfers and exchanges for annual water management. The District's updated Integrated Water Resources Plan includes long-term water transfers in its water management portfolios. SCVWD will continue to evaluate opportunities to secure long-term transfers that would provide up to 40,000 acre-feet of water in dry and critically dry years.

D. Source Water Quality Monitoring Practices

Surface Water Quality Monitoring Program

The District conducts an extensive water quality monitoring program for reservoirs utilizing CVP source water. Surface water monitoring is conducted pursuant to Title 22 of the California Code of Regulations, under the direct oversight of the California Department of Public Health, and Source Water Quality Management Program under the District's Water Quality Management Plan.

The direct source of CVP surface water for SCVWD is the San Luis Reservoir. After CVP water reaches Santa Clara County, most of it is delivered directly to the treatment plants or used for artificial recharge. CVP water can also be stored in two local District reservoirs, Anderson and Calero, where it is blended with local runoff. The SCVWD conducts monitoring in all three reservoirs.

Anderson Reservoir can receive CVP water via the Santa Clara Conduit, but is also fed by local

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rainwater. Calero can receive San Luis Reservoir CVP water via the Santa Clara Conduit and the Cross Valley Pipeline, or can receive a blend of CVP and San Luis and Anderson reservoirs' source water through the Cross Valley Pipeline and is also fed by local rainwater.

The District Title 22 monitoring program includes the compliance categories of general physical, microbiological, radionuclide, general mineral, inorganic and regulated organics, which include pesticides, herbicides and volatile organic carbons.

The Source Water Quality Management Program monitoring includes Title 22 parameters plus site specific local reservoir concerns of nutrients, fluorescence, bromide, Disinfection By-Product (DBP) precursors, ammonium perchlorate, and MTBE.

D1. Surface Water Quality Problems: How Quality Problems Limit the Use of Source Water

Surface water quality problems associated with San Luis Reservoir are primarily limited to algal growth events. These algal problems may arise when the level of the reservoir drops allowing algae floating near the surface to be sucked into the intake. An extensive investigation, the San Luis Reservoir Low Point Improvement Project, is underway to explore how this issue can be resolved. Algal growth, and eventual die-off, creates taste and odor episodes and the possible formation of DBP precursors. Treatment plant operations can be adjusted if algal build-up is not severe. Bromide levels are a DBP consideration with the addition of ozone processes at the water treatment plants.

Past water quality problems in Calero and Anderson reservoirs are associated with recreational use or residential growth, such as MTBE and bacteriological contamination. As stand-by drinking water sources, a program to prevent, manage, or mitigate potential water quality problems is in place called the Emergency Reservoir Operations Plan (EROP). The EROP is a method to allow water from these reservoirs to be used directly by treatment plants under a wide range of water supply and water quality emergency conditions while still allowing "incidental" water contact activities to continue. The term "incidental" excludes wading and swimming.

Groundwater Quality Monitoring Programs

The District implements a general groundwater quality monitoring program and conducts special monitoring studies on an as-needed basis. The 2009 groundwater quality analysis evaluated data from 94 wells sampled by the District and 211 wells sampled by water suppliers. For each of the three subbasins, the annual evaluation includes the following: general evaluation of water quality conditions; comparison of the annual data to drinking water standards and basin objectives for agricultural water; and analysis of water quality trends of nitrate, total dissolved solids, and chloride over the past 10 years. As the Santa Clara and Llagas Subbasins have significant confining layers, data for these subbasins is also analyzed for both the shallow and principal aquifer zones. Samples collected by the District are analyzed for major and minor inorganic compounds, volatile organic compounds, and other commonly included parameters such as nitrate, total dissolved solids, and specific conductance.

In addition to the basinwide monitoring program, special studies are performed as needed in

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selected areas or basinwide for selected chemicals. A major past study determined the location and extent of saltwater intrusion from the San Francisco Bay into shallow drinking water aquifers and inter-aquifer transfer along abandoned wells into deeper drinking water aquifers.

Groundwater Protection Programs

The District Act identifies water supply protection as part of the District's purpose (District Act Section 4(c)(4)). The goal of the District's groundwater protection programs is to evaluate water quality, identify potential threats, and implement programs to protect the quality of groundwater resources in accordance with District Water Supply Goal 2.1 "Current and future water supply for municipalities, industries, agriculture and the environment is reliable" and Water Supply Objective 2.1.1 "Aggressively protect groundwater basins from the threat of contamination and maintain the groundwater basins for reliability".

Through this countywide operations project, the District evaluates groundwater quality and potential threats and implements groundwater protection programs to help assure the long-term viability of groundwater resources. Activities include: assessing groundwater quality conditions, including the evaluation of trends; evaluating threats to groundwater quality; developing and implementing strategies for groundwater protection from point and non-point contaminant sources, including stormwater runoff and nitrate; analyzing groundwater quality data near recycled water irrigation sites; coordinating on recycled water issues to ensure adequate groundwater protection; evaluating the quality of water used for intentional groundwater recharge; maintaining updated and validated water quality data; tracking the status of high-threat contamination cases and coordinating with the appropriate regulatory agencies; and conducting public outreach related to groundwater protection.

The District's Well Ordinance Program administers Ordinance 90-1 (included in Appendix F), which the District adopted to protect groundwater. In direct support of District Water Supply Goal 2.1 and Water Supply Objective 2.1.1, this program is implemented to protect the quality and quantity of the County's groundwater resources by ensuring that wells are constructed, destroyed, modified, and maintained so that they do not act as vertical conduits that could allow poor quality surface or subsurface waters to move into drinking water aquifers. This program includes permitting, inspection, tracking and violation enforcement for wells and other deep excavations in Santa Clara County. Over 2,400 well permit applications are reviewed and processed annually. Over 2,000 well construction, destruction, or investigative well boring events are inspected annually. Over 100 well violation enforcement cases are pursued annually.

These activities directly relate to the District's core mission of comprehensive water resources management and the protection of groundwater supplies, and are critical to conserving groundwater resources and maintaining the long-term sustainability of the subbasins.

Groundwater Quality Problems Which Limit Use of Source Water

The majority of wells within Santa Clara County produce high-quality water that meets drinking water standards. The primary exception is nitrate, which is elevated in a number of wells in the Coyote Valley and Llagas Subbasin and continues to be a concern that the District and other agencies like the Regional Water Quality Control Boards are working to address.

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The District's 2010 Groundwater Quality Report includes an evaluation of water quality data from wells sampled by the District and local water suppliers. Unlike public water suppliers who sample for compliance purposes, the District monitors groundwater to assess regional conditions to identify potential adverse impacts, so they can be appropriately addressed.

For the wells analyzed in 2010, primary drinking water standards were exceeded at the following percentage of wells tested: nitrate (8%), perchlorate (<2%), and aluminum (<2%). Detections above drinking water standards occurred at both groundwater monitoring wells and water supply wells. Additional constituents were detected above secondary aesthetic-based drinking water standards, including TDS (19%), specific conductance (17%), iron (11%), manganese (9.6%), turbidity (<2%), aluminum (<2%), color (<2%) and Chloride (<1%).

Elevated nitrate concentrations are an ongoing groundwater quality challenge in the Coyote and Llagas Subbasin. For the wells analyzed in 2010, nitrate was detected above the primary drinking water standard of 45 mg/L in one public water supply well and one domestic well in the Coyote Valley. In the Llagas Subbasin, nitrate was detected above 45 mg/L in eight groundwater monitoring wells, 4 public water supply wells, and 7 domestic water supply wells. Although domestic wells are not subject to drinking water standards, public water systems must meet drinking water standards. For constituents detected above primary drinking water standards, this may require blending or treatment by the water supplier prior to delivery to customers. The District has undertaken various efforts to define the extent and severity of nitrate contamination, identify potential sources, and reduce nitrate loading. Current efforts focus on the evaluation of nitrate data to assess hot spots and trends, public outreach, and collaboration with other agencies to increase water and nutrient use efficiency.

Comparison of the 2010 data against the respective agricultural objectives in the Regional Water Quality Control Board Basin Plans indicates relatively few instances where constituents were detected above objectives for the wells in the Santa Clara Plain and Coyote Valley except for nitrate. In the Llagas Subbasins, the constituents most commonly detected above agricultural objectives were nitrate, bicarbonate, and specific conductance.

D2. Urban Districts—Annual Customer Water Quality Report

As a wholesaler of drinking water, the SCVWD does not provide Consumer Confidence Reports (CCR) directly to customers. Instead, each water retailer develops their own CCR. A table of parameters and their values to be included in a CCR, is provided to each retail customer by the SCVWD. The parameters and analysis results can be found in the *Annual Water Quality Report—Treated Water* which is submitted to the Regional Board. The CCRs for 2009 for retailers who buy water from SCVWD are included in Appendix E. Due to the blending of District sources, this water is a mix of CVP, State Water Project and local sources.

D3. Agricultural Districts Concerns

There are a limited number of agricultural users who take direct delivery of San Luis Reservoir CVP water through turn-outs on the Santa Clara Conduit and Cross Valley Pipeline. No water quality problems have been reported by the current users. Although algae problems in San Luis Reservoir could potentially clog drip irrigation systems as they have in San Benito County, the District's metering maintenance program is designed to address clogging from sediment and

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algae by frequent cleaning. Please refer to Table 2D for algal water quality testing performed by the District. No other agricultural water quality issues have been identified.

D4. Current Water Quality Monitoring Programs for Surface Water

As previously stated, surface water quality problems associated with the San Luis Reservoir are primarily limited to algal growth events. A variety of analyses are conducted by the District's water quality laboratory to monitor and track the precursors to an event, the speciation of algal populations, and taste and odor constituents associated with an algal episode. Table 2D summarizes algal analysis for the San Luis Reservoir.

Table 2D: Algal Analysis for San Luis Reservoir*

Analyses performed	Frequency Range	Concentration Range	Average Range
Algal cell/ml	3 per sampling station per month (May – Oct)	27-9242	168-3736
Fluor (Rhod-Equiv)	all sampling stations per month (May – Oct)	30-210	49-136
- Nutrient Precursors - NH3 mg/N03mg/l - P04 mg/l	1 per sampling station per quarter	NH3: ND N03: 3.0-4.0 PO4: 0.17-0.24	NH3: ND NO3: 3,3 PO4: .21
TOC mg/l(Total Organic Carbon)	1 per sampling station per quarter	1.76-3.93	3.10

*Complete analysis results can be found in 2010 Annual Water Quality Report: Source/Raw

D5. Agricultural District Current Year Total Dissolved Solid Range

For 2009, the total dissolved solids of groundwater in the principal aquifers varied from 214 to 1410 mg/l in the Santa Clara Valley Subbasin, with a median of 390 mg/l. For the Coyote Subbasin, dissolved solids varied from 308 to 560 mg/l, with a median of 330 mg/l. For the Llagas Subbasin principal aquifers, dissolved solids varied from 198 to 1420 mg/l, with a median of 369 mg/l.

E. Water Uses within the District

E1. Agricultural

Appendix D contains the water balance for 2009 including information about average annual crop acreage and water use from the District Water Resources Information System (WRIS). The data contained in WRIS is limited to agricultural production in the District's water utility zones that utilize groundwater and surface water supplies managed by the District. Information about individual irrigation methodologies is extremely limited. Information that has been collected with water bills is included in Table 2E (1) below. As described in Section 3, the District has a program of on-farm irrigation evaluations that teach individual farmers best management practices. Information from District CIMIS weather stations is used to allow farmers to tailor irrigation to existing weather patterns and crop needs.

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E2. Types of irrigation systems used for each crop

Table 2E (1): Most Common Irrigation Method of 2009 Crops

Crop	Acres	Irrigation Method
Peppers	2019	Trickle/Drip
Lettuce	2157	Trickle/Drip
Mixed Row	2038	Sprinkler
Cherries	868	Trickle/Drip & Sprinkler
Tomatoes, Bush	1349	Trickle/Drip
Grapes(vineyards)	1516	Trickle/Drip
Corn (sweet)	924	Trickle/Drip

Note: This information was reported through SCVWD's billing process.

E3. Urban

District records for 2009 show that the water use in the county is about 92 percent municipal and industrial (M&I) use and about 8 percent agricultural use. The District is a wholesale supplier of water to 10 major M&I users or retailers.

Although the District collects and analyzes water use patterns using retailer use by class data, each of the retailers in the county uses different classification breakdowns making comparisons difficult. Consequently, detailed breakdowns of water use within the District by type such as single family, multifamily, commercial and industrial are not available. However, the District is meeting regularly, through a water conservation subcommittee, with its water retailers to discuss reporting uniformity, as well as various other areas in which consistency among retailers is desirable. Through these discussions, it has become apparent that standardization of data reporting will require significant and potentially costly improvements to the retailers' billing systems. The District will continue to work with its retailers to facilitate these changes.

Table 2E (2) below, lists the District related water use data for 2009, and Table 2E (3) (following page) lists total water use by the District's retailers for 2009.

Table 2E (2): Retailer Related Water Use for 2009

Customer Type	No. of Connections 2009 Data	Urban Retailer 2009 Use (AF)
Raw Surface Water	80	2,970
Wholesale (Treated Water)	28 (District connections to water retailers)	110,900
Groundwater	5674	155,120
Reclaimed	7	15,280
Other (Hetch-Hetchy, Stanford, San Jose)	Not applicable	67,420
Unaccounted for		None
	TOTAL	351,690

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TABLE 2E(3): Total Water (AF) Use by Retailers for FY2009

Retailer	Treated Water	Ground-Water	Local Water	Hetch-Hetchy	Recycled Water	TOTAL Water Use
California Water Co.	8,728	5,213				13,941
City of Cupertino	2,824	360				3,184
Great Oaks Water Co.		5,376				5,376
City of Milpitas	3,509			7,581	950	12,040
City of Mountain View	1,148	446		10,637		12,231
City of Palo Alto				12,778	1,420	14,198
Purissima Hills				2,161		2,161
City of San Jose	14,864	814		4,783	5,066	25,527
San Jose Water Co.	67,508	60,505			1,230	129,243
City of Santa Clara	4,105	14,833		2,799	2,451	24,188
Stanford				2,411		2,411
City of Sunnyvale	8,176	1,231		11,596	1,643	22,646
City of Gilroy		8,475			1,902	10,377
City of Morgan Hill		7,816				7,816
TOTALS	110,862	105,069		54,746	14,662	285,339

E4. Urban Waste Water Collection and Treatment Systems Serving the Entire District Service Area (E3) and Urban Recycled Wastewater (E4)

Table 2E(4) below provides data responding to both sections E3 and E4.

Table 2E(4): Santa Clara County Waste Water Discharge for 2009 (AF)

Treatment Plant	Discharge To So. SF Bay	Reuse	Discharge to South County
Palo Alto	24,444	1,849	
Sunnyvale	3,976	1,454	
South Bay Water Recycling Program	119,742	9,901	
South County Regional Wastewater Authority		2,072	(Percolation) 5,535
Total	148,162	15,276	

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E5. Groundwater Recharge/Management/Banking in District Operated Groundwater Recharge Areas (as identified in Section 2B).

As discussed in Section 2B, the District operates and maintains 18 major recharge ponds, with a combined surface area of approximately 390 acres, and over 22 local creeks for artificial recharge to replenish the groundwater subbasins. The artificial recharge systems, method of recharge and controlled recharge are listed in Table 2E(5) below.

Table 2E(5): Recharge Volume and Method for each Recharge Area for 2008-2010

Recharge Area	Method of Recharge	2008 (AF)	2009 (AF)	2010 (AF)
Penitencia	Pond and instream percolation	2,470	3,043	2,128
Los Gatos	Pond and instream percolation	14,271	27,470	23,507
Westside	Pond and instream percolation	10,137	11,070	12,808
Guadalupe	Pond and instream percolation	15,682	13,913	15,260
Coyote	Pond and instream percolation	23,261	23,900	20,514
Upper Llagas	Pond and instream percolation	7,738	10,534	12,144
Lower Llagas	Pond and instream percolation	13,834	12,646	15,416
	Total	87,393	102,576	101,778

E6. Transfers and Exchanges (Described in Section 2C)

E7. Trades, Wheeling and Other Transactions of Water (Described in Section 2C)

E8. Other Uses of Water (Described in Section 2C)

F. Outflow from the District

F1. Surface and subsurface drain/outflow in current year

All drainage from the District service territory flows to one of two destinations: (1) San Francisco Bay to the north or (2) the Pajaro River to the south. The average local surface flow in the county is about 193,700 acre-feet per year based on the hydrologic data for the period 1967 to 1991. An unknown percentage of this flow may reach the bay or river depending on that year's hydrology and recharge operations. This, combined with wastewater treatment plant discharge of approximately 200,000 acre-feet, represents all drainage from the county.

F2. Description of the Outflow (surface and subsurface) water quality testing program and the role of each participant in the program

The District has no Outflow water quality testing program.

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F3. Outflow (surface drainage & spill) Quality Testing Program

Not applicable

F4. Not applicable. The District's service area is not within the jurisdiction of the Central Valley Water Quality Control Board.

G. Water Accounting (Inventory)

The completed tables for the Water Accounting Inventory are located in Appendix D

H. District Quantifiable Objectives (QOs)

Not applicable

Section 3: BMPs for Agricultural Contractors

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A. Critical Best Management Practices for Agricultural Contractors

A1. Measure the volume of water delivered by the Contractor to each turnout with devices that are operated and maintained to a reasonable degree of accuracy, under most conditions, to +/- 6 percent.

As discussed in Section 1-G, the District has a comprehensive water measurement program for surface water, treated water, and groundwater.

Number of turnouts that are unmeasured or do not meet the standards listed above: 30

Number of measurement devices installed last year: -0-

Number of measurement devices installed this year: -0-

Number of measurement devices to be installed next year: -0-

Measurement devices are installed as requested by customers. There are no planned installations

A2. Designate a water conservation coordinator to develop and implement the Plan and develop progress reports.

Name:	<u>Jerry De La Piedra</u>	Title:	<u>Water Use Efficiency Unit Manager</u>
Address:	<u>5750 Almaden Expressway</u> <u>San Jose, CA 95120</u>	Phone:	<u>(408) 265-2607 X2257</u>
		Fax:	<u>(408) 979.5639</u>
		E-mail:	<u>gdelapiedra@valleywater.org</u>

A3. Provide or support the availability of water management services to water users.

The District has sponsored a mobile irrigation lab within its service territory intermittently since 1998. The lab performs agricultural irrigation system distribution uniformity evaluations and pump efficiency tests.

The District currently maintains one California Irrigation Management Information System (CIMIS) station located in Gilroy. A second CIMIS station is in planning for East San Jose to support increased accuracy of Spatial CIMIS estimation, and two non-ideal weather stations operate in Saratoga and San Martin.

The District provides CIMIS reference evapotranspiration estimates for use in irrigation scheduling on the District's website. Local CIMIS station information, non-ideal station estimates for Saratoga and Spatial CIMIS evapotranspiration estimates county wide are available (<http://www.valleywater.org/programs/agriculture.aspx>). Irrigation scheduling calculators for drip and sprinkler systems are available on the District's website and on floppy disc for use with PCs or Macs.

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The District also presently funds the Santa Clara County Farm Bureau to provide intensive irrigation scheduling and educational and technical assistance to ten growers for a three year period.

a. On-farm evaluations

- 1) Data for on-farm irrigation system evaluations using a mobile lab type assessment are presented in Table 3A(1)

Table 3A(1): Agricultural Irrigation System Evaluations - 2009

Total number of irrigated acres:	18,203 +/- 300
Number of irrigated acres surveyed by on-farm irrigation evaluations:	62
Total number of Registered Growers:	431
Number of farms surveyed by on-farm irrigation:	10

- 2) Timely field and crop specific water use information to the water user.

Reference evapotranspiration (ET_o) estimates are available on the District's Web site. Irrigation calculators based on crop and percent shaded area are available on the site as well. Irrigation scheduling consultation is available upon request to growers.

b. Normal year and real-time irrigation scheduling and crop ET information

Normal year irrigation scheduling does not work adequately west of the Coast Range. Real-time irrigation scheduling is not actually real-time. The District will put estimates of daily ET_o, for major local crops for the past year on the District's web site in the spring of 2011. The District also plans to post populations of per-acre water use for major local crops derived from groundwater production statements.

c. Surface, ground and drainage water quantity and quality data

See Section 2-D for water quality information and Section 2-F for irrigation drainage information.

d. Agricultural water management educational programs and materials for farmers, staff, and public

The District maintains an agricultural section on its website, www.valleywater.org, featuring CIMIS information and irrigation calculators.

Table 3A(2): Summary of District's Irrigation and Fertilizer Management Program

Program	Co-funders (if any)	Yearly targets (audience)
Irrigation technical instruction	N/A	10

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A4. Pricing Structure

As described in Section 1G, the District's current rates are based on uniform, quantity charges for the various sources of water type of use. Costs are in direct proportion to the amount of use. Agricultural rates are set low by the District to help preserve the open space benefits of agriculture. As stated in Section 1G, Agricultural users can receive rebates of up to \$5 per acre-foot by taking part in the Mobile Lab Rebate Program and Infield Nutrient Assessment Assistance Program. The District currently plans to retain the existing billing procedures and pricing structure as detailed in Section 1G of this report.

A5. Evaluate and describe the need for changes in policies of the institutions to which the district is subject.

Uncertainty over annual allocations of CVP water in some years has caused the District to forego groundwater recharge during the early months of the District's contract year (January through March) to ensure sufficient supplies in later months to meet the anticipated needs at the treatment plants. If very low initial allocations are increased in the final April allocation, the District has lost the opportunity to recharge during the early months of the year. Finalizing Reclamation's M&I Water Supply Reliability Policy would reduce uncertainty and improve the District's ability to manage groundwater.

A second area of operational uncertainty is related to conveyance interruptions or difficulties in the San Felipe Division caused by water quality degradation during the annual low point of San Luis Reservoir, or facility outages. Reclamation should facilitate efforts to increase the District's operational flexibility to address these uncertainties. Specifically, Reclamation should support the District in its efforts to secure approvals that would allow delivery of the District's CVP supplies through the South Bay Aqueduct. This would allow the District to take delivery of its CVP supplies when conveyance issues arise on the San Felipe Division.

Reclamation's water transfer policies and application process should facilitate transfers to a greater degree. Transaction costs for transferring both Project and non-Project water should be minimized. For non-Project water ("Warren Act contracts"), the capital portion of the required cost-of-service rate should be applied to the District's repayment obligation for the facilities used.

A6. Evaluate and improve efficiencies of Contractor's pumps.

The District operates two pumping plants which include multiple pumps in parallel. Deliveries are currently scheduled from multiple sources so that water transmission and distribution systems operate by gravity whenever feasible. The system was designed to meet future demand. Increases in demand will thus necessitate significantly more pumping in the future.

Pump efficiency is rated for the range of flow rates and hydraulic grade conditions. Pumping plant operations are generally set to achieve maximum efficiency for the given hydraulic conditions and flow requirements. Pumps are tested for efficiency before and again after they are rebuilt. The target has been to rebuild the pumps at a period of no greater than 15 years or generally 35,000 hours of operation. The limit of 15 years is based on the understanding of the corrosion issues and fatigue failure of the pump wear rings gained through experience with the

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equipment. Additionally, the District is implementing a more automated efficiency testing process to aide in determining the optimum point to overhaul equipment. Implementation of this testing process is scheduled to be complete in early 2013 and will provide the ability to monitor individual pump hydraulic and electrical operating parameters.

B. Exemptible Best Management Practices for Agricultural Contractors

B1. Facilitate alternative land use

There are currently no lands in the county where irrigation leads to unmanageable problems such as high levels of selenium, saline drainage, or drainage difficulties.

B2. Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not cause harm to crops or soils.

The wastewater treatment plants in Santa Clara County all produce some water that is reclaimed and not discharged to the Bay. These plants are not operated by the Santa Clara Valley Water District. Reclaimed water from the South County Regional Wastewater Authority has been used to irrigate a farm and golf course in the south county since 2000.

The District, however, promotes recycled water for non-potable uses such as landscape irrigation, agricultural irrigation, and industrial processes through the public outreach described in other sections of this report (public information programs, school outreach, Agricultural Mobile Lab, etc. See Appendix G). District efforts have shifted toward indirect potable reuse.

B3. Facilitate the financing of capital improvements for on-farm irrigation systems.

Since agricultural production is such a small part of Santa Clara County's economy, facilitating financing of capital improvements for on-farm irrigation systems is not a high priority at the present. The District periodically reevaluates the economics of this financing.

B4. Incentive pricing

The District complies with this incentive pricing BMP by charging some customers based on the quantity of water used. The District's water rate structure is described in detail in Section 1G. As a wholesale water supplier, the District does not utilize tiered water pricing or other water conserving rate mechanisms except in severe drought conditions as necessary to protect the groundwater basin. The pricing of agricultural water is affected by the public policy goal of retaining agricultural lands in the county for open space.

In addition, Section 26.7 of the District Act (see Appendix B) contains a provision that allows for charging increased fees for excessive groundwater pumping. This provision is intended to be used during periods of water supply shortage as an incentive to reduce demands.

B5. Line or pipe ditches and canals

Distribution System

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As described in Section 1-B, the District already utilizes high pressure pipelines and lined canals to transport imported raw water and locally conserved water to various locations for treatment and distribution or for groundwater recharge.

Regulatory reservoirs

Section 1B provides a comprehensive description of the District's raw water distribution system, including existing regulatory reservoirs. The current configuration of facilities provides adequate system delivery flexibility for water supply purposes. However, the District is facing several issues that may lead to further evaluation of the feasibility, cost and benefits of additional regulatory reservoirs in the near future. These issues are: (1) improving imported source water quality by more selective timing of Delta export and/or blending; (2) improving the reliability of San Felipe Division supplies by drawing the District's allocation out of San Luis Reservoir before the annual low point; and (3) expanding the use of recycled water in Santa Clara County by appropriate treatment and blending.

B6. Increase flexibility in water ordering by, and delivery to, water users (within operational limits).

The District has identified several projects which may increase the flexibility of water supply operations and are worthy of further study. These include additional in-county surface storage, enlargement of existing water treatment facilities and other programs still being developed.

Studies are in progress to determine the feasibility, as well as the potential costs and benefits, of increasing surface water storage. Studies are also in progress to determine the cost effectiveness of treatment plant expansion. These studies are expected to be complete by 2013.

B7. Construct and operate Contractor spill and tailwater recovery systems.

As stated previously in Section 1-G, the District utilizes a high pressure distribution system to transport imported raw water as well as locally conserved water.

B8. Plan to measure outflow.

Total # of outflow (surface) locations/points 0
Total # of outflow (subsurface) locations/points 0
Total # of measured outflow points 0
Percentage of total outflow (volume) measured during report year 0

B9. Optimize conjunctive use of surface and groundwater.

Increase planned conjunctive use of surface and groundwater within the District

To optimize the use of groundwater and surface water resources, the District implements an active conjunctive use program as a key element of its overall water management strategy. Surface water is treated for distribution (reducing direct demands on groundwater) and is also stored in local subbasins through managed recharge. Conjunctive use helps to protect against groundwater overdraft and land subsidence, prevent saltwater intrusion, and enhance natural

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recharge. The potential for using advanced treated recycled water for groundwater recharged is being considered.

Also, as part of the District's future water supply planning efforts, several programs either are or will be investigated that would increase conjunctive use. For instance, the integrated water resources planning process recommended expanding recharge capacity and sites are currently being sought.

Improved Understanding of the Groundwater Subbasin monitoring data

The District has developed a groundwater model for the Santa Clara Valley Subbasin. This model is being used to better define the storage capacity of the basin, and to model groundwater pumping and recharge scenarios that will help the District optimize the use of the groundwater basin. In addition, groundwater models are in development for both the Coyote and Llagas subbasins for the south county.

Additional Reservoir Storage

Another possible alternative identified as helping meet the future water supply needs of the county is additional reservoir storage. This would allow more water, local and imported, to be stored during wet years for carryover until periods when groundwater recharge and or storage capacity is available. This would increase the use of recharge facilities and the conjunctive use of the groundwater basin.

B10. Automate canal structures.

As stated previously, the District utilizes a high pressure distribution system to transport imported raw water as well as locally conserved water.

B11. Facilitate or promote water user pump testing and evaluation.

The District promotes water user pump testing and evaluation through various educational measures, including distribution of the publication "Handbook for Agriculture Water Use Efficiency" which includes a section on pump efficiency. This publication is available on our website and is distributed at various outreach events.

B12. Mapping

See Section 1 - Figure 3

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C. Provide a 3-year Budget for Expenditures and Staff Effort for BMPs

Three year budget information is presented in the tables that follow.

1. Amount actually spent during current year (FY2010)

Table 3C(1): Actual Cost and Staff Time Summary for FY2009/10

BMP*	Programs	Est. Cost	Est. Staff time
A1	Measurement	\$0	0.0 FTE
A2	Conservation staff	\$0	0.25 FTE
A3	On-farm	\$204,000	0.5 FTE
A4	Quantity pricing	\$0	0.0 FTE
A5	Policy changes	\$0	0.0 FTE
A6	Contractor's pumps	\$0	0.0 FTE
B1	Alternative land use	\$0	0.0 FTE
B2	Urban recycled water use	\$0	0.25 FTE
B3	Facilitate financing of on-farm systems	\$0	0.0 FTE
B4	Incentive pricing	\$0	0.0 FTE
B5	Line or pipe canals/install reservoirs	\$0	0.0 FTE
B6	Increase delivery flexibility	\$0	0.0 FTE
B7	District spill/tailwater system	\$0	0.0 FTE
B8	Optimize conjunctive use	\$0	0.0 FTE
B9	Automate canal structures	\$0	0.0 FTE
B10	Customer pump testing	\$0	0.0 FTE
	TOTAL	~\$204,000	1.00 FTE

2. Cost summary for FY2011

Table 3C(2): Budget and Staff Time Summary for FY2010/11

BMP*	Programs	Est. Budget	Est. Staff time
A1	Measurement	\$0	0.0 FTE
A2	Conservation staff	\$0	0.25 FTE
A3	On-farm	\$160,500	0.5 FTE
A4	Quantity pricing	\$0	0.0 FTE

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BMP*	Programs	Est. Budget	Est. Staff time
A5	Policy changes	\$0	0.0 FTE
A6	Contractor's pumps	\$0	0.0 FTE
B1	Alternative land use	\$0	0.0 FTE
B2	Urban recycled water use	\$0	0.25 FTE
B3	Facilitate financing of on-farm systems	\$0	0.0 FTE
B4	Incentive pricing	\$0	0.0 FTE
B5	Line or pipe canals/install reservoirs	\$0	0.0 FTE
B6	Increase delivery flexibility	\$0	0.0 FTE
B7	District spill/tailwater system	\$0	0.0 FTE
B8	Optimize conjunctive use	\$0	0.0 FTE
B9	Automate canal structures	\$0	0.0 FTE
B10	Customer pump testing	\$0	0.0 FTE
	TOTAL	~\$160,500	1.00 FTE

3. Projected budget summary for 3rd year (FY2012)

Table 3C(3): Budget and Staff Time Summary for FY2011/12

BMP*	Programs	Est. Budget	Est. Staff time
A1	Measurement	\$0	0.0 FTE
A2	Conservation staff	\$0	0.25 FTE
A3	On-farm	\$165,980	0.5 FTE
A4	Quantity pricing	\$0	0.0 FTE
A5	Policy changes	\$0	0.0 FTE
A6	Contractor's pumps	\$0	0.0 FTE
B1	Alternative land use	\$0	0.0 FTE
B2	Urban recycled water use	\$0	0.25 FTE
B3	Facilitate financing of on-farm systems	\$0	0.0 FTE
B4	Incentive pricing	\$0	0.0 FTE
B5	Line or pipe canals/install reservoirs	\$0	0.0 FTE
B6	Increase delivery flexibility	\$0	0.0 FTE
B7	District spill/tailwater system	\$0	0.0 FTE
B8	Optimize conjunctive use	\$0	0.0 FTE

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BMP*	Programs	Est. Budget	Est. Staff time
B9	Automate canal structures	\$0	0.0 FTE
B10	Customer pump testing	\$0	0.0 FTE
	TOTAL	~\$165,980	~1.0 FTE

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Section 4. Best Management Practices for Urban Contractors

The Best Management Practices for Urban Contractors required in this CVPIA Water Conservation Plan are based on those outlined in the California Urban Water Conservation Council (CUWCC) 1991 *Memorandum of Understanding Regarding Urban Water Conservation Best Management Practices* (MOU). These Best Management Practices (BMPs) are the content of Section 4.

The District and its major water retailers enjoy a special cooperative partnership in the regional implementation of a variety of water conservation programs in an effort to permanently reduce water use in Santa Clara County.

In addition to the five water agencies which participate under the umbrella of the District, eight agencies have independently signed the Memorandum of Understanding (MOU). In 2008, the California Urban Water Conservation Council (CUWCC) updated the Demand Management Measures (DMMs)/BMPs, organizing them into five categories rather than fourteen. Foundational DMMs, which include Utility Operations and Education, are essential water conservation activities that all signatories to the MOU are required to implement. The other three DMMs are the Programmatic DMMs and include Residential; Commercial, Industrial, and Institutional (CII); and Landscape categories.

As the water wholesaler for Santa Clara County, the District is responsible for the implementation of portions of the two foundational DMM's. The District has continued to report compliance with urban water contractor Best Management Practices outlined by the CUWCC. A copy of the District's latest compliance report to CUWCC is provided at the end of Section 4. By meeting CUWCC's reporting requirements, the District has been deemed eligible for grant funding from the State. However, as described in this section, the District has taken the lead in implementing various components of many of the other DMMs for both the water retailers that are signatories and those that are not. By taking the lead on these DMMs the District is assisting its retailers meet their SBX7 7 requirement to reduce per capita water usage 20% by 2020.

A. Urban BMPs

1. Utility Operations

1.1 Operations Practices

Conservation Coordinator (formerly DMM 12)

The District is implementing this in accordance with the MOU by having established the position of Water Conservation Coordinator in 1990. Current Conservation Coordinator information:

Name: Jerry De La Piedra
Title: Program Administrator – Water Conservation Unit
Address: 5750 Almaden Expressway, San José, CA 95118
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Number of Conservation Coordinator Staff

There are three full-time staff members that report to the Water Conservation Program Administrator as well as 8 to 10 student interns (number varies depending on season and program needs).

Staff includes one senior water conservation specialist, one water conservation specialist, and one management analyst.

Water Waste Prevention (formerly DMM 13)

The District has limited authority to impose mandatory provisions restricting the wasteful use of water. As a wholesale water supplier, the District fulfills this DMM by developing a set of model water use restrictions in 1989 and 1993 to assist the water retailers and cities in the development of their water waste prohibitions. In 2009, the District worked closely with the cities and water retailers in its service area to develop a model Drought Response and Water Waste Ordinance (Appendix G). The District then worked closely with the cities and retailers to encourage adoption and enforcement of this model ordinance. Such restrictions, along with public outreach and education efforts, helped the county reach a water use reduction of roughly 19 percent from March 2009 through October 2010 (using 2004 as a baseline and adjusting for population growth). In 2010, the District once again worked closely with several cities and water retailers to develop an updated Drought Contingency Plan (Appendix H) for all water retailers in the county to consider when updating their 2010 UWMPs.

In addition, the District Act (Section 26.7) allows the District to impose proportional increases in groundwater production charges for groundwater pumping that exceeds a base period use, provided that a finding of drought and water shortage necessitates this imposition of increased charges. This provision allows the District to use financial disincentives to achieve cooperation on the part of groundwater producers, and is quoted below:

§ 26.7. Levy and collection of groundwater charges; rates; new or adjusted charges, reports; notice; hearing; errors

(C) The rate or rates, as applied to operators who produce groundwater above a specified annual amount, may, except in the case of any person extracting groundwater in compliance with a government-ordered program of cleanup of hazardous waste contamination, be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board, upon a finding by the board that conditions of drought and water shortage require the increases. The increases shall be related directly to the reduction in the affected zone groundwater levels in the same base period.

Wholesale Agency Assistance Programs (formerly DMM 10)

This DMM defines a wholesaler's support role in terms of financial, technical, and programmatic assistance to its retail agencies implementing DMMs. The District continues to provide a high

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level of support and enjoys the special cooperative partnership with the water retailers in the regional implementation of the DMMs. The District meets regularly, through a water conservation subcommittee, with its water retailers to discuss hot issues (i.e. drought, ordinances, legislation, etc.), District efforts/programs, water retailer efforts, emerging technologies/practices, training/events, as well as CUWCC membership and benefits.

Since the District has a cooperative relationship with its retailers it does not provide monetary incentives directly to them. Instead, the District's Water Conservation Unit implements many of the MOU DMMs, provides technical resources when needed (i.e. assistance in calculating water savings, development of ordinances, internal/external reporting, etc), and offers training and workshop opportunities. Over the next five years SCVWD will, to the extent feasible, work with its retail water agencies to encourage and assist them in reporting their specific conservation activities annually on the CUWCC website. SCVWD will continue to provide its conservation programs to individual customers within its wholesale service area to assist retail agencies in meeting their specific conservation goals and objectives. See each individual DMM section in this report for the programs in place.

1.2 Water Loss Control (formerly DMM 3)

The District has operated a distribution system survey and leak detection program since 1991, thus fulfilled the DMM 3 – System Water Audits, Leak Detection and Repair. The Leak Detection Program is in the operation and maintenance of its wholesale treated water distribution and groundwater recharge systems. All facilities are 100 percent metered or gauged. The District's Leak Detection Program includes: 24-hour-per-day monitoring of meters on all major conveyance facilities; daily flow records; monthly inspections; and water balances. Meters are calibrated regularly as part of the District's preventive maintenance program.

Flows in major facilities are monitored continuously with a SCADA system in the District's Operations Center, located at the Rinconada Water Treatment Plant and at each of the District's other two water treatment plants. Technicians and operators perform daily and monthly inspections. Daily, they record metered and gauged flows to verify system integrity. Monthly, the right-of-ways—in which facilities are buried—are inspected by helicopter for signs of leakage. Also monthly, an overall water balance and a treated water supply balance are conducted to establish and identify errors such as possible meter problems or distribution leakage. Our goal is to perform an investigation when the discrepancy is greater than 5 percent.

The District operates a facility for meter testing. Smaller meters up to 24 inches are tested based upon volume or time period. The program follows American Water Works Association (AWWA) standards. Larger meters are periodically tested volumetrically where feasible. All meters are regularly calibrated to manufacturer's specifications as part of the District's preventive maintenance program.

In addition, starting in 2009-2010, the District began to comply with the new BMP 1.2, Water Loss Control (formerly BMP 3) as amended September 16, 2009, which is detailed in the AWWA Manual for Water Supply Practices, M36: Water Audit and Loss Control programs (see Appendix I for completed FY 10 worksheets).

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The Manual M36 offers tools to the water utilities and retailers to instill accountability and control losses. M36 has procedures and worksheets for each step of the water audit to detect apparent (nonphysical) and real (physical) losses. M36 offers a roadmap to control apparent losses in metering and billing and to recover missed revenues. It also has steps to implement a leakage and pressure management program to control real losses and preserve water.

1.3 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (formerly DMM 4)

Although this DMM only applies to water retailers, the District meters and bills by volume of use all retail agency potable water supply deliveries. All municipal and industrial water users in the county are currently metered and were metered prior to the adoption of the MOU.

The District operates an aggressive water measurement program for both treated water deliveries and groundwater users. The current water measurement system measures 100 percent of all treated water deliveries, 95 percent of surface-delivered raw water deliveries, and 95 percent of all groundwater pumping. The remaining 5 percent (by volume) of groundwater pumping is done by small water users such as residential well owners. Although these residential wells are not metered, an estimate of water pumping or usage is made to determine the pumping fees. Because the cost of metering these customers would far outweigh the benefits, these customers' usage is estimated and they pay accordingly.

In addition, the District offers rebates for installation of submeters. This program, which began as a pilot program in FY 2001, gives a rebate of \$100 for every water submeter installed at multi-family housing complexes, such as mobile home parks and condominium complexes. During the pilot program 1,187 rebates were distributed. Water use records from participating mobile home parks showed an average water savings of 23 percent per mobile home. The program was extended and, in FY 2010, 1,740 more water submeters were installed; bringing the total for the program to 4,674. The District plans to continue this program to meet the region's long-term water conservation goals.

2. Education

2.1 Public Information Programs (formerly DMM 7)

The District conducts an extensive and comprehensive water conservation public information program, which includes general community outreach as well as more specific outreach to schools. The District's Communications staff is responsible for carrying out media relations and public outreach for the entire District, including water conservation, urban runoff pollution, water quality, groundwater recharge, water supply, water recycling, watershed and flood protection as well as stream stewardship. In addition, Water Conservation staff conducts targeted outreach designed to increase participation in individual conservation programs.

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Outreach activities include multi-media marketing campaign directed at the diverse county population, website development and maintenance, publications, public meetings, District participation at community events, inter-agency partnerships, corporate environmental fairs, professional trade shows, water conservation workshops and seminars and a speaker's bureau.

Every year, the District carries out a multi-media campaign emphasizing the importance of water conservation. Until 2008, this multi-media campaign was carried out primarily during late spring and the summer months. In 2009, the newly developed Five-Year Water Conservation Marketing Plan recommended conducting a year-long campaign. This recommendation also coincided with the fact that in February 2009, the California Governor proclaimed a state drought emergency and requested that all urban water users reduce their individual water use by 20 percent. In response to continued dry conditions, in 2009 the District's Board of Directors called for 15 percent mandatory conservation. As a result, in 2009 and 2010, the District stepped up its efforts and the funding to carry out year-long campaigns.

In 2006, the District's water conservation campaign urged the community to conserve water under the theme "Save it while we've got it." The campaign recognized the winter's bountiful rainfall, but encouraged residents to conserve water during times of plenty for use when eventual drought conditions return.

In 2007, the weather turned dry and the campaign was carried out in two phases. The first phase focused on the message that the winter of 2007 was particularly dry. The second phase called for a 10 percent voluntary water-use reduction. Both phases encouraged local residents to schedule a Water-Wise House Call to learn ways they can save water. The second phase was initiated after the District Board of Directors called for a voluntary 10 percent reduction in water use due to the dry conditions and the restrictions on pumping from the Sacramento-San Joaquin Delta.

In addition to the District's own media campaign, the District participated in a regional conservation campaign in collaboration with San Francisco Public Utilities Commission, Contra Costa Water District, Bay Area Water Supply and Conservation Agency, Zone 7 Water Agency, and Bay Area Clean Water Agencies. The campaign, which was launched in July 2007, was called Water Saving Heroes. Through print, transit, billboards and radio ads, residents were encouraged to be a Water Saving Hero by taking simple but effective steps to conserve. Residents were linked to conservation programs and services they may be eligible for in their local area through a search feature on the campaign website. This partnership continued into the following year (2008).

As the year before, District's 2008 conservation outreach was organized in two phases. The first phase focused on the District's continued call for 10 percent voluntary conservation. The second phase, which ran March 2008 through June 2008, was limited to testimonial-style print ads.

In 2009, the District launched a new year-long campaign based on the recommendations of the new five-year water conservation marketing plan. In addition, the campaign was redesigned during the year following the District's Board of Directors call for 15 percent mandatory conservation in March 2009. To help the community achieve the immediate goal, the District launched a new conservation campaign—"For a better world...Save 20 gallons." The campaign

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was developed in partnership with the local cities, water retailers and county and had two specific goals:

- Reduce Santa Clara County water consumption by 15 percent
- Overcome key barriers to water conservation

“Save 20 gallons” was based on research (i.e. focus groups) that showed a water conservation campaign had to use a reduction target that was more tangible than a percentage and express it in a manner that is more user friendly. Therefore, “20 gallons” was chosen as an amount representing the 15 percent reduction in daily residential water use for the average individual. In addition, it was also important to quantify savings achieved through individual conservation tips, enabling the audience to calculate how to reach the desired daily savings of 20 gallons. As a result, the “Save 20 Gallons” campaign focuses on people’s daily activities involving water use and quantifies the volumes of water that can be saved by making minor modifications to everyday behavior.

The multi-media campaign was carried out in English, Spanish, Vietnamese and Chinese languages. The District used a broad mix of media vehicles to combine high-reach and high-frequency media. Market research on media habits of target audiences called for moving away from old practices and increasing the utilization of vehicles where the audiences spend the most time— TV, radio and online. The online efforts included social messaging, updates to our website (www.valleywater.org), and development of a microsite (www.save20gallons.org). The websites are updated throughout the year to include the latest program information, the most recent ads, new reports/studies, updates on our workshops, and the addition of special features such as a tour of a virtual water conservation home. In addition, the District produced and distributed collateral material, including: program flyers, bookmarks, posters, restaurant signs for only serving water upon request, hotel signs encouraging the occupant to reuse their towels, static cling stickers for restroom mirrors, shower timers, and bill inserts.

In 2010, the District continued the “Save 20 gallons” campaign as a year-long effort. Total campaign budget and expenditures in FY 10 were just over \$1.3M.

Additional Public Information Water Conservation programs are detailed below.

Water Conservation Report

Each year the District produces a year-end report (Appendix J) detailing its activities and accomplishments in water conservation.

Program Specific Marketing

In addition to the general “Save 20 gallons” media campaign mentioned above, the District also does various program specific marketing throughout the year. Efforts include sending postcards and/or letters with a promotional flyer to end-users, handing out program flyers and brochures at various events, and using point of purchase pieces for technologies such as high-efficiency toilets and washing machines.

Nursery Program

To increase the public’s awareness of water-efficient gardening techniques, in 1995 the District developed the Nursery Program. This program distributes, at least quarterly, a series of

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educational materials to nurseries throughout the county. To display the materials, the program includes literature racks offering the free informational about water-wise gardening. The Nursery Program literature is currently being distributed to and displayed at roughly 20 participating nurseries.

Water Efficient Landscape Workshop Series

Each spring, the District hosts its Water-Efficient Landscape Workshop Series for county residents. The series consists of four consecutive class sessions addressing topics such as garden design, plant selection, irrigation design, installation and maintenance techniques and gardening with native species. The series draws approximately 150 - 200 attendees each year.

Spanish-Language Irrigation Workshop Series

These workshops provide hands-on training to English- and Spanish-speaking landscape professionals on irrigation controller programming, system scheduling, and irrigation troubleshooting. In each class of approximately 40 landscape professionals are those who collectively maintain around 400 sites in the county.

Water-Wise Gardening CD-Rom

In FY 2005 the District developed an interactive CD-ROM that showcases over 1,000 native, drought tolerant and water-efficient plants and features the District's landscape design brochure "Rules of Thumb for Water-Wise Gardening". Through features such as the "Garden Tours" and "Garden Gallery", users can view plants in beautiful, well established gardens and click on them to learn about each plant's water, sun, and soil requirements. Users also have the option of searching the "Plant List" database by scientific and common name or by a plant's unique characteristics. These reports can be printed (to attain the plant's photo). The user can then take this specific plant information to local nurseries and make water-efficient choices.

Bill Inserts

In the fall of 1999, the District developed a bill insert promoting the reduction of landscape water use by reminding homeowners to cut back on their watering schedule during the fall and winter months. In collaboration with the District's water retailers, this insert has been mailed each year in October/November. In addition to the fall insert, the District has developed spring and summer bill inserts and worked with the Santa Clara County cities and retailers to distribute these inserts.

Community Events

Each year the District participates in numerous community events, including environmental fairs, Earth Day events, garden tours, and many others. District staff distributes multiple educational materials and program flyers. Below are a few examples (see Appendix J for full list):

- Spring Garden Fairs
- Santa Clara County Home and Garden Show
- City of Cupertino Earth Day Fair
- Green Plumbers Workshop
- Silicon Valley Water Conservation Awards
- Native Garden Tour

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2.2 School Education Programs (formerly DMM 8)

This DMM requires water suppliers to implement a school education program that includes providing educational materials and instructional assistance. In 1995 the District's Public Information Office hired a full-time, fully credentialed educator who holds life-time teaching and Administrative Services credentials to coordinate the school education programs. This included developing school programs, contracting with the Youth Science Institute for additional instructors, and supervising university student interns as classroom assistants. From 2001-2007, a second, bilingual educator joined the District's full-time staff to assist with the program.

The District has been continuously active in this area by providing free classroom presentations, puppet plays, and tours of District facilities to schools within the county. The objective is to teach students about water conservation, water supply, watershed stewardship, and flood protection. The District also provides school curricula to area educators, including workbooks and videos, as well as hands-on training for teachers. In FY 10, over 11,200 kindergarten through 6th grade and 221 7th grade through 12th grade students were reached. The District completed 476 classroom presentations, with over 10,600 students attending. In addition, the District staffed an education booth at 2 events with roughly 400 attendees. The annual budget for the FY 10 program was \$215,000. The goal of the program this year is to reach 12,000 students, ranging from pre-kindergarten through college.

Materials distributed to students included topical lessons. All meet state education framework requirements and are grade-level appropriate. All students who participated in the program received materials.

Programmatic DMMs

As previously mentioned, the District and its major water retailers enjoy a special cooperative partnership in the regional implementation of a variety of water conservation programs. As the

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water wholesaler for Santa Clara County, the District is responsible for the implementation of portions of the two foundational DMM's, however it is also implementing multiple components of many of the other DMMs.

To determine compliance of the Programmatic DMMs, water retailers have the option of accomplishing the specific target for each DMM, implementing measures from a flex track menu that achieve equal or greater savings if implementing the DMMs, or achieving set water savings goals measured in gallons per capita per day consumption. Participation in all programs listed below is tracked by water retailer on a monthly basis. In addition, the District has sent out (and will continue to in the future) customer surveys to determine overall satisfaction with a program and to see how a program may be improved.

The District will continue to work with its water retailers to implement the programs that best meet the public's needs while achieving the local, regional, and state-wide goals.

3. RESIDENTIAL

3.1 Residential Assistance Program (formerly DMM 1 and 2)

3.2 Landscape Water Survey (formerly DMM 1)

As the administrator of this program, the District develops and implements a strategy to target and market water-use surveys to single-family and multi-family residential customers throughout Santa Clara County, except for San Jose Water Company's service area as they administer their own program. Since 1998, the District has performed more than 29,600 residential audits, including more than 2,000 in FY 2010.



The District's program, which began in July of 1998 as a pilot program, includes educating the customer on how to read a water meter; checking flow rates of showerheads; faucet aerators and toilets; checking for leaks; installing low-flow showerheads, aerators and/or toilet flappers if necessary; checking the irrigation system for efficiency (including leaks); measuring landscaped

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area; developing an efficient irrigation schedule for the different seasons; and providing the customer with evaluation results, water savings recommendations, and other educational materials. In 2004, the District began programming a homeowner's controllers as well (i.e., if allowed by the homeowner, the surveyors will input the recommended schedules into the controller).

The District's largest retailer, the San José Water Company, (SJWC) offers water audits, free of charge, to all of its customers. The audits are performed at customer request, typically in response to a high water bill concern and/or in response to SJWC or District marketing efforts. Audits are performed for both residential and commercial customers. The District supports SJWC's water audit program by providing free water conservation supplies, such as showerheads and faucet aerators. SJWC began performing water audits at the end of 1991 and is estimated to have completed over 24,000 audits since the program began.

During SJWC's audit, water meters are read and timed for water usage, and an examination is performed throughout the household to identify any water leaks. In addition to the indoor audits, SJWC further developed the landscape component of their audit program in 1994 to provide an extensive evaluation of the resident's landscape irrigation system. Through this program, residents are also trained on how to efficiently program their irrigation controllers.

Each year these programs are promoted countywide through a summer media campaign which typically includes television, radio, and print ads. The District plans to continue its program to meet the region's long-term water conservation goals.

The District also distributes high-quality, low-flow showerheads and faucet aerators to single-family and multi-family residents through the water retailers and public events. Since program inception in 1992, more than 296,000 low-flow showerheads and aerators have been distributed throughout the county, including more than 22,000 in FY 2010. The District plans to continue offering free showerheads and aerators through its Water-Wise House Call Program, its water retailers, and through various outreach events.

3.3 High-Efficiency Clothes Washer (formerly DMM 6)

The District has offered a residential high-efficiency washer rebate since July of 1995.

In October 2001 the District began participating in the regional Bay Area Water Utility Clothes Washer Rebate Program which has been successfully partnering with PG&E since January 2008. In 2010 the District and PG&E offered a combined rebate of \$175 (\$50 from PG&E, \$125 from the District) for clothes washers in the Consortium for Energy Efficiency's Tier 3, the most water-efficient category.

The District has given out more than 109,000 rebates since the program began in 1995 (16,559 in FY 2010) and will continue to offer this program in the future in order to reach the region's long-term water conservation goals.

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3.4 WaterSense Specification Toilets (formerly DMM 14)

This DMM calls for the implementation of programs for replacing existing high water using toilets with WaterSense toilets in single-family and multi-family residences. The program must result in water savings equivalent to having an ordinance requiring toilet replacement at time of home resale. From 1992 through June 2003, the District, in conjunction with each of the 13 participating retailers and through a series of cost-sharing agreements with the City of San José and the City of Sunnyvale, has provided incentives for the retrofit of approximately 244,000 residential toilets. Because of this, and as reported in our 2005 UWMP, the District has already met the original DMM cumulative water savings target.

Although the District has already completed the original DMM, in 2004 the District shifted to a high-efficiency toilet (HET) program. The current program, which only includes WaterSense HETs, consists of a rebate program for single-family and multi-family accounts and a full-installation program for multi-family accounts. Through 2010 the District has rebated and/or installed more than 7,700 single-family HETs (3,463 in FY 2010) and more than 8,000 multi-family HETs (1,970 in FY 2010). To meet the region's long-term goals the District will continue to implement HET programs in the future.

4. COMMERCIAL, INDUSTRIAL & INSTITUTIONAL (FORMERLY DMM 9)

During FY 1996/97, the District implemented a regional pilot program that provided 24 water-use surveys for large water-using businesses and industries in the county. For the past six years, the District has offered comprehensive CII surveys—including cost/benefit analysis for all recommendations—to businesses within Santa Clara County. The District's largest retailer, San José Water Company, has been offering commercial water-use surveys since 1994.

Since FY 2003/04, approximately 440 comprehensive CII water use surveys were completed by the District (136 in FY 2010). However, rather than focusing on surveys to meet the requirements of this DMM, the District has been implementing several water-saving programs over the last 10 to 12 years, including:

4.1 Water Efficient Technologies Program (WET)

To encourage all commercial and industrial businesses to implement permanent water reduction measures, the City of San José offers financial awards to businesses in San José, offering \$4 for every CCF conserved. Rebates range from \$400 to \$50,000 per site. Since 1997, the District and the City of San José have entered a cost-sharing agreement to jointly fund this program in the treatment area of the San José/Santa Clara Water Pollution Control Plant. Additionally, the District has expanded this program countywide. To date, the District has funded (either entirely or through cost-sharing with the City of San José) 84 projects saving approximately 613,000 CCF/year. The District will continue to offer this program in the future in order to reach the region's long-term water conservation goals.

4.2 Commercial Toilet and Urinal Program

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The District has been replacing inefficient toilets in CII sites since 1994. An ultra low flush toilet (ULFT) rebate program was offered from 1992-1999. In 2000, the District switched to a direct installation program. Additionally, the District reimbursed the City of San José for toilets replaced through their CII ULFT programs. From 1994 through 2005, more than 8,700 ULFTs were installed through District funded programs.

In FY 05, the District switched to High-Efficiency Toilets, or HETs, that flush at 1.28 gallons per flush or less. Since 2005, more than 9,000 HETs have been installed (1,679 in FY 2010). The District also recently initiated a urinal program to replace flush valves of old inefficient urinals that flush 1.0 gallon or more with a flush valve that uses only 0.5 gallons per flush. Since 2007, approximately 400 urinals had been retrofitted (328 in FY 2010). The District has offered two types of programs for both high-efficiency toilets and urinals, a rebate program and a free installation program. The District will continue to offer this program in the future in order to reach the region's long-term water conservation goals.

4.3 Commercial Washer Program

In July, 1999, the District, with funding partners Silicon Valley Power (supplier of electricity to customers within the City of Santa Clara) and the City of San José (administers Santa Clara/San José Water Pollution Control Plant), began offering a rebate for the replacement of high-efficiency clothes washers in Laundromats. Beginning in July, 2000, the commercial washer program was expanded throughout the county and now includes commercial machines installed in multi-family complexes. More than 3,400 washers have been rebated since 1999, including 367 in FY 2010.

In July 2010, the District began issuing rebates only for those machines in the highest tier of water efficiency. This will not only encourage the use of more efficient machines, it will be consistent with the requirements of PG&E's washer rebate programs. The District will continue to offer this program in the future in order to reach the region's long-term water conservation goals.

In addition to the programs mentioned above (WET, CII ULFTs/HETs, CII Washers) the District is implementing several other CII programs, including:

Pre-Rinse Spray Valve Program

In previous years the District partnered with other agencies to offer a direct install program for pre-rinse sprayers. In FY 2010 the District purchased a quantity of high-efficiency pre-rinse spray valves with a flow rate of 1.15 gallons per minute for distribution to commercial sites, especially those identified through the District's CII Water Survey Program. A total of 25 of these sprayers were distributed in FY 2010, and more than 4,300 since the District began promoting these devices in FY 2003.

Submeter Rebate Program

This program, which began as a pilot program in FY 2001, gives a rebate of \$100 for every water submeter installed at multi-family housing complexes, such as mobile home parks and condominium complexes. During the pilot program, 1,187 rebates were distributed. Water use records from participating mobile home parks showed an average water savings of 23 percent per mobile home. The program was extended in FY 2008 and, in FY 2010, 1,740 more water

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submeters were installed, bringing the total for the program to 4,674.

5. LANDSCAPE

This DMM calls for agencies to assign reference evapotranspiration-based (ET_o) water use budgets to accounts with dedicated irrigation meters, provide water-use surveys to accounts with mixed-use meters, and offer financial incentives to support the water budgets and surveys.

5.1 Landscape Surveys

Since 1995, the District has offered and provided large landscape water audits to sites in the county with one acre or more of landscaping. Landscape managers have been provided water-use analyses, scheduling information, in-depth irrigation evaluation, a site-specific water budget, and recommendations for affordable irrigation upgrades. Each site receives a detailed report upon completion of the audit. An annual report is generated to recap the previous year's efforts. To generate several reporting and monitoring options, water use history, meter numbers, account numbers, and site contacts and addresses are captured for each site in a specialized database. In 2009, the program was expanded to include sites with 5,000 square feet or more of irrigated landscape.

The Landscape Survey Program reaches the community through advertising in Tri-County Apartment Association's monthly Apartment Management magazine, colorful flyers at the biannual Home & Garden Show, NCTLC Turf & Landscape Expo, and retailer outreach through direct mailing of personalized letters to high water use customers and also through city newsletters and business newsletters.

This highly successful and well-received program has conducted nearly 1,300 audits through 2010 (94 were completed in FY 2010). The District will continue to offer this program in the future in order to reach the region's long-term water conservation goals.

5.2 Water Budgets

The District's staff is currently working on a comprehensive program to develop ET_o-based water use budgets for all large landscape sites by using aerial images and GIS techniques.

The project has acquired multi-spectral images of over 900 square miles of Santa Clara County, performed image analysis (classification) to identify the areas of turf, other landscaping, water features, bare ground and hardscape for each parcel (site) and has prepared a database of these areas to support Landscape Water Budgets as well as support the Landscape Survey Program.

Concurrently, the District is developing a database-backed website (Water Budget Manager) to deliver real-time Landscape Water Budget information to property and landscape managers via the Internet. Site managers will enter actual water use data either from their water bills or by reading their water meters. The District will routinely update each budget using ET_o data from the California Irrigation Management Information System (CIMIS) so that the budgets reflect

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actual site irrigation demands during the most recent billing cycle. It is projected that these Landscape Water Budgets will reduce water use for these sites by at least 10 percent (or 5,000 AF per year for the entire county).

The District will continue to offer surveys to sites that are found to be over-budget. This tool is scheduled to be available in 2011.

5.3 Financial Incentives

In 2006, the District partnered with five bay area water supply agencies and received a Department of Water Resources Proposition 13 grant that provided funding for the installation of weather-based irrigation controllers (WBICs). This new generation of irrigation controller utilizes the principals of evapotranspiration or “ET” to automatically calculate a site specific irrigation schedule based on several factors, including plants and soil type. The controller then adjusts the irrigation schedule as local weather changes to regulate unnecessary irrigation.

The District first implemented a direct install program which installed two types of WBICs (real time and historic) in both residential and commercial sites throughout the District’s service area. In order to expedite program participation and include emerging WBIC manufacturers, the District shifted the WBIC program to a rebate style program that offered rebates of \$300-\$1,100 per approved controller installed. More than 1,000 WBICs have been installed through 2010 (142 were installed in FY 2010).

The District expanded its irrigation equipment incentives beyond the WBIC program, when two grants were received in 2006 for the implementation of two types of water efficient irrigation hardware installation rebates programs.

The first grant, received from California Department of Water Resources, kicked off implementation of the Irrigation System Hardware Rebate Program (ISHRP). This program aimed to install a variety of water efficient irrigation hardware at commercial, industrial, and institutional sites throughout Santa Clara County. Through ISHRP, the District provided rebates ranging from \$200 to a maximum of \$2,000 per site (not to exceed 50 percent of the hardware cost). Qualifying hardware included: rain sensors, high distribution uniformity nozzles, dedicated landscape meters, replacement sprinkler heads, converting overhead irrigation to drip, pressure reducing valves, and spray heads or rotors with pressure compensating heads and/or check valves. From October 2006 through June 2010, 46 ISHRP rebates were issued.

The second water efficient irrigation equipment grant was received from the United States Bureau of Reclamation and was to launch the Residential Irrigation System Hardware Rebate Program (RISHRP). The program was designed to retrofit inefficient irrigation equipment at residential sites with new water conserving equipment. This residential version of the ISHRP program offered rebates for the same efficient irrigation equipment but was unique as RISRHP offered flat rebate amount per equipment items. Through the RISHRP program, residents could receive rebates ranging from \$50 up to \$1,000 per site. From September 2006 through June 2010, 228 RISHRP rebates were issued.

In addition to efficient irrigation equipment retrofits, the District began to focus on water efficient landscapes by launching the Water Efficient Landscape Rebate Program (WELRP) in early

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2005. The WELRP program offered rebates to residential and commercial sites for the replacement of approved high water using landscape with low water use plants, mulch and permeable hardscape. WELRP participants could receive up to \$0.75 per square foot of irrigated turf grass with a maximum of rebate of \$1,000 and \$10,000 for residential and commercial sites respectively. In an effort to expedite program participation, District's Board of Directors moved to double the maximum rebate from \$1,000 up to \$2,000 for residents and from \$10,000 up to \$20,000 for commercial sites in March 2009. There were 606 WELRP rebates issued from January 2005 through June 2010.

In the midst of three consecutive dry years from 2007 through 2009, the District's Board of Directors made a call for 15 percent mandatory water conservation in March 2009. In an effort to assist in meeting this call by expediting program participation and water savings, the District's Landscape Survey Program (LSP) was expanded to include any commercial, industrial, institutional site with 5,000 sq ft or greater of irrigated landscape. This new program was designed to serve not only as an informative landscape survey but to act as a pre-inspection for all commercial landscape rebate programs. In addition to the changes to the LSP, the four District landscape rebate programs (WBIC, ISHRP, RISHRP and WELRP) were combined into one new program, the Landscape Rebate Program. This new program offers rebates for both high-efficiency landscape conversion and for the installation of efficient irrigation equipment for residential and commercial sites. The District will continue to offer these programs in the future in order to reach the region's long-term water conservation goals.

Conclusion

The District, through a unique cooperative partnership with its retailers, offers regional implementation of a variety of water conservation programs in an effort to permanently reduce water use in Santa Clara County. Although the District is only responsible for implementation of portions of the Foundational DMMs, it continues to collaborate with its water retailers to implement various water conservation programs on a regional basis. By taking the lead on implementing many of the various DMM components, the District is ensuring its long-term water supply reliability goals are met as well as assisting its water retailers meet their goals, including compliance with recent legislation calling for 20 percent reduction in per capita water use by 2020.

The District's urban demand management measures are estimated to save more than 92,000 AFY by the year 2030, using 1992 as a base year. Combined with 6,000 AFY in savings from agriculture water conservation, the total of nearly 100,000 AFY by 2030 accounts for almost 20 percent of pre-savings demand and is a crucial water supply management program, now and into the future.

Section 4: BMPs for Urban Contractors

CVPIA Water Management Plan | December 2011

B. Provide a 3-Year Budget for Expenditures and Staff Effort of BMPs

1. Amount actually spent during FY2010

BMP	Programs	Est. Budget	Est. Staff time*
1.1	Utility Operation Practices	Entire program	1.0 FTE
1.2	Water Loss Control	(Operations budget)	(Operations staff)
1.3	Metering with Commodity Rates	(\$0-Fully metered)	N/A
2.1	Public Information Program	\$1,300,000	1.0 FTE
2.2	School Education Program	\$65,000	1.0 FTE
3	Residential	\$3,700,000	1.0 FTE
4	Commercial	\$1,500,000	1.0 FTE
5	Landscape	\$700,000	1.0 FTE
	TOTAL	~\$7,265,000	~6.0 FTE

*Additional to full-time employees, the District also relies upon 8-10 interns to assist with programs

FTE - Full Time Employee

2. Projected cost summary for 2nd year (FY2011)

BMP	Programs	Est. Budget	Est. Staff time*
1.1	Utility Operation Practices	Entire program	1.0 FTE
1.2	Water Loss Control	(Operations budget)	(Operations staff)
1.3	Metering with Commodity Rates	(\$0-Fully metered)	N/A
2.1	Public Information Program	\$200,000	0.5 FTE
2.2	School Education Program	\$75,000	1.0 FTE
3	Residential	\$2,525,000	1.5 FTE
4	Commercial	\$1,600,000	1.0 FTE
5	Landscape	\$900,000	1.0 FTE
	TOTAL	~\$5,300,000	~6.0 FTE

*Additional to full-time employees, the District also relies upon 8-10 interns to assist with programs

FTE - Full Time Employee

Section 4: BMPs for Urban Contractors

CVPIA Water Management Plan | December 2011

3. Projected budget summary for 3rd year (FY2012)

BMP	Programs	Est. Budget	Est. Staff time*
1.1	Utility Operation Practices	Entire program	1.0 FTE
1.2	Water Loss Control	(Operations budget)	(Operations staff)
1.3	Metering with Commodity Rates	(\$0-Fully metered)	N/A
2.1	Public Information Program	\$200,000	0.5 FTE
2.2	School Education Program	\$200,000	1.0 FTE
3	Residential	\$2,175,000	1.0 FTE
4	Commercial	\$1,400,000	0.75 FTE
5	Landscape	\$625,000	0.75 FTE
	TOTAL	~\$4,600,000	~5.0 FTE

*Additional to full-time employees, the District also relies upon 8-10 interns to assist with programs

FTE - Full Time Employee



CUWCC BMP COVERAGE REPORT FOR WHOLESALER AGENCIES

Foundation Best Management Practices for Urban Water Efficiency

Agency: **Santa Clara Valley Water District** District Name: **Santa Clara Valley Water District** CUWCC Unit #: **201**

Primary Contact: **Jerry De La Piedra** Email: **gdelapiedra@valleywater.org**

Base Year: **2008** Report Date: **27-May-11**

Foundational BMPs

BMP 1.1 Operational Practices

BMP 1.1.1 Conservation Coordinator

Conservation Coordinator Name: **Hossein Ashtorab**
 Title: **Water Use Efficiency Unit Manager**
 Email: **hashktrab@valleywater.org**

Conservation Coordinator provided with necessary resources to implement BMPs?

2009: **On Track**
 2010: **On Track**

BMP 1.1.2 Water Waste Prevention Assistance

Descriptive File
 Descriptive File 2010
 URL
 URL 2010
 Describe Ordinance Terms
 Describe Ordinance Terms 2010

On Track if any one of the 6 ordinance actions done, plus documentation or links provided

2009: **On Track**
 2010: **On Track**

BMP 1.1.3 Wholesale Agency Assistance Programs

Date of 2009 Data Download: **May 26, 2011**
 Date of 2010 Data Download: **May 26, 2011**

a) Financial investments and building partnerships Value of resources provided to retailers for:	2009 Monetary Amount for Financial Incentives		2009 Monetary Amount for Equivalent Resources	
	2009	2010	2009	2010
BMP 2.1 Outreach	\$ 950,000	\$ 1,300,000	\$ 122,231	\$ 100,804
BMP 3 Residential	\$ 1,923,247	\$ 1,300,000	\$ 169,086	\$ 100,804
BMP 4 Commercial	\$ 1,649,000	\$ 1,300,000	\$ 245,036	\$ 100,804
BMP 5 Landscape	\$ 1,186,460	\$ 1,300,000	\$ 185,315	\$ 100,804
BMP 2.2 School Programs	\$ -	\$ 1,300,000	\$ 278,133	\$ 100,804
no data	no data	no data	no data	no data
Total Value of Resources	\$ 5,708,707	\$ 5,708,707	\$ 999,801	\$ 999,801
	On Track	On Track	On Track	On Track

"On Track" if Retailer accepted offer and Wholesaler provided resources. "Not on Track" if Retailer accepted offer and Wholesaler did not provide resources.

Agency:	Santa Clara Valley Water District	District Name:	Santa Clara Valley Water District
BMP 2.2 School Programs	\$ -	-	\$ 215,706
BMP 3 Residential	\$ 2,816,800	2,816,800	\$ 118,726
BMP 4 Commercial	\$ 1,340,733	1,340,733	\$ 120,899
BMP 5 Landscape	\$ 1,005,501	1,005,501	\$ 146,693
no data	no data	no data	no data
Total Value of Resources	\$ 6,463,034	On Track	\$ 702,828
			On Track

b) Technical Support

2009 Technical Support Description
 Examples of technical support include: program implementation, assistance in calculating water savings, development of ordinances, internal/external reporting, and training and workshop opportunities

2010 Technical Support Description
 Examples of technical support include: program implementation, assistance in calculating water savings, development of ordinances, internal/external reporting, and training and workshop opportunities

" On Track" if Retailer accepted and Wholesaler provided and described Technical Support

On Track

2009		2010	
c) Retail Agency	Programs Managed for Retailers	c) Retail Agency	Programs Managed for Retailers
no data	no data	no data	no data
no data	no data	no data	no data
no data	no data	no data	no data
no data	no data	no data	no data
no data	no data	no data	no data
no data	no data	no data	no data

" On Track" if Retailer accepted and Wholesaler provided and lists programs managed for retailers

2009		2010	
d) Water Shortage Allocation	Adoption Date File Name	d) Water Shortage Allocation	Adoption Date File Name
Has Water shortage plan or policy been adopted?	no data	no data	no data
	See other BMP 1.1 form submitted	See other BMP 1.1 form submitted	

"On Track" if plan /policy adopted and document provided. "Not on Track" if no water shortage plan or policy adopted or document not provided.

2009		2010	
e) Non signatory Reporting of BMP implementation by non-signatory agencies	Adoption Date File Name	e) Non signatory Reporting of BMP implementation by non-signatory agencies	Adoption Date File Name
District tracks and provides program data on a quarterly basis to retailers as they do their own reporting.	no data	District tracks and provides program data on a quarterly basis to retailers as they do their own reporting.	no data
	See other BMP 1.1 form submitted		See other BMP 1.1 form submitted

Report if possible

2009		2010	
f) Encourage CUVCC Membership List Efforts to recruit retailers	List Efforts to recruit retailers	f) Encourage CUVCC Membership List Efforts to recruit retailers	List Efforts to recruit retailers
District hosts bi-monthly water conservation meetings with its water retailers. At these meetings the CUVCC (and its benefits) is discussed.	no data	District hosts bi-monthly water conservation meetings with its water retailers. At these meetings the CUVCC (and its benefits) is discussed.	no data
	See other BMP 1.1 form submitted		See other BMP 1.1 form submitted

"On Track" if efforts listed or dues paid.

Date of 2009 Data Submittal: May 20, 2011
 Date of 2010 Data Submittal: May 20, 2011

	2009	
Complete a prescreening Audit	Yes	On Track
Metered Sales AF	119,186	
Verifiable Other Uses AF	1	
Total Supply AF	119,187	
(Metered Sales + System uses)/ Total Supply > 0.89	1.00	On Track
If ratio is less than 0.9, complete a full scale Audit in 2009?	N/A	On Track
Verify Data with Records on File?	Yes	On Track
Operate a system Leak Detection Program?	Yes	On Track

On Track if Yes
 Metered sales to retail agencies
 Into wholesale system
 On Track if =>.89, Not on Track if No
 On Track if Yes
 On Track if Yes
 On Track if Yes

Comments

For wholesalers AWWA methodology applies to wholesalers, sales to retail agencies or sub wholesalers, and pipelines operated by wholesalers. End use retail customers are not considered in this

	2010	
Compile Standard Water Audit using AWWA Software?	Yes	On Track
AWWA file provided to CUWCC?	Yes	On Track
AWWA Water Audit Validity Score?	70	
Completed Training in AWWA Audit Method?	no	Info only until 2012
Completed Training in Component Analysis Process?	No	Info only until 2012
Complete Component Analysis?	no	Info only until 2012
Repaired all leaks and breaks to the extent cost effective?	Yes	On Track
Locate and repair unreported leaks to the extent cost effective.	Yes	On Track
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.		Info only until 2012
Provided 7 types of Water Loss Control Info		Info only until 2012

Leaks Repair	Value Losses	Apparent Losses	Miles Surveyed	Press Reduction	Cost Interventions	Water Lost from Leaks AF
0	\$	-	\$	0	No	-
						0

1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS

Date of 2009 Data Submittal: May 20, 2011
 Date of 2010 Data Submittal: May 20, 2011

	2009	2010	
Exemption requested? At least as Effective As Requested?	No	No	
Does Agency have Unmetered Deliveries to Retail Agencies or Other Wholesalers?	No	No	On Track
Metered Accounts billed by volume of use	Yes	Yes	On Track
Completed a written plan, policy or program to test, repair and replace meters	Yes	Yes	On Track

Volumetric billing required for all connections on same schedule as metering
 On Track if Yes, Not on Track if No

Agency Row #	59	62	48	46
	2009 BMP2.1	2010 BMP2.1	2009 BMP2.2	2010 BMP2.2

Enter District ID No. **201**

Data File Name



CUWCC BMP COVERAGE REPORT FOR WHOLESALE AGENCIES

Foundation Best Management Practices for Urban Water Efficiency

Agency: **Santa Clara Valley Water District** District Name: **Santa Clara Valley Water District** CUWCC Unit #: **201**
 WHOLESALE Water Supplier Coverage Report Date: **May 19, 2011**
 Primary Contact: **Jerry De La Piedra** Email: **gdela piedra@valleywater.org**

BMP 2. EDUCATION PROGRAMS

BMP 2.1 Public Outreach Actions Implemented and Reported to CUWCC

- 1) Contacts with the public (minimum = 4 times per year)
- 2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).
- 3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).
- 4) Description of materials used to meet minimum requirement.

date 2009 datafile downloaded: **May 26, 2011**
 date 2010 datafile downloaded: **May 26, 2011**

	2009	2010
1) Contacts with the public (minimum = 4 times per year)	44,064	53
2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).	26,280	47,699,383
3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).	Yes	Yes
4) Description of materials used to meet minimum requirement.	Flyers and/or brochures, bill stuffers, messages printed on bill, information packets General water conservation information General water conservation information General water conservation information Website Newspaper contacts Radio contacts Television contacts News releases Articles or stories resulting from outreach other	Flyers and/or brochures, bill stuffers, messages printed on bill, information packets Newsletter articles on conservation Email messages website general water conservation information Radio contacts Television contacts Newspaper contacts Articles or stories resulting from outreach News releases other
5) Annual budget for public outreach program.	\$ 950,000	\$ 1,300,000
6) Description of all other outreach programs	Information is too extensive to provide here; please see reporting PDF	Information is too extensive to provide here; please see reporting PDF

All 6 action types implemented and reported to CUWCC to be 'On Track'

On Track for 6 Actions

On Track for 6 Actions

Santa Clara Valley Water District
 WHOLESALE Water Supplier

Santa Clara Valley Water District
 Coverage Report Date:
 May 19, 2011

Santa Clara Valley Water District
 Coverage Report Date:
 May 26, 2011

CUWCC Unit #: 201

date 2009 datafile downloaded:
 May 26, 2011

date 2010 datafile downloaded:
 May 26, 2011

2.2 School Education Programs Implemented and Reported to CUWCC

Does this wholesale agency implement School Education Programs for Sub Wholesalers or Retail utility's benefit?

Names of Sub Wholesale and Retail Agencies benefiting from Program?

1) Curriculum materials developed and/or provided by wholesale agency

2) Materials meet state education framework requirements and are grade-level appropriate?

3) Materials Distributed to K-6?

Describe K-6 Materials

Materials distributed to 7-12 students?

4) Annual budget for school education program.

5) Description of all other water supplier education programs

2009	2010
<p>Yes</p> <p>Cal Water - Los Altos, city of Gilroy, Great Oaks Water Company, city of Milpitas, city of Morgan Hill, city of Mountain View, city of Palo Alto, Purissima Hills Water District, San</p> <p>All lessons presented to students are tied to state standards. For a complete listing of lessons by grade level and the standards they teach, go to http://www.valleywater.org/Programs/SchoolProgram.aspx and scroll to "State Standards."</p> <p>Yes</p> <p>Yes</p> <p>Materials distributed to students develop and promote water awareness, reinforce water conservation and pollution prevention lessons taught in the classroom and regularly integrate messages and issues of other water district communication programs.</p> <p>Yes</p> <p>\$ 278,133</p> <p>classroom presentations, staffing children's booths at events and festivals, and teacher training workshops</p> <p>On Track</p>	<p>Yes</p> <p>Cal Water - Los Altos, city of Gilroy, Great Oaks Water Company, city of Milpitas, city of Morgan Hill, city of Mountain View, city of Palo Alto, Purissima Hills Water District, San Jose</p> <p>All lessons presented to students are tied to state standards. For a complete listing of lessons by grade level and the standards they teach, go to http://www.valleywater.org/Programs/SchoolIProgram.aspx and scroll to "State Standards."</p> <p>Yes</p> <p>Yes</p> <p>Materials distributed to students develop and promote water awareness, reinforce water conservation and pollution prevention lessons taught in the classroom and regularly integrate messages and issues of other water district communication programs.</p> <p>Yes</p> <p>\$ 215,706</p> <p>classroom presentations, staffing children's booths at events and festivals, and teacher training workshops</p> <p>On Track</p>

All 5 actions types implemented and reported to CUWCC to be 'On Track'

Describe materials to meet minimum requirements

Info Only

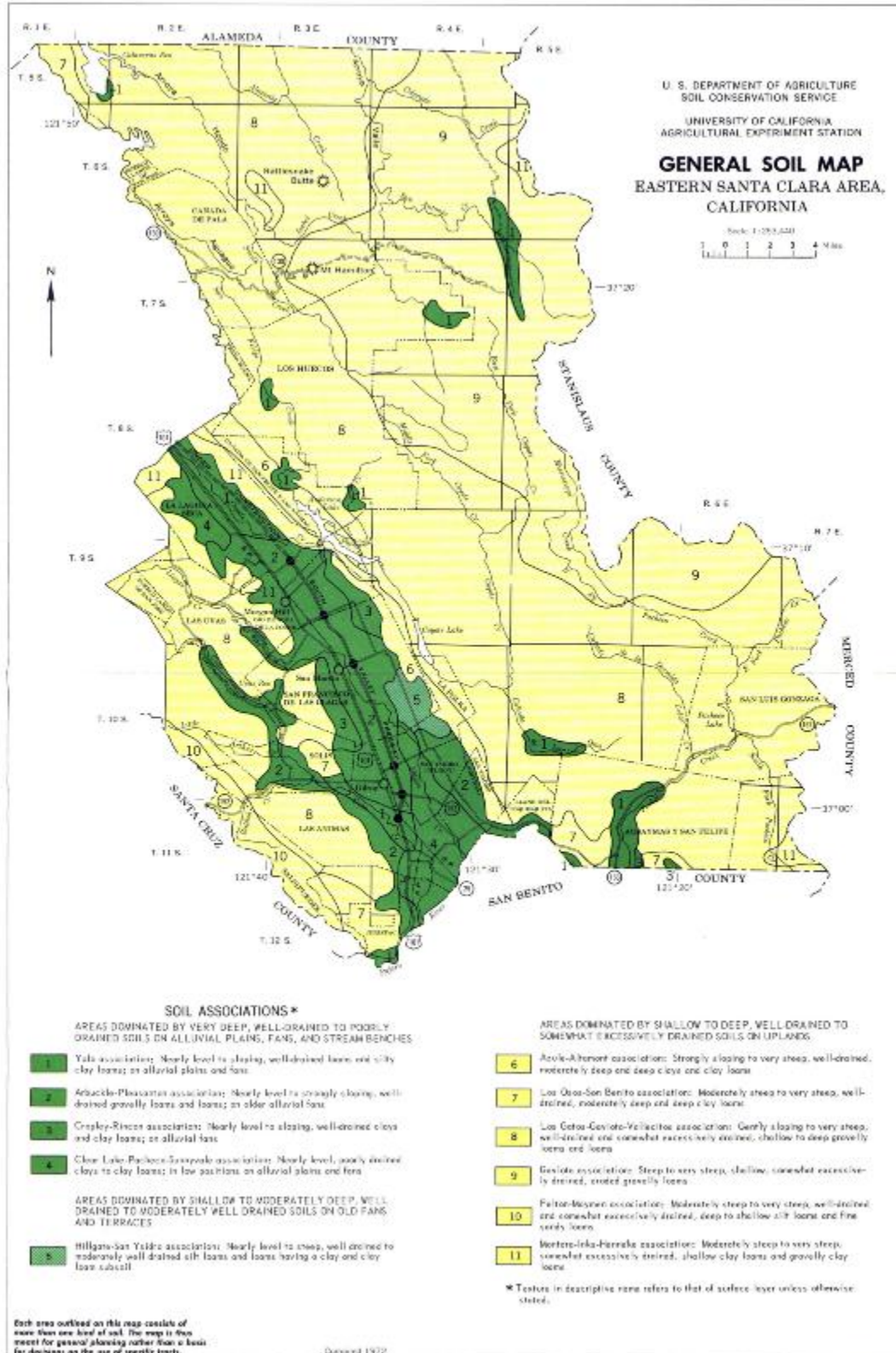
Appendix A

Soil Map

Eastern Santa Clara

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Appendix A



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Appendix B

District Act- Excerpt of Sections Relative to
Groundwater Charge: revised 7/1/96

&

Ordinance No. 70-1

Rules and Regulations

Governing the Recording of
Ground Water Production

Amended 6/2/87

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DISTRICT ACT

**Chapter 1405 of the Statutes
of 1951, Section 26**

**EXCERPT OF SECTIONS RELATIVE
TO GROUNDWATER CHARGE**

REVISED 7/1/96



● 26. Groundwater charge; power to levy and collect

Sec. 26. The board shall have the power, in addition to the powers enumerated elsewhere in this act, to levy and collect a groundwater charge for the production of water from the groundwater supplies within a zone or zones of the district which will benefit from the recharge of underground water supplies of the distribution of imported water in such zone or zones.

● 26.1. Definitions relative to groundwater charge

Sec. 26.1. As used in connection with the groundwater charge, the following words shall mean:

“Person,” “owner,” or “operator” means public agencies, federal, state, and local, private corporations, firms, partnerships, limited liability companies, individuals or groups of individuals, whether legally organized or not; “owner” or “operator” also means the person to whom a water-producing facility is assessed by the county assessor, or, if not separately assessed, the person who owns the land upon which a water-producing facility is located.

“Groundwater” means nonsaline water beneath the natural surface of the ground, whether or not flowing through known and definite channels; “nonsaline water” means water which has less than 1,000 parts of chlorides to 1,000,000 parts of water, both quantities measured by weight.

“Production” or “producing” means the extraction or extracting of groundwater, by pumping or any other method, from shafts, tunnels, wells (including, but not limited to, abandoned oil wells), excavations or other sources of groundwater, for domestic, municipal, irrigation, industrial, or other beneficial use, except that the terms do not mean or include the extraction of groundwater produced in the construction or reconstruction of a well, or water incidentally produced with oil or gas in the production thereof, or water incidentally produced in a bona fide mining or excavating operation or water incidentally produced in the bona fide construction of a tunnel, unless the groundwater so extracted shall be used or sold by the producer for domestic, municipal, irrigation, industrial, or other beneficial purpose.

“Water-producing facility” means any device or method, mechanical or otherwise, for the production of water from the groundwater supplies within the district or a zone thereof.

“Water production statement” means the certified statement filed by the owner or operator of a water-producing facility with the district of the production of groundwater of the facility in a specified period.

“Water year” means July 1st of one calendar year to June 30th of the following calendar year.

“Agricultural water” means water primarily used in the commercial production of agricultural crops or livestock.

● 26.2. Groundwater charge zones; establishment; amendment

Sec. 26.2. Prior to the establishment of any groundwater charge, the board shall establish a zone or zones within the district within which the groundwater charge will be effective. Said zone or zones shall be established and may be amended to the extent and in the manner prescribed in Section 3 of this act.

● 26.3. Purpose of groundwater charges; use of revenues

Sec. 26.3. Groundwater charges levied pursuant to this act are declared to be in furtherance of district activities in the protection and augmentation of the water supplies for users within a zone or zones of the district which are necessary for the public health, welfare and safety of the people of this State. The groundwater charges are authorized to be levied upon the production of groundwater from all water-producing facilities, whether public or private, within said zone or zones of the district for the benefit of all who rely directly or indirectly upon the groundwater supplies of such zone or zones and water imported into such zone or zones.

The proceeds of groundwater charges levied and collected upon the production of water from groundwater supplies within such zone or zones of the district are authorized and shall be used exclusively by the board for the following purposes:

1. To pay the costs of constructing, maintaining and operating facilities which will import water into the district which will benefit such zone or zones, including payments made under any contract between the district and the State of California, the United States of America, or any public, private or municipal utility.

2. To pay the costs of purchasing water for importation into such zone or zones, including payments made under contract to the State of California, the United States of America, or any public, private or municipal utility.

3. To pay the costs of constructing, maintaining and operating facilities which will conserve or distribute water within such zone or zones, including facilities for groundwater recharge, surface distribution, and the purification and treatment of such water.

4. To pay the principal or interest of any bonded indebtedness or other obligations incurred by the district on behalf of such zone or zones for any of the purposes set forth in paragraphs 1, 2, and 3 of this section.

The district may apply to any one or more of the purposes set forth in paragraphs 1, 2, 3, and 4 of this section any or all revenues received by the district from water sale contracts executed by the district pursuant to this act.

● 26.4. Registration of water-producing facilities; violation; penalty

Sec. 26.4. Within six months after the date of establishing any such zone or zones, all water-producing facilities located within the boundaries of such zone or zones shall be registered with the district and, if required by the board, measured with a water-measuring device satisfactory to the district installed by the district or at the district's option by the operator thereof. Any new water-producing facility, constructed or reestablished, or any abandoned water-producing facility which is reactivated, after such date, shall be registered with the district and, if required by the board, measured with a water-measuring device satisfactory to the district within 30 days after the completion or reestablishment, or reactivation thereof.

Failure to register any water-producing facility, as required by this act, is a misdemeanor punishable by a fine of not to exceed five hundred dollars (\$500), or imprisonment in the county jail for not to exceed six months, or by both such fine and imprisonment.

In addition to other information which the district may determine is necessary and may require in the registration form provided, there shall also be given information as to the owner or owners of the land upon which each water-producing facility is located, a general description and location of each water-producing facility, the name and address of the person charged with the operation of each water-producing facility, and the name or names and addresses of all persons owning or claiming to own an interest in the water-producing facility.

● 26.5. Annual report on district's activities; contents

Sec. 26.5. (a) The district shall annually prepare a written report upon the district's activities in the protection and augmentation of the water supplies of the district. The report shall include, among other information the board may order, a financial analysis of the district's water utility system; information as to the present and future water requirements of the district, the water supply available to the district, and future capital improvement and maintenance and operating requirements; a method of financing those requirements; a recommendation as to whether or not a groundwater charge should be levied in any zone or zones of the district during the ensuing water year and, if any groundwater charge is recommended, a proposal of a rate or rates per acre-foot for agricultural water and a rate or rates per acre-foot for all water other than agricultural water for the zone or zones, which rate or rates, as applied to operators who produce groundwater above a specified annual amount, may be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board.

(b) The report shall not contain a recommendation of any increases in proportion to increased production in a zone unless based upon an analysis showing the cause of the reduction in the groundwater levels of the zone requiring the increases, with attention given to the effect of extractions of pumpers outside of, as well as within the zone, and with an evaluation of alternative measures which may feasibly be taken within the entire affected groundwater basin and of any alternative supplies of water available for that zone, including the availability of treated water supplied by the district or treated groundwaters or groundwaters extracted in a cleanup operation and available to the district for reuse. The report shall be consistent with any conservation and reuse plan approved by the State Water Resources Control Board. The report shall also include all of the following:

- (1) The amount of groundwater produced in the proposed zone and alternative water sources.
- (2) The estimated costs of recharging each zone or zones.
- (3) The estimated costs of mitigating any effects of pumping.
- (4) Information specifying the benefits that have been received and will be received within the zone or zones where a groundwater charge has been levied and collected, or is recommended to be levied and collected.

● 26.6. Hearing on report; notice

Sec. 26.6. On or before the first Tuesday in April of each year the report shall be delivered to the clerk of the district board in writing. The clerk shall publish, pursuant to Section 6061 of the Government Code, a notice of the receipt of the report and of the public hearing to be held on or before the fourth Tuesday in April in a newspaper of general circulation printed and published within the district, at least 10 days prior to the date at which the public hearing regarding the report shall be held. The notice, among other information which the district may provide, shall contain an invitation to all operators of water-producing facilities within the district and to any person interested in the district's activities in the protection and augmentation of the water supplies of the district to call at the offices of the district to examine the report. There shall be held on or before the fourth Tuesday of April of each year, in the chambers of the board, a public hearing at which time any operator of a water-producing facility within the district, or any person interested in the district's activities in the protection and augmentation of the water supplies of the district, may in person, or by representative, appear and submit evidence concerning the subject of the written report.

● 26.7. Levy and collection of groundwater charges; rates; new or adjusted charges; reports; notice; hearing; errors

Sec. 26.7. (a) (1) Prior to the end of the water year in which the hearing is held, and based upon the findings and determinations from the hearing, the board shall determine whether or not a groundwater charge should be levied in any zone or zones.

(2) If the board determines that a groundwater charge should be levied, it shall levy, assess, and affix the charge or charges against all persons operating groundwater-producing facilities within the zone or zones during the ensuing water year.

(3) (A) The charge shall be computed at a fixed and uniform rate or rates per acre-foot for agricultural water, and at a fixed and uniform rate or rates per acre-foot for all water other than agricultural water.

(B) Different rates may be established in different zones, except that in each zone the rate or rates for agricultural water shall be fixed and uniform, and the rate or rates for water other than agricultural water shall be fixed and uniform.

(C) The rate or rates, as applied to operators who produce groundwater above a specified annual amount, may, except in the case of any person extracting groundwater in compliance with a government-ordered program of cleanup of hazardous waste contamination, be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board, upon a finding by the board that conditions of drought and water shortage require the increases. The increases shall be related directly to the reduction in the affected zone groundwater levels in the same base period.

(D) The rates shall be established each year in accordance with a budget for that year submitted by the district to the Board of Supervisors of Santa Clara County pursuant to this act, or amendments or adjustments to that budget, and shall be fixed and uniform rates for agricultural water and for all water other than agricultural water, respectively, except that each such rate for agricultural water shall not exceed one-fourth of the rate for all water other than agricultural water.

(b) (1) The board may also impose or adjust any groundwater charge, and the rate of any charge, on or before January 1 of each water year or at any time during the 1992-93 water year whenever the board determines that the imposition or adjustment of the charge is necessary.

(2) The board shall prepare a supplemental report to the annual report prepared pursuant to Section 26.5, explaining the reasons for the imposition or adjustment of the charge. The board shall file the supplemental report with the clerk of the board at least 45 days before the date the new or adjusted charge is proposed to take effect.

(3) (A) The clerk shall publish in a newspaper of general circulation published within the district, pursuant to Section 6061 of the Government Code, a notice of the receipt of the supplemental report and a hearing to be held on the proposed imposition or adjustment of the groundwater charge at least 31 days before the date on which the new or adjusted charge is proposed to take effect and at least 10 days before the date of the hearing.

(B) The notice shall invite any operator of a water-producing facility within the district and other interested parties to examine the supplemental report prepared pursuant to paragraph (2) at the district office.

(4) (A) A public hearing shall be held at least 21 days before the date on which the new or adjusted groundwater charge is proposed to take effect in the chambers of the board.

(B) Any operator of a water-producing facility within the district may, in person or by means of a representative, present evidence at the hearing concerning the imposition or adjustment of the groundwater charge.

(c) Any groundwater charge levied pursuant to this section shall be in addition to any general tax or assessment levied within the district or any zone or zones thereof.

(d) Clerical errors occurring or appearing in the name of any person or in the description of the water-producing facility where the production of water therefrom is otherwise properly charged, or in the making or extension of any charge upon the records which do not affect the substantial rights of the assessee or assesses, shall not invalidate the groundwater charge.

● 26.8. Notice to owners or operators

Sec. 26.8. The district, after the levying of the groundwater charge, shall give notice thereof to each owner or operator of each water-producing facility in the zone or zones as disclosed by the records of said district, which notice shall state the rate for each class of water of the groundwater charge for each acre-foot of water to be produced during the ensuing water year. Said notice may be sent by postal card or by other first-class mail and with postage prepaid by the district.

● 26.9. Water production statement; computation of charges; interest and penalties

Sec. 26.9. (a) After the establishment of a zone in which a groundwater charge may be levied, each owner or operator of a water-producing facility within the zone, until the time that the water-producing facility has been permanently abandoned, shall file with the district, on or before the 30th day following the end of collection periods established by the board, a water production statement setting forth the total production in acre-feet of water for the preceding collection period, a general description or number locating each water-producing facility, the method or basis of the computation of the water production, and the amount of the groundwater charge based on the computation. The collection periods may be established at intervals of not more than one year or less than one month. If no water has been produced from the water-producing facility during a preceding collection period, this statement shall be filed as provided for in this section, setting forth that no water has been produced during the applicable period. The statement shall be verified by a written declaration under penalty of perjury.

(b) The groundwater charge is payable to the district on or before the last date upon which the water production statements shall be filed, and is computed by multiplying the production in acre-feet of water for each classification as disclosed in the statement by the groundwater charge for each classification of water. The owner or operator of a water-producing facility which is being permanently abandoned shall give written notice of the abandonment to the district. If any owner or operator of a water-producing facility fails to pay the groundwater charge when due, the district shall charge interest at the rate of 1 percent each month on the delinquent amount of the groundwater charge.

(c) If any owner or operator of a water-producing facility fails to register each water-producing facility, or fails to file the water production statements as required by this act, the district shall, in addition to charging interest, assess a penalty charge against the owner or operator in an amount of 10 percent of the amount found by said district to be due. The board may adopt regulations to provide that in excusable or justifiable circumstances the penalty may be reduced or waived.

(d) If any owner or operator of a water-producing facility fails to file a water production statement as required by this act, the district shall, in addition to charging interest and assessing a penalty charge, assess an administrative charge to recover the costs of collection. The board may adopt regulations to provide that in excusable or justifiable circumstances the administrative charge may be reduced or waived.

(e) If a water-measuring device is permanently attached to a water-producing facility, the record of production as disclosed by the water-measuring device shall be presumed to be accurate and shall be used as the basis for computing the water production of the water-producing facility in completing the water production statement, unless it can be shown that the water-measuring device is not measuring accurately.

(f) If a water-measuring device is not permanently attached to a water-producing facility, the board may establish a method or methods to be used in computing the amount of water produced from the water-producing facilities. The methods may be based upon any or all of the following criteria: the minimum charge sufficient to cover administrative costs of collection, size of water-producing facility discharge opening, area served by the water-producing facility, number of persons served by the water-producing facility, use of land served by the water-producing facility, crops grown on land served by the water-producing facility, or any other criteria or criteria which may be used to determine with reasonable accuracy the amount of water produced from that water-producing facility. The district may levy an annual charge upon a water-producing facility for which no production has been recorded but which has not been permanently abandoned if that charge does not exceed the annual cost to the district of maintaining and administering the registration of that facility.

● **26.10. Amendment of statement; correction of records**

Sec. 26.10. Upon good cause shown, an amended statement of water production may be filed or a correction of the records may be made at any time within six months of filing the water production statement; provided that if pursuant to Section 26.13, the owner or operator has been notified of a determination by the district that the production of water from the water-producing facility is in excess of that disclosed by the sworn statement covering such water-producing facility, and such owner or operator fails to protest such determination in the manner and in the time set forth in Section 26.13, the owner or operator shall be precluded from later filing an amended water production statement for that period for such water-producing facility.

● **26.11. Record of water production and groundwater charges**

Sec. 26.11. The district shall prepare each year a record called "The Record of Water Production and Groundwater Charges" in which shall be entered a general description of the property upon which each water-producing facility is located, an identifying number or code which is assigned to such facility, the annual water production for each class of water produced from each water-producing facility, and the groundwater charge for each class of water.

● **26.12. Injunctive relief; grounds; process; procedure**

Sec. 26.12. The superior court of the county in which the district lies may issue a temporary restraining order upon the filing by the district with said court of a petition or complaint setting forth that the person named therein as defendant is the operator of a water-producing facility which has not been registered with the district, or that such defendant is delinquent in the payment of a groundwater charge. Such temporary restraining order shall be returnable to said court on or before 10 days after its issuance.

The court may issue and grant an injunction restraining and prohibiting the named defendant from the operation of any water-producing facility when it is established at the hearing that the defendant has failed to register such water-producing facility with the district, or that the defendant is delinquent in payment of groundwater charges thereon. Such court may provide that the injunction so made and issued shall be stayed for a period not to exceed 10 days to permit the defendant to register the water-producing facility or to pay the delinquent groundwater charge.

Service of process is completed by posting a copy of the summons and complaint upon the water-producing facility or the parcel of land upon which it is located and by personal service upon the named defendant.

The right to proceed for injunctive relief granted herein is an additional right to those which may be provided elsewhere in this act or otherwise allowed by law. The procedure provided in Chapter 3 (commencing with Section 525), Title 7, Part 2, of the code of Civil Procedure, regarding injunctions shall be followed except insofar as it may herein be otherwise provided. The district shall not be required to provide an undertaking or bond as a condition to granting injunctive relief.

● **26.13. Excess water production; investigation and report; fixing amount of production; protest**

Sec. 26.13. If the district has probable cause to believe that the production of water from any water-producing facility is in excess of that disclosed by the sworn statements covering such water-producing facility, or if no statements are filed covering any water-producing facility, the district may cause an investigation and report to be made concerning the production of water from each such water-producing facility. The district may fix the amount of water production from any such water-producing facility at an amount not to exceed the maximum production capacity of such water-producing facility; provided, however, where a water-measuring device is permanently attached thereto, the record of production, as disclosed by such water-measuring device, shall be presumed to be accurate.

After such determination has been made by the district, a written notice thereof shall be mailed to the person operating such water-producing facilities at the address shown by the district's records. Any such determination made by the district shall be conclusive on all persons having an interest in such water-producing facility, and the groundwater charge, interest and penalties thereon, shall be paid forthwith, unless such person files with the board within 15 days after the mailing of such notice, a written protest setting forth the ground or grounds for protesting the amount of production so fixed. Upon the filing of such protest, the board thereafter shall hold a hearing at which time the total amount of the water production and the groundwater charge thereon shall be determined, which shall be conclusive if based upon substantial evidence. If the water production statement was filed and the amount disclosed thereon was paid within the time required by this act, and the board finds that the failure to report the amount of water actually produced resulted from excusable or justifiable circumstances, the board may waive the charge of interest on the amount found to be due. A notice of such hearing shall be mailed to the protestant at least 10 days before the date fixed for the hearing. Notice of the determination by the board shall be mailed to each protestant, who shall have 20 days from the date of mailing to pay the groundwater charge, interest or penalties provided by the provisions of this act.

Notice as required in this section shall be given by deposit thereof in any postal facility regularly maintained by the government of the United States in a sealed envelope with postage paid, addressed to the person on whom it is served at the name and address disclosed by the records of the district. The service is complete at the time of deposit.

●26.14. Collection of delinquent charges; interest and penalties; attachment

Sec. 26.14. The district may bring a suit in the court having jurisdiction against any operator of a water-producing facility within the district for the collection of any delinquent groundwater charge. The court having jurisdiction of said suit may, in addition to allowing recovery of costs to said district as allowed by law, fix and allow as part of the judgment interest and penalties as provided in Section 26.9. Should the district, as a provisional remedy in bringing such suit, seek an attachment against the property of any named defendant therein, the district shall not be required to provide a bond or undertaking as is otherwise provided for in the Code of Civil procedure of the State of California in Chapter 4 (commencing with Section 537), Title 7, Part 2, thereof.

●26.15. Production from unregistered facilities; violations; penalties

Sec. 26.15. It shall be unlawful to produce water from any water-producing facility required to be registered pursuant to the terms of this act unless such water-producing facility has been registered with the district within the time required by the provisions of this act and, if required by the board, has a water-measuring device affixed thereto capable of registering the accumulated amount of water produced therefrom.

Violation of this provision shall be punishable by a fine not to exceed five hundred dollars (\$500), or imprisonment in the county jail for not to exceed six months, or by both such fine and imprisonment. Each day of operation in violation hereof shall constitute a separate offense.

●26.16. Interfering or tampering with measuring device; filing fraudulent statements

Sec. 26.16. Any person who injures, alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures or causes or directs any person to injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any water-measuring device affixed to any water-producing facility as required by this act, so as to cause said water-measuring device to improperly or inaccurately measure and record said water production, or any person who willfully does not file with the district a water production statement as prescribed and within the time required by this act, or any person who willfully removes or breaks a seal attached to an abandoned water-producing facility, or any person who with intent to evade any provision or requirement of this act files with the district any false or fraudulent water production statement is guilty of a misdemeanor and is punishable by a fine not to exceed five hundred dollars (\$500), or imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

●26.17. Enforcement powers

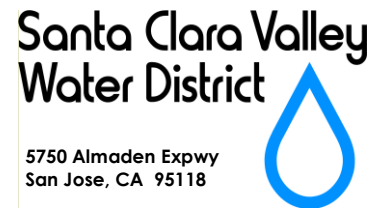
Sec. 26.17. In implementing the enforcement of the provisions of this act relating to groundwater charges, the district shall have the power, in addition to the powers enumerated elsewhere in this act:

1. To install and maintain water-measuring devices, and other devices which will aid in determining accurate water production, on water-producing facilities not owned by the district.

2. To affix seals to water-producing facilities which the owner or operator thereof has declared to be abandoned, or are in fact permanently abandoned.

3. To enter on to any land for the purposes enumerated in this section and for the purpose of making investigations relating to water production.

Ordinance No. 70-1



ENACTING RULES AND REGULATIONS
GOVERNING THE RECORDING OF GROUND
WATER PRODUCTION WITHIN A ZONE OF
SANTA CLARA VALLEY WATER DISTRICT IN
WHICH A GROUND WATER EXTRACTION
CHARGE IS LEVIED. AS AMENDED 6/2/87

**Rules and Regulations
Governing the Recording of
Ground Water Production**

REVISED 7/1/87

The Board of Directors of Santa Clara Valley Water District do hereby enact as follows:

ARTICLE I

Ordinance W-2.2.1 of the District is hereby repealed.

ARTICLE II

The following Rules and Regulations Governing the Recording of Ground Water Production are hereby adopted and shall apply in any zone of Santa Clara Valley Water District in which a ground water extraction charge is levied.

Opening Statement

Under the provisions of the Santa Clara Valley Water District Act of the State of California, if this District elects to impose a ground water charge, it must base that charge upon the production of ground water in acre feet. The responsibility of the owner or operator of a pump or other ground water producing facility is to keep a record and to file a report of his production. The following rules and regulations are established to ensure that the ground water charge is equitably laid; that **ALL** production is reported with a maximum of accuracy and that consequently no one is unfairly burdened.

Sec. 1. RECORDS OF GROUND WATER PRODUCTION

Each owner or operator of a ground water producing facility shall keep a record of water produced from each such facility, and in preparing his semi-annual water production statement as required by Section 26.9 of said Act shall follow the instructions and worksheets to be supplied by the District in form as officially adopted from time to time by resolution of the Board.

Sec. 2. DETERMINATION OF UNMETERED GROUND WATER

In the case of a ground water producing facility to which no meter is attached, the record of production shall be determined by a method reasonably available to the owner or operator and most likely to be accurate. The acceptable methods of determining such production graded as to accuracy from highest to lowest are as follows:

- (a) By use of an efficiency or flow test determining the rate of production of the facility together with a device which accurately records the duration of operation of the facility within the reporting period.
- (b) By use of an efficiency or flow test determining the kilowatt hours of electrical power necessary to produce an acre foot or other quantity of water together with a device that accurately records the consumption of kilowatt hours within the reporting period.

- (c) By reference to a record of total kilowatt hours consumed by the facility and/or booster pump for the reporting period together with total head (defined as including depth to water, a determination of the drawdown, sprinkler operating pressure and line loss or lift), by use of the following alternative formulae:

Where pump efficiency is known the formula shall be:

$$\frac{\text{head in feet} \times .00314}{\text{pump efficiency} \times \text{motor efficiency}} = \frac{\text{kilowatt hours per}}{1,000 \text{ gallons produced}}$$

Where pump efficiency is unknown a total efficiency of pump and motor of 40 percent is assumed and the formula shall be:

$$\frac{\text{Kilowatt hours} \times .391}{\text{total head}} = \frac{\text{total acre-feet of}}{\text{water produced}}$$

- (d) By reference to a crop factor, being the average of normal irrigation requirements per acre of the crop or crops irrigated by the facility in question, as shown in the current "Table of Water Factors" as adopted by resolution of the Board. In the case of a ground water producing facility producing water devoted in whole or in part to a domestic use, the domestic use portion of such production shall be determined by reference to a "Table of Average Uses" as adopted by resolution of the Board.

Sec. 3. ACQUISITION, INSTALLATION AND MAINTENANCE OF METERS BY OWNER OR OPERATOR

Each owner or operator of a ground water producing facility primarily producing (a) agricultural water or (b) water other than agricultural water in not less than amounts to be set for each said category by the Board of Directors for each fiscal year in which a ground water extraction charge is levied, shall acquire and install on each such facility a meter. The meter and its installation shall be satisfactory to the District. To be satisfactory such a meter shall be capable of recording to within approximately two percent of 100 percent accuracy. Where measurement of production cannot reasonably be determined without a meter the acquisition and installation of a satisfactory water meter or other appropriate device may be ordered in particular cases by the General Manager of the District without regard to the estimate of production hereinabove specified. Ground water producing facilities installed hereafter shall be installed equipped with meters if subject to this section; installation of meters upon existing facilities where required by this section shall be completed within thirty days of the effective date of this Ordinance or of receipt of a written direction by the General Manager so to do, subject, nevertheless to the provisions of Sec. 6 hereof. All meters or other devices used to base sworn statements of the production of a ground water producing facility shall be systematically and properly maintained by the owner or operator for accurate operation, failing which the record of production so disclosed shall have no presumption of accuracy and the District may cause an investigation and report to be made concerning such water producing facility as provided by law,

a copy of test records supplied with new meters and at times of overhaul and retest shall be supplied by the owner or operator to the District.

Sec. 4. ACQUISITION, INSTALLATION AND MAINTENANCE OF METERS BY DISTRICT

Notwithstanding the foregoing any owner or operator who is required to acquire, install and maintain a meter pursuant to this Ordinance by reason of installation of a ground water producing facility or a reactivation or a change of use of such a facility, may request the District to acquire, install and maintain such meter and to relocate piping or do other associated connection work. The request will be denied if the District determines that:

- (a) The request was not made at a time long enough prior to installation or reactivation of a ground water producing facility to permit the acquisition of a meter and the installation thereof as part of the installation or reactivation of such facility, 30 days being deemed, in the absence of special circumstances, the minimum such period; or
- (b) The provision of a meter is not economically justifiable and other acceptable means of measuring production exist or the facility is to be deactivated in the reasonably near future.

Where the District has determined that the request was not timely the District may, nevertheless, acquire and deliver and maintain a meter at its cost but may install the same (including any necessary additional piping) at the expense of the owner or operator. In such a case the owner or operator may accomplish the installation if the work is done under District supervision and to District approval.

Sec. 5. DISTRICT METER ON ABANDONED FACILITY

If the meter on any abandoned water-producing facility is owned by the District, the owner or operator of the water-producing facility shall, within 10 calendar days after said abandonment of such water-producing facility, notify the District in writing of the abandonment, and shall be responsible for and shall preserve such meter in a safe condition for 10 calendar days after written notice has been given to the District.

Sec. 6. APPLICATION FOR EXCEPTIONS

Upon the application of any owner or operator of a water-producing facility, stating fully the grounds of the application and all facts relied upon by the applicant, the Board of Directors of this District may authorize exceptions from the provisions of this Ordinance. In order for the

application to come within this section it will be necessary for the applicant to show:

- (a) That the determinations of the District which are the subject of the application are not reasonably accurate, or
- (b) That there are special circumstances which make the application of this Ordinance unreasonable or unnecessary in relation to a particular water-producing facility or group of facilities; that the granting of the exception will not be detrimental to the orderly and economic collections of ground water charges; and that the granting of the exception will not be inconsistent with the intent of this Ordinance.
- (c) That any application relating to metering of water-producing facilities primarily producing agricultural water has first been presented to and considered by the Agricultural Water Advisory Committee of this District, and that said Committee has made its recommendation thereon.

The Board of Directors of this District in granting any exception may attach conditions thereto, including, but not limited to, requirements that the owner or operator of any unmetered water-producing facility keep and supply the District with regularly kept records and logs of information regarding the facility, including depth of water, electrical power consumption, the result of any efficiency tests made, measurements of pump output, hours of operation, time of operation and other data pertinent to determination of production, in addition to the requirements of Sec. 1 hereof.

Sec. 7. VIOLATIONS A MISDEMEANOR

Any owner or operator violating any of the provisions of Sections 3 or 5 of this Ordinance shall be guilty of a misdemeanor and is punishable by a fine not exceeding \$500 or by imprisonment in the County jail for a period of not to exceed 6 months or by both such fine and imprisonment.

Sec. 8. SEVERABILITY

Should any section or provision of this Ordinance be decided by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the Ordinance as a whole or any part thereof other than the part decided to be unconstitutional or invalid.

PASSED AND ADOPTED by the Board of Directors of Santa Clara County Flood Control and Water District [now SANTA CLARA VALLEY WATER DISTRICT] this 13th day of January, 1970, by the following vote:

AYES: Directors J. Chiri, V. F. Corsiglia, M. E. Dullea, J. J. Lenihan, R. T. Sapp, R. J. Sturla, F. A. Wilcox

NOES: Directors NONE

ABSENT: Directors NONE

James Lenihan
Chairman of the Board of Directors

ATTEST: Violet V. Enander
Clerk of said Board of Directors

AS AMENDED 6/2/87
EFFECTIVE 7/4/87

Appendix C

Examples of Water Production Statement

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Appendix C

CVPIA Water Management Plan | December 2011

Santa Clara Valley
Water District
Wells and Water Production Unit
5750 Almaden Expressway
San Jose, CA 95118-3886
(408) 265-2600 or (408) 847-6484

SEMI-ANNUAL WATER PRODUCTION STATEMENT

TIME STAMP

DO NOT
WRITE IN THIS
SPACE

AMOUNT PAID \$	CASHIER	POSTED
AMOUNT PAID \$	CASHIER	POSTED

Note Any Change of Address or Ownership Below.

DISTRICT WELL NO.	OWNER NO.	APN	DUE DATE
STATEMENT NO.	STATEMENT PERIOD	DATES OF OWNERSHIP	
REPORTING METHOD			

	WATER METER 1 SERIAL NUMBER			WATER METER 2 SERIAL NUMBER		
	UNIT OF MEASURE/MULTIPLIER	ACRE FEET		UNIT OF MEASURE/MULTIPLIER	ACRE FEET	
1. Ending Water Meter Reading . . .						
2. Beginning Water Meter Reading						
3. Water Meter Production	X		=	X		=

4. Additional Metered/Correlated Production	AF	
5. Total Metered/Correlated Production	AF	
6. Non-Agricultural Water Use—See definition on Page 5.	AF X	= \$
7. Agricultural Water Use—See definition on Page 5	AF X	= \$

WATER USAGE	RATE PER ACRE-FOOT	WATER USAGE COST
AF X		= \$
AF X		= \$

8. Add both Non-Agricultural and Agricultural Water Usage Costs, and enter the result here	TOTAL WATER USAGE COST	\$
9. Penalty: Multiply Total Water Usage Cost by .10 and enter here	\$	
10. Interest: Multiply Total Water Usage Cost by .01 for each month or portion of a month payment is past due and enter here . . .	\$	
11. TOTAL AMOUNT DUE: Add Lines 8, 9, and 10, then enter Total here. PAY THIS AMOUNT →	TOTAL AMOUNT DUE	\$

I declare under penalties of perjury that the statements made and figures shown on this water production statement and on any accompanying worksheets or statements to this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.	SIGNATURE	DATE
	X	

Change of Address or Ownership:
If you are no longer the owner of the water producing facility listed herein, please furnish the following information:

The last date you were owner (date deed was recorded): _____ Month _____ Day _____ Year New Owner Name: _____

Street _____ Phone No. _____

City _____ State _____ Zip Code _____

PLEASE SEE INSTRUCTIONS ON PAGE 7

The Santa Clara Valley Water District will make reasonable efforts in the filing of water production statements to accommodate persons with disabilities. Please advise the Wells and Water Production Unit at (408) 265-2607, extension 2770, of any special needs.

DISTRICT COPY—RETURN WITH YOUR PAYMENT & APPLICABLE WORKSHEETS

Appendix C



HOUR METER, EFFICIENCY TEST, POWER METER METHOD

WORKSHEET A WORKSHEET A INSTRUCTIONS

HOUR METER METHOD

- Line 2 Enter your current hour meter reading exactly as the meter reads, being certain to place the decimal point correctly.
- Line 3 Subtract the meter reading on this line from the reading on Line 2 and enter the result on Line 4.
- Line 4 Convert hours to minutes (x 60) and multiply by the gallons per minute (GPM) to determine Total Gallons.
Divide Total Gallons by Gallons/AF to determine Total AF.

EFFICIENCY TEST METHOD

- Line 2 Enter your current power meter reading exactly as the meter reads, being certain to place the decimal point correctly.
- Line 3 Subtract the meter reading on this line from the reading on Line 2 and enter the result on Line 4.
- Line 4 Multiply the KWH on the power meter by the Multiplier to determine Total KWH.
Divide the total KWH by KWH/AF to determine Total AF.

POWER METER METHOD

- Line 2 Enter your current power meter reading exactly as the meter reads, being certain to place the decimal point correctly.
- Line 3 Subtract the meter reading on this line from the reading on Line 2 and enter the result on Line 4.
- Line 4 Multiply the KWH on the power meter by the multiplier to determine Total KWH. Divide Total KWH by Total Head.
Multiply the results by .391 to determine Total AF.

Ending hour and power meter reading may be obtained by calling the Water Production Unit at (408) 265-2600.
If applicable, please refer to Page 7 for instructions on dividing Total AF between agricultural and non-agricultural usage.

HOUR METER METHOD						
1. Hour meter serial number	<input style="width: 100%;" type="text"/>					
2. Ending hour meter reading	<input style="width: 100%;" type="text"/>					
3. Beginning hour meter reading		MINUTES		GPM	TOTAL GALLONS	TOTAL AF
4. Total hours of operation	X	60	X	=	=	
					325,850 GA/AF	
EFFICIENCY TEST METHOD						
1. Power meter serial number	<input style="width: 100%;" type="text"/>					
2. Ending power meter reading	<input style="width: 100%;" type="text"/>					
3. Beginning power meter reading		MULTIPLIER		TOTAL KWH	TOTAL AF	
4. KWH on power meter	X		=	=		
				KWH/AF		
POWER METER METHOD						
1. Power meter serial number	<input style="width: 100%;" type="text"/>					
2. Ending power meter reading	<input style="width: 100%;" type="text"/>					
3. Beginning power meter reading		MULTIPLIER		TOTAL KWH	EFFICIENCY MODIFICATION RATE	TOTAL AF
4. KWH on power meter	X		=	=	X .391 =	
				TOTAL HEAD		

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF IT IS USED TO DETERMINE PRODUCTION

Appendix C

CVPIA Water Management Plan | December 2011

Santa Clara Valley
Water District

Wells and Water Production Unit
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600 or (408) 847-6484

SEMI-ANNUAL WATER PRODUCTION STATEMENT

TIME STAMP

DO NOT
WRITE IN THIS
SPACE

AMOUNT PAID \$	CASHIER	POSTED
AMOUNT PAID \$	CASHIER	POSTED

Note Any Change of Address or Ownership Below.

DISTRICT WELL NO.	OWNER NO.	APN	DUE DATE
STATEMENT NO.	STATEMENT PERIOD	DATES OF OWNERSHIP	
REPORTING METHOD			

	WATER METER 1 SERIAL NUMBER			WATER METER 2 SERIAL NUMBER		
	UNIT OF	ACRE		UNIT OF	ACRE	
	MEASURE/MULTIPLIER	FEET		MEASURE/MULTIPLIER	FEET	
1. Ending Water Meter Reading						
2. Beginning Water Meter Reading						
3. Water Meter Production	X		=	X		=

4. Additional Metered/Correlated Production	AF	
5. Total Metered/Correlated Production	AF	
6. Non-Agricultural Water Use—See definition on Page 5	AF X	= \$
7. Agricultural Water Use—See definition on Page 5	AF X	= \$

WATER USAGE	RATE PER ACRE-FOOT	WATER USAGE COST
AF X		= \$
AF X		= \$

8. Add both Non-Agricultural and Agricultural Water Usage Costs, and enter the result here	TOTAL WATER USAGE COST	\$
9. Penalty: Multiply Total Water Usage Cost by .10 and enter here		\$
10. Interest: Multiply Total Water Usage Cost by .01 for each month or portion of a month payment is past due and enter here		\$
11. TOTAL AMOUNT DUE: Add Lines 8, 9, and 10, then enter Total here. PAY THIS AMOUNT	TOTAL AMOUNT DUE	\$
I declare under penalties of perjury that the statements made and figures shown on this water production statement and on any accompanying worksheets or statements to this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.		SIGNATURE
		DATE

Change of Address or Ownership:

If you are no longer the owner of the water producing facility listed herein, please furnish the following information:

The last date you were owner (date deed was recorded): _____ Month _____ Day _____ Year New Owner Name: _____

Street _____ Phone No. _____

City _____ State _____ Zip Code _____

PLEASE SEE INSTRUCTIONS ON PAGE 7

The Santa Clara Valley Water District will make reasonable efforts in the filing of water production statements to accommodate persons with disabilities. Please advise the Wells and Water Production Unit at (408) 265-2607, extension 2770, of any special needs.

KEEP THIS PART WITH YOUR RECORDS

Appendix C



AGRICULTURAL USE ONLY

WORKSHEET B

WORKSHEET B INSTRUCTIONS

If you report groundwater production using the Table of Applied Water Factors, the amount you owe is fixed for the calendar year on a per crop basis. You must report and pay the Semi-Annual Crop Factor in both the first and second reporting periods when you irrigate in the spring or if you irrigate both in the spring and the fall. If you only irrigate in the fall, and you do not report in semi-annual installments, then you owe 2 times the Semi-Annual Crop Factor for the second reporting period, for a crop brought to harvest within that calendar year.

If you determine production using a water meter or Worksheet A, and the water used was 100% agricultural, complete the "CROP TYPE," "METHOD OF IRRIGATION," and "ACRES CULTIVATED" sections. Otherwise, complete all sections of this worksheet to calculate acre-feet.

LINE 1 Table of Irrigation Methods.

LINE 2 To determine the total amount of agricultural water used, include any and all water used by the well owner or operator plus any water sold to others during the reporting period. Portions and variables from the Table of Applied Water Factors are not allowed if this method is used. Enter the appropriate irrigation code from Line 1, Table of Irrigation Methods, for each crop grown.

LINE 3 Livestock Water Use: Enter the appropriate number of units and multiply by the Water Use Factor to determine Number of Gallons. Divide the Number of Gallons by 325,850 to determine Acre Feet.

LINE 4 Add all totals of Acre Feet and enter here.

TABLE OF APPLIED WATER FACTORS—USE ONLY FOR CROP FACTOR METHOD

CROP TYPE	SEMI-ANNUAL CROP FACTOR	CROP TYPE	SEMI-ANNUAL CROP FACTOR
Alfalfa	0.65	Jojoba	0.35
Apples	1.05	Kiwi	1.20
Apricots	0.50	Lettuce	0.90
Artichokes	0.85	Mushrooms	1.50
Asparagus	1.25	Onions (Dry)	1.05
Barley	0.35	Onions (Green)	1.85
Beans (Bush)	0.75	Orchard (Mixed)	0.65
Beans (Pole)	0.70	Ornamental Plants	0.65
Berries	2.05	Pasture (Hay)	0.85
Broccoli	1.00	Peaches	0.75
Cabbage	1.00	Pears	1.05
Carrots	0.85	Pears (Prickly)	1.05
Cauliflower	0.75	Peppers	1.20
Celery	2.00	Persimmons	0.85
Cherries	1.10	Prunes	0.70
Chinese Cabbage	0.60	Pumpkins	0.60
Christmas Trees	0.60	Rose Bushes	2.75
Corn (Corn Nuts)	1.00	Row Crop (Mixed)	1.05
Corn (Silage)	0.50	Sod	1.75
Corn (Sweet)	1.10	Squash	0.50
Cucumbers	1.25	Sugar Beets	0.85
Eucalyptus	0.65	Tomatoes (Bush)	1.00
Flowers	2.00	Tomatoes (Pole)	1.40
Flowers (for seed)	1.00	Vineyards (Grape)	0.35
Garlic	0.90	Walnuts	0.60
Herbs (Indoor)	1.85		
Herbs (Outdoor)	1.20		

1. TABLE OF IRRIGATION METHODS	IRRIGATION METHOD				IRRIGATION CODE		
	Contour				01		
	Drip—Use 1/2 of the Semi-Annual Crop Factor of Normal Irrigation				02		
	Free Flow				03		
Sprinklers—Average Line Pressure _____ PSI				04			
2. AGRICULTURAL WATER USE	CROP TYPE		METHOD OF IRRIGATION	ACRES CULTIVATED THIS PERIOD	SEMI-ANNUAL CROP FACTOR (Above)	ACRE FEET	
				X	=		
				X	=		
				X	=		
				X	=		
				X	=		
3. LIVESTOCK WATER USE	TYPE OF USE	UNIT	NO. OF UNITS	WATER USE FACTOR	NO. OF GALLONS	CONVERSION FACTOR	ACRE FEET
	Chicken Ranches	100 Chickens	X	883.2	=	/	325,850 =
	Livestock Drinking Water	Head	X	2,760.0	=	/	325,850 =
	Dairy Farm	Gallons of Milk per Day	X	850.0	=	/	325,850 =
4. TOTAL AGRICULTURAL ACRE FEET							

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF YOU CLAIM THE AGRICULTURAL RATE

SEMI-ANNUAL WATER PRODUCTION STATEMENT INSTRUCTIONS, WORKSHEETS AND APPLIED WATER FACTORS

The owner of the parcel of land upon which a water-producing facility is located is responsible for filing the water production statement and paying the resultant charges. If no water was produced, the statement must be filed stating "NO PRODUCTION" until such time as the water-producing facility is permanently abandoned.

REQUIREMENTS OF STATE LAW

- A. If any owner or operator of a water producing facility fails to file the water production statement by the due date, the District shall assess a penalty charge against the owner or operator in the amount of ten percent (10%) of the amount found due by the District. In addition to assessing a penalty charge, the District shall assess an administrative charge to recover the costs of collection.

An owner or operator who is assessed penalty and administrative charges may petition the District in writing for reduction or waiver thereof, specifying the excusable or justifiable circumstances grounding the petition. The written petition must be received by the District within 15 days of the receipt by the owner or operator of the notice of assessment.

- B. If any owner or operator of a water-producing facility fails to pay the groundwater charge by the due date, the District shall charge interest at the rate of one percent (1%) each month the payment is past due. *There is no provision under state law whereby the interest charge can be waived.*
- C. If the District has probable cause to believe that the production of water from any water-producing facility is in excess of the amount disclosed on the sworn statements filed, or if no statements are filed for such

facility, the District may fix the amount of water production at an amount not to exceed the maximum production for such facility.

DEFINITIONS

- A. COMPLETED STATEMENT—A statement filed with the District that:
1. Was calculated using the correct reporting method.
 2. Was signed under penalty of perjury by the owner or an authorized representative.
 3. Was accompanied by all necessary worksheets relating to the method of calculation and agricultural rate.
- B. FINAL FILING DATE (imprinted on statement)—The date statement must be filed with the District or postmarked on or before midnight.
- C. AGRICULTURAL WATER—Water primarily used in the commercial production of agricultural crops or livestock.
- D. NON-AGRICULTURAL WATER—All water that does not qualify as agricultural water.
- E. AGRICULTURAL RATE—To qualify for the agricultural rate, the production must fulfill all the requirements of the agricultural water definition and be supported by a completed Worksheet B.
- F. PERMANENT ABANDONMENT—A permanently abandoned well is a well that has been properly sealed in accordance with District Ordinance 90-1.

REPORTING METHODS

WATER METER	<p>If there's a water meter installed, the recorded production must be used as the basis for computing water production. If all or part of the metered water was used for agricultural purposes, you must complete Worksheet B.</p> <p>Do not attempt any maintenance, lubrication, repair or adjustment of the water meter.</p> <p>If your meter does not register, has any broken seals, is leaking or does not appear to be operating properly, immediately report the condition to the Water Production Unit by calling (408) 265-2600. Notify the District if it becomes necessary to move the meter to change your pump or piping arrangement.</p> <p>A lock and key is furnished for each meter. Please keep the cover plate locked to avoid damage to the register head. If your key should become lost, record the well number and lock number and request a replacement key from the District.</p>
HOURLY METER	A correlation based on a recording device used to record the actual accrued time the pump was in operation and a valid output flow check. Use Worksheet A to calculate water production.
EFFICIENCY TEST	A correlation based on kilowatt hours required to pump an acre foot of water based upon a pump test. Use Worksheet A to calculate water production.
POWER METER	A correlation based on power consumption divided by total head (drawdown in feet to the standing depth to water in the well plus the calculated change from pressure head to feet). Use Worksheet A to calculate water production.
TABLES OF AVERAGE USES	Production of each type of usage must be determined from tables. Use Worksheets B, C, and/or D to calculate production.

All worksheets used in the determination of production must be filed with the water production statement.

Ending water, hour, and power meter readings may be obtained by calling the Water Production Unit at (408) 265-2600.

Appendix C



WORKSHEET C WORKSHEET C INSTRUCTIONS

NON-AGRICULTURAL USE DOMESTIC USE ONLY

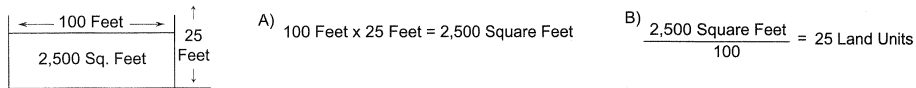
Table of Average
Water Use Method

LINE 1 **Table of Average Water Use:** Water usage is divided into four categories: inside use, watered land, livestock, and farm workers.

INSIDE WATER USE—Water used for household purposes. Usage (AF) is determined by multiplying the number of persons by the factor.

WATERED LAND—Water used for irrigation of lawn, flowers, shrubs, trees, family gardens and pasture for domestic livestock. Usage (AF) is determined by multiplying the number of Land Units by the factor. A Land Unit is 100 square feet, one acre is 435.6 Land Units.

EXAMPLE: Determine Land Units by multiplying the length of the irrigated land (in feet) by the width (in feet) and *then* divide by 100.



LIVESTOCK—Water used for domestic animals such as horses, cattle, sheep or goats, raised for home use. Usage (AF) is determined by multiplying the number of livestock by the factor.

FARM WORKERS—Water used for farm workers. Usage (AF) is determined by multiplying the number of farm workers by the factor.

LINE 2—**Total AF (acre feet):** Total each column of AF.

LINE 3—Add all totals of AF from Line 2 and enter here.

1.	INSIDE WATER USE			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	AF	NO. OF LAND UNITS	FACTOR	AF	NO. OF LIVESTOCK	FACTOR	AF	NO. OF WORKERS	FACTOR	AF
RESIDENCE 1	X	.04 =		X	.004 =		X	.01 =		X	.02 =	
RESIDENCE 2	X	.04 =		X	.004 =		X	.01 =		X	.02 =	
RESIDENCE 3	X	.04 =		X	.004 =		X	.01 =		X	.02 =	
RESIDENCE 4	X	.04 =		X	.004 =		X	.01 =		X	.02 =	
RESIDENCE 5	X	.04 =		X	.004 =		X	.01 =		X	.02 =	
2. Total AF	TOTAL			TOTAL			TOTAL			TOTAL		
3. TOTAL DOMESTIC ACRE FEET												

SEMI-ANNUAL WATER PRODUCTION STATEMENT INSTRUCTIONS

Lines 1 through 5 apply only to the water meter reporting method. For instructions on hour meter, efficiency test, power meter and tables of average use reporting methods, please refer to Page 5.

- LINE 1 Enter your current meter reading exactly as the meter reads, being certain to place the decimal point correctly. Meter readings may be obtained by calling the Wells and Water Production Unit at (408) 265-2607, extension 2770.
 - LINE 2 Subtract the meter reading on this line from the reading on Line 1 and enter the results on Line 3.
 - LINE 3 If your meter reads in acre feet, the amount shown on Line 3 is your metered water use in acre feet.
If your meter reads in gallons, multiply the production on Line 3 by the multiplier shown and divide the results by 325,850 to determine acre feet.
If your meter reads in cubic feet, multiply the production on Line 3 by the multiplier shown and divide the results by 43,560 to determine acre feet.
 - LINE 4 Production from any meter which may have been removed from this well during the reporting period and/or correlated production for any unmetered production.
 - LINE 5 Add Acre Feet from Lines 3 and 4 to determine Total Metered/Correlated Production.
If applicable, please refer to the section below to determine how to divide metered production between non-agricultural and agricultural usage.
Round Total Metered/Correlated Production to two decimal places before entering in the appropriate WATER USAGE COST boxes.
 - LINE 6 Enter non-agricultural water use, multiply by the rate and enter the result in WATER USAGE COST box.
 - LINE 7 Enter agricultural water use, multiply by the rate and enter the result in the WATER USAGE COST box.
 - LINE 8 Add the WATER USAGE COST for lines 6 and 7, and enter the result in the TOTAL WATER USAGE COST box.
- IF STATEMENT IS FILED AND/OR PAID AFTER THE DUE DATE, COMPLETE LINES 9 AND 10.**
- LINE 9 **Penalty:** Multiply Total Water Usage Cost by .10 (10%).
 - LINE 10 **Interest:** Multiply Total Water Usage Cost by .01 (1%) for each month or portion of a month payment is past due.
 - LINE 11 **Total Amount Due:** Add Lines 8, 9, and 10 to determine Total Amount Due. **Sign, date and return with payment and completed worksheets.**

INSTRUCTIONS FOR DIVIDING AGRICULTURAL AND NON-AGRICULTURAL USAGE WHEN PRODUCTION IS DETERMINED BY WATER METER OR WORKSHEET A

- A. If the water production metered or calculated using Worksheet A was used 100% for AGRICULTURAL:
 - Complete the "CROP TYPE," "METHOD OF IRRIGATION," and "ACRES CULTIVATED" sections of Worksheet B.
 - Enter the total acre feet from Worksheet B on Statement Line 7 in the Water Usage box.
- B. If the water production metered or calculated using Worksheet A was used 100% for NON-AGRICULTURAL:
 - Enter the total acre feet on Statement Line 6 in the Water Usage box.
- C. If the total metered water produced was used in a combination of ways and the least amount of water used was:
 - Agricultural then complete Worksheet B.
 - Domestic then complete Worksheet C.
 - Municipal and Industrial then complete Worksheet D.

D. Enter total metered water here AF

E. Enter the least amount of your water production from the worksheet(s) used on Line C above AF

- If the water use shown by the amount on Line E is:
- Agricultural—Enter this amount on the Water Production Statement on Line 7, Water Usage box.
 - Non-Agricultural—Enter this amount on the Water Production Statement on Line 6, Water Usage box.

F. Subtract the amount on Line E above from the amount on Line D above and enter here AF

- If the amount on Line F is agricultural water, enter this amount on the Water Production Statement on Line 7, Water Usage box.
- If the amount on Line F is non-agricultural water, enter this amount on the Water Production Statement on Line 6, Water Usage box.

Appendix C



WORKSHEET D

UNIT CONSUMPTION METHOD MUNICIPAL AND INDUSTRIAL USE ONLY

WORKSHEET D INSTRUCTIONS

- Line 1 Calculate inside water use, if any, by filling in the table for your type of business activities that are listed here.
- Line 2 Add all gallon totals and enter into box on Line 2.
- Line 3 Convert gallons to acre feet by dividing Line 2 total by 325,850 and enter into box on Line 3.
- Line 4 Calculate outside water use, if any, by filling in the table for your type of business activities that are listed here.
- Line 5 Add all acre feet totals and enter into box on Line 5.
- Line 6 Add AF on Lines 3 and 5 and enter here.

1. Calculate inside water use by completing the following table.						
TYPE OF BUSINESS ACTIVITY	UNIT	NO. OF UNITS	NO. OF DAYS	WATER USE FACTOR	GALLONS	
Livestock Drinking Water	Head		N/A	x	2,760 =	
Milk Processing Plant	Gallon		N/A	x	850 =	
Church/Meeting Hall	Person		x	x	20 =	
Laundromat	Washing Machine		N/A	x	23,000 =	
Motel/Hotel	Room		N/A	x	16,000 =	
Office Building	Office		N/A	x	9,650 =	
Manufacturing Plant	Employee		x	x	50 =	
Restaurant	Seat		N/A	x	2,850 =	
Service Station	Service Station		N/A	x	87,500 =	
Store	Square Foot		N/A	x	13 =	
Mobile Home Park	Resident		N/A	x	9,200 =	
Elementary School	Student		x	x	20 =	
Junior/Senior High School	Student		x	x	40 =	
Other			x	x	=	
2. Enter total number of gallons here.						GA
3. Convert gallons to acre feet by dividing total number of gallons by 325,850.						AF
4. Calculate total water use for each applicable business activity by completing the following table.						
TYPE OF BUSINESS ACTIVITY	UNIT	NO. OF UNITS	NO. OF DAYS	WATER USE FACTOR	ACRE-FEET	
Parks and Golf Courses—Gross Acreage	Acre		N/A	x	1.25 =	
Parks and Golf Courses—Net Watered Area	Acre		N/A	x	1.75 =	
Watered Land—Non-Agricultural	Acre		N/A	x	1.25 =	
Artificial Ponds, Lakes, or Streams	(capacity in acre feet)					
5. Enter total number of acre-feet here.						
6. TOTAL MUNICIPAL AND INDUSTRIAL ACRE FEET (ADD LINES 3 AND 5)						

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF IT IS USED TO DETERMINE PRODUCTION



Domestic Water Production Statement and Instructions

The owner of the parcel of land upon which a water-producing facility is located is responsible for filing the water production statement and paying the resultant charges. If no water was produced, the statement must be filed stating "NO PRODUCTION" until such time as the water-producing facility is permanently abandoned.

DISTRICT WELL NO.	OWNER NO.	APN	STATEMENT NO.
STATEMENT PERIOD		DATES OF OWNERSHIP	DUE DATE

REQUIREMENTS OF STATE LAW

- A. If any owner or operator of a water-producing facility fails to file the water production statement by the due date, the District shall assess a penalty charge against the owner or operator in the amount of ten percent (10%) of the amount found due by the District. In addition to assessing a penalty charge, the District shall assess an administrative charge to recover the costs of collection.

An owner or operator who is assessed penalty and administrative charges may petition the District in writing for reduction or waiver thereof, specifying the excusable or justifiable circumstances grounding the petition. The written petition must be received by the District within 15 days of the receipt by the owner or operator of the notice of assessment.

- B. If any owner or operator of a water-producing facility fails to pay the groundwater charge by the due date, the District shall charge interest at the rate of one percent (1%) each month the payment is past due. *There is no provision under State Law whereby the interest charge can be waived.*
- C. If the District has probable cause to believe that the production of water from any water-producing facility is in excess of the amount disclosed on the sworn statements filed, or if no statements are filed for such facility, the District may fix the amount of water production at an amount not to exceed the maximum production for such facility.

DEFINITIONS

- A. **COMPLETED STATEMENT** - A statement filed with the District that:

1. Was calculated using the correct reporting method.
2. Was signed under penalty of perjury by the owner or an authorized representative.
3. Was accompanied by all necessary worksheets relating to the method of calculation and agricultural rate.

- B. **FINAL FILING DATE** (imprinted on statement) - The date statement must be filed with the District or postmarked on or before midnight.



- C. **PERMANENT ABANDONMENT** - A permanently abandoned well is a well that has been properly sealed in accordance with District Ordinance 90-1.

OPEN HERE

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities in the filing of water production statements. Please advise Water Revenue in advance of any special needs by calling (408) 265-2600.

Appendix C

CVPIA Water Management Plan | December 2011



DOMESTIC WATER PRODUCTION STATEMENT

TIME STAMP

**DO NOT
WRITE IN THIS
SPACE**

AMOUNT PAID	CASHIER	POSTED
\$		
AMOUNT PAID	CASHIER	POSTED
\$		

DISTRICT WELL NO.	OWNER NO.	APN	STATEMENT NO.
STATEMENT PERIOD		DATES OF OWNERSHIP	DUE DATE

1. Calculate total water use by completing the following Table of Average Water Use (see instructions on back of first page)

	INSIDE WATER			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	TOTAL AF	NO. OF LAND UNITS	FACTOR	TOTAL AF	NO. OF LIVESTOCK	FACTOR	TOTAL AF	NO. OF WORKERS	FACTOR	TOTAL AF
RESIDENCE 1.....	X	.08 =		X	.008 =		X	.01 =		X	.04 =	
RESIDENCE 2.....	X	.08 =		X	.008 =		X	.01 =		X	.04 =	
RESIDENCE 3.....	X	.08 =		X	.008 =		X	.01 =		X	.04 =	
RESIDENCE 4.....	X	.08 =		X	.008 =		X	.01 =		X	.04 =	
RESIDENCE 5.....	X	.08 =		X	.008 =		X	.01 =		X	.04 =	
2. Acre Feet (AF) Totals:	TOTAL			TOTAL			TOTAL			TOTAL		

3. Total Water Use: Add all AF totals from Line 2 and enter in "Total Water Use" box.

4. Multiply the "Total Water Use" by the "Rate Per Acre Foot" and enter into the "Water Usage Cost" box.....

TOTAL WATER USE	RATE PER ACRE FOOT	WATER USAGE COST
AF	X \$	= \$

IF STATEMENT IS FILED AND/OR PAID AFTER DUE DATE, COMPLETE LINES 5 and 6.

5. Penalty: Multiply "Water Usage Cost" by .10 and enter here..... \$

6. Interest: Multiply "Water Usage Cost" by .01 for each month payment is past due and enter here..... \$

7. TOTAL AMOUNT DUE: Add Lines 4, 5 and 6, then enter Total here **PAY THIS AMOUNT** → \$

I declare under penalties of perjury that the statements made and figures shown on this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.	SIGNATURE X	DATE
--	----------------	------

**DISTRICT COPY
RETURN WITH YOUR PAYMENT**

PC 1210 (10/09)

Appendix C

CVPIA Water Management Plan | December 2011



Wells and Water Production Unit
5750 Almaden Expressway
San Jose, CA 95118-3686
(408) 265-2600 or (408) 847-6484

SEMI-ANNUAL WATER PRODUCTION STATEMENT

COPY

STAMP
DO NOT
WRITE IN THIS
SPACE

Note Any Change of Address or Ownership Below.

DISTRICT WELL NO. 10S04E17Q002	OWNER NO. 00001401	APN 635-11-025	DUE DATE 01/31/11
STATEMENT NO. CS055302	STATEMENT PERIOD 07/01/10 - 12/31/10	DATES OF OWNERSHIP CONTINUOUS	

REPORTING METHOD:

Table of Average Uses

	WATER METER 1 SERIAL NUMBER		WATER METER 2 SERIAL NUMBER	
	UNIT OF MEASURE/MULTIPLIER	ACRE FEET	UNIT OF MEASURE/MULTIPLIER	ACRE FEET
Ending Water Meter Reading ...				
Beginning Water Meter Reading				
Water Meter Production	X		X	

Additional Metered/Correlated Production	AF	.96	\$264.00
Total Metered/Correlated Production	AF	.958	\$275.00 = \$263.45
Non-Agricultural Water Use—See definition on Page 5.	AF X	\$16.50	= \$
Agricultural Water Use—See definition on Page 5.			
Add both Non-Agricultural and Agricultural Water Usage Costs, and enter the result here		\$264.00	TOTAL WATER USAGE COST \$

STATEMENT IS FILED AND/OR PAID AFTER DUE DATE, COMPLETE LINES 9 AND 10.

9. Penalty: Multiply Total Water Usage Cost by .10 and enter here ... \$

10. Interest: Multiply Total Water Usage Cost by .01 for each month or portion of a month payment is past due and enter here ... \$

TOTAL AMOUNT DUE: Add Lines 8, 9, and 10, then enter Total here. **\$263.45**

PAY THIS AMOUNT **\$264**

Signature: **X** DATE: **1/21/2011**

Change of Address or Ownership:

If you are no longer the owner of the water producing facility listed herein, please furnish the following information:

The last date you were owner (date deed was recorded): _____ New Owner Name: _____

Street: _____ Phone No. _____

City: _____ State: _____ Zip Code: _____

PLEASE SEE INSTRUCTIONS ON PAGE 7

The Santa Clara Valley Water District will make reasonable efforts in the filing of water production statements to accommodate persons with disabilities. Please advise the Wells and Water Production Unit at (408) 265-2607, extension 2770, of any special needs.

Appendix C



WORKSHEET C WORKSHEET C INSTRUCTIONS

NON-AGRICULTURAL USE DOMESTIC USE ONLY

Table of Average
Water Use Method

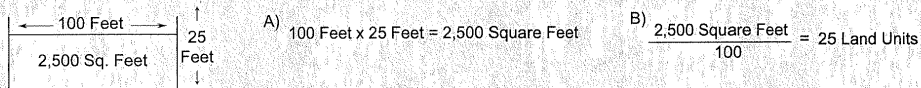
SCWD05-0012-411 AND 0650

LINE 1 Table of Average Water Use: Water usage is divided into four categories: inside use, watered land, livestock, and farm workers.

INSIDE WATER USE—Water used for household purposes. Usage (AF) is determined by multiplying the number of persons by the factor.

WATERED LAND—Water used for irrigation of lawn, flowers, shrubs, trees, family gardens and pasture for domestic livestock. Usage (AF) is determined by multiplying the number of Land Units by the factor. A Land Unit is 100 square feet, one acre is 435.6 Land Units.

EXAMPLE: Determine Land Units by multiplying the length of the irrigated land (in feet) by the width (in feet) and *then* divide by 100.



LIVESTOCK—Water used for domestic animals such as horses, cattle, sheep or goats, raised for home use. Usage (AF) is determined by multiplying the number of livestock by the factor.

FARM WORKERS—Water used for farm workers. Usage (AF) is determined by multiplying the number of farm workers by the factor.

LINE 2—Total AF (acre feet): Total each column of AF.

LINE 3—Add all totals of AF from Line 2 and enter here.

1.	INSIDE WATER USE			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	AF	NO. OF LAND UNITS	FACTOR	AF	NO. OF LIVESTOCK	FACTOR	AF	NO. OF WORKERS	FACTOR	AF
RESIDENCE 1	1	X .04 =	.04	222	X .004 =	.888	3	X .01 =	.03		X .02 =	
RESIDENCE 2		X .04 =			X .004 =			X .01 =			X .02 =	
RESIDENCE 3		X .04 =			X .004 =			X .01 =			X .02 =	
RESIDENCE 4		X .04 =			X .004 =			X .01 =			X .02 =	
RESIDENCE 5		X .04 =			X .004 =			X .01 =			X .02 =	
2. Total AF		TOTAL	.04		TOTAL	.888		TOTAL	.03		TOTAL	
3. TOTAL DOMESTIC ACRE FEET			.04			.89			.03			.96
												.958

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF IT IS USED TO DETERMINE PRODUCTION

Appendix C

CVPIA Water Management Plan | December 2011



DOMESTIC WATER PRODUCTION STATEMENT

TIME STAMP
 DO NOT WRITE IN THIS SPACE

AMOUNT PAID \$ 44	CASHIER	POSTED
AMOUNT PAID	CASHIER	POSTED

DISTRICT WELL NO. 10S04E17P005	OWNER NO. 00006347	APN 835-11-098	STATEMENT NO. GA053529
STATEMENT PERIOD 07/01/09 - 06/30/10		DATES OF OWNERSHIP CONTINUOUS	DUE DATE 08/02/10

1. Calculate total water use by completing the following Table of Average Water Use (see instructions on back of first page)

	INSIDE WATER			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	TOTAL AF	NO. OF LAND UNITS	FACTOR	TOTAL AF	NO. OF LIVESTOCK	FACTOR	TOTAL AF	NO. OF WORKERS	FACTOR	TOTAL AF
RESIDENCE 1	2	X .08 =	0.16		X .008 =			X .01 =		X	X .04 =	
RESIDENCE 2		X .08 =			X .008 =			X .01 =		X	X .04 =	
RESIDENCE 3		X .08 =			X .008 =			X .01 =		X	X .04 =	
RESIDENCE 4		X .08 =			X .008 =			X .01 =		X	X .04 =	
RESIDENCE 5		X .08 =			X .008 =			X .01 =		X	X .04 =	
2. Acre Feet (AF) Totals:	TOTAL 0.16			TOTAL			TOTAL			TOTAL		

3. Total Water Use: Add all AF totals from Line 2 and enter in "Total Water Use" box.

4. Multiply the "Total Water Use" by the "Rate Per Acre Foot" and enter into the "Water Usage Cost" box

TOTAL WATER USE	RATE PER ACRE FOOT	WATER USAGE COST
0.16 AF	X \$275.00	= \$44.00

IF STATEMENT IS FILED AND/OR PAID AFTER DUE DATE, COMPLETE LINES 5 and 6.

5. Penalty: Multiply "Water Usage Cost" by .10 and enter here	\$
6. Interest: Multiply "Water Usage Cost" by .01 for each month payment is past due and enter here	\$
7. TOTAL AMOUNT DUE: Add Lines 4, 5 and 6, then enter Total here	\$ 44.00

I declare under penalties of perjury that the statements made and figures shown on this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.	SIGNATURE X	DATE 7-16-10
--	----------------	-----------------

DISTRICT COPY
 RETURN WITH YOUR PAYMENT

Appendix C

CVPIA Water Management Plan | December 2011

Santa Clara Valley Water District
 Water Revenue Division
 5750 Almaden Expressway
 San Jose, CA 95118
 (408) 265-2600 or (408) 847-6484



RECYCLED WATER INVOICE



3KE

COPY

TIME STAMP
 DO NOT
 WRITE IN THIS
 SPACE

AMOUNT PAID \$ 4,336.75	CASHIER [Signature]	POSTED 11/10/11
AMOUNT PAID \$	CASHIER	POSTED

INVOICE NUMBER RI000191	DATE 03/01/2011	DUE DATE 04/01/2011
DIVERSION NUMBER GR000142	BILLING PERIOD 07/01/2010 - 12/31/2010	

DESCRIPTION	ACRE FEET	RATE	AMOUNT
Non Ag Water	15.77	\$ 275.00	\$ 4,336.75
Total Amount Due			\$ 4,336.75
Less Amount Paid			\$ 0.00
PAY THIS AMOUNT →			\$ 4,336.75

In accordance with Section 11.6 of the Rules and Regulations for the Service of Surface Water, the amount shown due is final unless a written protest accompanied by evidence indicating that this invoice is in error is received within fifteen (15) days following the mailing date of this invoice.

In accordance with Section 11.2(b) of the Rules and Regulations for the Service of Surface Water, if any user shall fail to pay the amount found due within thirty (30) days of billing, the District shall make a late charge at the rate of one percent (1%) each month on the delinquent amount and no further water delivery shall be made until the same is paid.

PLEASE RETURN ONE COPY OF THIS INVOICE WITH YOUR REMITTANCE.

Appendix C

CVPIA Water Management Plan | December 2011

Santa Clara Valley Water District
 Wells and Water Production Unit
 5750 Almaden Expressway
 San Jose, CA 95118
 (408) 265-2600 or (408) 847-6484



SURFACE WATER INVOICE

COPY

TIME STAMP

DO NOT WRITE IN THIS SPACE

AMOUNT PAID \$ 1,187.15	CASHIER <i>[Signature]</i>	POSTED 0188
AMOUNT PAID \$	CASHIER	POSTED

INVOICE NUMBER SI003474		DATE 04/04/2011		DUE DATE ON RECEIPT	
DIVERSION NUMBER HL000071			BILLING PERIOD 07/01/2010 - 12/31/2010		
DESCRIPTION	GROSS ACRE FEET	ENTITLEMENT	NET ACRE FEET	RATE	AMOUNT
Non Ag Water	4.14	0.00	4.14	275.00	\$ 1,138.50
Water Master Chg	4.14	0.00	4.14	11.75	\$ 48.65
Total Amount Due					\$ 1,187.15
Less Amount Paid					\$ 0.00
PAY THIS AMOUNT →					\$ 1,187.15

In accordance with Section 11.6 of the Rules and Regulations for the Service of Surface Water, the amount shown due is final unless a written protest accompanied by evidence indicating that this invoice is in error is received within fifteen (15) days following the mailing date of this invoice.

In accordance with Section 11.2(b) of the Rules and Regulations for the Service of Surface Water, if any user shall fail to pay the amount found due within thirty (30) days of billing, the District shall make a late charge at the rate of one percent (1%) each month on the delinquent amount and no further water delivery shall be made until the same is paid.

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Appendix C

CVPIA Water Management Plan | December 2011

Santa Clara Valley Water District
 Wells and Water Production Unit
 5750 Almaden Expressway
 San Jose, CA 95118
 (408) 265-2600 or (408) 847-6484



TREATED WATER INVOICE

TIME STAMP
 SCVWD1APR13 11AM11:14
 DO NOT
 WRITE IN THIS
 SPACE

COPY

AMOUNT PAID \$ 274,094.40	CASHIER Efo	POSTED 11/01/99
AMOUNT PAID \$	CASHIER	POSTED

INVOICE NUMBER TI001505	DATE 04/05/2011	DUE DATE 04/25/2011	
BILLING PERIOD 03/01/2011 - 03/31/2011			
DESCRIPTION	ACRE FEET	RATE	AMOUNT
Contract Deliveries			
Rinconada	273.00	\$ 620.00	\$ 169,260.00
Non Contract Deliveries			
Rinconada	183.92	\$ 570.00	\$ 104,834.40
Total Amount Due			\$ 274,094.40
Less Amount Paid			\$ 0.00
PAY THIS AMOUNT →			\$ 274,094.40

BREAKDOWN OF DELIVERIES TO TURNOUT

Farndon	238.51
Granger	93.07
Vallco	124.17
Covington	1.17

In accordance with Article B, Section 6 and Article C, Section 8, if payment is not made within twenty (20) days after billing, 1/2 of 1% interest per month shall accrue on the delinquent amount.

PLEASE RETURN ONE COPY OF THIS INVOICE WITH YOUR REMITTANCE.

Appendix D

Water Inventory Tables

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Appendix D

CVPIA Water Management Plan | December 2011

Table 1

<i>Surface Water Supply</i>							
2009	Federal Ag Water	Federal non-Ag Water.	State Water	Local Water*	Other Water*	Upslope Drain Water	Total
Month	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)
Method							
January	2,693	0	0	1,060	10,011	0	13,764
February	2,479	0	0	28,503	3,651	0	34,633
March	0	0	0	28,469	3,518	0	31,987
April	448	0	0	2,317	6,661	0	9,426
May	12,383	0	0	1,441	8,596	0	22,420
June	10,615	0	0	218	8,903	0	19,736
July	11,014	0	0	0	8,936	0	19,950
August	7,942	0	0	0	10,975	0	18,917
September	7,258	0	3,303	0	6,523	0	17,084
October	4,697	0	4,037	10,226	4,902	0	23,862
November	4,205	0	0	978	4,944	0	10,127
December	6,132	0	1,848	4,567	456	0	13,003
TOTAL	69,866	0	9,188	77,779	78,076	0	234,909
*Local Water is the New Reservoir Inflow							
**Other water is SWP Carryover, CVP Rescheduled water, transfers, and takes from Semitropic Groundwater Bank							

Table 2

Ground Water Supply

2009	District	Private	Private Agric
Month	Groundwater	Urban	Groundwater
Method	(acre-feet)	*(acre-feet)	*(acre-feet)
January	0	7,424	1
February	0	5,807	54
March	0	6,646	1,707
April	0	11,031	2,410
May	0	12,903	3,746
June	0	13,866	4,923
July	0	15,271	4,157
August	0	15,826	3,451
September	0	13,647	2,581
October	0	10,196	536
November	0	9,470	0
December	0	7,557	1,911
TOTAL	0	129,644	25,477

*normally estimated

Table 3

Total Water Supply

2009 Month	Surface Water Total (acre-feet)	Private Groundwater (acre-feet)	Recycled M&I (acre-feet)	Total District (acre-feet)
Method				
January	13,764	7,425	519	21,708
February	34,633	5,861	620	41,114
March	31,987	8,353	725	41,065
April	9,426	13,441	1,174	24,041
May	22,420	16,649	1,659	40,728
June	19,736	18,789	1,629	40,154
July	19,950	19,428	2,113	41,491
August	18,917	19,277	2,045	40,239
September	17,084	16,228	1,706	35,018
October	23,862	10,732	1,284	35,878
November	10,127	9,470	992	20,589
December	13,003	9,468	809	23,280
TOTAL	234,909	155,121	15,276	405,306

*Recycled M&I Wastewater is treated urban wastewater that is used for agriculture.

Appendix D

Table 4

Raw and Treated Water Distribution System						
2009 Canals	Length (Miles)	Capacity (CFS)				
Almaden-Calero	4.4	120				
Coyote	9.0	125				
Kirk Ditch	1.9	35				
Page Ditch	2.0	50				
TOTAL	17.3	330				
2009 Raw Water Pipelines	Length (miles)	Pipe Diameter (Inches)	2009 Treated Water Pipelines	Length (miles)	Pipe Diameter (Inches)	
Almaden Valley	12.3	72-78	Campbell Distributary	2.0	20	
Anderson Force Main	0.8	54	East	6.4	33-48	
Calero	2.6	78	Graystone	0.2	36	
Central	13.1	66	Milpitas	4.6	42	
Coyote-Madrone	2.0	24	Mountain View Distributary	1.1	24	
Cross Valley	8.8	78	Parallel East	4.1	54	
Gilroy Reclamation (co-owned)	9.0	12	Penitencia Delivery Main	0.3	60	
Hollister Conduit	19.1	54-60	Santa Clara Distributary	4.0	30-36	
Main Avenue	1.0	16-24	Snell	9.7	60-72	
Pacheco Conduit I and II	7.9	120	Sunnyvale Distributary	0.5	33	
Penitencia Force Main	0.3	66	West	9.0	30-84	
Rinconada Force Main	1.0	72				
Santa Clara Conduit I and II	20.0	96				
Santa Teresa Force Main	0.3	66				
Stevens Creek	9.8	20-37				
Uvas-Llagas Transfer	2.8	27-39				
TOTAL	110.8	0	TOTAL	41.9	0	

Appendix D

CVPIA Water Management Plan | December 2011

Crop Water Needs						
2009	Area	Crop ET	Leaching Requirement	Cultural Practices	Effective Precipitat	Appl. Crop Water Use
Crop Name	(crop acres)	(AF/Ac)	(AF/Ac)	(AF/Ac)	(AF/Ac)	(acre-feet)
grain	4,915	1.2	0.0	0.0	0.6	2,949
lettuce	3,188	1.5	0.0	0.0	0.1	4,463
peppers	2,493	2.5	0.0	0.4	0.0	7,180
grapes/wine	1,516	1.7	0.0	0.0	0.6	1,668
corn	1,310	1.8	0.0	0.0	0.0	2,358
tomatoes/process	1,160	1.9	0.0	0.0	0.0	2,204
cherries	941	2.9	0.0	0.0	0.6	2,164
spinach	854	0.5	0.0	0.0	0.0	427
beans/snap	622	1.0	0.0	0.0	0.0	622
tomatoes/fresh	589	1.9	0.0	0.0	0.0	1,119
pasture/irrigated	488	3.7	0.0	0.0	0.6	1,513
alfalfa	469	3.9	0.0	0.0	0.6	1,548
garlic	454	1.3	0.0	0.4	0.6	490
squash	377	1.1	0.0	0.4	0.0	558
onions	341	1.6	0.0	0.4	0.6	471
apricots	230	3.0	0.0	0.0	0.6	552
cabbage	222	0.7	0.0	0.0	0.6	22
celery	215	1.8	0.0	0.0	0.0	387
walnuts	185	2.9	0.0	0.0	0.6	426
misc	2,405	1.9	0.0	0.0	0.0	4,570
Crop Acres	22,974					35,690
Total Irrig. Acres	18,059	(If this number is larger than your known total, it may be due to double cropping)				
¹ Water quality is sufficiently good not to require in most years a leaching fraction supplemental to winter rains and DU deficiencies.						
² Estimation of effective precipitation is rendered problematic by the facts that infiltration is restricted due to overwintering tarped beds and soil structure degradation from cultivation. Half of precip is entered where appropriate						
³ Applied crop water use does not account for distribution uniformity.						
⁴ Miscellaneous ETc and water use have been arrived at by averaging all preceding entries.						
⁵ No CIMIS station was operating in the Llagas Valley between 5/08 and 9/09. Precipitation has been estimated from a correlation between CIMIS #126 and #211						
⁶ ETo from SpatialCIMIS						

Appendix D

CVPIA Water Management Plan | December 2011

Table 6				
2009 District Water Inventory				
Water Supply		Table 3		405,306
Environmental Consumptive Use			minus	18,000
Groundwater recharge	(perc ponds & recharge wells)		minus	102,100
Water Exchanges or Transfers			minus	(280)
Evaporation			minus	6,261
Distribution System Leaks & Breaks			minus	0
Non-Urban deliveries			minus	2,970
Releases from Prior year Reservoir			plus	5,040
Water Available for sale to customers				281,295
<hr/>				
2009 Actual Agricultural Water Sales		From District Sales Records		1,263
Private Groundwater		Table 2	plus	25,477
Crop Water Needs		Table 5	minus	35,690
Drainwater outflow	(tail and tile not recycled)		minus	0
Percolation from Agricultural Land		(calculated)		(8,950)
<hr/>				
2009 M&I Actual Water Sales		From District Records		110,900
Private M&I Groundwater		Table 2		129,644
Inside Use		Feb urban use x 12		144,228
Landscape / Outside Use		(calculated)		96,316

Table 7 - Not applicable

Influence on Groundwater and Saline Sink

2009

Agric Land Deep Perc + Seepage + Recharge - Groundwater Pumping = District	0
Estimated actual change in ground water storage, including natural recharge)	0
Irrigated Acres (from Table 5)	0
Irrigated acres over a perched water table	0
Irrigated acres draining to a saline sink	0
Portion of percolation from agri seeping to a perched water table	0
Portion of percolation from agri seeping to a saline sink	0
Portion of On-Farm Drain water flowing to a perched water table/saline sink	0
Portion of Dist. Sys. seep/leaks/spills to perched water table/saline sink	0
Total (AF) flowing to a perched water table and saline sink	0

Table 8

Annual Water Quantities Delivered Under Each Right or Contract

Year	Federal Ag Water (acre-feet)	Federal non-Ag Water. (acre-feet)	State Water (acre-feet)	Local Water (acre-feet)	Other* (acre-feet)	Total (acre-feet)
2000	70,844	9,171	60,433	92,200	29,182	261,830
2001	105,127	6,656	35,689	56,040	50,966	254,478
2002	113,393	7,277	55,172	72,750	16,582	265,174
2003	79,907	12,173	57,158	83,200	33,310	265,748
2004	93,869	8,517	52,867	76,400	31,946	263,599
2005	69,318	7,234	48,339	140,500	16,622	282,013
2006	52,797	0	47,344	174,350	28,259	302,750
2007	95,058	4,000	38,812	10,580	64,978	213,428
2008	96,768	6,130	8,184	61,160	64,810	237,052
2009	69,866	0	9,188	77,779	78,076	234,909
Total	846,947	61,158	413,186	844,959	414,731	2,580,981
Average	84,695	6,116	41,319	84,496	41,473	258,098

*Other water is SWP Carryover, CVP Rescheduled water, transfers and takes from the Semitropic Groundwater Bank

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Appendix E

Consumer Confidence Reports for
Water Retailers Purchasing Water from the
Santa Clara Valley Water District

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LOS ALTOS-SUBURBAN

2009
WATER
QUALITY
REPORT



INTRODUCTION

At California Water Service Company (Cal Water), our goal is to supply you with safe, high-quality drinking water, 24 hours per day, seven days per week, 365 days per year. As part of that effort, we are pleased to provide this annual water quality report, which includes information about where your water comes from, what it contains, how it compares to state and federal standards, and how you can help us conserve water. It also explains the steps we take to protect your water supply. **Most importantly, it confirms that your water met or surpassed all primary and secondary water quality standards during this reporting period.**

If you have any questions, suggestions, or concerns, please contact your local Customer Center, either by phone or through the contact link on our web site. Also, please watch for bill inserts, where you will find announcements of any water-related public meetings or workshops, as well as important information about your water. Additional information and time-sensitive announcements about your water can be found at www.calwater.com.

2009 WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

WHERE YOUR WATER COMES FROM

Cal Water has provided high-quality water utility services in the Los Altos area since 1931. To meet the needs of our customers in Los Altos and parts of Los Altos Hills, Cupertino, Mountain View, and Sunnyvale, we use a combination of local groundwater and imported water. Our imported water, which is treated surface water purchased from the Santa Clara Valley Water District (SCVWD), comes from SCVWD reservoirs and the San Joaquin-Sacramento River Delta. Our water system includes 295 miles of pipeline, 65 booster pumps, and 46 storage tanks. We proactively maintain and upgrade our facilities to ensure a reliable, high-quality supply.

DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM (DWSAPP)

By the end of 2002, Cal Water had submitted to the California Department of Public Health a DWSAPP report for each water source in the water system. The DWSAPP report identifies possible sources of contamination to aid in prioritizing cleanup and pollution prevention efforts.

The water sources in your district are considered most vulnerable to the following activities, for which no associated contaminant has been detected: sewer collection systems, gas stations, dry cleaners, underground storage tanks (confirmed leaking tanks), chemical/petroleum pipelines, electrical/electronic manufacturing, research laboratories, agricultural drainage, and wells (agricultural).

SCVWD provides treated surface water to the Silicon Valley from three water treatment plants. SCVWD surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed. SCVWD's local water sources include Anderson and Calero Reservoirs.

SCVWD's source waters are vulnerable to potential contamination from a variety of land-use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wild-land fires in open space areas. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD's treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the SCVWD web site at www.valleywater.org.

We encourage customers to join us in our efforts to prevent water pollution and protect our most precious natural resource.

INSIDE WATER QUALITY

Meeting strict water quality regulations is a full-time job for dozens of Cal Water employees. One of those employees is Sophie James, Cal Water's Manager of Laboratory Services.

"I didn't set out to work in water quality," says Sophie. "It just happened. I graduated from college with a Bachelor of Science Degree in chemistry and was hired by an agency that placed temporary employees in scientific positions. My first assignment was with an environmental laboratory that conducted drinking water and wastewater testing for a local municipality. I've worked at Cal Water for almost four years."

Fourteen years of laboratory experience, undergraduate and graduate degrees in chemistry, and management experience have helped prepare Sophie for this demanding position.

Of course, Sophie doesn't manage water quality on her own. "Our water quality team is made up of 25 employees. This includes our laboratory group, which is, among other things, responsible for providing analytical services to all of our water systems; our project management team, which handles the regulatory aspects of water quality; and our administrative and management teams."

The effort required to meet water quality standards is determined by the water source. Some require less treatment and testing, and some require more. We dedicate whatever resources are necessary to ensure that our customers receive good, clean water. As Sophie says, "We mean it when we say that protecting customer health and safety is our highest priority!"

WHAT ABOUT FLUORIDE?

Fluoride occurs naturally in many water sources, but Cal Water does not add fluoride to your water supply.

California law requires Cal Water to add fluoride as funding from federal grants or other sources becomes available. In the meantime, you might wish to check with your dentist to see if fluoride supplements are recommended for any children in your family. Note that supplements may not be recommended for children who attend a school that has fluoridated water.

More information about fluoridation, oral health, and current issues can be found on the CDPH web site at www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx. For general information on water fluoridation, visit us online at www.calwater.com.

CALIFORNIA WATER SERVICE COMPANY

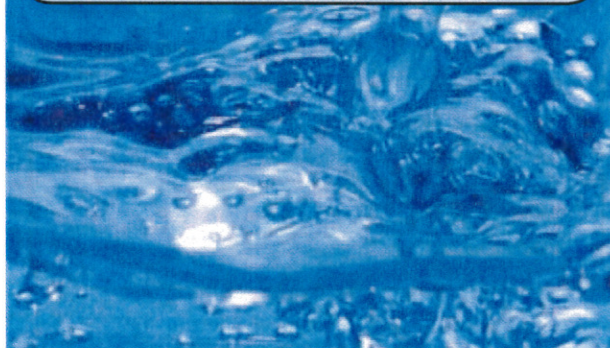
Los Altos District
949 "B" Street
Los Altos, CA 94024
(650) 917-0152
www.calwater.com

WATER MAIN FLUSHING

Due to drought conditions, Cal Water only conducts flushing when necessary to ensure good water quality or when local fire agencies require fire protection data. By opening certain fire hydrants under controlled conditions, we remove minerals and sediment that build up in water lines over time or enter during water line repairs.

Although it may seem wasteful to the casual observer, flushing is actually an important and necessary water utility activity that is endorsed by the American Water Works Association and conducted in accordance with guidelines set by the California Department of Public Health. Cal Water is also actively researching practical methods of capturing water released during flushing so that it can be put to additional use.

You will continue to receive water if we need to flush in your area, but the pressure might be lowered temporarily. If you notice any discoloration or sediment in your water after we have flushed, please allow water to run from your outside hose bib until it clears.



LEAD IN WATER

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing.

The water delivered by Cal Water to your meter meets all water quality standards, but your home plumbing can affect water quality. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.



If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

POTENTIAL SOURCES OF CONTAMINATION

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency (USEPA) Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly people, and infants, can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. USEPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

LOVE YOUR YARD; PROTECT YOUR WATER

A significant portion of residential water use — more than half in most cases — occurs outdoors. And, sadly, much of the water used outdoors is lost to evaporation, runoff, and overwatering. This wasted water can affect water quality. Why? Because what goes around, comes around.

When it comes to water, nature is the ultimate recycler. The water from your garden hose may go on to help form a rain cloud or seep into the ground to feed a nearby well. Over the course of time, it may end up back in your garden hose, ready to start the whole process over again.

But when water from your yard runs into storm drains or finds its way into the water table, it can take contaminants with it, such as fertilizers and pesticides. When that happens, Cal Water must spend time, money, and energy to remove those contaminants before the water can be provided to customers.

The California State Water Resources Control Board has a number of recommendations for ways to reduce the impact of these contaminants, including:

- Buy household and garden products that are environmentally safe, and don't buy more than you need.
- Apply all household and garden products sparingly, and carefully follow instructions printed on the package.
- Do not apply lawn or garden products when rain is forecast.
- Take unused pesticides, fertilizers, weed killers, and paints to a recycling station.



Read the instructions carefully before using fertilizers, pesticides, or any other substance in your garden or yard, and consult an expert if you still have questions. You can help prevent runoff and reduce water contaminants by reducing the amount of water you use outdoors.

In addition to carefully and conservatively managing your garden, shortening your sprinkler run times can make a significant difference. You can also be greener by eliminating sprinkler overspray, repairing leaks, and turning off your sprinklers when it rains.

Last, but not least, think about what kind of plants you have. Native and drought-tolerant plants generally use less water and might require less fertilizer and pesticide than plants that are not indigenous to your area.



WATER QUICK FACTS

- “Flushing” occurs when a Cal Water employee opens a fire hydrant and releases water. This is done to remove sediment from the water lines and ensure that water circulates adequately throughout the system. Because of our focus on conservation, Cal Water does not flush water lines unless absolutely necessary. Fire hydrants may also be opened for testing purposes.
- If you notice white particles in your water or your water pressure is lower than usual, check your faucet aerators for buildup. If they are clean, you may be seeing minerals that have built up in your water lines, home plumbing, or water heater.
- It is also important to maintain your water heater as directed by the manufacturer. Not doing so can lead to wasted energy, mineral buildup, and other problems. If you detect an odor in your hot water that is not present in your cold water, you may need to adjust, flush, or repair your water heater. Check with the manufacturer for details. If you detect an odor in both the hot and cold water, inform your local Customer Center.
- You might occasionally hear news stories warning about the possibility of trace amounts of pharmaceuticals in tap water. It is important to remember that the quantities of pharmaceutical substances found in these reports are generally measured in parts per trillion — amounts millions of times smaller than therapeutic doses. Although no current scientific study has found that human health issues can arise from these miniscule amounts of pharmaceuticals, Cal Water reminds you that you can help protect your water supply by responsibly disposing of drugs that are expired or no longer needed. Do not flush them down the toilet or put them in the sink.
- Both tap and bottled water must meet strict water quality standards, but tap water is subject to more frequent testing. Although bottled water is generally not better quality than what comes out of your tap, it’s definitely more expensive — a Cal Water customer could fill multiple 55-gallon drums with water for much less than the average price of a 20-ounce container of bottled water.
- In some of Cal Water’s service areas, water sources change at certain times of the year due to the availability of supplies, and water from different sources may have slightly different tastes. But while the change in water source may cause a noticeable change in your water’s taste, water from all sources must meet the same rigorous standards.

If you have any questions, please contact Ron Richardson, District Manager, at (650) 917-0152.

CONSERVATION: WORKING TOGETHER TO MEET OUR GOALS

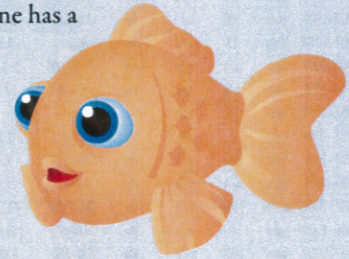
In November 2009, Governor Schwarzenegger signed Senate Bill 7 into law. This bill requires that water retailers in the state of California achieve a 20% reduction in their customers' water usage by December 31, 2020.

Cal Water offers a variety of traditional and innovative programs to help you conserve, including:

- Rebates on select water-efficient appliances for both home and business.
- Many high-efficiency plumbing fixtures — including showerheads and hose nozzles — available to our customers at no charge.
- Educational materials on a variety of topics, including conservation gardening, checking for leaks around the house, and more.
- Conservation-related events and school programs.

But, in the end, water conservation comes down to you, the customer. Even a small effort can add up to a lot of savings. With that in mind, here are some ways you can help us meet California's conservation goals:

- If you see a problem with a water pipe, such as water coming up through a crack in the street, report it to Cal Water immediately.
- Hunt down and fix leaks all around your house. This includes leaky pipes, faucets, and hoses, and toilets that may have slow, quiet leaks (you can use a dye tablet in your toilet tank to check for these "hidden" leaks).
- If you have a dishwasher or washing machine, only run full loads. Even if your machine has a setting for partial loads, you'll save more water by only running it when it's full.
- Make sure that all of your faucets have high-efficiency aerators. A faucet aerator can make a small stream of water do the work of a significantly larger stream.
- Keep your showers as short as practical, and make sure you have a high-efficiency showerhead.
- Don't use a garden hose to clean paved areas — stick with a broom. And if you use a hose to wash your car, use a shut-off hose nozzle or, even better, a bucket of water.



Visit www.calwater.com/conservation to learn more about programs available in your area, apply for an appliance rebate, request water-saving fixtures, and find other ways that Cal Water can help you conserve water.

PRIMARY DRINKING WATER STANDARDS										
LOS ALTOS GROUNDWATER							SCVWD RINCONADA ¹			
Radiological	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Gross alpha particle activity	2006–2009	pCi/L	15	(0)	No	ND–7.1	1.3			Erosion of natural deposits
Radium 228	2009	pCi/L	5	0.019 (0)	No	ND–1.3	0.19			Erosion of natural deposits
Uranium	2006–2009	pCi/L	20	0.43	No	ND–12.08	1.6			Erosion of natural deposits
Inorganic Chemicals	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Aluminum	2007–2009	ppm	1 (0.2)	0.6	No			ND–60	57	Erosion of natural deposits; residue from some surface water treatment processes
Barium	2007–2009	ppm	1	2	No	ND–0.18	0.1			Discharges of oil-drilling waste and from metal refineries; erosion of natural deposits
Chromium	2007–2009	ppb	50	(100)	No	ND–44	6.3			Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	2007–2009	ppm	2	1	No	ND–0.28	0.14			Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as nitrate) ²	2009	ppm	45	45	No	5–39.43	30.8	ND–6	4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Turbidity (surface water requiring filtration) ³	Year Tested	Unit	MCL	PHG (MCLG)	Exceeded Standard?	Highest Level	Lowest Monthly Percent	Highest Level	Lowest Monthly Percent	Source of Substance
	2009	NTU	TT	n/a	No		n/a	0.13	100	Soil runoff
Disinfection Byproducts	Year Tested	Unit	MCL	PHG (MCLG)	Exceeded Standard?	Range	Highest Annual Average	Range	Highest Annual Average	Source of Substance
Total haloacetic acids	2009	ppb	60	n/a	No	ND–26.5	16.19	ND–26.5	16.19	Byproduct of drinking water chlorination
Total trihalomethanes	2009	ppb	80	n/a	No	ND–54.8	41.89	ND–54.8	41.89	Byproduct of drinking water chlorination
Disinfectant and DBP Precursor	Year Tested	Unit	MRDL	MRDLG	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Chloramine	2009	ppm	4	4	No	ND–2.2	1.07	n/a	n/a	Drinking water disinfectant added for treatment
Total organic carbon ⁴	2009	ppm	TT	n/a	No		n/a	0.99–2.38	1.8	Various natural and manmade sources
Microbiological	Year Tested	Unit	MCL	(MCLG)	Exceeded Standard?	Highest Monthly	Highest Monthly	Source of Substance		
Total Coliform (systems with >40 samples/month) ⁵	2009	positive samples	5%	(0)	No		2			Naturally present in the environment
E. coli (systems with >40 samples/month) ⁵	2009	positive samples	Repeat positive samples	(0)	No		1			Human and animal fecal waste

OTHER REGULATED SUBSTANCES										
Metals	Year Tested	Unit	AL	PHG	Exceeded Standard?	90th Percentile	Samples > AL	90th Percentile	Samples > AL	Source of Substance
Copper	2007	ppm	1.3	0.3	No	0.47	0 of 31			Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SECONDARY DRINKING WATER STANDARDS AND UNREGULATED COMPOUNDS										
Inorganic Chemicals	Year Tested	Unit	SMCL	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Boron	2007–2009	ppm	NL=1	n/a	No			101–294	186	Erosion of natural deposits
Calcium	2007–2009	ppm	n/a	n/a	No	60–140	84.83	16–31	22	Erosion of natural deposits
Chloride	2007–2009	ppm	500	n/a	No	33–100	53.78			Erosion of natural deposits; seawater influence
Color	2007–2009	Units	15	n/a	No	ND–1	0.38			Naturally occurring organic matter
Hardness	2007–2009	ppm	n/a	n/a	No	171.6–500	318.66	83–159	116	Erosion of natural deposits
Magnesium	2007–2009	ppm	n/a	n/a	No	20–36	27.25	11–15	22	Erosion of natural deposits
Manganese ⁶	2007–2009	ppb	50	n/a	No			ND–64	ND	Leaching from natural deposits
Odor	2007–2009	Units	3	n/a	No	ND–2	0.24		1	Naturally occurring organic matter
pH	2007–2009	Units	n/a	n/a	No	7.19–7.91	7.5	7.5–7.7	7.6	Inherent characteristic of water
Sodium	2007–2009	ppm	n/a	n/a	No	21–45	31.14	58–114	81	Erosion of natural deposits; seawater influence
Specific conductance	2007–2009	µS/cm	1600	n/a	No	530–1100	727.15	468–900	647	Erosion of natural deposits; seawater influence
Sulfate	2007–2009	ppm	500	n/a	No	17–49	32.64	43.5–99.5	67.1	Runoff/leaching from natural deposits; industrial wastes
Total dissolved solids	2007–2009	ppm	1000	n/a	No	320–630	433.4	242–470	346	Runoff/leaching from natural deposits
Turbidity (groundwater)	2007–2009	NTU	5	n/a	No	ND–1.9	0.26		n/a	Soil runoff
Vanadium	2007–2009	ppb	NL=50	n/a	No	3.99–10.64	7.06	ND–4	4	Erosion of natural deposits; manufacturing of alloys and steel

¹The Santa Clara Valley Water District (SCVWD) provides treated surface water to the Silicon Valley from three water treatment plants. SCVWD surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed. SCVWD's local water sources include Anderson and Calero Reservoirs.

SCVWD's source waters are vulnerable to potential contamination from a variety of land-use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildfires. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD's treated water, and the water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the SCVWD on the web at www.valleywater.org.

²The average nitrate level was 30 ppm, with a maximum level of 39 ppm. We are closely monitoring the nitrate levels. Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should seek advice from your health care provider.

³For surface water systems, the treatment technique dictates that the turbidity level of the filtered water be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measurement of the cloudiness of water. SCVWD monitors it because it is a good indicator of the effectiveness of their filtration system.

⁴Total organic carbon (TOC) has no health effects; however, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). The treatment technique dictates that a removal ratio of 1 or higher must be achieved. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects such as liver, kidney, or nervous system problems, and may lead to an increased risk of cancer. Concerns regarding disinfection byproducts are based upon exposure over many years.

⁵In 2009, two separate routine water samples at a system sample station had initial positive test results for E. coli. There were also three separate routine samples that had positive readings for total coliform. In all cases, follow-up samples were confirmed negative for total coliform and E. coli. As a protective measure, we provided notification to the affected area. Corrective actions have been taken in the system to resolve the issue.

⁶The average of 4 samples collected quarterly by SCVWD for manganese was below the Detection Limit for Reporting (DLR) of 20 µg/L. Although a value of 64 µg/L for manganese was detected, the average compliance-based value is reported as Not detected (ND).

HOW TO READ THIS TABLE

We test your water for more than 100 regulated contaminants. The table in this report lists only those that were detected.

The table shows water quality test results divided into two main sections: "primary standards" and "secondary standards." Primary standards protect public health by limiting the levels of constituents in drinking water. Secondary standards are limits for substances that could affect the water's taste, odor, or appearance.

DEFINITIONS

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as are economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Notification Level (NL): A health-based advisory level for an unregulated contaminant in drinking water. It is used by the California Department of Public Health to provide guidance to drinking water systems.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other required action by the water provider.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

µS/cm = measure of specific conductance
n/a = not applicable

ND = not detected

NTU = nephelometric turbidity unit
pCi/L = picoCuries per liter
(measure of radioactivity)

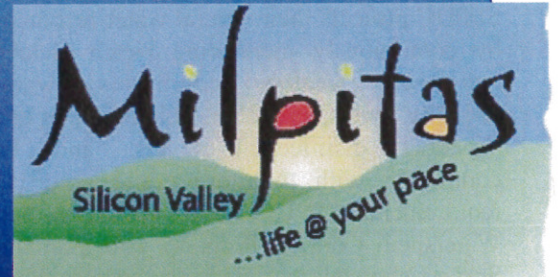
ppb = parts per billion (micrograms per liter)

ppm = parts per million (milligrams per liter)

SMCL = secondary maximum contaminant level

City of Milpitas 2010 Consumer Confidence Report

The City of Milpitas is pleased to provide our consumers with information about the quality of our drinking water. In this report, you will find information on our water sources, water quality test results, and water conservation. We are happy to report that Milpitas drinking water meets all water quality standards of the California Department of Public Health (CDPH) and the U.S. Environmental Protection Agency (USEPA).



City Hall Fountains

Water Sources

The City purchases drinking water from two wholesalers: two-thirds from the San Francisco Public Utilities Commission (SFPUC) and one-third from the Santa Clara Valley Water District (SCVWD). SFPUC water is primarily from the Hetch Hetchy watershed located in the Sierra Nevada Mountains and is supplemented by the Alameda watershed. SCVWD water is primarily from the Sacramento-San Joaquin Delta watershed and is supplemented by local water sources such as Anderson and Calero Reservoirs. In 2009, the City supplied an average of 10 million gallons of water per day to approximately 17,000 homes and businesses in Milpitas for indoor and outdoor use.

Emergency Supplies

The City does not blend SFPUC and SCVWD waters under normal operating conditions. However, the service areas can be physically interconnected to provide emergency water supply if needed.

The City also has emergency interties with Alameda County Water District to the north and San Jose Water Company to the south. SFPUC and SCVWD share an intertie that can supply water from one wholesaler to the other. The City's Pinewood Well, located in the southwestern portion of the City, is also an emergency water supply.

SFPUC service areas are south of Calaveras Blvd. and east of I-680, as well as north of Calaveras Blvd. and east of I-880. SCVWD service areas are west of I-880, as well as south of Calaveras Blvd. and west of I-680. The City generally provides SFPUC water to residential areas and SCVWD water to commercial and industrial areas. Refer to the Water Source Map on page 2 to view the water service areas.

In case of emergency, you should store a gallon of drinking water per person per day (two quarts for drinking and two quarts for food preparation and sanitation). Keep at least a three-day supply per person. By maintaining emergency supplies, you can be self-sufficient for a few days if utilities and infrastructure are damaged and need to be repaired during an emergency or natural disaster.

Liam Harris, grandson of Milpitas residents, spends a hot summer day playing in the water.

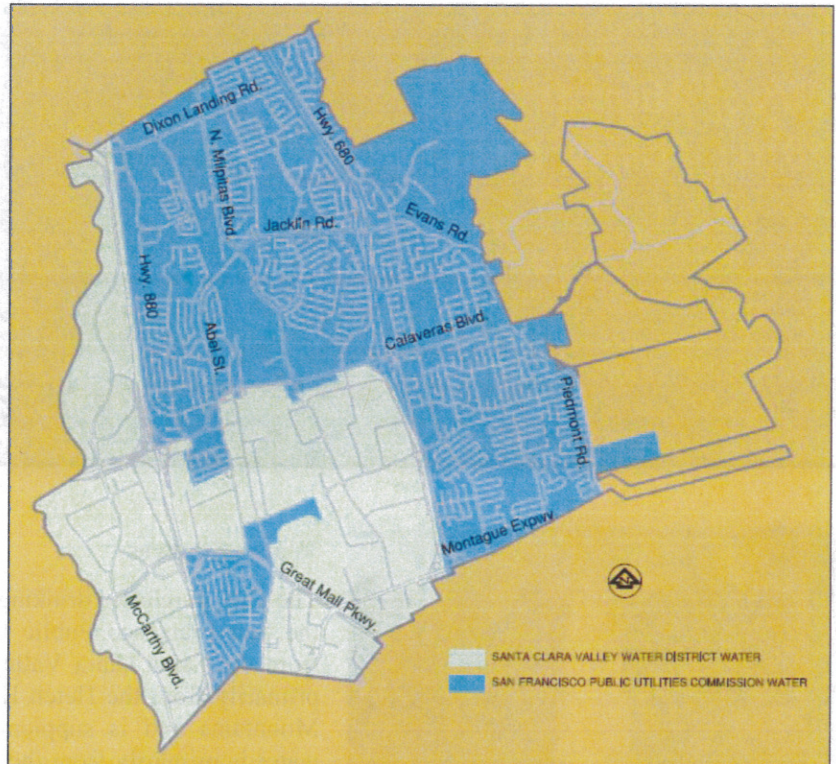


Protecting Water Sources

SFPUC protects their natural water resources by continuously monitoring Hetch Hetchy watershed weather conditions, water turbidity levels, microbial contaminants and aqueduct disinfectant levels, and by complying with monitoring and reporting requirements. SFPUC's 2005 update on their Watershed Control Program and Sanitary Survey showed that their watersheds have very low levels of contaminants that could potentially affect the source water. Those contaminants found are associated with wildlife and, to a limited extent, human recreational activity.

In 2003, SCVWD completed a vulnerability analysis, as its source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildland fires in open space areas. In addition, local sources are also vulnerable to potential contamination from commercial horse stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD's treated water. The water treatment plants provide multiple treatment processes for physical removal and disinfection of contaminants.

The City completed a drinking water source assessment of Pinewood Well in 2000. Following CDPH procedures, the well is classified as vulnerable due to a nearby dry-cleaning establishment and the local sewer collection system. However, the well is about 590 feet deep and the groundwater is protected by clay soil, which prevents contaminants from entering the groundwater supply. No drinking water standards have been exceeded in the well water. To obtain a copy of the assessment, please call (408) 586-3348.



Our utility maintenance crew tests Milpitas' water quality every week.

Recycled Water - Preserving Drinking Water for the Future

In 2009, commercial irrigation and industrial customers in Milpitas used 800,000 gallons of recycled water per day, thereby conserving an equal amount of drinking water. Recycled water from the San Jose/Santa Clara Water Pollution Control Plant undergoes an extensive treatment process (including filtration and disinfection) and is delivered to landscape irrigation and industrial process customers in Milpitas, San Jose and Santa Clara. For more information, please visit the South Bay Water Recycling Program's web site at: <http://www.sanjoseca.gov/sbwr>.

Hydrant and Water Main Flushing

City maintenance crews routinely flush fire hydrants and water mains to remove sediment and keep the distribution system refreshed. As a result, residents in the immediate vicinity may experience temporary discoloration in their water. This discoloration does not affect the safety of the water. If you experience discoloration in your water after crews have been flushing in your neighborhood, clear the water from your home pipes by running water faucets for a few minutes.



Our utility maintenance crew flushes a City fire hydrant. There are over 1,500 fire hydrants to maintain in the City.



City worker, Jon Frost, exercises a water valve.

Important Note for Dialysis Patients and Aquarium Owners

Both SFPUC and SCVWD waters are treated with chloramine to protect public health by destroying disease-causing organisms. Chloramine is considered safe for use as a water disinfectant. However, home dialysis patients and aquarium owners must take precautions before using the water in kidney dialysis machines or aquariums. Dialysis patients should consult with their doctor or dialysis technician and aquarium owners should consult with their local pet store.

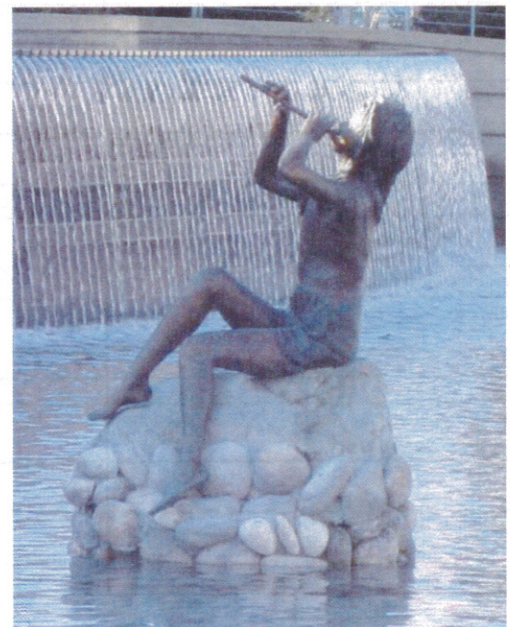
SFPUC Water Is Fluoridated; SCVWD Water is Not

SFPUC supplies fluoridated water to the City. However, customers in both SFPUC and SCVWD service areas should check with their dentist to determine if fluoride supplements are still necessary for use.

For more information, please visit CDPH's website at:
<http://cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx>.

Information on Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in household plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at: <http://www.epa.gov/safewater/lead>.



"The Flute Player" by Carla Moss - City Hall Pond

Water Quality Test Results

In 2009, the City collected over 2,000 drinking water samples for analysis in State-certified laboratories. We are pleased to report that water supplied in Milpitas did not exceed any water quality standards in 2009, as shown in the following table, which lists all drinking water constituents that were detected during the 2009 calendar year. Many other constituents were monitored but were not detected in the water. Unless otherwise noted, the data presented in this table is for testing done between January 1 and December 31, 2009.

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to control the odor, taste, and appearance of drinking water. MCLs are set by CDPH.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health.

MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL): These are health-based advisory levels established by CDPH for chemicals in drinking water that lack MCLs.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, requires the water supplier to do additional treatment or follow other requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

2009 Water Quality Data

DETECTED CONSTITUENTS	Unit	MCL	PHG [MCLG]	SCVWD Water ⁽¹⁾		SFPUC Water ⁽²⁾		Typical Sources in Drinking Water
				Range	Avg. or [Max]	Range	Avg. or [Max]	
Microbiological								
Total Coliform Bacteria ⁽³⁾	%	5	[0]	0	0	0 - 1 ⁽⁴⁾	0	Naturally present in environment
<i>Giardia lamblia</i>	cyst/L	TT	[0]	0	0	0.01 - 0.05	[0.05]	Naturally present in environment
Turbidity⁽⁵⁾								
Unfiltered Hetch Hetchy Water, max 5 NTU	NTU	TT	NS	NA	NA	0.27 - 0.52 ⁽⁶⁾	[3.87]	Soil runoff
Filtered Water - SVWTP, max 1 NTU	NTU	TT	NS	NA	NA	NA	[0.26]	Soil runoff
Filtered Water - SVWTP, > 95% of measurements < 0.3 NTU	%	TT	NS	NA	NA	100%	-	Soil runoff
Filtered Water - PWTP, max 1 NTU	NTU	TT	NS	-	[0.09]	NA	NA	Soil runoff
Filtered Water - STWTP, max 1 NTU	NTU	TT	NS	-	[0.09]	NA	NA	Soil runoff
Filtered Water - PWTP & STWTP, >95% of measurements < 0.3 NTU	%	TT	NS	100%	-	NA	NA	Soil runoff
Inorganic Constituents								
Aluminum	ppb	1000	600	<50 - 82	51	<50 - 51	<50	Erosion of natural deposits
Chlorine residual ⁽³⁾	ppm	MRDL=4	MRDLG=4	0.3 - 2.6	1.82	0.3 - 2.8	2.12	Disinfection treatment
Fluoride (naturally occurring)	ppm	2	1	<0.1 - 0.1	<0.1	<0.1 - 0.8	0.3	Erosion of natural deposits
Fluoride (with additive) ⁽⁷⁾	ppm	2	1	NA	NA	0.7 - 1.3	1.0	Water additive promotes strong teeth
Nitrate (as NO ₃)	ppm	45	45	<2 - 6	<2	<2	<2	Fertilizer runoff, erosion of natural deposits
Organic Constituents								
Total Organic Carbon ⁽⁸⁾	ppm	NS	NS	0.81 - 2.54	1.73	2.2 - 2.8	2.5	Various natural and man-made sources
Secondary Standards								
Chloride	ppm	500	NS	50 - 136	89	4 - 14.6	9.5	Soil runoff, leaching from natural deposits
Color ⁽³⁾	unit	15	NS	<5 - 5	<5	<5 - 5	<5	Natural occurring organics
Odor ⁽³⁾	ton	3	NS	1 - 1	1	1 - 1	1	Natural occurring organics
Specific Conductance	µS/cm	1600	NS	406 - 903	559	30 - 309	170	Substances that form ions when in water
Sulfate	ppm	500	NS	29.5 - 93.7	51.6	1.1 - 35.6	16.6	Soil runoff, leaching from natural deposits
Total Dissolved Solids (TDS)	ppm	1000	NS	248 - 436	302	22 - 168	92	Soil runoff, leaching from natural deposits
Turbidity ⁽³⁾	NTU	5	NS	0.01 - 0.54	0.21	0.01 - 1.09	0.26	Soil runoff

KEY								
<=	Less Than	NTU =	Nephelometric Turbidity Units	STWTP =	Santa Teresa Water Treatment Plant			
cyst/L =	microbe cysts/liter	ppb =	parts per billion	SVWTP =	Sunol Valley Water Treatment Plant			
Max =	Maximum	ppm =	parts per million	TON =	Threshold Odor Number			
NA =	Not Applicable	PWTP =	Penitencia Water	µS/cm =	microSiemens/centimeter			
NS =	No Standard							

2009 Water Quality Data

DETECTED CONSTITUENTS - No Standards	Unit	MCL	PHG [MCL G]	SCVWD Water ⁽¹⁾		SFPUC Water ⁽²⁾		
				Range	Avg. or [Max]	Range	Avg. or [Max]	
Alkalinity (as CaCO ₃)	ppm	NS	NS	52 - 90	67	8 - 102	50	Physical characteristic
Ammonia (free)	ppm	NS	NS	0.08 - 0.15	0.11	0 - 0.14	0.04	Disinfection treatment
Ammonia (total)	ppm	NS	NS	0.45 - 0.52	0.50	-	-	Disinfection treatment
Boron	ppb	NS	NS	<100 - 307	149	<100 - 102	<100	Natural deposits
Bromide	ppm	NS	NS	<0.05 - 0.15	0.08	<10 - 16	<10	Natural deposits
Calcium	ppm	NS	NS	14 - 32	20	2 - 26	12	Natural deposits
Chlorate	ppb	NS	NS	98 - 124	111	56 - 511	258	Byproduct of disinfection
Hardness (as CaCO ₃)	ppm	NS	NS	77 - 159	103	12 - 108	55	Physical characteristic
Magnesium	ppm	NS	NS	11 - 21	14	0.2 - 8.8	4.5	Natural deposits
pH ⁽³⁾	unit	NS	NS	7.2 - 8.8	8.0	7.6 - 9.4	8.6	Acidity of water
Phosphate	ppm	NS	NS	1 - 1	1	<1	<1	Natural deposits, anticorrosive additive
Potassium	ppm	NS	NS	2.4 - 4.6	3.2	0.24 - 1.5	0.9	Natural deposits, soil runoff
Silica	ppm	NS	NS	10 - 15	11	4.8 - 7.5	5.9	Natural deposits, treatment
Sodium	ppm	NS	NS	46 - 115	69	3 - 23	14	Natural deposits
Vanadium	ppb	NS	NS	<3 - 5	3	<3	<3	Natural deposits
Disinfection By-products								
Total Trihalomethanes ⁽³⁾	ppb	80	NS	29 - 74	44.5 ⁽⁹⁾	28 - 46	44.5 ⁽⁹⁾	By-product of disinfection
Total Haloacetic Acids ⁽³⁾	ppb	60	NS	7.6 - 17	20.5 ⁽⁹⁾	20 - 37	20.5 ⁽⁹⁾	By-product of disinfection
Lead and Copper⁽¹⁰⁾	Unit	AL	PHG	Range	90th Percentile	# sites⁽¹¹⁾	# sites >AL	Typical Sources in Drinking Water
Copper ⁽³⁾	ppb	1300	300	4.6 - 190	120	38	0	Corrosion of household plumbing
Lead ⁽³⁾	ppb	15	0.2	<0.5 - 76	2.6	38	2	Corrosion of household plumbing

Notes:

- (1) Water quality data in SCVWD's transmission system.
- (2) Water quality data in SFPUC's transmission system.
- (3) Water quality data in the City's distribution system.
- (4) One positive sample was collected in 2009. All confirmation and follow up samples were negative for fecal coliforms and *E. Coli*.
- (5) Turbidity is an indicator for water clarity, water quality and treatment system efficiency.
- (6) Monthly average turbidity values.
- (7) SFPUC started fluoridating its water in November 2005.
- (8) Precursor for disinfection byproduct formation.
- (9) The highest running annual average for SFPUC and SCVWD combined.
- (10) Lead and copper monitoring was conducted for selected homes and businesses in September 2007. The standard is met if the 90th percentile is less than the action level.
- (11) SFPUC service area had 28 sites; SCVWD service area had 10 sites.

How Do Drinking Water Sources Become Polluted?

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive contaminants** that can be naturally occurring or be the result of oil and gas production and mining activities.

Be the Solution to Storm Water Pollution

Ever wonder where that storm drain goes? Unlike indoor plumbing, the storm drain carries rainwater and urban pollution directly to our neighborhood creeks and eventually to the San Francisco Bay without treatment! Here are a few simple things you can do to prevent pollution of our creeks and Bay:

- Call (408)299-7300 to make an appointment to dispose of household hazardous wastes such as batteries, paints, fluorescent lamps, and used motor oil to your local hazardous waste facilities.
- Wash your car at a commercial car wash that recycles water.
- Sweep up leaves, dirt and waste near curbs and place in the proper bins for recycling or garbage collection.
- Keep pet waste away from neighborhood streets and storm drains.
- Pick up litter. A large portion of the trash in our creeks and Bay starts out as litter on our streets.



Rainwater causes trash on the street to collect in our creek beds, Coyote Creek.

In order to ensure that tap water is safe to drink, USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by limits for public water systems. CDPH regulations also establish contaminants in bottled water that must provide the same protection for public health.

What Else Should I Know?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including *Cryptosporidium* and *Giardia*. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's Safe Drinking Water Hotline.



City storm water outfall located at Coyote Creek.

Water Conservation Fun Facts

- If everyone in the U.S. flushed one less time per day, we could conserve a lake full of water!
- Every glass of water brought to your table in a restaurant requires another two glasses of water to wash and rinse the glass. If one in every four people avoided the free glass of water at a restaurant, we could conserve more than 26 million gallons of water!
- A faucet drip or invisible toilet leak that total only two tablespoons a minute come to 15 gallons a day. That's 5,460 wasted gallons of water a year!
- Here's a two-for-one idea if you have a fish tank in the house. When cleaning the tank, use the dirty water on your houseplants. It's rich in nitrogen and phosphorous, giving you a nice fertilizer, while you use the same water *twice*.



Cartwheels™ by Carla Moss, front lawn of City Hall

Indoor Water Saving Tips:

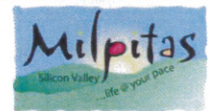
- Shorten your shower by 5 minutes & you'll save 15 gallons, every time.
- Install aerators & low flow shower heads. You'll save 16 gallons a day!
- Wash dishes & laundry in a full load & save more than 20 gallons per load.
- High-efficiency toilets save 25 gallons per day!
- High-efficiency washers save 20 gallons per load.
- Turn off the faucet while shaving & brushing your teeth, it saves 2 gallons per minute.
- Installing water efficient appliances helps to save water and may qualify you for money saving rebates! Check out ValleyWater.org for more information on rebates.

Outdoor Water Saving Tips:

- Water your lawn between midnight & 6:00 a.m. when evaporation is kept to a minimum.
- Apply a layer of organic mulch around plants to reduce moisture loss and weed growth.
- For landscaping, use drought resistant plants; see your local nursery for advise.
- Check your irrigation system for leaks.
- Adjust lawn watering seasonally.

For more information on water conservation, visit www.save20gallons.org

City of Milpitas Information Request Form



Name: _____

Address: _____, Milpitas, CA 95035 Phone: _____

Please send me the following: (circle all that apply)

- Faucet Aerator (FREE -2 max)
- Low Flow Showerheads (FREE - 2 max)
- Less Toxic Gardening Tips
- Water Wise House Call Program
- Water Wise Garden CD

REBATE INFORMATION

- Clothes Washer
- High Efficiency Toilet
- Water Efficient Landscape
- Non-Residential Programs

Place form in a stamped envelope and mail to:

City of Milpitas/Utility Engineering
455 E. Calaveras Blvd.
Milpitas, CA 95035



Your City Services at Work for You...

Visit our website at www.ci.Milpitas.ca.gov

To find out more about drinking water treatment, quality and regulations, visit these internet sites:

American Water Works Association • www.awwa.org

Santa Clara Valley Water District • www.valleywater.org

San Francisco Public Utilities Commission • www.sfwater.org

United States Environmental Protection Agency • www.epa.gov/safewater/

California Department of Public Health • www.cdph.ca.gov/programs/pages/ddwem.aspx

We value our consumers and work hard to ensure service and satisfaction. If you have any questions or comments about this report, please call the appropriate number below.

Billing Questions 408.586.3100

Water Hotline 408.586.2605

Water Emergencies (Mon.-Fri., 8:00 a.m - 5:00 p.m.) 408.586.2600

Water Emergencies (after hours) 408.586.2400

Water Quality Questions 408.586.3348

EPA Safe Drinking Water Hotline 800.426.4791

HOW CAN I GET INVOLVED?

City Council meetings typically occur on the first and third Tuesday of every month at 7:00 p.m. in the City Hall Council Chambers located at 455 E. Calaveras Blvd. City Council Agendas are posted prior to each meeting at City Hall and on the City's website.

The City is a member of the American Water Works Association and the Bay Area Water Supply and Conservation Agency.

This report contains important information about your drinking water. Translate or speak it with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Chi tiet này thật quan trọng.

Xin nhờ người dịch cho quý vị.

此份有关你的食水报告,内有重要资料和讯息,请找他人為你翻譯及解釋清楚。

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।

कृपा करके किसी से :सका अनुवाद कराये ।

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।

ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।



City of Milpitas
455 E. Calaveras Blvd.
Milpitas, CA 95035

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Permit No. 4

Postal Customer



IMPORTANT CONTACT INFORMATION

CITY CONTACTS

City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086
Tel: (408) 730-7415
TDD: (408) 730-7501
Fax: (408) 747-1139
www.sunnyvale.ca.gov

Hours of Operation:
8 am to 5 pm

Field Services (Leaks, Breaks, and Water Quality Questions)
(408) 730-7510

Utility Division (Billing)
(408) 730-7400, Residential
(408) 730-7681, Commercial

Backflow and Cross Connection Control Program
(408) 730-7574

Water Conservation Hotline (SCVWD)
(408) 265-2607, ext. 2554

WEB RESOURCES

California Department of Public Health
www.cdph.ca.gov

US Environmental Protection Agency
www.epa.gov/ogwdw

Department of Water Resources
www.dwr.water.ca.gov

Emergency Preparedness
www.ready.gov

Bay Area Water Supply and Conservation Agency
www.bawsca.org

American Water Works Association
www.awwa.com
www.DrinkTap.org

TO GET INVOLVED

To provide input on decisions that affect drinking water quality, you are welcome to speak on any issue specifically coming before the City Council at a regularly scheduled council meeting. You can also speak on any topic you wish to bring to the Council's attention during the "Citizens to be Heard" portion of the meeting agenda. Alternatively, you can send a letter in advance of a meeting.

City Council Meetings

City Hall Council Chambers
456 West Olive Avenue
Sunnyvale, California
Tuesdays, 7 pm

A list of City Council meetings, agenda items, and study issues can be obtained by calling the City Clerk's office at (408) 730-7483 or by visiting our website at www.sunnyvale.ca.gov.



HEALTH & EDUCATION INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline.

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USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline.

USEPA Safe Drinking Water Hotline ►
(800) 426-4791

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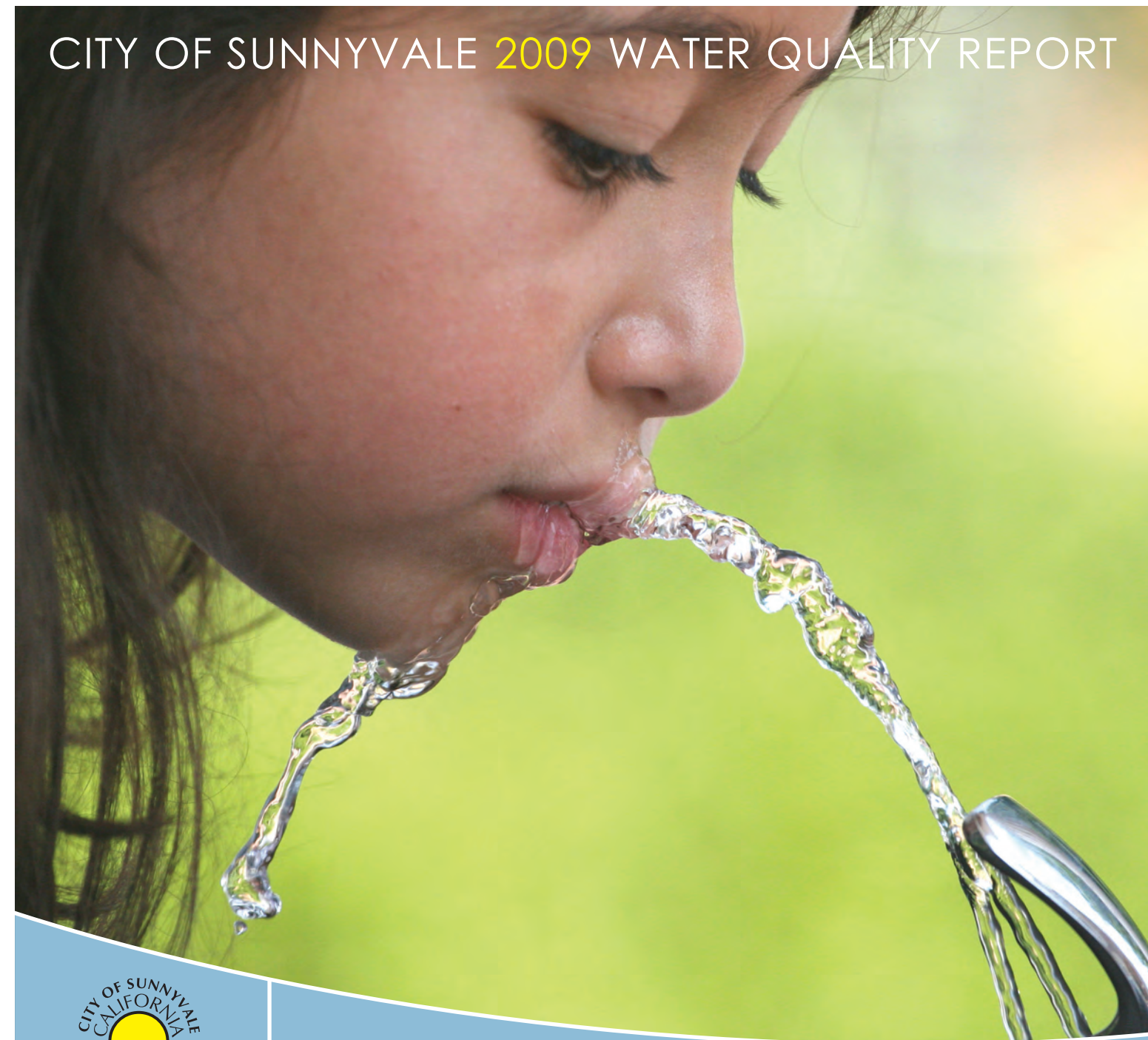
Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

यह सूचना महत्वपूर्ण है । कृपा करके किसी से :सका अनुवाद करायें ।

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

CITY OF SUNNYVALE 2009 WATER QUALITY REPORT



ABOUT THIS REPORT

This brochure describes the quality of your water. Included are details about where your water comes from, what it contains, and how it compares to state and federal drinking water standards.

Last year your tap water met all state and federal drinking water health standards

The City of Sunnyvale aims to provide superior service while delivering a reliable, high quality drinking water supply to our customers. Last year, your tap water met all state and federal drinking water health standards. The City vigilantly safeguards its water supplies, and once again we are proud to report that our system has met and/or exceeded water quality standards.

INSIDE: Important information about your water ►

Protecting your water supply

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Protecting the water supply is important to ensure that water is safe from contamination and aesthetically pleasing for use. Protection begins in the watersheds, where people and their activities can be a major cause of source contamination. Contamination requires additional treatment, which increases the cost to deliver water to your tap.

Understanding that drinking water—including bottled water—may reasonably be expected to contain at least minute amounts of contaminants will help you make an informed choice about your drinking water. The presence of contaminants does not necessarily indicate a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants** such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants** such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides** that may come from a variety of sources such as agricultural, urban stormwater runoff and residential uses.
- **Organic Chemical Contaminants** including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive Contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.

Participating in public meetings and forums regarding water issues enables decision makers to hear your perspective and allows you to be directly involved in protecting your water supply.



Where your water comes from

The City of Sunnyvale has three different sources of drinking water supply: local groundwater, treated surface water from the Santa Clara Valley Water District (SCVWD), and treated surface water from San Francisco Public Utilities Commission (SFPUC). About a dozen pocket areas in Sunnyvale receive water from the California Water Service Company (Cal Water); questions regarding the source and delivery of water provided by Cal Water can be directed to its local office at (650) 917-0152.

Local Groundwater

The City owns, operates, and maintains eight deep wells. The wells are used to help supplement the imported water supplies during peak demands in the summer months and emergency situations. The City is currently completing an improvement project that will increase flexibility in using local groundwater supplies to enhance water quality, reduce operating costs, and increase reliability. Other groundwater improvements include electrical upgrades and installation of an emergency generator. Groundwater pumped from these wells is taxed by SCVWD.

The City completed a Drinking Water Source Assessment Program (DWSAP) in January 2003 for these groundwater sources. The City's groundwater sources are considered most vulnerable to

contamination by leaky underground fuel tanks, dry cleaning chemicals, sewer collection systems, old septic systems, and machine shops.

SFPUC Supply

The City purchases a blend of Hetch Hetchy water and treated water from SFPUC to serve the northern part of the City. Filtered water turbidity from SFPUC must be less than 0.3 NTU 95% of the time. This standard was met 100% of the time.

The Hetch Hetchy Watershed provides most of the SFPUC water supply, with supplementation by local watersheds in Alameda and Santa Clara Counties. The major water source originates from spring snowmelt flowing down the Tuolumne River and is stored in the Hetch Hetchy Reservoir. Since this water source meets all federal and state standards for watershed protection,

disinfection treatment practices, bacteriological quality monitoring, and operations, the State has granted this water source a filtration exemption.

The Alameda Watershed spans more than 35,000 acres in Alameda and Santa Clara Counties. Surface water from rainfall and runoff is collected in the Calaveras and San Antonio Reservoirs. Prior to distribution, the water from these reservoirs is treated. Fluoridation, chloramination, and corrosion control treatment are provided for the combined Hetch Hetchy and treated water. Fluoride is added to the naturally occurring level to help protect against tooth decay in consumers. The fluoride levels in the treated water are maintained within a range of 0.8–1.5 mg/L as required by CDPH.

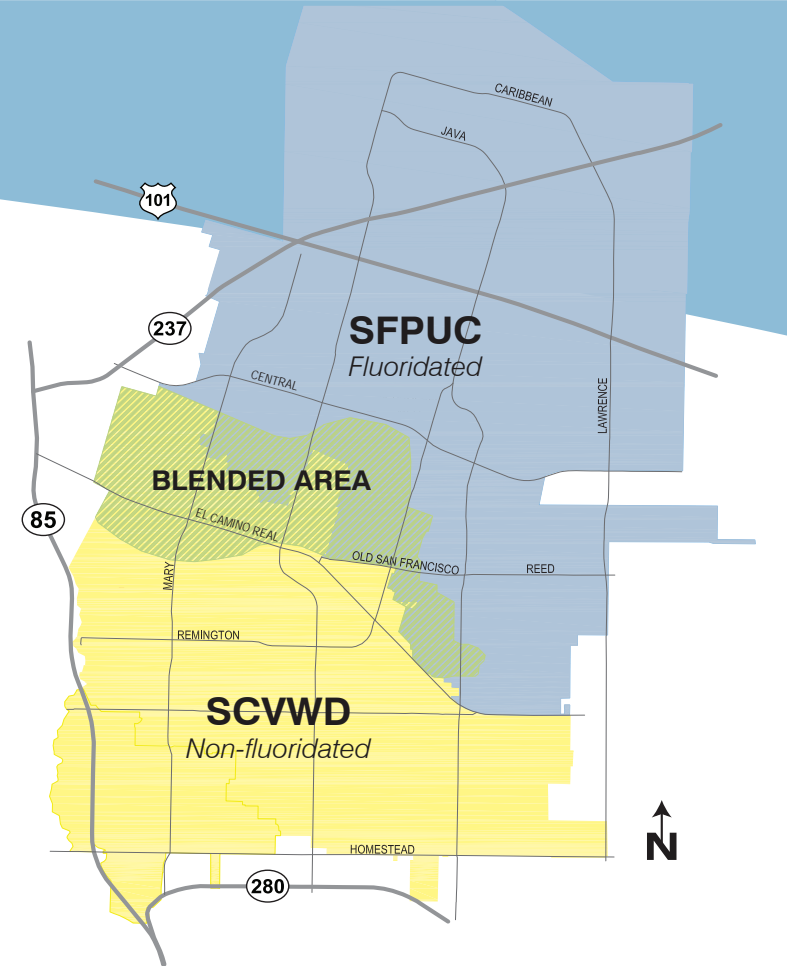
An annual report on the Hetch Hetchy Watershed and neighboring watersheds reflects the evaluation of their sanitary conditions, water quality, and potential contamination sources. The report also presents performance

results of watershed management activities implemented by SFPUC and partner agencies to reduce or eliminate potential contamination sources. The 2008 sanitary survey concluded that very low levels of contaminants associated with wildlife and human activities exist in these watersheds. The survey is available through the CDPH San Francisco District office.

More information on SFPUC ▶
Visit <http://sfwater.org>

SCVWD Supply

The City purchases treated surface water from SCVWD and delivers it to the southern portion of the City. SCVWD imports more than half of its supply from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta Watershed. SCVWD local surface water sources include Anderson and Calero Reservoirs. SCVWD source waters are vulnerable to potential contamination from a



variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. Imported sources are vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildfires in watershed areas. Local sources are additionally vulnerable to contamination from

commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD treated water. Water treatment plants provide multiple barriers for physical removal and disinfection of contaminants.

More information on SCVWD ▶
Visit <http://www.valleywater.org>

INVESTING TO PROTECT YOUR WATER: SUNNYVALE WORKS!



The City has invested over \$3.6 million in water and sewer utilities projects through the *Sunnyvale Works!* Program.

To help protect your water supply, the City of Sunnyvale is replacing and/or upgrading aging water facilities to meet current regulatory requirements. The City is accomplishing this through our very successful *Sunnyvale Works!* program.

Sunnyvale Works! is an innovative capital improvements acceleration and stimulus program launched by the City in April 2009. This program streamlines the process for designing, reviewing, and awarding capital improvement projects, which ultimately shortens the overall timeline for projects and significantly reduces project costs.

Program managers have been so successful in obtaining outside funding that projects have impacted the City's budget far less than expected. American Recovery and Reinvestment Act stimulus funding, Community Development Block Grants, and state gas tax funds have enabled the expansion of the *Sunnyvale Works!* program to its current \$100 million level.

On average, submitted project bids have been approximately 30 percent lower than expected. The savings have been reinvested into the program, expanding the number of projects planned or underway.

Importantly, the *Sunnyvale Works!* program is expected to create as many as 600 or more jobs within the companies that are awarded *Sunnyvale Works!* projects.

SUNNYVALE WORKS! Water and Sewer Projects

- Wolfe/Evelyn Water Tank Painting
- Refurbishing Water Tanks at Wright Avenue
- Evaluation of Bridge and Levees
- Interior Coating of Water Tanks
- Hamilton Water Plant Improvements
- Well Connections to Transmission Line
- Water Main Replacements
- Recycled Water System Extension
- Water and Sewer SCADA Improvements

HYDRANT AND MAIN FLUSHING

Look for signs in your neighborhood to be posted the day before flushing occurs.



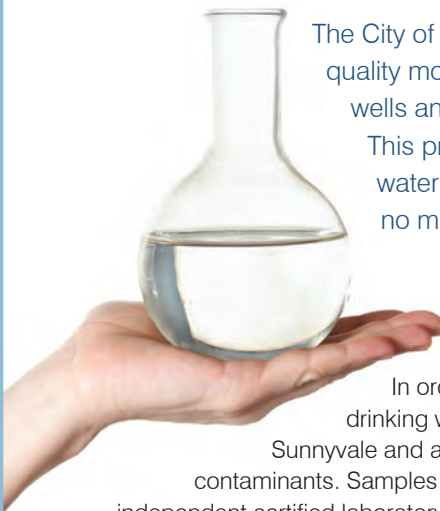
Maintenance of the potable water distribution system includes periodic flushing of hydrants and water mains. Flushing the system clears water lines of sand and sediment that may have accumulated during the year.

After hydrant flushing, your tap water may be temporarily discolored. This does not present any health hazard.

The discoloration may be removed by flushing your tap; run the water in your sink and/or shower until it runs clear.

For more information ▶
Call Field Services at (408) 730-7510.

2009 WATER QUALITY TEST RESULTS



The City of Sunnyvale has instituted a comprehensive water quality monitoring program that encompasses City-owned wells and all water purchased from SFPUC and SCVWD. This program ensures that all of our customers receive water that complies with all regulatory criteria and that no maximum contaminant levels (MCLs) or maximum contaminant level goals (MCLGs) for regulated chemicals, bacteria, or pollutants are exceeded.

In order to ensure water quality standards are met, drinking water samples are collected daily throughout Sunnyvale and analyzed for a variety of regulated and unregulated contaminants. Samples are tested by the City's certified laboratory and an independent certified laboratory using the latest testing procedures and equipment. We collect more samples than required by the California Department of Public Health (CDPH) to provide you with the highest quality of water at all times. In addition, the City's wholesalers, SCVWD and SFPUC, conduct their own testing before delivering water to the City. Such measures help us to continue meeting established water quality standards.

The table to the right shows the results of the distribution system and source water analyses conducted by the City, SCVWD, and SFPUC. Water quality data is grouped by water source. Last year we conducted more than 20,000 tests for over 80 parameters. We detected only 11 of these parameters, and none were found at levels higher than CDPH allows.

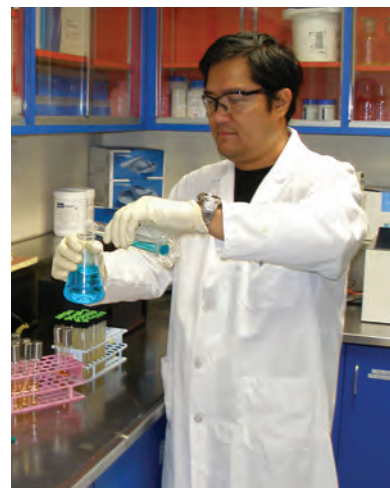
Only the parameters detected are shown. Other constituents were analyzed but are not listed because they were not detected. Additionally, unregulated parameters are shown to provide you with supplemental information.

For more information ►
For a complete list of all the chemicals analyzed, or to ask questions about this report or the City's water quality monitoring program, please contact:
Val Conzet
City of Sunnyvale
Water Operations Manager
Phone: (408) 730-7510
TDD (408) 730-7501
vconzet@ci.sunnyvale.ca.us

Some data—although representative—was collected prior to 2009, as the CDPH requires monitoring for some constituents less than once per year since the concentrations of these constituents do not vary frequently or significantly.

Certified Labs and Operators

The City's Environmental Laboratory is responsible for analyzing drinking water samples to ensure compliance with Safe Drinking Water Act requirements. The City's laboratory is certified under the Environmental Laboratory Accreditation Program and conducts the majority of the required tests; however, more specialized tests are conducted by contracted certified laboratories.



The City's water system personnel are certified by CDPH and the American Water Works Association as Water Distribution Operators, Water Treatment Operators, Back Flow Prevention Assembly Testers, and/or Cross Connection Control Program Specialists.

PRIMARY DRINKING WATER STANDARDS (PUBLIC HEALTH RELATED STANDARDS)										
Parameter	Unit	MCL, (AL), or [MRDL]	PHG, (MCLG), or [MRDLG]	Groundwater Well		SCVWD		SFPUC		Typical Sources*
				Average or [Max]	Range	Average or [Max]	Range	Average or [Max]	Range	
INORGANIC CHEMICALS (SOURCE WATER SAMPLING)										
Aluminum	ppm	1	0.6	ND	ND	ND	ND-0.060	<0.05	<0.05-0.051	3, 4
Barium	ppm	1	2	0.11	0.09-0.12	ND	ND	ND	ND	3
Fluoride	ppm	2	1	0.15	0.13-0.19	ND	ND	0.3	<0.1-0.8	3, 5, 6
Turbidity	NTU	TT	NA	0.24	0.11-0.46	0.11	0.06-0.25	[3.87]	0.27-0.52	2
Nitrate as NO ₃	ppm	45	45	17	9.2-30	3	ND-6	ND	ND	3, 7, 8
DISINFECTION BYPRODUCTS AND PRECURSORS (SOURCE WATER SAMPLING)										
Total Trihalomethanes	ppb	80	NA			55	35-66	[33]	9-54	9
Total Haloacetic Acids	ppb	60	NA			16	11-23	[21]	5-27	9
TOC (precursor control)	ppm	TT	NA			1.78	0.99-2.38	2.7	2.3-3.2	10
LEAD AND COPPER (SUNNYVALE 2007 AT-THE-TAP SAMPLING)				90th Percentile			# of Samples Above AL			
Lead	ppb	(15)	0.2	2			1 out of 52			
Copper	ppm	(1.3)	0.3	0.151			1 out of 52			
DISINFECTION RESIDUALS AND BYPRODUCTS (DISTRIBUTION SYSTEM SAMPLING)				Highest Running Annual Average			Range			
Disinfectant Residual	ppm	[4]	[4]	1.9			<0.01-3.1			
Total Trihalomethanes	ppb	80	NA	46.7			11.7-71.9			
Total Haloacetic Acids	ppb	60	NA	21			6.9-34			
MICROBIOLOGICAL (DISTRIBUTION SYSTEM SAMPLING)				Average			Range			
Total Coliform Bacteria	%pos/month	<5.0%	(0)	0.21			0.0-0.70			
SECONDARY DRINKING WATER STANDARDS (AESTHETIC STANDARDS)										
Parameter	Unit	MCL	Average	Range	Average	Range	Average	Range	Range	Sources*
Aluminum	ppb	200	ND	ND	ND	ND-60	<50	<50-51		3, 4
Chloride	ppm	500	46	35-72	100	74-134	9.5	4-14.6		11, 12, 14
Color	CU	15	ND	ND	<2.5	<2.5-<2.5	<5	<5-9		13
Iron	ppb	300	ND	ND	ND	ND	ND	ND		12, 15
Manganese	ppb	50	0.65	ND-3.9	ND	ND-64	ND	ND		12
Odor — Threshold	T.O.N.	3	1	1-1	1	1-1	ND	ND		13
Specific Conductance	µS/cm	1600	690	610-790	647	468-900	170	30-309		14, 16
Sulfate	ppm	500	34	27-39	67.1	43.5-99.5	16.6	1.1-35.6		11, 12, 15
Total Dissolved Solids	ppm	1000	405	360-450	346	242-470	92	22-168		11, 12
UNREGULATED PARAMETERS										
Parameter	Unit	NL	Average	Range	Average	Range	Average	Range	Range	
Boron	ppb	1000	160	110-230	186	101-294	<100	<100-102		
Chromium VI (Hexavalent Chromium)	ppb	NA	1.4	ND-3.1	ND	ND	NA	NA		
Vanadium	ppb	50	6.7	4.3-22	ND	ND-4	NA	NA		
OTHER WATER QUALITY PARAMETERS										
Parameter	Unit	MCL	Average	Range	Average	Range	Average	Range	Range	
Hardness (as CaCO ₃)	ppm	NS	298	270-320	116	83-159	55	12-108		
pH	units	NS	8.2	7.3-9.5	7.6	7.5-7.7	8.7	8.7-8.8		
Sodium	ppm	NS	28	22-40	81	58-114	14	3-23		
Temperature	°C	NS	16	11-21	18	11-24	NA	NA		

Important information about your water quality

Disinfection

Sunnyvale residents should know that the water in the Sunnyvale system includes water treated with chloramine and well water that is tested but not treated. Chloramine, a combination of chlorine and ammonia, is more stable than chlorine and offers a number of health benefits. Chloramine lasts longer in water to provide more protection against pathogens such as bacteria and viruses, and produces lower levels of disinfection byproducts such as trihalomethanes. State and federal regulations effective January 2002 lowered the allowable level of exposure to disinfection byproducts. The water provided by SFPUC and SCVWD is disinfected with chloramines which can affect dialysis treatment. The City maintains contact with dialysis treatment centers in the City. Residents on home dialysis should contact their physicians to discuss the impact on their treatment. The Transpacific Network for Dialysis at (415) 331-1545 can provide more information about chloramines and dialysis. Fish and aquarium owners should check with their local pet stores to make sure they are using the correct equipment for chloramine removal of any concentration.

Fluoride

The SFPUC completed construction on the new, system-wide fluoridation facility in 2005. Beginning November 2005, all water from the SFPUC is fluoridated. However, the City's other wholesale water provider (SCVWD) has no plans to fluoridate its water, and the City does not fluoridate well water. As a result, some areas of Sunnyvale receive fluoridated water, other areas receive non-fluoridated water, and some areas receive a mixture of fluoridated and non-fluoridated water. A map showing the different areas is included. If you would like more information please contact the City at (408) 730-7510.

Hardness

Hardness consists mainly of calcium and magnesium salts. Although it does not pose a health risk, it may be considered undesirable for other reasons. Some benefits in reducing hardness or water softening are reductions in soap usage, longer life for water heaters, and a decrease in incrustation of pipes. Some disadvantages are an increase in sodium

intake (depending on type of softener used), proper maintenance/servicing requirements, and potential adverse affects on plants and landscaping. To convert hardness from ppm to grains per gallon, divide by 17.1.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Nitrate

Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.



HOW TO READ THIS CHART

DEFINITIONS OF KEY TERMS

Regulatory Action Level (AL). The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. MCLs are established by USEPA and CDPH.

Maximum Contaminant Level Goal (MCLG). The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL). The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG). The level of a drinking water

disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL). Notification levels are health-based advisory levels established by CDPH for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Primary Drinking Water Standard (PDWS). MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG). The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Treatment Technique (TT). A required process intended to reduce the level of a contaminant in drinking water.

Total Organic Carbon (TOC). TOC has no health effects. However, TOC provides a medium for the formation of disinfection byproducts including trihalomethanes and haloacetic acids. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.

Turbidity. Turbidity has no health effects. It is the water clarity indicator and standards are set per TT or source water type. It is a measure of the cloudiness of the water and is monitored because it is a good indicator of water quality and the effectiveness of the filtration system. The MCL for turbidity is based on the TT. For unfiltered water, the MCL is 5.0 NTU. For filtered water, the MCL is ≤0.3 NTU 95% of the time.

Variations and Exemptions. CDPH permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Waiver. State permission to decrease the monitoring frequency for a particular contaminant.

ABBREVIATIONS

°C	Degrees Celsius
CDPH	California Department of Public Health
CU	Color unit
DLR	Detection level reporting
Max	Maximum
NA	Not available
ND	Not detected
NS	No standard
NTU	Nephelometric turbidity unit
ppb	parts per billion (micrograms per liter)
ppm	parts per million (milligrams per liter)
µS/cm	microSiemens per centimeter
% pos	% positive
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
TOC	Total organic carbon
T.O.N.	Threshold odor number
USEPA	United States Environmental Protection Agency

* TYPICAL SOURCES IN DRINKING WATER

- Naturally present in the environment
- Soil runoff
- Erosion of natural deposits
- Residue from some surface water treatment processes
- Water additive that promotes strong teeth
- Discharge from fertilizer and aluminum factories
- Runoff and leaching from fertilizer use
- Leaching from septic tanks and sewage
- By-product of drinking water disinfection
- Various natural and man-made sources
- Runoff from natural deposits
- Leaching from natural deposits
- Naturally-occurring organic materials
- Seawater influence
- Industrial wastes
- Substances that form ions when in water
- Internal corrosion of household plumbing systems
- Leaching from wood preservatives
- Discharges from industrial manufacturers
- Drinking water disinfectant added for treatment

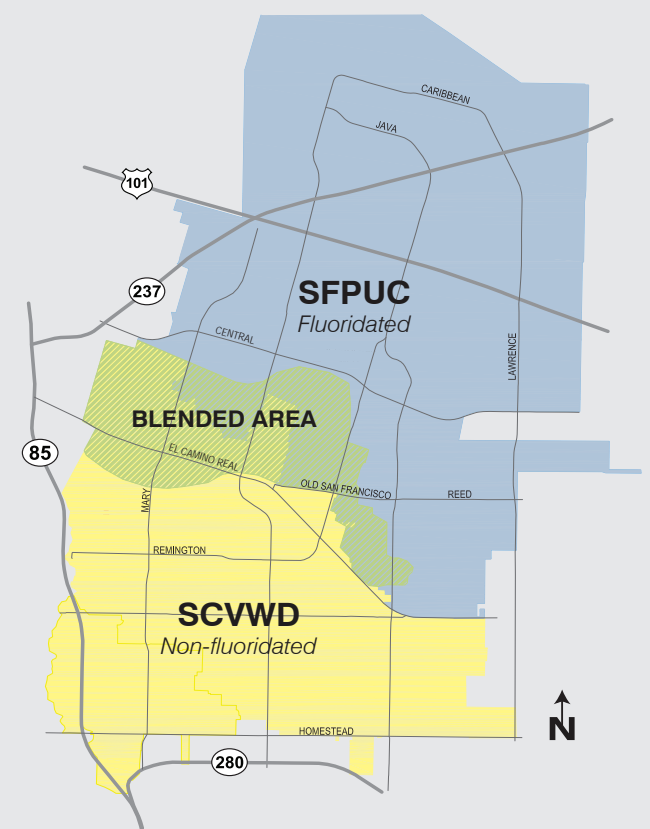
SOURCE MAP

The adjacent map indicates which areas of the city are supplied by SFPUC, SCVWD, or a mixture of the two. The colored regions correspond to the colored columns in the table above.

Groundwater wells, which are not shown on this map, are located throughout the city. Local groundwater is blended with surface water supplies from SFPUC and SCVWD.

SFPUC water is fluoridated but SCVWD and groundwater supplies are not.

For a larger map, see reverse side.



Nitrate

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Nitrate levels in SJWC water sources are shown in the enclosed table. In 2009, SJWC did not detect nitrate at or above 45 mg/L in any sources.



To Learn More about the Quality of Your Water

Reminder for Dialysis Patients and Aquarium Owners

Chloramine and chlorine may be present in the water provided by SJWC. These chemicals are used to protect public health by destroying disease-causing organisms. Except for a slight chlorinous taste or odor, these disinfectants will not cause any problems for the general public. However, home dialysis patients and aquarium owners must take special precautions before the water can be used in kidney dialysis machines or aquariums. Please consult your doctor or dialysis technician to be sure your home equipment is adequate and proper tests are being performed every time it is used. Before filling an aquarium or fish pond, the disinfectant must be removed. Your local tropical fish store can help determine the best water treatment for your fish.

Your drinking water is continually tested to ensure compliance with state and federal standards for quality and safety. This annual report summarizes the results of more than 17,000 water quality tests conducted throughout the year. If you have any questions about your water quality, service, or the information contained in this report, please call us at (408) 279-7900 during normal business hours (Monday through Friday between 8:00 a.m. and 5:30 p.m.). Or, you may contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791 for additional public information about the Safe Drinking Water Act or USEPA's drinking water regulatory programs.

Drinking Water Information on the Internet

Detailed information about specific drinking water topics is available on the Internet. Visit our web site or any other of those listed below to find out more about water treatment, quality, and current regulations.

San Jose Water Company: www.sjwater.com

Santa Clara Valley Water District: www.valleywater.org

American Water Works Association: www.awwa.org

California Department of Public Health Division of Drinking Water and Environmental Management:

<http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Regulations.aspx>

United States Environmental Protection Agency:

<http://www.epa.gov/ebtpages/watedrinkingwater.html>



110 West Taylor St., San Jose, CA 95110

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www.sjwater.com

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Customer Confidence



2009 Annual Water Quality Report



Customer Confidence

Clean drinking water is vital to maintaining public health and preserving the quality of life we all enjoy. San Jose Water Company's primary mission is to provide that high-quality water coupled with exceptional customer service and value.

For more than 140 years, San Jose Water Company has provided reliable water service to the residents of San Jose and surrounding communities. The Company now serves nearly one million people through a state-of-the-art water system that has kept pace with the expansion and innova-



tion of Silicon Valley.

Providing high quality drinking water requires a combination of planning, training, technology, and cooperation among multiple agencies and talented professionals. Before water is delivered to you, it undergoes appropriate treatment and a rigorous quality control program reviewed and approved by the California Department of Public Health. Stringent regulations govern sampling frequency, selection of sample locations, laboratory accreditation requirements, testing procedures, water treatment plant performance,



record-keeping and reporting methods, and, of course, acceptable levels of potential contaminants.

San Jose Water Company is proud of its long and exemplary track record of water quality and environmental compliance. The Company uses a combination of continuous sampling via scientific instruments and routine samples collected by specially-trained technicians to monitor your water before, during, and after treatment, and throughout the water distribution system. Water quality samples are tested at a State-certified third-party laboratory and results are sent electronically to both San Jose Water Company and the Department of Public Health to ensure thorough review and timely reporting.

For your convenience, this report provides information on any contaminants detected in the water we supply. We test for many more contaminants than you see listed, but we only report on the ones we find. We are again pleased to report that no Maximum Contaminant Levels were exceeded in water we delivered to our customers in 2009, and that your water continues to surpass all state and federal standards for drinking water quality.

Water Quality Guidance

This report is being sent to you in compliance with the Safe Drinking Water Act. Landlords, businesses, and schools are encouraged to share this report with nonbilled water users at their locations. Additional copies are available free of charge by calling our office.

Este informe contiene información importante sobre el agua que usted esta bebiendo. Platique con alguien que entienda la información ó que alguien tradusca la información contenida en este informe.

Bản báo cáo này bao gồm những tài liệu quan trọng về nước uống của quý vị. Xin hãy tìm người thông dịch qua Việt ngữ, hoặc nói chuyện với những ai hiểu được.

Source Water Assessment

An assessment of the drinking water sources for SJWC's water system was completed in December 2002. SJWC's wells are considered most vulnerable to one or more of the following activities, which have not been associated with any contaminants detected in the water supply: dry cleaners, automobile gas stations and repair shops, and underground storage tanks. Some of SJWC's wells are also considered vulnerable to metal plating and finishing, photo processing/printing, electrical/electronics manufacturing, chemical/petroleum processing/storage, known contaminant plumes, and plastics/synthetics producers. SJWC's surface supplies are considered most vulnerable to low density septic systems. Imported surface water purchased from Santa Clara Valley Water District (SCVWD) is considered most vulnerable to a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, as well as residential and industrial development. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. Although these activities exist in areas near one or more of SJWC's or SCVWD's sources, physical barriers, treatment systems, and monitoring programs are in place to ensure that water supplied to our customers is not adversely affected. Customers seeking additional information may view a copy of the assessment during normal business hours at SJWC's offices at 110 West Taylor Street, San Jose.

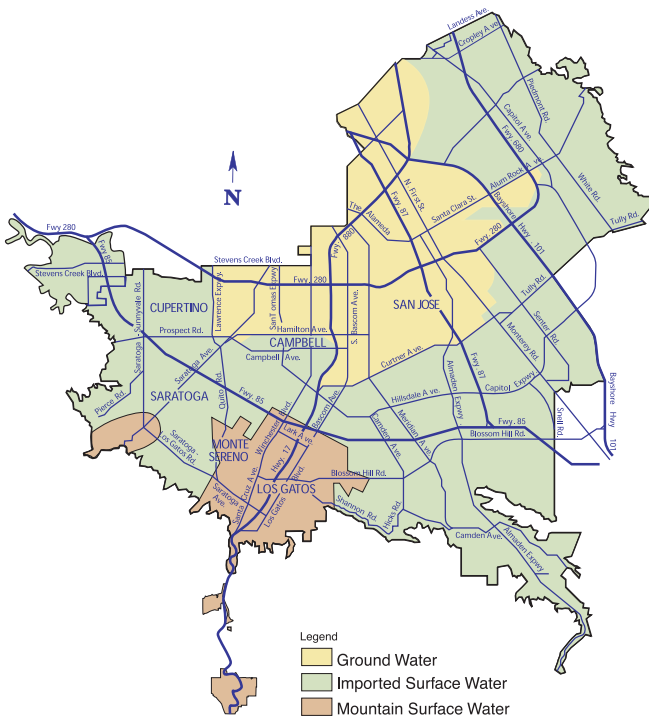
Special Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. Additional information is available from the California Department of Public Health (CDPH) Division of Communicable Disease Control at (510) 540-2566 or the Santa Clara County Department of Environmental Health at (408) 918-3400.

SJWC Service Area and Water Supply Sources

SJWC provides water from three major sources. The first source is groundwater, which is pumped from over 100 wells that draw water from the Santa Clara Valley Groundwater Basin. The second source is local mountain surface water, which is collected in our watershed in the Santa Cruz Mountains and treated at our two treatment plants. The third source, imported surface water, is provided by the Santa Clara Valley Water District, (SCVWD) our wholesale supplier. A majority of imported water originates as Sierra snowmelt and travels through the State and Federal water projects before treatment at SCVWD's three treatment plants. A smaller portion is impounded in local reservoirs in Santa Clara County.

During 2009, the majority of SJWC's water supply was imported surface water followed by groundwater and local mountain surface water. Since there are seasonal changes in this distribution pattern and the sources are often blended together, this map shows only the predominant source for a particular area during a typical year.



Drinking Water Regulation

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. SJWC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your

tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

Important Definitions

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

One part per million (ppm): is the same as one milligram per liter (mg/L). One ppm corresponds to a single penny in \$10,000 or one minute in two years.

One part per billion (ppb): is the same as one microgram per liter (ug/L). One ppb corresponds to a single penny in \$10,000,000 or one minute in two thousand years.

Detection Limit for Purposes of Reporting (DLR): The lowest level of a constituent that the Department of Public Health requires to be reported.

Nephelometric Turbidity Units (NTU): This is a measure of the cloudiness of the water.

Not Detected (ND): If a constituent is not measured at or above a DLR, it is reported as ND.

Not Analyzed (NA): Source designated non-vulnerable or testing not required.

2009 SJWC Annual Water Quality Report

This brochure provides a snapshot of last year's water quality data for SJWC. Included are details about where your water comes from and how your water quality compares to State standards. As you can see, in 2009, as in years past, your tap water met all USEPA and State primary drinking water health standards.



Typical Sources of Chemical Constituents

- 1 Erosion of natural deposits
- 2 Runoff and leaching from fertilizer use
- 3 Runoff and leaching of natural deposits
- 4 Residue from some surface water treatment processes
- 5 Industrial waste
- 6 Seawater influence
- 7 Discharge from industry chemical factories
- 8 Discharge from metal degreasing sites and other factories
- 9 Glass and electronics production waste
- 10 By-product of drinking water disinfection
- 11 Naturally present in the environment
- 12 Soil erosion and stream sediments
- 13 Naturally occurring organic materials
- 14 Substances that form ions when in water
- 15 Fumigant
- 16 Internal corrosion of household plumbing systems
- 17 Dry cleaning solvent
- 18 Extraction and degreasing solvent
- 19 Discharge from metal factories
- 20 Municipal and industrial waste discharges
- 21 Extraction and degreasing solvent

SJWC tests your water supplies for over 200 possible contaminants. Only those contaminants that were detected in any of our water sources appear in this table. Primary standards relate to public health, while secondary standards relate to aesthetic qualities such as taste, odor, and color. The California Department of Public Health allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of the data reported below, although representative, are more than one year old. Data for radionuclides, microbiological, turbidity, secondary standards, and inorganic and organic chemicals are all from testing performed in 2009.

PRIMARY STANDARDS — MANDATORY HEALTH-RELATED STANDARDS

Parameter	Units	MCL	PHG or MCLG	Groundwater		Imported Surface Water		Mountain Surface Water		Typical Sources
				Average	Range	Average	Range	Average	Range	
INORGANIC CHEMICALS										
Aluminum	ppm	1	.06	0.05	ND - 0.9	0.02	ND - 0.08	0.05	ND - 0.15	1, 4
Arsenic	ppb	10	0.004	0.1	ND - 0.6	ND	ND	ND	ND	1, 9
Barium	ppm	1	2	0.13	0.05 - 0.24	ND	ND	0.06	0.04 - 0.08	1
Chromium	ppb	50	100	2	0.8 - 10	ND	ND	ND	ND	1, 16, 17
Fluoride	ppm	2	1	0.1	0.06 - 0.21	ND	ND - 0.1	0.2	0.09 - 0.38	1
Nickel	ppb	100	12	2	ND - 10	ND	ND	ND - 6	2	1, 19
Nitrate (as NO ₃)	ppm	45	45	19	0.7 - 38	1	ND - 6	0.4	ND - 1.3	1, 2
Selenium	ppb	50	50	0.7	ND - 5	ND	ND	ND	ND	1
RADIONUCLIDES										
Gross Alpha Activity	pCi/L	15	15	3.3	0.7 - 7.6	ND	ND	1.3	ND - 3	1
Combined Radium	pCi/L	5	5	1.1	ND - 2.0	ND	ND	ND	ND	1
VOLATILE ORGANIC CHEMICALS										
1,1-Dichloroethane	ppb	5	3	ND	ND - 0.2	ND	ND	ND	ND	15, 21
1,1-Dichloroethylene	ppb	6	10	ND	ND - 3.0	ND	ND	ND	ND	7
1,1,1-Trichloroethane	ppb	200	1000	1	ND - 3	ND	ND	ND	ND	8
Trichlorotrifluoroethane	ppm	1.2	4	ND	ND - 0.002	ND	ND	ND	ND	8, 17
CLARITY										
Turbidity	NTU	TT = 1 NTU	none	NA			Level Found	Level Found		
	NTU	TT=95% of samples ≤0.3 NTU	none	NA			0.11	0.13	100%	12
MICROBIOLOGICAL										
SWJC Distribution System										
				Range		Highest Level Detected				
Coliform Bacteria	%	>5% of monthly samples positive	0	ND - 0.76%		0.76%		11		
LEAD AND COPPER										
SWJC at-the-tap Sampling (2008)										
				90th Percentile Level		# of sites above AL				
Lead	ppb	AL	PHG	ND		0 of 55		1, 16		
Copper	ppm	1.3	0.3	0.16		0 of 55		1, 16		
DISINFECTION BYPRODUCTS										
				Compliance Level		Range				
Total Trihalomethanes	ppb	80	none	38.5		ND - 82		10		
Haloacetic Acids	ppb	60	none	19.3		ND - 83		10		
DISINFECTION										
				SWJC Distribution System Running Annual Average		0.85				
Total Chlorine	ppm	4 as Cl ₂	4 as Cl ₂							

SECONDARY STANDARDS — AESTHETIC STANDARDS

Parameter	Units	MCL	PHG or MCLG	Groundwater		Imported Surface Water		Mountain Surface Water		Typical Sources
				Average	Range	Average	Range	Average	Range	
Color	15 Units	15 Units	none	ND	ND	ND	ND	ND	ND - 3	13
Odor — Threshold	3 Units	3 Units	none	ND	ND - 1	1	ND - 1	ND	ND - 1	13
Hardness (as CaCO ₃)	ppm	NA	none	292	134 - 400	118	77 - 167	194	181 - 210	1
Chloride	ppm	500	none	48	14 - 100	91	23 - 136	16	13 - 21	3, 6
Iron	ppb	300	none	80	ND - 300	ND	ND	ND	ND - 190	3, 5
Manganese	ppb	50	none	9	ND - 33	ND	ND - 64	ND	ND	3
Sodium	ppm	NA	none	33	14 - 130	72	29 - 115	24	17 - 31	1
Sulfate	ppm	500	none	48	35 - 70	59	29 - 99	37	26 - 44	3, 5
Total Dissolved Solids	ppm	1000	none	397	230 - 540	326	242 - 470	245	220 - 270	3
Specific Conductance	uS/cm	1600	none	664	381 - 1100	452	406 - 903	405	340 - 450	6, 14
Zinc	ppm	5.0	none	0.01	ND - 0.05	ND	ND	0.05	ND - 0.03	3, 5
Foaming Agents (MBAS)	ppb	500	none	106	ND - 210	ND	ND	ND	ND	20

UNREGULATED CONTAMINANTS

Parameter	Units	Notification Level	PHG or MCLG	Groundwater		Imported Surface Water		Mountain Surface Water	
				Average	Range	Average	Range	Average	Range
Vandium	ppb	50	none	5	ND - 11	1	ND - 5	ND	ND
N-nitrosodimethylamine (NDMA)	ppb	none	none		ND - 0.003		ND - 0.007		ND
N-nitrosodiethylamine (NDEA)	ppb	none	none		ND		ND		ND - 0.005

Unregulated contaminant monitoring helps USEPA and the California Department of Public Health to determine where certain contaminants occur and whether the contaminants need to be regulated.



CITY OF SANTA CLARA WATER UTILITY

CONSUMER CONFIDENCE REPORT 2010

The City of Santa Clara is committed to providing you, the water consumer, with a safe and reliable supply of high quality drinking water. Each year we publish our annual water quality report known as the Consumer Confidence Report. This is our 22nd annual report on water quality. It contains the latest water quality monitoring results obtained through the end of calendar year 2009. It answers some of the most common water quality questions asked by our customers. We hope it will provide the facts and perspectives you need to make an informed evaluation of your tap water.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The California Department of Public Health regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

This report has been prepared in accordance with the requirements of the Safe Drinking Water Act and State regulations. Although the water you receive is tested for more than 100 potential contaminants and 48 other parameters, the majority of the potential contaminants are never detected. To simplify the report, only the constituents that were detected in at least one water source appear in the water quality table. We are also required by the State to provide additional information about certain constituents that appear on the water quality table even though the water meets all applicable drinking water standards.

It is important to us that you, the water consumer, have current and factual information about your water supply. In this latest issue of our Report, we hope to further your understanding and strengthen your confidence in the quality and integrity of the water supplied to you by the City of Santa Clara. We take great pride in delivering the safest and highest quality water available.

If you have any questions about the information in this report, or if you want to participate in water quality related issues, please call us at (408) 615-2000. You may also attend regularly scheduled City Council meetings at 7:00 pm on Tuesdays in the Council Chambers of City Hall, 1500 Warburton Avenue, Santa Clara.

Q: What are the standards that drinking water must meet?

A: The quality of drinking water is carefully regulated by the Federal Government. In 1974, Congress passed the Safe Drinking Water Act, requiring the United States Environmental Protection Agency (USEPA) to establish uniform standards for drinking water. The Safe Drinking Water Act was further amended in 1986 and 1996, adding even more stringent standards. In California, these standards are enforced by the California Department of Public Health (CDPH), Division of Drinking Water and Environmental Management.

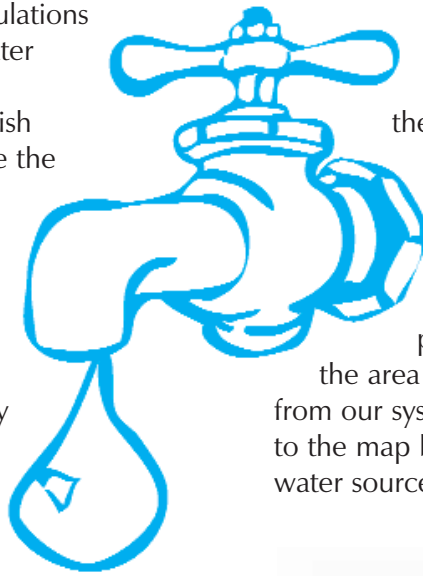
There are two types of drinking water standards. PRIMARY STANDARDS are designed to protect public health. These standards specify the limits, called "Maximum Contaminant Levels" (MCLs) for

substances in water that may be harmful to humans or affect their health if consumed in large quantities. SECONDARY STANDARDS are based on aesthetic qualities of water such as color, taste and odor. These standards specify limits for substances that may affect consumer acceptance of the water. Both Primary and Secondary Standards are listed in this Report.

Q: Where does our water come from?

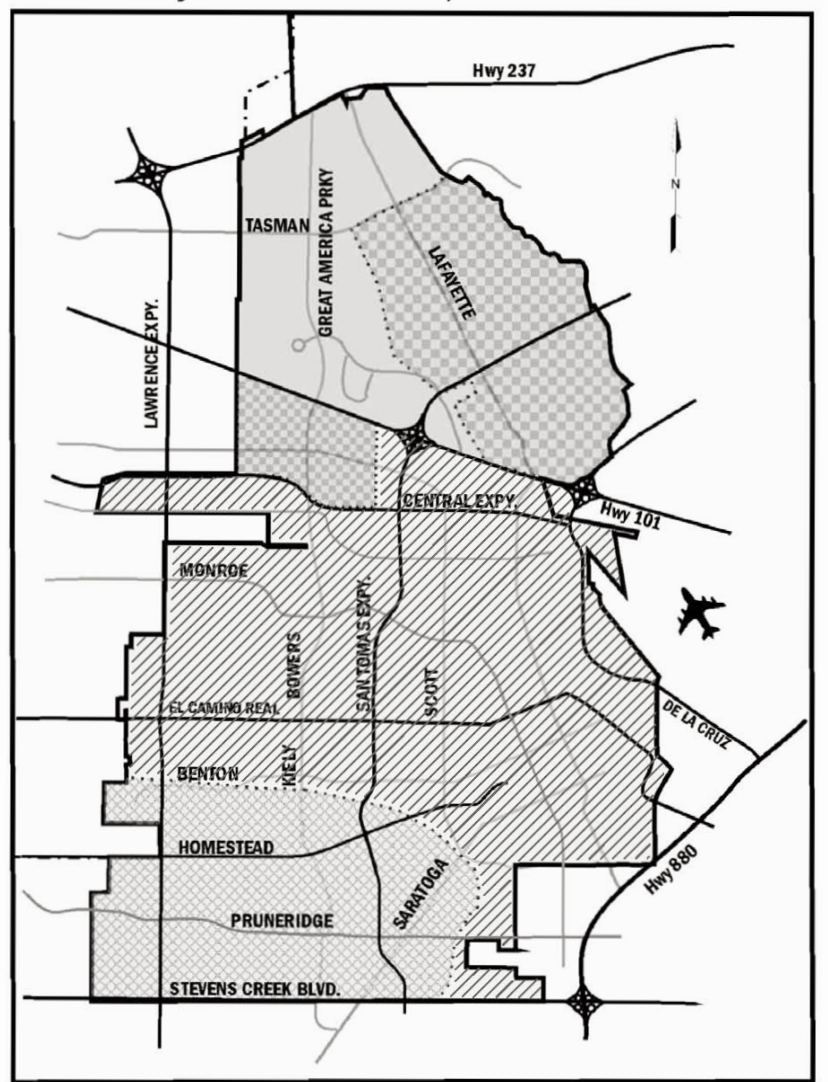
A: The City of Santa Clara has three separate sources of drinking water. Often, these sources are used interchangeably or are blended together. Together, these sources provide an average of 22 million gallons of water per day to the homes, businesses, industries and institutions of Santa Clara. In 2009 about 32% of our water was treated surface water purchased from the Santa Clara Valley Water District (District), imported from the Sacramento-San Joaquin Delta, and from the San Francisco Public Utility Commission's (SFPUC) Hetch Hetchy System (imported from the Sierra Nevada Mountains).

District water serves primarily the southwesterly portion of the City. Hetch Hetchy water typically serves the area north of Highway 101. The remaining 68% is pumped from our system of 27 deep wells serving the rest of the City. Refer to the map below. It shows the general areas served by the different water sources.



CONSUMER CONFIDENCE REPORT 2010

City of Santa Clara, California



- SFPUC Hetch Hetchy**
- Blend of SFPUC Hetch Hetchy and well water**
- City of Santa Clara well water**
- Blend of well water and SCVWD treated surface water**



**Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.**

Atencion: Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

INFORMATION ABOUT THE DRINKING WATER SOURCE ASSESSMENT PROGRAM:

The City has completed a Drinking Water Source Assessment Program and Plan (DWSAP) for the groundwater sources. The DWSAP was completed in August 2002 and submitted to the CDPH in December 2002. A copy of the DWSAP is available at the City's Water Utility offices at 1500 Warburton Avenue, Santa Clara. You may request a summary of the individual assessments by contacting the Water Utility at (408) 615-2000 or by email at water@santaclearaca.gov.

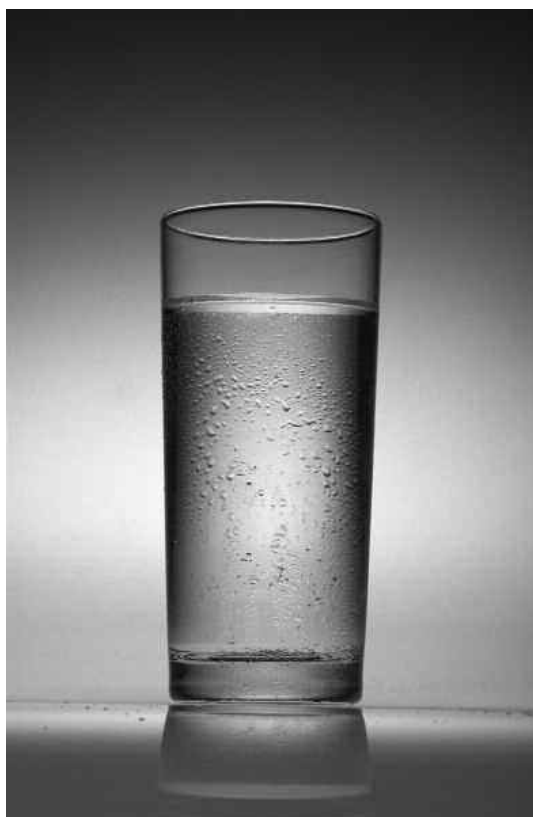
The City's groundwater sources are considered most vulnerable to contamination by leaking underground tanks containing fuel or dry-cleaning chemicals; old, unrecorded septic systems; storm drain dry wells located at various places around the City; many old, shallow, private wells, abandoned and not properly destroyed; and possibly some contaminants from a small landfill dump left over from the early years of the 20th century.

The City owns and operates 27 active deep wells. Only one well shows measurable contamination from regulated solvents, Well 24. This well is still in operation and the solvent level is monitored frequently. The contaminants are attributed to a plume from a near-by CERCLA (Superfund) site.

The City purchases water from the **Hetch Hetchy System**. The SFPUC aggressively protects the natural water resources entrusted to its care. An annual report on the Hetch Hetchy and its neighboring watersheds is prepared to evaluate their sanitary conditions, water quality, and potential contamination sources. The report also presents performance results of watershed management activities implemented by the SFPUC and its partner agencies, such as the National Parks Service, to reduce or eliminate the potential contamination sources. The 2007 sanitary survey concludes that very low levels of contaminants associated with wildlife and human activities exist in these up-country watersheds. The SFPUC complies with monitoring and reporting requirements to protect its watersheds and to update its watershed sanitary surveys for the Hetch Hetchy supply annually.

The SFPUC also conducts sanitary surveys of the two local watersheds (the Alameda Watershed and the Peninsula Watershed) every five years. The potential contamination sources identified in the 2005 survey are similar to the upcountry watersheds. These surveys reports are available at the CDPH San Francisco District office (510-620-3474).

The District provides treated surface water to our water system from the **Rinconada Water Treatment Plant**, one of three water treatment plants the District operates. District surface water is imported from the South Bay Aqueduct, Lake Del Valle and San Luis Reservoir, which all draw water from the Sacramento - San Joaquin Delta watershed. The District's local water sources include Anderson and Calero Reservoirs. The District's source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildland fires in open space areas. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in the District's treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the District website at www.valleywater.org.



Q: Is fluoride added to our water?

A: Fluoride is nature's cavity fighter. Fluoridation adjusts the naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Fluoridated drinking water benefits people of all ages by preventing tooth decay. In November of 2005, the SFPUC Hetch Hetchy system completed construction of a fluoridation facility in the East Bay. The water purchased by the City from the SFPUC is fluoridated. If your zip code is 95054, you are in the area receiving fluoridated water. However, this area is also served by well water that has not been fluoridated. The map on the front page of this report shows the area supplied with water from both the Hetch Hetchy system and the City's wells. The majority of the City will continue to receive water without added fluoride. State law requires the addition of fluoride to all water systems in California serving 10,000 customers or more. Fluoridation of the remaining water sources in the City would require installation of fluoride injecting equipment at each of the City's 27 active wells and at its treated water connection from the District. The law includes a provision for state funds to finance this fluoridation equipment however; it may be some time before the state can provide funding to move forward with a fluoridation program for the remainder of the City.

For more information about fluoridation, log on to the California Department of Public Health website: www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx.

Contaminants that occur in drinking water obtained from surface sources and underground sources:

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial (microbiological) contaminants, such as viruses and bacteria, that may come from wildlife, agriculture and/or livestock operations, sewage treatment plants and septic systems;
- Inorganic contaminants such as salts and metals, occurring naturally or resulting from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants including synthetic and volatile organic compounds. These are by-products of industrial processes, petroleum production, gas stations, urban stormwater runoff, agricultural chemical and fertilizer applications, and septic systems;
- Radioactive contaminants, which can be naturally occurring or result from oil and gas production and mining.

In order to ensure that tap water is safe to drink, the (USEPA) and the (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including Cryptosporidium and Giardia. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water hotline at 1-800-426-4791. You may also contact the USEPA at www.epa.gov/safewater

Information and guidance for people with compromised immune systems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791), or on the EPA's web site www.epa.gov/safewater/hfacts.html.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시오.

Q: Is there any lead contamination in the City's drinking water?

A: There have been no exceedences of the ACTION LEVEL for lead in the City of Santa Clara groundwater sources or supplies purchased from other agencies. It is possible for lead levels in your home to be higher than other homes in the community because of materials used in the original construction of your home. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Santa Clara is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Information about Nitrates in groundwater resources:

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants less than six months old. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.



Cryptosporidium and Giardia in water resources:

Cryptosporidiosis is a disease of the intestinal tract brought on by a parasitic microbe (a protozoan) called Cryptosporidium. The disease is transmitted through contaminated water, food or direct contact with human or animal waste. If you are healthy with a normal immune system, the flu-like symptoms usually last about two weeks. Symptoms include diarrhea, stomach cramps, upset stomach and slight fever. However, if your immune system is compromised or artificially suppressed, complications of this disease can be serious, possibly life-threatening.

The water purchased by the City from the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy system has been tested for Cryptosporidium and Giardia. The source waters and treated waters are tested at least monthly and occasionally show very low levels of Cryptosporidium in the waters serving the East Bay, South Bay and San Francisco Peninsula. Giardia, another parasitic organism causing similar symptoms, is monitored with the same frequency and very low levels are occasionally detected in the same source waters.

The general public is at very low risk and there have been no reported cases of Cryptosporidiosis and Giardiasis attributed to the City's public water supply. This advisory applies to water received from the Hetch Hetchy system in the area of the City north of Highway 101. The CDPH issues guidance for people with serious immune system problems. Currently available guidance from the state and county health agencies recommends that people with such conditions consult with their doctor or primary health care provider about preventing Cryptosporidium and Giardia infection from all potential sources. Water consumers may choose to boil their drinking water at a rolling boil for at least one minute as an extra precaution.

For information about Cryptosporidiosis and Giardiasis, or copies of available guidance, contact the Santa Clara County Department of Environmental Health at (408) 918-3400. You may also contact the USEPA Drinking Water Hotline at 1-800-426-4791.

FOR ADDITIONAL INFORMATION ON WATER QUALITY:

If you would like to learn more about drinking water quality, treatment and regulation, contact these home pages on the Internet:

- American Water Works Association: www.awwa.org
- California Department of Public Health, Division of Drinking Water and Environmental Management: www.cdph.ca.gov/programs/Pages/DDWEM.aspx
- United States Environmental Protection Agency: www.epa.gov/OGWDW
- San Francisco Public Utilities Commission, Water Quality Bureau: sfwater.org/msc_main.cfm/MC_ID/13/MSC_ID/166
- Santa Clara Valley Water District: www.valleywater.org
- Water Education Foundation: www.water-education.org
- Water Quality Information Center: www.nal.usda.gov/wqic

CONSUMER INFORMATION

TEST	UNIT	MCL	State PHG Fed MCLG	analysis for City SC Well Water		analysis for SCVWaterDistrict		analysis for HETCH HETCHY	
				range	average	range	average	range	average
pH	units	NS	NS	7.4-8.0	7.8	7.5-7.7	7.6	8.7-8.8	8.7
Alkalinity	PPM	NS	NS	160-260	206	63-89	75	8-102	50
Hardness	PPM	NS	NS	142-330	244	83-159	116	12-108	55
Calcium (as CaCO3)	PPM	NS	NS	37-91	66	16-31	22	2-26	12
Sodium	PPM	NS	NS	22-52	32	58-114	81	3-23	14
Temperature	Centigrade	NS	NS	10-26	19	11-24	18	10-20	15
Magnesium	PPM	NS	NS	12-31	20	11-20	15	0.2-8.8	4.5
Potassium	PPM	NS	NS	1.2-1.4	1.3	3.0-4.5	3.5	0.24-1.5	0.9

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

WATER QUALITY TABLE

	UNIT	MCL	State PHG/ Fed MCLG	analysis for City SC Well Water range average	analysis for SCV Water District range average	analysis for HETCH HETCHY range average	Common Sources of:			
PRIMARY STANDARDS:										
MICROBIOLOGICAL										
coliform bacteria	P/A/100ml	% comply	0	A	A	A	A	A	A	naturally present in environ.
fecal coliform	P/A/100ml	% comply	0	A	A	A	A	A	A	human/animal fecal waste
giardia lamblia	cyst/L	TT	0	NA	NA	NA	NA	0.01-0.05	<0.05	naturally present in environ.
RADIOACTIVITY										
Gross Alpha	pCi/L	15	0	ND-3.5	<3	ND	ND	NA	NA	decay/erosion of natural deposits
INORGANIC CHEMICAL										
Aluminum	PPM	1	0.6	ND	ND	ND-.06	ND	ND-0.051	ND	natural deposits/treatment proce
Arsenic	PPB	10	0.004	ND-2.9	0.19	ND	ND	ND	ND	erosion nat'l deposit/runoff
Barium	PPM	1	2	0.08-0.19	0.125	ND	ND	ND	ND	erosion of nat'l deposit/oil drilling
Chromium	PPB	50	100	ND-5.3	1.5	ND	ND	ND	ND	erosion of nat'l deposit/plating
Copper	PPM	AL=15.0	0.3	ND-0.002	ND	ND	ND	ND	ND	erosion of nat'l deposit/leaching
Fluoride	PPM	2	1	0.08-0.19	0.14	ND-0.1	0.1	<0.1-0.8	0.3	water additive/erosion of nat'l deposits
Nitrate (as NO3)	PPM	45	45	2.2-31	14.3	ND-6	3	ND	ND	runoff/leaching
VOLATILE ORGANIC CHEMICALS										
Freon113	PPM	1.2	4	ND-0.001	ND	ND	ND	ND	ND	metal degreasing/industrial discharge
DISINFECTION BYPRODUCTS, RESIDUALS, PRECURSORS										
Trihalomethanes	PPB	80	NA	NA	NA	40-66	59.3	9.0-54	33	byproduct of water chlorination
Haloacetic Acids	PPB	60	NA	NA	NA	11.0-22.0	13.3	5.0-27	21	byproduct of disinfection
Chlorine	PPM	4	4	0.0-2.6	0.6	1.0-2.4	1.7	1.0-2.3	1.65	water disinfection
TOC(precursor control)	PPM	TT	TT	NA	NA	1.32-3.51	2.25	2.3-3.2	2.7	various nat'l/manmade sources
PRIMARY STANDARDS AS MEASURED IN CITY OF SANTA CLARA DISTRIBUTION SYSTEM:										
Microbiological										
Coliform	%+	5.00%	0	A	A					naturally present in environment
Fecal Coliform	%+	0	0	0	0					human/animal fecal waste
Chlorine residual	PPM	4	4	0.0-2.5	0.6					water disinfection
Inorganic Chemical as measured at 51 Residential Taps in 2007:										
Copper	PPM	AL=1.3	0.3	90th percentile = 480 ppb		Number Exceeded = 0				
Lead	PPB	AL= 15	0.2	90th percentile =5 ppb		Number Exceeded = 0				
Disinfection Byproducts:										
Trihalomethanes	PPB	80	NA	0-56	24					
Haloacetic Acids	PPB	60	NA	0-32	9.3					
SECONDARY STANDARDS: "CONSUMER ACCEPTANCE CONTAMINENT LEVELS"										
Color	UNITS	15	NA	ND-3	<0.1	<2.5	ND	<5-9	<5	naturally occuring
Foaming Agents	UNITS	500	NA	ND-0.062	<0.002	<0.05	ND	ND	ND	municipal/inductrial discharge
Manganese	PPB	50	NA	ND-31	2.73	ND-64	ND	ND	ND	leaching of natural sources
Odor	UNITS	3	NA	1.0-2.0	1	1	1	ND	ND	naturally occuring
Turbidity	NTU	5	NA	0.05-0.35	0.13	0.06-0.25	0.11	0.08-0.33	0.16	soil runoff
Tot.Dissolved Solids	PPM	1000	NA	298-470	358	242-470	346	22-168	92	leaching of natural sources
Sp. Conductance	um/cm	1600	NA	473-750	604	468-900	647	30-309	170	subst.forming ions/seawater intrusion
Chloride	PPM	500	NA	22-53	39	74-134	100	4-14.6	9.5	subst.forming ions/seawater intrusion
Sulfate	PPM	500	NA	23-68	39	43.5-99.5	67.1	1.1-35.6	16.6	leaching nat'l deposits/ind.waste
STATE REGULATED CONTAMINANTS with NO MAXIMUM CONTAMINANT LEVELS:										
"UNREGULATED CONTAMINANT" NOTIFICATION LEVEL										
Boron	PPB	1000	NA	NA	101-294	186	ND-102	ND		see health effects language
Vanadium	PPB	50	NA	NA	ND-4	4	NA	NA		see health effects language

DEFINITIONS AND NOTES:

PRIMARY DRINKING WATER STANDARD (PDWS) = MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

MCL = Maximum Contaminant Level = the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the State PHGs (or Fed MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

STATE PHG = State of California Public Health Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are unenforceable targets set by the California Environmental Protection Agency.

FED MCLG = FEDERAL MAXIMUM CONTAMINANT LEVEL GOAL is the level of a contaminant in drinking water below which there is no known or expected risk to public health. MCLGs are set by the U.S. Environmental Protection Agency.

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL) = the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG) = the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

pCi/L= picocuries per liter (a measure of radioactivity)

PPM = Parts Per Million

PPB = Parts Per Billion

P = Present

A = Absent

RAL = REGULATORY ACTION LEVEL = the concentration of a contaminant, if exceeded, triggers treatment or other requirements that a water system must follow

DISTRIBUTION SYSTEM = drinking water delivery system

RESIDENTIAL TAPS = household faucets used for lead and copper sampling

DISINFECTION BYPRODUCTS = chemical by products of disinfection

SECONDARY STANDARDS = secondary MCLs are set to protect the aesthetics of drinking water

FOAMING AGENTS/UNITS = methylene blue activated substance/in units

NTU = nephelometric turbidity units

um/cm = micromoles per centimeter

NA = not applicable

ND = not detected

NS = no standard

TT = TREATMENT TECHNIQUE = a required process intended to reduce the level of a contaminant in drinking water

Copper and Lead Tap Monitoring was performed in August 2007.

BORON = the babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

VANADIUM = the babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

Water delivered in 2009 by the San Jose Municipal Water System again met all drinking water standards set by the U.S. Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH). This brochure summarizes last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to USEPA and CDPH standards.



2009 WATER QUALITY REPORT

ENVIRONMENTAL SERVICES DEPARTMENT ■ SAN JOSE MUNICIPAL WATER SYSTEM
Working with our community to conserve natural resources and safeguard the environment for future generations



San Jose Municipal Water System
Environmental Services Department
3025 Tuers Road
San José, CA 95121

2009 WATER QUALITY REPORT

This report contains important information about your drinking water. We hope it will provide the facts and perspective you need to make an informed evaluation of your tap water.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Chi tiet này thật quan trọng. Xin nhờ người dịch cho quý vị.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

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본인을 위해 번역인을 사용하십시오.



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A Message from the U.S. Environmental Protection Agency

Across America, the sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, which can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or result from oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. USEPA/ Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Drinking water, including bottled water, may reasonably be expected to contain at least minute amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.



ALMADEN RESERVOIR, 2004. PHOTO COURTESY OF CAIT HUTNIK.

SAFEGUARDING YOUR WATER SUPPLY

PROTECTING our water supply is important to ensure that water is safe from contamination and aesthetically pleasing for use. Protection begins in the watersheds, where people and their activities can be a major cause of source contamination. Contamination requires additional treatment, which increases the cost to deliver water to your tap.

PARTICIPATING in public meetings and forums regarding water issues enables decision-makers to hear your perspective and allows you to be directly involved in protecting your water supply.

UNDERSTANDING that drinking water — including bottled water — may reasonably be expected to contain at least minute amounts of contaminants will help you make an informed choice about your drinking water. The presence of contaminants does not necessarily indicate a health risk.

The Source of Your Water

The San Jose Municipal Water System (Muni Water) serves the North San José, Alviso, Evergreen, Edenvale, and Coyote Valley communities of the City of San José. The source of your water depends on the service area in which you are located.

■ North San José/Alviso Service Area

Muni Water purchases a blend of Hetch Hetchy water and treated water from San Francisco Public Utilities Commission (SFPUC) and delivers it to our Alviso and North San José customers. In 2009, the Hetch Hetchy Watershed provided most of the total SFPUC water supply, with supplementation by local watersheds in Alameda and Santa Clara counties. The major water source originates from spring snowmelt flowing down the Tuolumne River, and is stored in the Hetch Hetchy Reservoir. Since this water source meets all federal and state criteria for watershed protection, disinfection treatment practices, bacteriological quality monitoring, and high operational standards, the State and USEPA have granted this water source a filtration exemption.

The Alameda Watershed spans more than 35,000 acres in Alameda and Santa Clara counties. Surface water from rainfall and runoff is collected in the Calaveras and San Antonio reservoirs. Prior to distribution, the water from these reservoirs is treated at the Sunol Valley Water Treatment Plant (SVWTP). Fluoridation, chloramination, and corrosion control treatment are provided for the combined Hetch Hetchy and SVWTP water at the Sunol Chloramination and Fluoridation facilities.

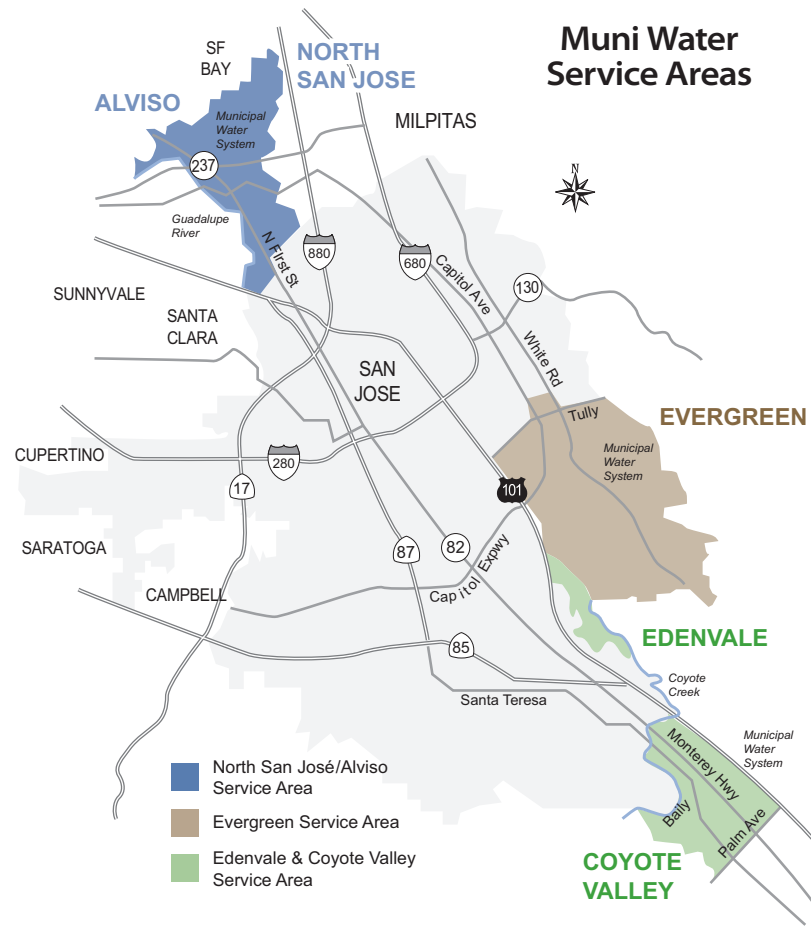
The SFPUC actively and aggressively protects the natural water resources entrusted to its care. An annual report on the Hetch Hetchy Watershed reflects the evaluation of its sanitary conditions, water quality, and potential contamination sources. The report also presents performance results of watershed management activities implemented by the SFPUC and partner agencies to reduce or eliminate potential contamination sources. The 2009 sanitary survey concluded that very low levels of contaminants associated with wildlife and human activities exist in the watershed. The SFPUC also conducts sanitary surveys of the local watersheds every five years. The potential contamination sources identified in the 2005 survey are similar to the upcountry watershed. These surveys are available through the CDPH San Francisco District office.

Local groundwater from deep water wells is available for emergency supply. However, the North San José wells were not used in 2009. Muni conducted a one-time source water assessment of the wells in January of 2003.*

■ Evergreen Service Area

Muni Water purchases treated surface water from the Santa Clara Valley Water District (SCVWD) and delivers it to our Evergreen customers. SCVWD surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed. SCVWD local surface water sources include Anderson and Calero reservoirs. Water from imported and local sources is pumped to and treated at the Santa Teresa Water Treatment Plant in San José.

Since 2006, the SCVWD has used ozone as the primary disinfectant. Ozone disinfection is highly effective at inactivating microbial



contaminants and creates fewer disinfection by-products than chlorine. Ozone also effectively removes negative tastes and odors often caused by seasonal algal blooms in the Delta source waters.

SCVWD source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. Imported sources are additionally vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildfires in watershed areas. Local sources are additionally vulnerable to contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. Additional information on water treatment can be found at www.valleywater.org.

Local groundwater from deep water wells is available for emergency supply. The Evergreen wells were not used in 2009. Muni Water conducted a one-time source water assessment for the Evergreen wells in January 2003.*

■ Edenvale Service Area

Groundwater from deep water wells provides 100 percent of the supply for this service area. Muni Water conducted a one-time source water assessment for the Edenvale wells in January 2003.* Although the source is considered potentially vulnerable to chemical and petroleum processing activities, no contaminants associated with these activities have been detected.

■ Coyote Valley Service Area

Groundwater from deep water wells provides 100 percent of the supply for this service area. An assessment of these wells was conducted in June 2004,* and potable use of the groundwater began in 2005. Although the source is considered potentially vulnerable to agricultural drainage, unauthorized dumping, storage tank leaks, and sewer collection systems, no contaminants associated with these activities have been detected. Precautions taken during construction, in combination with the local hydrology, have protected the existing well locations from contamination.

*For information about the type of contaminants tested or to get a copy of the groundwater well assessment reports for your service area, please contact a Water Quality Engineer at 408-277-3671.

Water Quality

Disinfection of surface water is necessary to destroy disease-causing organisms for the protection of public health. In Evergreen, North San José, and Alviso, water is disinfected using chloramine. Except for a slight chlorinous taste or odor, chloramine is not harmful to the general public. However, it must be removed for kidney dialysis machines and aquariums. If you are receiving kidney dialysis treatment, please contact your doctor or dialysis technician. For pet fish, contact your local fish store for more information about special water treatment.

Fluoride is added to the naturally occurring level in Evergreen, North San José, and Alviso to help prevent dental cavities in consumers. The Evergreen community approved fluoridation with an advisory vote in the early 1960s. The SFPUC System-Wide Fluoridation Project (affecting North San José and Alviso) became operational in November 2005. The fluoride levels in the treated water are maintained within the range required by state regulations. At present, additional fluoride is not added in Edenvale or Coyote Valley service areas. Consult your doctor or dentist if you are considering additional fluoride supplements or treatments.

Hardness consists mainly of calcium and magnesium salts. Although it does not pose a health risk, it may be considered undesirable for other reasons. Some benefits to reducing hardness by using water softeners are reductions in soap usage, longer life for water heaters, and less incrustation of pipes. Some disadvantages are an increase in sodium intake (depending on type of softener used), proper maintenance/servicing requirements, and potential adverse effects on plants and landscaping.

Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the water treatment process. The turbidity standard for unfiltered supplies (e.g., Hetch Hetchy) is 5 NTU. The turbidity for

filtered water supplies (e.g., SCVWD treated water) must be less than 0.3 NTU 95 percent of the time, and at no time higher than 1 NTU.

Coliforms, reported as “Total Coliform,” are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Standards for compliance vary depending on the size of the distribution system. In larger systems (including Evergreen, Edenvale, and Coyote Valley), 95 percent of all samples taken each month must be free of coliforms. In smaller systems (including North San José and Alviso), no more than one sample per month may test positive for the presence of coliforms.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this water-borne pathogen, and found it at very low levels in source water and treated water in 2009. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Lead, if present at elevated levels, can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Muni Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/safewater/lead.

2009 Water Quality Data

Water at various locations in the distribution system is tested by certified City staff and a private, state-certified laboratory using the latest testing procedures and equipment. During 2009, more than 4,700 tests were conducted on samples taken from the distribution system. In addition to these tests, the SCVWD and SFPUC perform their own water quality analyses of the source and treated water.

Test results from the distribution system and source water analyses are shown in the table at right. Some of the data, though representative, are more than one year old. CDPH allows us to monitor for some contaminants less than once per year since the concentrations of these contaminants do not change frequently.

Lab analysis was also performed for many constituents other than those listed in the tables; only those chemicals detected in the tap water are shown. For a complete list of all the chemicals analyzed or any questions about this report, please contact a Water Quality Engineer at 408-277-3671.



Primary Drinking Water Standards — Public Health-Related Standards

Parameter	Unit	MCL (MRDL) [AL]	PHG (MCLG) [MRDLG]	Evergreen (SCVWD Treated Water)		Edenvale (Groundwater)		Coyote Valley (Groundwater)		North San Jose/Alviso (SFPUC Treated Water)		Typical Source
				Average	Range	Average	Range	Average	Range	Average	Range	
Inorganic Chemicals												
Aluminum	ppm	1	0.6	ND	ND - 0.076	ND ^c	ND	ND ^d	ND - 0.21	ND	ND - 0.051	1
Barium	ppm	1	2	ND	ND	0.2 ^c	0.2 - 0.2	0.1 ^d	0.1 - 0.1	ND	ND	1
Fluoride	ppm	2	1	0.85	0.7 - 1.1	0.1 ^c	0.1 - 0.1	0.2 ^d	0.2 - 0.2	1.0	0.7 - 1.3	1, 2
Nitrate (as NO ₃)	ppm	45	45	ND	ND - 4	11	8 - 13	3	3 - 3	ND	ND	1, 3
Organic Chemicals												
Total Trihalomethanes ^b	ppb	80	NS	48	39 - 56	NA	NA	NA	NA	42	35 - 52	4
Total Haloacetic Acids ^b	ppb	60	NS	8	3 - 12	NA	NA	NA	NA	30	24 - 36	4
Total Organic Carbon	ppm	TT	NS	1.92	1.07 - 2.70	NA	NA	NA	NA	2.7	2.3 - 3.2	15
Disinfection												
Chlorine Residual ^a	ppm	(4)	[4]	1.5	0.1 - 2.8	NA	NA	NA	NA	2.3	1.5 - 3.8	5
Microbiological												
<i>Giardia lamblia</i>	cyst/L	TT	(0)	ND	ND	ND	ND	ND	ND	0.01 - 0.05	Max = 0.05	6
				# Positive Samples		# Positive Samples		# Positive Samples		# Positive Samples		
<i>E. coli</i> ^a	# pos per year	^f	0	3		0		0		0		17
				Highest % Range		Highest % Range		Highest % Range		Highest # Range		
Total Coliform ^a	% pos per month	5	(0)	2.8	0 - 2.8	2.8	0 - 2.8	2.8	0 - 2.8	NA	NA	6
	# pos per month	1	(0)	NA	NA	NA	NA	NA	NA	1	0 - 1	6
Clarity												
Turbidity (unfiltered sources)	NTU	5	NS	NA		NA	NA	NA	NA	Highest Level = 3.87		7
Turbidity (filtered sources)	NTU	1	NS	Highest Level = 0.09 ^e		NA	NA	NA	NA	Highest Level = 0.26 ^e		7
Lead and Copper				90th Percentile (# Samples Exceeding AL)								
Lead ^a	ppb	[15]	0.2	ND (0 of 31)		ND (0 of 31)		ND (0 of 31)		ND (1 of 30)		8
Copper ^a	ppb	[1300]	300	160 (0 of 31)		160 (0 of 31)		160 (0 of 31)		91 (0 of 30)		8

Secondary Drinking Water Standards — Aesthetic Standards

Parameter	Unit	MCL	Average	Range	Average	Range	Average	Range	Average	Range	Typical Source
Chloride	ppm	500	84	23 - 110	44 ^c	42 - 45	36 ^d	34 - 38	9.5	4 - 14.6	9, 10
Color	CU	15	ND	ND	ND ^c	ND	ND ^d	ND	ND	ND - 9	11
Iron	ppb	300	ND	ND	ND ^c	ND	ND ^d	ND - 400	ND	ND	9, 12
Odor	TON	3	1	1 - 1	ND ^c	ND	ND ^d	ND	ND	ND	11
Silver	ppb	100	ND	ND	ND ^c	ND	ND ^d	ND - 10	ND	ND	13
Specific Conductance	µS/cm	1600	604	478 - 683	655 ^c	640 - 670	547 ^d	510 - 570	170	30 - 309	10, 14
Sulfate	ppm	500	59.8	52.2 - 66.6	47 ^c	46 - 47	36 ^d	36 - 37	16.6	1.1 - 35.6	9, 12
Total Dissolved Solids	ppm	1000	331	262 - 370	385 ^c	370 - 400	347 ^d	330 - 360	92	22 - 168	9
Turbidity	NTU	5	0.06	0.05 - 0.08	0.1 ^c	0.1 - 0.1	1.1 ^d	0.3 - 2.7	0.16	0.08 - 0.33	7

Other Water Quality Parameters

Parameter	Unit	MCL	Average	Range	Average	Range	Average	Range	Average	Range	Typical Source
Boron	ppb	NS	173	110 - 212	NA	NA	NA	NA	ND	ND - 102	16
Calcium	ppm	NS	28	23 - 39	48 ^c	47 - 49	51 ^d	48 - 55	12	2 - 26	16
Hardness (as CaCO ₃) ^g	ppm	NS	136	116 - 167	311 ^c	301 - 320	280 ^d	255 - 308	55	12 - 108	1
Magnesium	ppm	NS	17	15 - 19	46 ^c	43 - 49	38 ^d	33 - 42	4.5	0.2 - 8.8	16
Sodium	ppm	NS	67	29 - 85	27 ^c	26 - 28	21 ^d	20 - 21	14	3 - 23	1
Vanadium	ppb	NS	ND	ND - 4	NA	NA	NA	NA	ND	ND	16

NOTES:

- a Distribution system data in 2009
- b Distribution system data in 2009. Running averages are calculated from data for previous quarters that are not shown in this table.
- c Well data in 2008
- d Well data in 2007
- e Filtered water turbidity required to be < 0.3 NTU in 95% of samples. All filtered water sources met this standard
- f MCL is exceeded for *E. coli* when a routine sample and a repeat sample are total coliform positive, and one of these is also *E. coli* positive. The MCL was not exceeded.
- g To convert hardness from ppm to grains per gallon, divide by 17.1.

TYPICAL SOURCES IN DRINKING WATER:

- 1 Erosion of natural deposits
- 2 Water additive that promotes strong teeth
- 3 Runoff/leaching from fertilizers
- 4 By-product of drinking water disinfection
- 5 Added for disinfection
- 6 Naturally present in the environment
- 7 Soil runoff
- 8 Internal corrosion of household plumbing systems
- 9 Runoff/leaching of natural deposits
- 10 Seawater influence
- 11 Naturally-occurring organic material
- 12 Industrial waste
- 13 Industrial discharges
- 14 Substances forming ions in water
- 15 Various natural and manmade sources
- 16 Naturally occurring
- 17 Human/animal fecal waste

See back panel for definitions and abbreviations used in this table.

IT'S EASY TO SAVE WATER

Tips for residents and businesses

- **Fix leaks promptly.** Some faucet and toilet leaks are simple enough to fix yourself. A free guide on fixing simple leaks is available at the Muni Water office or visit our website.
- **Choose drought-tolerant plants and water efficiently.** A CD of drought-tolerant plants is available at the Muni Water office. Watering before 5:00 a.m. is best, and don't overwater — two to three times a week is sufficient.
- **Sign up for a Free Water-Wise House Call.** A trained technician will help you find leaks and provide advice on ways to save water in your home and garden. Call 1-800-548-1882.
- **Run full loads.** Wait for full loads to wash clothes and dishes. Don't bother pre-rinsing your dishes as this is rarely necessary.
- **Clean sidewalks with a broom, not a hose.** If you must use a hose, make sure the hose has a self-closing nozzle so that water doesn't flow freely.
- **Switch to water-efficient toilets.** Homeowners should replace toilets built before 1992 — look for the date and year inside the tank. Call 1-877-874-8479 to see if you qualify for a rebate on a dual-flush or high efficiency toilet. Businesses and schools may also qualify for free high efficiency toilets or water-free urinals. Call 408-265-2607, ext. 2707.
- **Restaurants serve water upon request.** Restaurants can obtain free table-top cards to inform customers that water is served upon request. Call 408-277-3671.



About Us

THE SAN JOSE MUNICIPAL WATER SYSTEM is a City-owned water utility that has served customers since 1961. We are committed to delivering a reliable water supply that meets or exceeds all drinking water health standards. In 2008, Muni Water developed and implemented an

Environmental Management System (EMS) that achieved ISO 14001 certification. For our customers, this significant achievement means we are continuously improving our operational efficiency and controlling and reducing impacts to the environment.

Our office is open from 8:00 a.m. to 5:00 p.m., Monday through Friday (closed holidays). For more information, visit our website at www.sjmunewater.com or call 408-535-3500 (translation services are available).



Registered to
ISO 14001

In accordance with the Americans with Disabilities Act, City of San José Environmental Services Department materials can be made available upon request in alternative formats, such as Braille, large print, audiotope or computer disk. Requests may be made by calling 408-277-3671 (voice), 1-800-735-2929 (California Relay Service), or 408-294-9337 (TTY).

The City of San José is committed to open and honest government and strives to consistently meet the community's expectations by providing excellent service, in a positive and timely manner, and in the full view of the public.



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Definitions

AL (Regulatory Action Level)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technically feasible.

Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

MRDL (Maximum Residual Disinfectant Level)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NL (Notification Level)

Health-based advisory levels established by the CDPH for chemicals in drinking water that lack maximum contaminant levels.

PDWS (Primary Drinking Water Standard)

MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting, and water treatment requirements.

PHG (Public Health Goal)

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Source Water

Raw water that has not been treated to meet drinking water standards.

Treated Water

Water that has been treated to meet USEPA and CDPH drinking water standards.

Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

Abbreviations:

<	less than
AL	Action Level
CU	Color Unit
NA	Not Applicable
ND	Not Detected
NS	No Standard
NTU	Nephelometric Turbidity Units
pCi/L	pico Curies per liter
ppb	parts-per-billion (equals 1 microgram per liter (µg/L))
ppm	parts-per-million (equals 1 milligram per liter (mg/L))
TON	Threshold Odor Number
TT	Treatment Technique
µS/cm	microSiemens per centimeter



Water Quality

JUNE 2010



CONSUMER CONFIDENCE REPORT

2009

Your Water

The City of Mountain View is committed to providing its water customers with a safe and reliable supply of high-quality drinking water that meets or exceeds Federal and State standards.

Each year, the City publishes a water quality report known as the Consumer Confidence Report. This report provides Mountain View water customers with important information regarding the City's water supply sources, the results of the City's water quality testing program, and water system operations and improvements.

The City of Mountain View tests more than 2,000 water samples each year to continuously monitor the quality of the water distributed to its customers. The results of the 2009 sampling program show that Mountain View water meets all regulatory standards. Additional information regarding the testing program and its results are listed on Pages 5 and 6.

The 2009 Consumer Confidence Report has been prepared in accordance with the Federal Safe Drinking Water Act and California Department of Public Health (CDPH) requirements.

Diverse Water Portfolio

Mountain View obtains water from several sources to minimize impacts on the City's water supply in the event of drought, natural disaster or operational problems. The City purchases water from the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD), and obtains groundwater from a network of City-owned wells. In 2009, Mountain View completed construction of a recycled water system to provide water for irrigation needs and save potable water for domestic uses. The City also actively encourages water conservation by providing programs and services to the residential and business communities.



Read more inside...

- Drinking Water Assessments 2
- System Updates 3
- Water Quality Chart 5
- Important Definitions..... 6
- Protecting Your Health..... 7
- How to Contact Us 8



This report contains important information about your community's water quality.

If necessary, please have it translated or speak with a friend who understands it well.

Este reporte contiene información muy importante sobre el agua que toma.

Llama a (650) 903-6145, si necesita ayuda en español.

Данный рапорт содержит важную информацию о вашей питьевой воде. проконсультируйтесь с тем, кто его понимает.

這份報告包含了飲用水的重要資訊，請找看得懂的人為你翻譯或說明。

Drinking Water Sources

The City of Mountain View distributes more than 4 billion gallons of water to its customers each year from three separate sources:

Hetch Hetchy System. The City purchases approximately 87 percent of its water from the San Francisco Public Utilities Commission's (SFPUC's) Hetch Hetchy System. Most of SFPUC's water originates from snowmelt that flows into the Tuolumne River and is then stored in the Hetch Hetchy Reservoir in Yosemite National Park. Other sources of SFPUC water include surface water collected in watersheds in Alameda, San Mateo and Santa Clara counties.

Santa Clara Valley Water District. Approximately 10 percent of the City's water supply is purchased from the Santa Clara Valley Water District (SCVWD). This water is imported from the Sacramento-San Joaquin Delta and local watersheds in Santa Clara County.

City Wells. Three percent of the City's water supply comes from eight groundwater wells owned and operated by the City. This water is pumped from a deep aquifer and blended with treated water for distribution to City water customers.

Protecting Water Resources

Drinking Water Source Assessment Program

Drinking Water Source Assessment Programs identify how vulnerable drinking water sources may be to commercial and industrial contamination from leaking underground storage tanks containing fuel or dry-cleaning chemicals, old or unrecorded septic tanks, sewer collection systems, or other commercial and industrial sources.

Drinking water source assessments have been conducted for all three of the City of Mountain View's water supplies—the SFPUC, the SCVWD and City wells. Assessments are available for review at the CDPH Drinking Water Field Operations Branch, 850 Marina Bay Parkway, Bldg. P, Second Floor, Richmond, California, 94804.

SFPUC

The SFPUC actively and aggressively protects the natural water resources entrusted to its care. The SFPUC prepares an annual report to evaluate the sanitary conditions, water quality, and potential contamination sources of the Hetch Hetchy watershed. The report includes performance results of watershed management activities implemented by the SFPUC and its partner agencies, such as the National Park Service, to reduce potential contamination sources. In addition to annually surveying the SFPUC Hetch Hetchy system, the SFPUC surveys its Bay Area watersheds every five years.

The 2009 Sanitary Survey and the 2005 local watershed survey concluded that the SFPUC watersheds have only very low levels of contaminants associated with wildlife and human activities.

SCVWD

The SCVWD provides treated surface water to Mountain View from the Rinconada treatment plant. SCVWD surface water is imported mainly from the South Bay Aqueduct, Lake Del Valle and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed. SCVWD local water sources include Anderson and Calero Reservoirs.



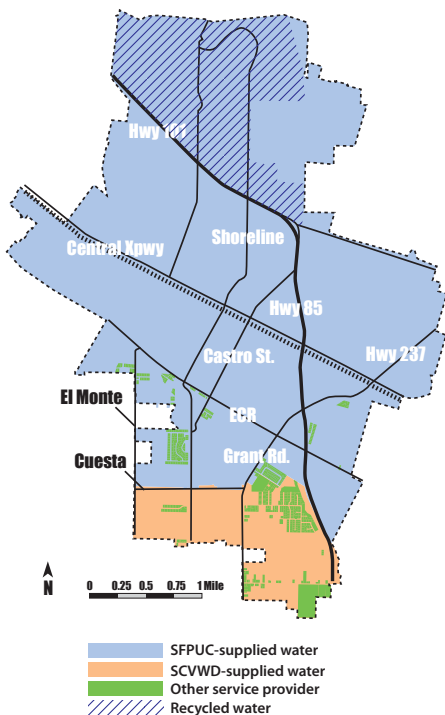
SCVWD source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development.

Water from imported sources is vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildland fires in open space areas. Commercial stables and historic mining practices may also be sources of contamination to water supplies. Water treatment plants provide multiple barriers for physical removal and disinfection of contaminants, and no contaminant associated with any of these activities has been detected in SCVWD treated water.

City Wells

Groundwater beneath the City of Mountain View is available in two aquifers separated by natural clay formations. In order to ensure the safety of its groundwater supply, Mountain View actively monitors water produced by the City wells. Mountain View completed the source assessment for its eight drinking water wells in 2007. This assessment found that groundwater in Mountain View is potentially vulnerable to contamination from auto repair shops and leaking underground storage tanks, but that these potential impacts are likely to be confined to the upper aquifer. Because the City wells are drilled deep into the lower aquifer, the clay formations and geology protect the City's groundwater supply from contaminants.

To receive a copy of the well assessment summary, contact the Public Services Division at (650) 903-6329.



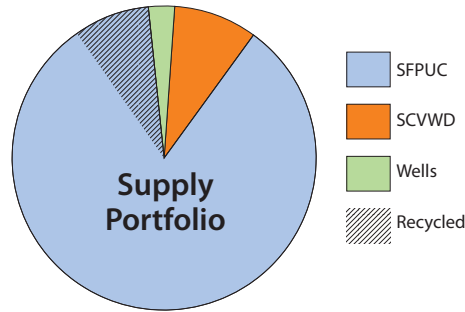
SCVWD water serves the area of the City south of Cuesta Drive. SFPUC water serves the remaining area generally north of Cuesta Drive.

Recycled Water

Augmenting our Water Portfolio

In 2009, the City of Mountain View reached a milestone when it initiated deliveries of recycled water to the Shoreline Golf Links and Shoreline area parks and businesses. The recycled water system includes a 7.5-mile pipeline network beginning at the Palo Alto Regional Water Quality Control Plant and terminating in Mountain View's North Bayshore Area. The project was jointly funded by the cities of Mountain View and Palo Alto, and grants and low-interest loans from the State of California and the Federal Bureau of Reclamation.

Recycled water is a droughtproof supply that will be used to meet the North Bayshore Area's irrigation and other nonpotable needs. The system will supply recycled water to many of Mountain View's largest water consumers and business customers, and the City estimates that recycled water consumption will exceed 1 million gallons per day within 5 years, reducing potable use within the City by up to 10 percent.



Recycled water is an important component of the supply portfolio

Operational Shutdowns

Water suppliers have periodic operational maintenance shutdowns and water source changes. In 2009, the SCVWD conducted winter capital maintenance projects that halted deliveries of treated water to Mountain View during the months of November and December.

Built in the early to mid 1900s, many parts of the SFPUC system are nearing the end of their useful life. In 2002, the SFPUC launched a \$4.6 billion program to repair, replace and seismically upgrade the system's deteriorating pipelines, tunnels, reservoirs, pump stations, storage tanks and dams. Funded by a bond measure, the program includes more than 80 projects throughout the SFPUC service area—from San Francisco to the Central Valley. This effort is the largest infrastructure program ever undertaken by the City of San Francisco and is anticipated to be complete by 2015. The City will notify customers of any impacts the program may have on residents and businesses.

Because Mountain View uses multiple water supplies, the City will continue to provide uninterrupted water service. When changes to water quality are anticipated in response to water source changes, Mountain View will post notices regarding the water quality parameters on the City website. If you have questions about the shutdowns, please contact the Public Services Division at (650) 903-6329 or the City's Water Quality Technician at (650) 903-6241.

What's New in the System

Infrastructure And Capital Improvement Program (CIP) Update

System Improvements

During 2009, the City continued efforts to ensure there is an adequate and dependable water supply to meet the community's current and future needs through the following projects:

- Completing a Water System Master Plan to assist the City in planning future water supply, capacity and system improvements through the year 2030. The Water System Master Plan will be used in conjunction with the City's General Plan update.
- Completing the engineering design for water main and service replacements on Gilmore Street, Appletree, Cherrytree, Plumtree and Peartree Lanes, Tulane Court and Bush Street.
- Replacing a water main and water service lines on Marilyn Drive, Park Drive, West Dana Street, Marich Way, Wake Forest Drive and Rainbow Drive/Alice Avenue, and San Ramon Avenue; work on San Luis Avenue is near completion.
- Continuing to replace old water meters with new meters that can be read remotely rather than manually. Water main and service line replacement projects also include replacing standard meters with electronic meters.

These water system improvements were supplemented by ongoing maintenance and repair activities performed by City water crews. In addition, water crews flush portions of the City's water distribution system on an annual basis to remove sediment to promote good water quality. The water used in flushing activities represents a very small portion of the water used by the City each year.



Operator flushes the distribution system

Groundwater Rule Compliance

The Environmental Protection Agency Ground Water Rule (GWR) was developed to reduce the risk of exposure to contamination that may be present in public water systems that use groundwater sources. The GWR establishes a risk-targeted strategy to identify groundwater systems that are at high risk for fecal contamination and specifies when corrective action (which may include disinfection) is required to protect consumers from bacteria and viruses.

The GWR also applies to any system that mixes surface and groundwater if the groundwater is added directly to the distribution system and provided to consumers without treatment equivalent to surface water treatment. The State of California is not considered a high-risk state because of its geological stratigraphy. In 2009, the City of Mountain View developed a monitoring plan for conformance with the GWR.



Operator conducts water quality tests

Fluoride in Your Drinking Water

The City of Mountain View supplies its water customers with approximately one part per million of fluoride in its drinking water. This level of fluoride is the optimum level prescribed by the California Department of Public Health to reduce tooth decay. Mountain View fluoridates the water that it purchases from the SCVWD and draws from City wells. Water purchased from the SFPUC is fluoridated through the treatment process prior to its arrival in Mountain View. For more information on fluoride, consult the CDPH fluoridation website at www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx.

Perks of Great Water | Tap versus Bottled Water

The City of Mountain View provides excellent quality water that is strictly monitored and affordable. Tap water is a bargain; a gallon of water costs less than 1 cent! Mountain View staff annually conducts over 2,000 water quality tests in addition to the testing performed by the SFPUC and the SCVWD (the City's potable water suppliers), and the City's water complies with all State and Federal regulations.



The regulations for tap water are different from those for bottled water. The CDPH website has extensive information on bottled water and vended water in California—visit their website at www.cdph.ca.gov/programs/Pages/DWP.aspx to learn about the differences between bottled water and tap water. Bottled water can actually be supplied from municipal water systems; read the label on the bottle to learn more about what you are drinking.

The production and consumption of bottled water also has significant environment impacts, including consuming energy to produce and transport plastic bottles that may end up in the waste stream. As part of the City's ongoing commitment to environmental sustainability, Mountain View prohibits the use of City funds for purchasing bottled water and instead promotes the use of our healthy, safe and reliable tap water.

Water Hardness and Water Softeners

Many water customers are concerned about the hardness of their water, which is caused by dissolved minerals such as calcium and magnesium. Hard water requires more soap and synthetic detergents for home laundry and washing, and contributes to scaling in boilers and industrial equipment. General guidelines for classifying water hardness are: 0 to 60 mg/L (milligrams per liter) of calcium carbonate is classified as soft; 61 to 120 mg/L as moderately hard; 121 to 180 mg/L as hard; and more than 180 mg/L as very hard. Water softeners can be used to reduce hardness, but since Mountain View's water supply is characterized as soft to moderately hard, using a water softener is not necessary.

Hard water is not a health hazard. The National Research Council (National Academy of Sciences) states that hard drinking water generally contributes a small amount toward total calcium and magnesium human dietary needs. In fact, mineral water contains more than 250 mg/L of hardness that originates from underground water sources.

Water softeners use salts, such as sodium chloride, to remove calcium and magnesium from a water supply. Studies have shown that when sodium above a certain level is present in drinking water, it can contribute to certain heart ailments or high blood

pressure, particularly in susceptible individuals. Additionally, although not known to cause adverse health effects, chloride can make drinking water taste unpleasant when present at levels exceeding Federal drinking water standards.

Wastewater from the use of water softeners is discharged directly to the municipal sewer system. Following treatment at the Palo Alto Regional Water Quality Control Plant, treated wastewater is discharged to either the Bay or into the recycled water system. The City of Mountain View's Salinity Reduction Policy aims to reduce the inflow of salts into Mountain View's sewer system, thereby reducing the inflow of salts into our recycled water supply, and asks you to consider this before installing or using a water softener.

Cryptosporidium and Giardia

are parasitic microbes found in most surface water supplies. The SFPUC and the SCVWD test for *Cryptosporidium* and *Giardia* regularly in their sources and treated water supplies. *Giardia* was occasionally found at very low levels in the SFPUC water in 2009. If ingested, these parasites may produce symptoms of nausea, stomach cramps and associated headaches.

Water Quality Data

Water Quality staff from the SFPUC, SCVWD and City of Mountain View regularly collect and test water samples from reservoirs, wells and designated sampling points to ensure that the water supplied to Mountain View customers meets or exceeds Federal and State drinking water standards.

This table provides an analysis of the results of water samples collected in 2009. The table contains the name of each substance found in the water sample, the highest level allowed by regulation, the amount detected, the usual sources of such contamination, and a key to units of measurement. Sample results below detection limits are not listed. Please note: the presence of a substance does NOT necessarily indicate the drinking water poses a health risk.

To understand the table, please refer to the footnotes below, and the definitions and key on Page 6.

Footnotes

- (1) All results met State and Federal drinking water regulations.
- (2) Turbidity is a water clarity indicator; it also indicates the effectiveness of water treatment plants.
- (3) Turbidity is measured every four hours. These are monthly average turbidity values.
- (4) This is the highest turbidity of the unfiltered water served to customers in 2009. The highest single turbidity measurement was 10 NTU and was discharged into a reservoir without serving customers. The start-up of the San Joaquin pipelines caused elevated turbidity as a result of sediment resuspension in the pipeline.
- (5) There is no MCL for turbidity. The limits are based on the TT requirement in the State drinking water standards.
- (6) Filtered water turbidity was equal to or less than 0.3 NTU 95 percent of the time.
- (7) The reported data is the highest quarterly running annual average value.
- (8) Total organic carbon is a precursor for the formation of disinfection byproducts. The TT requirement applies to the filtered water from the Sunol Valley Water Treatment Plant.
- (9) Fluoride occurs naturally in source waters from SFPUC, SCVWD and wells. The City of Mountain View and SFPUC added fluoride in 2009 to meet CDPH-required levels.
- (10) The reported data for manganese is a single maximum measurement in 2009; however, the MCL is based on a running annual average calculation.
- (11) There was no chlorate detected in the raw water sources. The detected chlorate in treated water is a byproduct of the degradation of sodium hypochlorite, the primary disinfectant used by the SFPUC for water disinfection.
- (12) The reported data for TTHMs is a single maximum measurement in 2009; however, the MCL is based on a running annual average calculation.

City of Mountain View Source Water Quality Data for Year 2009 (1)											
Detected Contaminants	Measurements						Water Source				
	Primary Health Related Constituents	Units	DLR	MCL	PHG (or MCLG)	SFPUC Range	SFPUC Avg. or [Max]	SCVWD Range	SCVWD Avg. or [Max]	CMV Wells Range	Typical Source in Drinking Water
Turbidity(2)											
Unfiltered Hetch Hetchy Water, max 5 NTU	NTU	—	TT	NS	0.27 — 0.52 (3)	[3.87] (4)	—	—	—	—	Soil run-off
Filtered Water, maximum turbidity, minimum percentage of time (6)	NTU	—	TT (5)	NS	—	[0.26]	0.06 — 0.25	0.11	—	—	Soil run-off
	—	—	TT	NS	100%	—	100%	[0.09]	—	—	Soil run-off
Microbiological											
Giardia lamblia	Cyst/l	—	TT	(0)	0.01 — 0.05	[0.05]	ND	ND	—	—	Naturally present in the environment
Organic Chemicals											
Total Trihalomethanes (TTHMs)	ppb	0.5	80	NS	9 — 54	[33] (7)	50 — 64	54	—	—	Byproduct of drinking water chlorination
Total Haloacetic Acids (HAA-5s)	ppb	1	60	NS	5 — 27	[21] (7)	12 — 21	16	—	—	Byproduct of drinking water chlorination
Total Organic Carbon (8)	ppm	0.3	TT	NS	2.3 — 3.2	2.7	0.99 — 2.38	1.78	—	—	Various natural and man-made sources
Inorganic Chemicals											
Fluoride (9)	ppm	0.1	2.0	1.0	<0.1 — 0.8	0.3	ND — 0.1	0.1	ND — 0.14	—	Erosion of natural deposits
Nitrate (as NO3)	ppm	2	45	45	ND	ND	ND — 6	3	15 — 41	—	Run-off/leaching from natural deposits
Constituents with Secondary Standards											
Aluminum	ppb	50	1000	600	<50 — 51	<50	63 — 89	75	210 — 260	—	Naturally occurring
Bromide	ppb	NS	NS	NS	<10 — 16	<10	60	90	80	—	Leaching from natural deposits
Chloride	ppm	NS	250	NS	4 — 14.6	9.5	74 — 134	100	27 — 60	—	Run-off/leaching from natural deposits
Color	unit	NS	15	NS	<5 — 9	<5	<2.5	0	<5	—	Naturally occurring organic material
Manganese	ppb	20	50	NS	—	—	ND — 64 (11)	ND	—	—	Leaching from natural deposits
Odor	TON	NS	3	NS	ND — 2.5	ND — 6.5	1	1	<1 — 1	—	Naturally occurring organic material
Specific Conductance	µS/cm	NS	2200	NS	30 — 309	170	468 — 900	647	570 — 760	—	Substances that form ions when in water
Sulfate	ppm	0.5	500	NS	1.1 — 35.6	16.6	43.5 — 99.5	67.1	28 — 40	—	Run-off/leaching from natural deposits
Total Dissolved Solids	ppm	NS	500	NS	22 — 168	92	2.42 — 470	346	340 — 430	—	Run-off/leaching from natural deposits
Turbidity	NTU	NS	5	NS	0.08 — 0.33	0.16	0.06 — 0.25	0.11	0.1 — 0.44	—	Soil run-off
Other Water Constituents Analyzed											
Alkalinity (as CaCO3)	ppm	NS	NS	NS	8 — 102	50	63 — 89	75	210 — 260	—	Naturally occurring
Barium	ppb	100	1000	2000	ND	ND	ND	ND	130 — 170	—	Naturally occurring
Boron	ppb	100	NS	NS	<100 — 102	<100	101 — 294	186	—	—	Naturally occurring
Calcium (as Ca)	ppm	NS	NS	NS	2 — 26	12	16 — 31	22	66 — 95	—	Naturally occurring
Chlorate (11)	ppb	20	NS	NS	56 — 511	258	ND	ND	—	—	Naturally occurring
Hardness (as CaCO3)	ppm	NS	NS	NS	12 — 108	55	83 — 159	116	249 — 385	—	Naturally occurring
Iron	ppb	100	300	—	—	—	ND	ND	<100	—	Naturally occurring
Magnesium	ppm	NS	NS	NS	0.2 — 8.8	4.5	11 — 20	15	21 — 36	—	Naturally occurring
pH	unit	NS	NS	NS	8.7 — 8.8	8.7	7.5 — 7.7	7.6	7.7 — 7.9	—	Naturally occurring
Potassium	ppm	NS	NS	NS	0.24 — 1.5	0.9	3.0 — 4.5	3.5	—	—	Naturally occurring
Silica	ppm	NS	NS	NS	4.8 — 7.5	5.9	10 — 14	12	—	—	Naturally occurring
Sodium	ppm	NS	NS	NS	3 — 2.3	14	58 — 114	81	30 — 43	—	Naturally occurring
Vanadium	ppb	3	NS	NS	ND	ND	ND — 4	ND	ND	—	Naturally occurring

Mountain View System Constituents	Units	DLR	MCL (or AL)	PHG (or MCLG)	Range or [Max]	Typical Source in Drinking Water
Turbidity	NTU	—	5	NS	0.0 — 0.5	Soil run-off
Organic Chemicals						
Total Trihalomethanes (TTHMs)	ppb	0.5	80	80	32.2 — 105.5 (12)	Byproduct of drinking water chlorination
Total Haloacetic Acids (HAA-5s)	ppb	1	60	60	10.9 — 33.5	Byproduct of drinking water chlorination
Other Water Constituents Analyzed						
Fluoride	ppm	0.1	2.0	1.0	0.8 — 1.4	Naturally occurring and added for treatment
Foaming Agents (MBAS)	ppm	NS	0.5	NS	ND — 0.064	Municipal and industrial waste discharges
Total Chlorine	ppm	—	MRDL=4	MRDLG=4	1.0 — 2.6	Water disinfectant added for treatment
Free Ammonia	%	NS	NS	NS	ND — 0.02	Water disinfectant added for treatment

KEY

- Non Applicable
- < Less Than
- AL Action Level
- ND Non-Detect
- NS No Standard
- NTU Nephelometric Turbidity Unit
- ppb Parts per Billion
- ppm Parts per Million
- µS/cm microSiemens/centimeter
- DLR Detection Limit Reporting
- SMCL Secondary Maximum Contaminant Level
- CMV City of Mountain View

Important Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regulatory Action Level: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Additional water quality data may be obtained by calling the City of Mountain View, Public Services Division, at **(650) 903-6329**.

Water Quality Monitoring & Disinfection

Nitrates

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Although the City of Mountain View is responsible for providing high-quality drinking water, it cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking

or cooking. Keep a pitcher or small watering can nearby to collect this flush water and reuse it to water plants in your house, deck or garden.

If you are concerned about lead in your water, you may wish to have your water tested independently. This can be done using an over-the-counter lead testing kit commonly available at local hardware stores. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Chloramine Disinfectant

Drinking water provided to the City of Mountain View by the SFPUC and the SCVWD is disinfected using chloramine.

Although people and animals can safely drink chloraminated water, chloramine must be removed or neutralized in water for some special users/customers. These users include some business and industrial customers, kidney dialysis patients, and customers with fish and amphibian pets. Contact the Public Services Division at (650) 903-6329 to learn how to remove chloramine from your drinking water.

How Do Drinking Water Sources Become Polluted?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA Safe Drinking Water Hotline (800) 426-4791.

Protecting Your Health

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of small amounts of contaminants does not necessarily indicate that the water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. United States Environmental Protection Agency (U.S. EPA)/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the U.S. EPA Safe Drinking Water Hotline (800) 426-4791.



City of Mountain View
 Public Services Division
 231 North Whisman Road
 Mountain View, CA 94043

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Water Conservation

The City of Mountain View encourages all of its customers to use water wisely. In 2009, water use in Mountain View decreased by 11 percent compared to the base year of 2004, which is considered to be the most recent normal water supply year. Despite this achievement in water conservation, additional efforts are needed to reach the State’s long-term goal of reducing per capita water use by 20 percent by 2020. To help customers continue saving water, the City of Mountain View Water Conservation Program offers a variety of programs, including free water-wise surveys, rebates for water-efficient landscapes and plumbing fixtures, and free water-saving devices. Information about residential and business programs and services can be found on the City of Mountain View website at <http://conservewater.mountainview.gov> or by calling the City’s Water Conservation Hotline at (650) 903-6216.



To Contact Us

Public Services Division
 City of Mountain View
 231 North Whisman Road
 Mountain View, CA 94043
 (650) 903-6329
www.mountainview.gov

Business Hours:
Monday - Friday
8:00 a.m. - 4:00 p.m.

For more information about this Consumer Confidence Report or your water service, please call:

Utilities Services Manager
 (650) 903-6329

Kerry Holeman
 Water Quality Technician
 (650) 903-6241

Water Quality and System Operations (24 hours)
 (650) 903-6329

Suspicious Activities or Persons
 911

Utility Account Status/Billing
 Monday – Friday
 8:00 a.m. – 5:00 p.m.
 (650) 903-6317

Water Conservation Hotline
 (650) 903-6216

More information regarding drinking water treatment, quality, or regulations is available at California Department of Public Health Drinking Water Branch:
 (510) 620-3474
www.cdph.ca.gov/programs/pages/ddwem.aspx

U.S. Environmental Protection Agency (EPA) Safe Drinking Water Hotline
 (800) 426-4791
www.epa.gov/safewater

San Francisco Public Utilities Commission (SFPUC) website
www.sfwater.org

Santa Clara Valley Water District (SCVWD) website
www.valleywater.org

Bay Area Water Supply and Conservation Agency (BAWSCA) website
www.bawsca.org

Public Participation

The Mountain View City Council meets regularly on the second and fourth Tuesday of each month at 6:30 p.m. in the Council Chambers at City Hall, 500 Castro Street, Second Floor. Members of the public are encouraged to attend. Contact the City Clerk’s Office at (650) 903-6304 for more information.

WATER QUALITY Consumer Confidence Report



Our Goal: Meet or Exceed Federal & State Regulations

The City of Morgan Hill is committed to providing the community a safe, reliable supply of excellent quality drinking water that meets or exceeds Federal and State regulations. Again in 2009 we met or exceeded every water quality standard without a single violation.

This report gives information about the quality of water provided in 2009. It describes where your water comes from, what it contains and how it compares to State standards.

This report contains information regarding testing for perchlorate levels in the City's water wells. Other perchlorate information can be found at www.valleywater.org on the Santa Clara Valley Water District's web site.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their locations who are not billed customers of the City of Morgan Hill and therefore do not receive this report directly.

Este informe contiene informacion muy importante sobre su agua para beber. Traduzcalo, o hable con alguien que lo entienda bien.

This report contains important information about your community's water quality. If necessary, please have it translated, or speak with a friend who understands it well.

A Word About Chemicals and Organisms

Here is a brief description of chemicals and organisms, and how the City of Morgan Hill monitors, tests, and treats for them:

Methyl Tertiary-Butyl Ether (MTBE)

Added to gasoline either seasonally or year round in many parts of the United States to increase octane levels and reduce carbon monoxide and ozone levels in the air. In California, it has been added to gasoline since January 1996. The City of Morgan Hill has tested quarterly for MTBE in its 17 wells. No MTBE has been detected.

Lead and Copper Testing

In 1991, the EPA adopted the Lead and Copper Rule which requires all cities, including Morgan Hill, to perform lead and copper testing. The City's public water system does not have detectable levels of lead and copper; however these metals may leach into the water from home plumbing.

In June of 1997 the City completed Lead and Copper testing from inside homes under the guidance of the Department of Public Health. Results showed that the Copper levels were below the Federal Action Level of 1300 parts per billion (ppb), and the Lead levels were below the Federal Action Level of 15 parts per billion (ppb).

The City is on a three year cycle for testing of Lead and Copper determined by the primary testing performed at the first inception of the Lead and Copper Rule. The City has completed its 2009 tri-annual round of sampling and the sample results remain under Federal Action Levels for Lead and Copper. We will retest these levels again in 2012.

Nitrates

Nitrate in drinking water at levels above 45 mg/l is a health risk for infants below the age of six months. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin.

The City's Perchlorate Challenge

Perchlorate contamination of drinking water supplies in the South Valley, including water supplied by the City of Morgan Hill, has been an ongoing concern of City government and all local residents and businesses. Prior to the adoption of a maximum contaminant level "MCL" by the California Department of Public Health in October 2007, the City aggressively responded to the discovery of perchlorate in the South Valley aquifer by taking the following actions:

- Maintain a Perchlorate Removal systems on Tennant Well to provide residents with an adequate supply of quality drinking water;
- Testing City wells for the presence of perchlorate in excess of EPA or DPH requirements;
- Turning off or treating any City well that tests above six parts per billion (ppb) the adopted MCL;
- Cooperating with the Santa Clara Valley Water District, Regional Water Quality Control Board (SWRCB), and State Department of Public Health on approaches to addressing perchlorate; and,
- Pursuing recovery of the City's costs associated with perchlorate contamination.

Perchlorate Surcharge Imposed. On April 1, 2004, a 5% surcharge on water usage fees was applied to the water bills of every City water user to pay for perchlorate removal and the cost associated with resolving the perchlorate problem. The surcharge was increased to 10% in 2005, 15% in 2006, and reduced back to 10% in 2008 to meet the programs funding demand. On July 1, 2009, the perchlorate surcharge was reduced to 3%. Perchlorate surcharge revenues are accounted for separately and spent only on perchlorate-related costs.

The proposed 2010/11 operating budget requirements for perchlorate related costs are the same as in 2009/10. The draft 2010/11 Budget recommends the perchlorate surcharge of 3% remain in place to cover operating costs. The City continues its efforts to resolve the perchlorate issue and is making provision in the 2010/11 budget to respond to the upcoming year's challenges.

The need for future surcharges will be evaluated annually. In addition, any repayments the City receives from any source to compensate the City for perchlorate-related costs will be credited to the perchlorate account in the Water Fund and shall also be credited to customers if they are determined to be in excess of the City's perchlorate-related costs.

High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly in short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider, or choose to use bottled water for mixing formula and juice for your baby. If you are pregnant, you should drink bottled water.

The City's water supply is below the MCL for nitrates. In 2009, the City performed 306 nitrate analyses alone to ensure a safe water supply.

Unregulated Contaminants

The City proactively monitors for unregulated contaminants. This helps the EPA and the California Department of Public Health determine where certain contaminants occur, and whether the contaminants need to be regulated.

Perchlorate

On October 18, 2007, the California Department of Public Health (DPH) established the "maximum contaminant level" (MCL) for perchlorate at 6 parts-per-billion "ppb". DPH determined that at this level, there was minimal health risk to individuals drinking the water for a lifetime of use including at-risk populations such as pregnant women and infants. The City of Morgan Hill amended its perchlorate

treatment rule to be consistent with the State DPH protocol in most instances. However, the City continues to take extra precautions that exceed EPA and DPH legal requirements with regards to monitoring perchlorate levels in certain wells. City wells that have detectable levels of perchlorate at the state detection limit range "DLR" are tested monthly for perchlorate contamination – well beyond the State testing requirement of quarterly in regulations. Also well beyond the State requirements, we test all city wells at least annually.

Radon

The City tested its source waters for radon on a quarterly basis in 2005. Radon is a radioactive gas found throughout the U.S. that you can't see, taste, or smell. It can move up through ground and into a home through cracks and holes in the foundation, and can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities.

Compared to Radon entering the home through the soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause an increased risk of stomach cancer.

If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is four picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program, or call EPA's Radon Hotline (800-SOS-RADON).

Radioactive Contamination

These contaminants can be naturally occurring or may be the result of oil and gas production and mining activities.

Water Sources

Morgan Hill is located in South Santa Clara County, situated between the Coyote and Llagas underground aquifers. These aquifers are the source of Morgan Hill's water supply.

The City currently operates 17 deep water wells throughout the city. In 2009, these wells supplied 2,488 million gallons of water to approximately 12,000 Morgan Hill homes and businesses. The water produced by these wells is disinfected with chlorine to protect against microbial contaminants.

An assessment of the drinking water sources for the City of Morgan Hill was completed in September of 2002. The groundwater source is considered to be most vulnerable to the following activities associated with contaminants detected in groundwater: animal feeding operations, low density septic systems, irrigated crops, grazing and animal operations, agricultural/irrigation wells and animal feeding operations (occurrence of nitrate in groundwater).

In addition, the groundwater source is considered most vulnerable to these activities for which no associated contaminant has been detected: gas stations, dry cleaners, animal feeding operations, repair shops, sewer collections systems and pesticide/fertilizer/petroleum storage.

A copy of the complete assessment

is available at the Department of Public Health, Drinking Water Field Operations Branch at 850 Marina Bay Parkway, Bldg. P, 2nd Floor, Room 458, Richmond, California, and the City of Morgan Hill Public Works Department at 100 Edes Court.

Water Quality Data

The table in this report lists all the drinking water contaminants detected during the test cycle up to December 31, 2009.

To ensure that tap water is safe to drink, the California Department of Public Health (DPH) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Morgan Hill's water is treated in accordance with the Department's regulations.

The DHS Food and Drug Branch regulations establish limits for contaminants in bottled water; these limits provide the same protection for the public water supply. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table is from testing done over the period January 1-December 31, 2009. The State allows the City to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of the data – though representative of the water quality – is more than a year old.

Water Sampling and Testing

The annual water sampling required by the State Department of Public Health consists of Bacteria (758 samples), Nitrate (192 samples), Turbidity (52 samples), Trihalomethenes (64 samples), and (HAA5) Halocetic Acids (64 samples), for a total of 1,130 samples from the 40 separate sample stations and source facilities located throughout

TERMS & ABBREVIATIONS USED IN THE DATA TABLES

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U. S. Environmental Protection Agency

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow

n/a: not applicable

ns: no standard

nd: not detectable at testing limit

cu: Color Unit (a measure of color in water)

ppb: parts per billion or micrograms per liter

ug/L: micrograms per liter

ppm: parts per million or milligrams per liter

mg/L: milligrams per liter

pCi/l: picocuries per liter (a measure of radiation)

MFL: Million Fibers per Liter, with a fiber length greater than 10 micrometers

grains per gallon: the measure of the concentration of a solution.

TON: Threshold Odor Number (a measure of the odor associated with water)

umhos/cm: the measure of the dissolved inorganic salt content

<: less than

Contaminants that may be present in source water before we treat it.

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agricultural and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petrochemical, and can also come from gas stations, urban runoff & septic systems.

Water Quality Statement

For the calendar year 2008, your tap water met all U.S. Environmental Protection Agency (USEPA) and state drinking water health standards. The City of Morgan Hill vigilantly safeguards your water supply, and once again we are proud to report that the City's system has not violated any California Department of Health Standards.

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) (MRDL)	GROUNDWATER DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
PRIMARY STANDARDS - MANDATED HEALTH RELATED STANDARDS									
CLARITY									
TURBIDITY	2009	NTU	5	N/A	ND	.75	0.15	SOIL RUNOFF	NO
DISINFECTANTS/DISINFECTION BY-PRODUCTS RULE									
TOTAL TRIHALOMETHANES	QUARTERLY 2009	ppb	80	N/A	ND	2	1.8	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO
HALOACETIC ACIDS (HAA5)	QUARTERLY 2009	ppb	60	N/A	ND	.4	0.1	BY-PRODUCT OF DRINKING WATER DISINFECTION	NO
CHLORINE RESIDUAL	QUARTERLY 2009	ppm	4.0	[4.0]	0.28	0.34	0.32	DRINKING WATER DISINFECTANT ADDED FOR TREATMENT	NO
INORGANIC CHEMICALS									
ASBESTOS	2004	MFL	7	(7)	ND	0.32	0.02	INTERNAL CORROSION OF ASBESTOS CEMENT WATER MAINS; EROSION OF NATURAL DEPOSITS	NO
BARIUM	2007	mg/l	1	(2)	0.05	0.14	0.08	DISCHARGES OF OIL DRILLING WASTES AND FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS	NO
FLUORIDE	2007	mg/l	2	1	ND	ND	ND	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE THAT PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES	NO
NITRATE (as NO3)	2009	mg/L	45	45	8	34	22	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO
PERCHLORATE	MONTHLY 2009	ppb	6	6	ND	5.2	ND	MANUFACTURING USE OF LUBRICATING OILS, FABRICS, DYES, RUBBER, PAINTS, FIREWORKS, AND CERTAIN FERTILIZERS	NO
RADIOACTIVE CONTAMINANTS									
GROSS ALPHA ACTIVITY	QUARTERLY 2009	pCi/l	15	N/A	ND	2	1.2	EROSION OF NATURAL DEPOSITS	NO
RADIUM 228	QUARTERLY 9005	pCi/l	5	0.19	ND	0.13	0.02	NATURALLY OCCURRING - FORMED BY DECAY OF PRIMORDIAL RADIONUCLIDES IN EARTH'S CRUST	NO
SECONDARY STANDARDS - AESTHETIC STANDARDS									
CHLORIDE	2007	mg/L	500	N/A	28	69	47	RUNOFF/LEACHING FROM NATURAL DEPOSITS; SEAWATER INFLUENCE	NO
SULFATE	2007	mg/L	500	N/A	28	47	38.4	RUNOFF/LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
TOTAL DISSOLVED SOLIDS	2007	mg/L	1000	N/A	280	580	367	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NO
IRON	2007	ug/L	300	N/A	ND	140	15.6	LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
SPECIFIC CONDUCTANCE (E.C.)	2007	umho/cm	1,600	N/A	490	700	585	SUBSTANCES THAT FORM IONS WHEN IN WATER; SEA WATER INFLUENCES	NO
COLOR	2007	C	15	N/A	ND	12	3.5	NATURALLY-OCCURRING ORGANIC MATERIALS	NO
ODOR-THRESHOLD	2007	TON	3	N/A	ND	ND	ND	NATURALLY-OCCURRING ORGANIC MATERIALS	NO
SODIUM	2007	ppm	NS	N/A	18	36	27	"SODIUM" REFERS TO THE SALT PRESENT IN THE WATER AND IS GENERALLY NATURALLY-OCCURRING	NS
LIST OF ADDITIONAL CONSTITUENTS ANALYZED									
pH	2007	unit	NS		7.2	7.6	7.4	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2007	ppm	NS		200	300	240	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2007	GRAINS/GAL	NS		12	18	14	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS

PARAMETER	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	NUMBER OF SITES SAMPLED	HOUSEHOLD RESULTS 90th PERCENTILE	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
LEAD AND COPPER								
LEAD	Sept 2009	ppb	15	2	30	2.4 ppb	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO
COPPER	Sept 2009	ppm	1.3	0.3	30	0.36 ppm	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO

PARAMETER	DATE TESTED	UNITS	NOTIFICATION LEVEL	PHG (MCLG)	GROUNDWATER DETECTION			TYPICAL SOURCE OF CONTAMINATION	NOTIFICATION LEVEL EXCEEDED?
					LOW	HIGH	AVG.		
UNREGULATED CHEMICALS									
RADON	2000	pCi/L	0	NS	459	828	597		NS
CHROMIUM VI	2002	ppb	NS	NS	ND	4.0	1.8		NS
VANADIUM	2003	ppb	50	NS	ND	6.0	1.0		NO
BORON	2003	ppb	1,000	NS	ND	100	32		NO

Additional information about the content of this report (and additional copies) can be obtained by calling the Public Works Department at 776-7333.

the City's water distribution system.

Other Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at-risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water System Improvements

The City's water system consists of 17 production wells, 115 miles of water main, nine pumping stations, and 12 reservoirs. This complex, interrelated system requires 24-hour monitoring and an extensive program of ongoing maintenance. Additionally, a 5-year program of capital improvements must be constantly updated to plan and fund new capacity and the replacement of aging infrastructure. The past year was used to plan and design several projects that will be completed next fiscal year. These water system planned improvements include:

- **Diana Well 1 Replacement project:** Replace an old existing well to meet current specifications and reclaim lost production
- **Glen Ayre Booster:** Upgrade facility
- **Water Main Replacement Project:** Replace older water mains in the Downtown area to improve fire flow and water service reliability

ANNUAL

WATER
QUALITY
REPORT

Water testing performed in 2009



PWSID#: CA4310022

This report was prepared by:
Great Oaks Water Company
20 Great Oaks Blvd, Suite 120
San Jose, CA 95119

此份有關你的食水報告，
內有重要資料和訊息，請找
他人為你翻譯及解釋清楚。

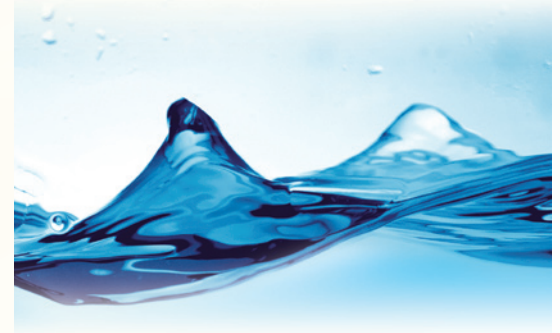
Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

Este informe contiene información muy
importante sobre su agua potable. Tradúzcalo
o hable con alguien que lo entienda bien.

Maintaining High Standards

Once again we are proud to present our annual water quality report. This report covers all testing performed between January 1 and December 31, 2009. The events of the past few years have presented many of us with challenges we could not have imagined. Yet, in spite of this we have maintained our high standards in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future but know that we will always stand behind you and the drinking water we work diligently to provide.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.



For more information about this report, or for any questions relating to your drinking water, please call Bobby Dartez, Water Quality Specialist, at (408) 227-9540.

Source Water Description

The customers of Great Oaks Water Company are fortunate to have water supplied from very pristine and plentiful aquifers underlying this valley. All of our water is pumped from 19 wells (not surface water) located throughout our service area.

To learn more about our watershed on the Web, go to the U.S. EPA's Surf Your Watershed Web site at www.epa.gov/surf.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include: Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems; Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

Great Oaks Water conducted Drinking Water Source Assessments for all wells to determine potential sources of contamination. Assessments were performed in accordance with the Safe Drinking Water Act requirements. The assessments indicate that the wells may be vulnerable to contaminants from the following sources: septic systems, sewer collection systems serving nearby single family residential housing, nearby agricultural wells, gas stations, parks, highways and their related activities, nearby computer related manufacturing facilities, roads, streets, parking lots, railroads, spreading basins, storm-drain discharge, crops, illegal activities, unauthorized dumping, unregulated tanks, photo processing and printing, and monitoring wells. All Great Oaks Water Company wells are constructed to minimize the influence of these potential contaminants under the approval of the California Department of Public Health. A copy of the assessment is available for viewing at the California Department of Public Health Drinking Water Program Office, 850 Marina Bay Parkway, Building P, Second Floor, Richmond, CA or at Great Oaks Water Company, 20 Great Oaks Boulevard, Suite 120, San Jose, CA.

A Message from the CEO

Dear Customers,

The water you received from Great Oaks Water Co. for the year 2009 met all of the high quality and purity standards set by the U.S. EPA and State of California for drinking water. Throughout each year, your water is tested approximately 1,600 times. We test for more than 120 contaminants and, again, none were detected at a level higher than permitted. Water served by Great Oaks did not violate an MCL or any other water quality standard during 2009.

This report is sent in compliance with the Safe Drinking Water Act and only contaminants that were detected in samples are listed in this report. Landlords, businesses and schools are encouraged to share this report with nonbilled water users at their locations. Additional copies are available at no charge by calling our office at (408) 227-9540.

The Advantages of Well Water

As always, Great Oaks serves only cool, fresh well water pumped from the abundant groundwater aquifers underlying the Valley. Other water companies in Santa Clara County purchase treated surface water with chlorine added. Great Oaks does not add chlorine, so you are not exposed to the undesirable by-products of chlorination. Water from Great Oaks is not only safe and of high quality, it also tastes great!

Turning off the Golden Spigot

In the past year, Great Oaks has made great progress against the government abuse that causes your water bills to be too high. In 2009, the Superior Court of Santa Clara County found that the Santa Clara Valley Water District (the "Golden Spigot") misallocated restricted funds and abused its discretion under the District Act, in addition to imposing an unconstitutional pump tax and denying the public its right to vote on taxes. Pump Tax is responsible for nearly two thirds of the quantity charge on your water bill. The Water District was ordered to refund the illegal and unconstitutional charges, but the Water District has instead chosen to spend taxpayer money to appeal and defend its illegal conduct, while still collecting the illegal pump tax.

Your Help Is Needed

Rather than comply with the law, the Water District is now seeking to change the law and give itself broad new powers. Legislation (AB 2483) introduced by Assemblyman Joe Coto would repeal the present District Act and create a new one. AB 2483 is opposed by Great Oaks, the other regulated utilities, taxpayer associations, Stanford University and many others. We believe the passage of this Bill will result in higher water bills to our customers. You can help by contacting your State Assemblyman or Senator and telling him to vote against the Golden Spigot Bill (AB 2483).

Your water is safe, clean and great tasting and you pay among the lowest rates in the state. As your water provider, Great Oaks is uniquely positioned to be an advocate on your behalf for positive change on water issues affecting your lives. Thank you for your encouragement in our past efforts and we will continue to provide you with high quality water and strong community service.

Sincerely,

John Roeder, Chairman and Chief Executive Officer

Great Oaks Water Co.

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips.

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/hotline/.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,1,1-Trichloroethane (ppb)	2009	200	1000	.15	ND-2	No	Discharge from metal degreasing sites and other factories; manufacture of food wrappings
Barium (ppm)	2007	1	2	0.165	ND-0.86	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	2007	50	(100)	0.28	ND-12	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2008	2.0	1	0.16	0.14-0.22	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2008	15	(0)	0.19	ND-4.1	No	Erosion of natural deposits
Nitrate [as nitrate] (ppm)	2009	45	45	7.5	3-22	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Coliform Bacteria [Total Coliform Rule] (% positive samples)	2009	More than 5.0% of monthly samples are positive	(0)	3.8 %	ND-3.8%	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0.3	0.2	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SECONDARY SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AVERAGE	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2007	500	NS	38.4	31-43	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance μ S/cm	2007	1,600	NS	651	466-887	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2007	500	NS	52.06	36-62	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids ppm	2007	1,000	NS	399	320-508	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2007	5	NS	0.135	0.05-0.25	No	Soil runoff

OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE	RANGE LOW-HIGH
Bicarbonate [HCO ₃] (ppm)	2007	302	233–390
Calcium (ppm)	2007	58	40–73
Chloromethane (ppm)	2007	0.12	ND–0.6
Potassium (ppm)	2007	1.04	ND–1.5
Total Hardness [CaCO ₃] (grains/gal)	2007	17.5	13.6–23.3
Trichlorotrifluoroethane (ppm)	2009	0.55	ND–14
Sodium (ppm)	2007	28.2	20–41
Magnesium (ppm)	2007	38	30–53

Definitions

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

grains/gal (grains per gallon): Grains of compound per gallon of water.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): This is the measure of the cloudiness of the water.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Appendix F

Ordinance 90-1

The District's Well Ordinance

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SANTA CLARA VALLEY WATER DISTRICT

ORDINANCE NO. 90-1

AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT REGULATING THE CLASSIFICATION, CONSTRUCTION AND DESTRUCTION OF WELLS AND OTHER DEEP EXCAVATIONS; REQUIRING THE DESTRUCTION OF ABANDONED OR UNUSED WELLS; ADOPTING WATER CONTAMINATION HAZARD STANDARDS; MAKING VIOLATION A MISDEMEANOR; AND REPEALING ORDINANCE NO. 85-1

Santa Clara Valley Water District
5750 Almaden Expressway, San Jose, CA 95118 (408) 265-2600



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The Board of Directors of Santa Clara Valley Water District do ordain as follows:

Section 1: Purpose

- 1.1. It is the purpose of this Ordinance to provide within the District for the classification of existing wells; to regulate the construction of new wells; the reconstruction or deepening of existing wells, and the destruction of wells, including water wells, monitoring wells, cathodic protection wells, exploratory holes, and other deep excavations, to the end that such wells and excavations will not cause pollution or contamination of groundwater or otherwise jeopardize the health, safety, or welfare of the people of the District.

Section 2: Classification of Wells

- 2.1. All wells within Santa Clara County will be placed into one of the three following classifications: (1) "Active Well," (2) "Inactive Well," or (3) "Abandoned or Unused Well."
- 2.2. **Active Well:** An active well is a well that has been utilized at least once in the preceding 12 months for the extraction of groundwater. Active wells within groundwater production charge zones of the District are subject to the District's groundwater production requirements and require, pursuant to the District Act, the filing of groundwater production statements.
 - a. If the pump from an active water well has been removed for repair or replacement, the well is still considered to be an active well. During the repair period, the well shall be adequately covered to prevent injury to people and to prevent the entrance of undesirable water or foreign matter.
- 2.3. **Inactive or Standby Well:** An inactive or standby well means a well that has not been used for a period of 1 year or more for the production of groundwater but is maintained in such a condition that it could be so used, or a monitoring well maintained for such use, or a cathodic protection well maintained for such use.
 - a. The owner of a well who desires to place or maintain it in the above classification shall obtain from the District, at intervals set by the District, a permit verifying the classification.
 - b. As evidence of the owner's intention regarding continued use and as conditions of the permit, the owner shall properly maintain the well in such a way that:
 1. The well has no defects which will permit the impairment of quality of water in the well or in the water-bearing formation penetrated.
 2. The well head is appropriately protected to prevent accidental entry and to prevent the entrance of undesirable water or foreign matter.

3. The well is marked so that it can be clearly seen.
 4. The area surrounding the well is kept clear of brush or debris.
 - c. Wells used for monitoring are considered inactive wells so long as they are maintained for this purpose. However, such wells shall be in compliance with this Ordinance and bear an appropriate cap, with the label, "Monitoring Well," and the name of the agency or organization using the well. It shall be securely locked when not in use.
 - d. Cathodic protection wells or test wells deep enough to promote interaquifer transfer of groundwater shall be considered inactive wells as long as they remain functional.
- 2.4. **Abandoned or Unused Well:** An abandoned or unused well may be defined under one or more of the following:
- a. A well, other than a monitoring well, which has been out of service continuously for 1 year or more, and does not meet the definition of a standby well.
 - b. A monitoring well from which no measurement or sample has been taken for a period of 3 years.
 - c. A well which is in such a state of disrepair that it cannot be made operational for its intended purpose.
 - d. A test hole or exploratory boring 24 hours after construction and testing work has been completed.
 - e. A cathodic protection well that is no longer functional for its original purpose.
 - f. Any boring that cannot be satisfactorily completed as a well.
- 2.5. The determination as to the status of a well will be made by the District.

Section 3: Definitions

- 3.1. Definitions of terms shall be as set forth from time to time in: (1) Chapter II and Appendix I of the Department of Water Resources Bulletin No. 74, "Water Well Standards: State of California;" (2) "Standards for the Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County," by the Santa Clara Valley Water District, referenced in Section 7 of this Ordinance, and (3) as set forth below:
- a. "Board" shall mean the Board of Directors of the Santa Clara Valley Water District.
 - b. "District" shall mean the Santa Clara Valley Water District.

- c. "General Manager" shall mean the General Manager of the Santa Clara Valley Water District or his or her designee.
- d. "Health Department" shall mean the Santa Clara County Health Department.
- e. "Inspecting Officer" shall mean a person designated by the General Manager and authorized to ensure that the provisions of this Ordinance are enforced. Such person will be a member of staff of the District or the Health Department.
- f. "Person," as used in this Ordinance, shall mean any person, association, firm, corporation, municipality, the County of Santa Clara, special district, or public agency.
- g. "Water Contamination Hazard:" Pursuant to Section 6.1 of the Santa Clara Valley Water District Act, the Board hereby declares that a water contamination hazard is a condition created by wells or deep excavations into which water will or may foreseeably flow, where that water contains contaminants in excess of the applicable standard currently promulgated by the California Department of Health Services or which is the subject of a cleanup order issued by the cognizant Regional Water Quality Control Board.
- h. Tense or Gender: Words used in the present tense include the future as well as the present. Words used in the masculine gender include the feminine and neuter. The singular number includes the plural, and the plural, the singular.
- i. Section Headings, when contained in this Ordinance, shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or intent of the provisions of any section.

Section 4: State Reporting

- 4.1. Nothing contained in this Ordinance shall be deemed to release any person from compliance with the provisions of Article 3, Chapter 10, Division 7 of the Water Code of the State of California or any amendment thereto.

Section 5: Prohibitions

- 5.1. No person within the County of Santa Clara shall construct, modify, or destroy a well unless a written permit has been first obtained from the District.
- 5.2. To prevent the contamination of underground water supplies through open wells, no person within the County of Santa Clara shall knowingly permit the existence on premises in his or her ownership or possession and control of any well opening or entrance which is not sealed or secured in such a way as to prevent the introduction of contaminants.

- 5.3. No person within the County of Santa Clara shall knowingly permit the existence of any abandoned well on premises in his or her ownership or possession and control.

Section 6: Permit Procedures

- 6.1. **When Permit Required:** No person shall dig, bore, drill, deepen, modify, repair, or destroy a water well, cathodic protection well, observation well, monitoring well, or any other excavation that may intersect groundwater without first applying for and receiving a permit as provided in this Ordinance unless exempted by law.
- 6.2. **Penalty for Failure to Obtain Permit:** In addition to the requirements of Section 10 hereof, any person who shall commence any work for which a permit is required by this Ordinance without having obtained a permit shall be required, if subsequently granted a permit for this work, to pay double the standard permit fee.
- 6.3. **Emergency Work:** The above provisions shall not apply to emergency work required on short notice to maintain drinking water or agricultural supply systems. In such cases, the person responsible for the emergency work shall:
- a. Satisfy the District that the work was urgently necessary, and
 - b. Demonstrate that all work performed was done in conformance with the technical standards as designated in Section 7.
- 6.4. **Application:** Permits required by this Ordinance shall be subject to conditions set forth in this Ordinance or as required by law. The General Manager shall prescribe and provide a standard form of application for permits under the terms of this Ordinance. The application form shall contain space for the name and address of the applicant, together with such information as, in the judgment of the General Manager, is necessary to establish the location of the well, the purpose of the permit, and the extent of any proposed work. When required by the District, drawings and specifications for any proposed work shall accompany the application form and shall be detailed enough to demonstrate compliance with the standards.
- 6.5. **Fees:** Fees to cover District costs required for the review of applications, issuance of permits, Board hearings of appeals, and inspection of work under this Ordinance, and the method of payment of such fees, may be as established and adopted by the Board from time to time by resolution.
- 6.6. **Payment of Fees and Costs, Waiver:** At the recommendation of the General Manager and approval by the Board, all or any part of the fees and costs of compliance with this Ordinance may be waived or paid by the District in accordance with such guidelines and procedures as may be established by the Board.

- 6.7. **Abandoned Wells:** As a condition of a construction or reconstruction permit, any abandoned wells on the property shall be destroyed in accordance with standards provided in this Ordinance.
- 6.8. **Posting of Permit:** It shall be the responsibility of the permittee to maintain a copy of the permit on the drilling site during all stages of construction or destruction.
- 6.9. **Permit—Denial:** The District shall deny an application for a permit if, in its judgment, issuance of a permit is not in the public interest.
- 6.10. **Limitations:** When the District issues a permit pursuant to this Ordinance, it may condition the permit in any manner necessary to carry out the purposes of this Ordinance. Conditions may include, but are not limited to, such quantity and quality testing methods as the District finds necessary.
- 6.11. **Persons Permitted to Work on Wells:** All construction, reconstruction, or destruction work on wells shall be performed by a person who possesses an active C-57 contractor's license in accordance with the provisions of the California Business and Professions Code, Section 7000, et seq. and Water Code Section 13750.5.
- 6.12. **Terms of Permit and Completion of Work:** Work authorized by a permit issued pursuant to this Ordinance shall begin within one hundred eighty (180) calendar days from the date of issuance of the permit unless a different starting date is stated in the permit. If the work is not so begun, the permit shall become void. The permittee shall notify the District at least one (1) working day before starting any work authorized by the permit. Subject to revocation, as hereinafter specified, the permit shall be valid for a term of one (1) year from the date of issuance unless a lesser term is specified. The permittee shall complete the work authorized by the permit within the time specified in the permit. If, at any time, the General Manager determines that any delay in the prosecution or completion of the work authorized is due to lack of reasonable diligence on the part of the permittee, the General Manager may, following due notice to the permittee and an opportunity to be heard, revoke the permit. The General Manager may, upon good cause being shown, extend the permit for an additional maximum period of six (6) months. Further extensions may be granted only by the Board.
- 6.13. **Ordered Additional Work:** Upon suspending or revoking any permit, the District may order the permittee to perform any work reasonably necessary to protect the underground waters from pollution or contamination, if any work already done by the permittee has left a well in such a condition as to constitute a hazard to the quality of the underground waters. No permittee or person who has held any permit issued pursuant to the Ordinance shall fail to comply with any such order.
- 6.14. **Guarantee of Performance:** Prior to the issuance of a permit, the applicant shall post with the General Manager a cash deposit or bond guaranteeing compliance with the terms of this Ordinance, in an amount determined by the General Manager as necessary to

protect the District and public against faulty or uncompleted work. The amount shall not exceed the total estimated cost of the work. The deposit or bond may be waived if the General Manager determines that other assurances of compliance are adequate.

- 6.15. **Liability:** A permittee shall assume all liability imposed by law for personal injury or property damage resulting from any work performed by the permittee or his or her agent under the permit, or resulting from failure of the permittee to perform each obligation under said permit. If any claim of such liability is made against the District, its officers, employees, or agents, the permittee shall defend, indemnify, and hold them and each of them harmless from such claim.
- 6.16. **Variations:** The District shall have the power under the following specified conditions to grant a variance from any provision of the standards referenced above and to prescribe alternative requirements in their place.
 - a. **Special Circumstances:** There must be, in a specific case, a special circumstance where practical difficulties or unnecessary hardship would result from the strict interpretation and enforcement of any standard.
 - b. **Intent of Ordinance Not Compromised:** The granting of such a variance shall be consistent with the purposes of this Ordinance.
- 6.17. **Special Groundwater Protection Areas:** The District may designate areas where groundwater quality problems are known to exist and where a well will penetrate more than one aquifer. The District may require in these designated areas special well seal(s) to prevent mixing of water from several aquifers. Where an applicant proposes well construction, reconstruction, or destruction work in such an area, the District may require the applicant to provide a report prepared by a Registered Geologist or Registered Civil Engineer (California Business and Professions Code Sections 7850 and 6762, respectively) that identifies all strata contained poor quality water and recommends the location and specifications of the seal or seals needed to prevent the entrance of poor quality water or its migration into other aquifers.

Section 7: Standards

- 7.1. Standards for the construction and destruction of wells and other deep excavations will be in accordance with the latest revisions of both the District Well Standards and Department of Water Resources Bulletin 74-81, and all subsequent supplements and revisions to either.
- 7.2. **Destruction of Abandoned Wells:** All persons owning an abandoned well as defined in the well standards shall destroy it or cause it to be destroyed before December 13, 1991, except those excluded by California Health and Safety Code Section 24440.
- 7.3. **Inspections:** The District shall make an inspection of the annular seal placement upon construction or reconstruction of a well and of the grouting of wells to be destroyed. It may

make an initial inspection of each proposed work site, an inspection at the completion of the work, and inspections at such other times as it deems appropriate.

- 7.4. **Required Notice:** The District shall be notified a minimum of twenty-four (24) hours prior to sealing the annular space and prior to destruction of a well. Drillers who anticipate completing a well in less than 1 day shall notify the District twenty-four (24) hours prior to commencement of drilling and provide the anticipated time to commence the sealing of the annular space.
- 7.5. **Should the District Fail to be Present:** If the District wishes to allow a seal to be tremied and placed or a well destroyed without inspection, the driller shall seal the well in accordance with the standards of this Ordinance and any permit conditions. No seal shall be tremied or placed or a well destroyed until permission to proceed is given.
- 7.6. **Final Inspection:** If requested by the District, the driller shall notify the District within seven (7) calendar days of the completion of the work at each drilling site. The District may make a final inspection after completion of the work to determine whether the well was completed in accordance with this Ordinance.
- 7.7. **Submittal of State "Report of Completion":** A copy of the "Report of Completion" (Water Well Driller's Report, Department of Water Resources Form 188) required by California Water Code Section 13751, shall be submitted by the permittee to the District within thirty (30) calendar days of construction, alteration, or destruction of any well. This report shall document that the work was completed in accordance with the standards and all additional permit conditions.
- 7.8. **Confidentiality of Report:** In accordance with California Water Code Section 13752, reports made in accordance with Section 7.8 above, will not be made available for inspection by the public but shall be made available for inspection by governmental agencies for use in making studies. Reports shall be made available to any person who obtains written authorization from the owner of the well.
- 7.9. **Requirements of Other Agencies:** Nothing in this Ordinance shall be deemed to excuse any person from compliance with the provisions of California Water Code Section 13750 through 13755 relating to notices and reports of completion or any other federal, state, or local reporting regulations.

Section 8: Right of Hearing

- 8.1. **Review and Appeal:** Any person aggrieved by the refusal to issue a permit, by the terms of a permit, or by any District decision made under this Ordinance, shall have the right of review and appeal.
 - a. The aggrieved person may, upon written request, have the matter reviewed by the General Manager. Upon receipt of such a written request, the General Manager shall

schedule the same for review within thirty (30) calendar days and give applicant at least fourteen (14) calendar days written notice of the time and place of said review unless applicant agrees to a lesser time.

- b. If the applicant is not satisfied with the results of the review by the General Manager, an appeal may be presented to the Board.
- c. The appeal to the Board shall be in writing and made within fourteen (14) calendar days after the General Manager's review. It shall specify the grounds upon which it is taken, and shall be accompanied by a filing fee as established by the Board. The Clerk of the Board shall set the appeal for hearing at the earliest practicable time, and shall notify the appellant, in writing, of the time so set at least five (5) days prior to the hearing. After the hearing, the Board may reverse in whole or in part, or may modify the order or determination appealed from. The action of the Board shall be final and conclusive.

Section 9: Entry and Inspection

9.1. **Right of Entry and Inspection:** Representatives of the District shall have the right to entry upon any premises at all reasonable times to make inspections and tests for the purpose of such enforcement and administration. The representative shall first present proper credentials and demand entry. If premises are unoccupied, a reasonable effort will be made to locate the owner or other person having charge or control of same. If entry is refused, recourse will be had to such remedies as are provided by law to secure entry.

Section 10: Enforcement

- 10.1. **Notice of Violation:** Whenever the District determines that a well (a) has not been completed, constructed, or destroyed in accordance with a permit or the plans and specifications relating thereto; (b) has been completed, constructed, or destroyed without the required permit; or (c) has been abandoned and not been destroyed in accordance with the provisions of this Ordinance, the District may record a Notice of Violation with the Office of the County Recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their respective addresses are available.
- 10.2. **Appeal:** If the property owner(s) or authorized agent disagree with the determination, he or she may submit evidence to the District indicating that there is no violation and then shall have the right to appeal an adverse decision of the District to the Board in accordance with the provisions of Section 8 hereof.
- 10.3. **Notice of Public Nuisance:** Whenever the District determines that a public nuisance as defined by Section 6.1 of the Santa Clara Valley Water District Act exists, the General Manager shall proceed in accordance with said Act to initiate proceedings to abate the same.

- 10.4. **Emergency Abatement:** If the General Manager finds that a well subject to this Ordinance is, by reason of condition, operation or maintenance, causing significant irreparable damage to the groundwater or presents an immediate danger to health and safety, and that it is impracticable to notify the owner or permittee, the General Manager may perform emergency work necessary to abate the condition without giving notice as above required, and the owner of the land, as shown on the last equalized assessment roll, shall be liable for the cost thereof.
- 10.5. **Removal of Violation Notice:** The District shall submit a removal of Notice of Violation to the county recorder when (a) it is determined by the District, after review, that no violation of this Ordinance exists or (b) all required and corrective work has been completed and approved by the District.
- 10.6. **Violation a Misdemeanor:** Any person who violates any of the provisions of this Ordinance, or fails to satisfy the terms of a permit issued hereunder, is guilty of a misdemeanor, and upon conviction thereof is punishable by a fine not exceeding five hundred dollars (\$500), or imprisonment in the county jail not to exceed thirty (30) days, or both that fine and that imprisonment. Any violation or threatened violation may also be enjoined by civil action.
- 10.7. **Civil Enforcement:** Violations of this Ordinance may also be redressed by civil action. In addition to being subject to prosecution, any person who violates any of the provisions of this Ordinance may be made the subject of a civil action. Appropriate civil action includes, but is not limited to, injunctive relief and cost recovery.
- 10.8. **Remedies Cumulative:** The remedies available to the Board to enforce this Ordinance are in addition to any other remedies available under ordinance or statute, and do not replace or supplant any other remedy but are cumulative thereto.

Section 11: Prior Ordinances

- 11.1. **Conflicts and Repeal:** Ordinance 85-1 is hereby repealed. All ordinances of the District in conflict with the terms and conditions of this Ordinance are hereby repealed to the extent of such conflict.

Section 12: Severability

- 12.1. If any section, subsection, paragraph, subparagraph, sentence, clause, or phrase of this Ordinance is, for any reason, held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this Ordinance; and the Board declares that this Ordinance and each section, subsection, paragraph, subparagraph, sentence, clause, and phrase, thereof, would have been adopted irrespective of the fact that one or more such section, subsection, paragraph, subparagraph, sentence, clause, or phrase be declared invalid or unconstitutional.

Section 13: Effective Date

13.1. This Ordinance shall take effect May 24, 1990. Within ten (10) days after its adoption, it shall be published once in full with the names of the members voting for and against the same in a newspaper or general circulation printed, published and circulated in the District.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District on April 24, 1990, by the following vote:

AYES: DIRECTORS J. Donohue, P. T. Ferraro,
 R. W. Gross, J. Judge,
 J. J. Lenihan, J. Pandit,
 S. Sanchez

NOES: DIRECTORS None

ABSENT: DIRECTORS None

SANTA CLARA VALLEY WATER DISTRICT

By: SIG SANCHEZ
 Chairman/Board of Directors

ATTEST: SUSAN A. PINO
 Clerk/Board of Directors

Appendix G

Links to District's Web Page Agricultural Section

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Santa Clara Valley Water District Website Addresses for Agricultural Information

Water Use Efficiency in Agriculture

<http://www.valleywater.org/programs/agriculture.aspx>

Agricultural Water Advisory Committee

<http://www.valleywater.org/About/AgriculturalWaterAdvisoryCommittee.aspx>

Mobile lab helps farmer improve water efficiency

<http://www.valleywater.org/Programs/MobileLab.aspx>

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Appendix H

Retail Water Company Rates

2010

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Cal Water

Categories	Tiers	Rates*	Monthly Service Charge	
All Delivered Water**	N/A	\$2.827		All
			5/8"	13.16
			3/4"	19.75
			1"	30.16
			1.5"	48.27
			2"	75.40
			3"	131.22
			4"	180.97
			6"	249.09
			8"	470.55
			10"	670.33
			12"	865.51
			14"	16.39
*Tiers in gallons				
**Agricultural users receive a \$.501 credit per HCF used.				

Gilroy

Categories	Tiers*	Zone 1**	Zone 2	Zone 3	Monthly Service Charge		
Residential						Residential	Commercial
	0-5,000	\$0.88	\$1.60	\$2.38			
	5,001-15,000	\$1.73	\$2.47	\$3.23	5/8"		
	15001-30,000	\$4.65	\$5.40	\$6.16	3/4"	\$6.02	\$6.02
	30,001+	\$6.78	\$7.51	\$8.28	1"	\$6.79	\$6.79
					1.5"	\$16.98	\$16.98
					2"	\$27.15	\$27.15
					3"		
					4"		
					6"		
					8"		
					10"		
Seniors	0-5,000	Free	Free	Free			
	5,001-15,000	\$1.73	\$2.47	\$3.23			
	15001-30,000	\$4.65	\$5.40	\$6.16			
	30,001+	\$6.78	\$7.51	\$8.28			
Commercial	0-3,000	\$0.88	\$1.62	\$2.38			
	3,001-30,000	\$2.10	\$2.82	\$3.59			
	30,000+	\$2.33	\$3.07	\$3.83			
Irrigation Only	0-30,000	\$4.65	\$5.40	\$6.16			
	30,000+	\$6.78	\$7.51	\$8.28			
*Tiers in gallons							
**All Rates per 1000 gallons							

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Great Oaks

Categories	Tiers	Rates*	Monthly Service Charge	
All Delivered Water	N/A	\$1.894		All
			5/8"	\$7.96
*Rates per HCF			3/4"	\$11.90
			1"	\$19.85
			1.5"	\$39.70
			2"	\$63.51
			3"	\$119.10
			4"	\$198.48
			6"	\$396.97
			8"	\$635.15
			10"	\$913.04

Milpitas

Categories	Tiers	Rates*
Residential	1-20.	\$1.77
	21+	\$3.72
Commercial	N/A	\$4.04
Recycled Industrial Process	N/A	\$2.02
Recycled Sanitary	N/A	\$2.02
Potable Irrigation	N/A	\$4.62
Recycled (Formerly Wells)**	N/A	\$0.81
Recycled (Agricultural)**	N/A	\$0.37
City Accounts	N/A	\$1.03
Recycled (All Other)	N/A	\$3.70
Santa Clara County (Ed Levin Park)	N/A	\$1.94
City of Milpitas accounts (Potable)	N/A	\$1.81

Bi-Monthly Service Charge		
	Residential	Commercial
5/8"	\$22.41	\$23.64
3/4"	\$23.82	\$25.14
1"	\$33.83	\$35.77
1.5"	\$42.67	\$45.10
2"	\$55.69	\$58.82
3"	\$149.09	\$157.45
4"	\$188.93	\$199.48
6"	\$288.32	\$304.49
8"	\$377.74	\$398.94
10"	\$546.80	\$577.47

*Rates per HCF

**Flat Bi-Monthly Service Charge of \$60

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CVPIA Water Management Plan | December 2011

Mountain View

Categories	Tiers	Rates*	Monthly Service Charge		
				Residential	Commercial
Residential Single Unit	1-3.	\$1.654			
	3.1-25	\$3.407	5/8"	\$4.10	
	25+	\$6.769	3/4"	\$4.10	
			1"	\$8.20	\$11.20
Multiple Unit (2-4), on 5-8" or 3/4"	1-6.	\$1.654	1.5"	\$13.30	\$18.20
	6.1-40	\$3.407	2"	\$24.80	\$33.90
	40+	\$6.769	3"	\$43.05	\$58.70
			4"	\$67.70	\$92.25
Commercial on 1" or 1.5"	1-20.	\$3.407	6"	\$135.55	\$184.70
	21-200	\$3.672	8"	\$215.85	\$294.05
	200+	\$6.769	10"	\$315.00	\$429.15
Commercial on 2" to 4"	1-500.	\$3.407			
	501-2000	\$3.672			
	2000+	\$6.769			
Commercial 6" or larger	1-4000.	\$3.407			
	4001-10000	\$3.672			
	10000+	\$6.769			
*Rates per HCF					

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Morgan Hill

Categories	Tiers	Rates*
City Residents**	1-10	\$1.10
	11-30	\$2.21
	31+	\$3.31
County Residents***	1-10	\$1.65
	11-30	\$3.32
	31+	\$4.97
Commercial	N/A	
*Rates per HCF		
**City Residential Monthly Base Rate \$5.10		
***County Residential Monthly Base Rate \$7.91		
NOTE: Low Income Deduction is \$2.95 off Monthly Base Rate		

Palo Alto

Categories	Tiers	Rates*
Residential**	0-7	\$3.949
	7+	\$5.624
Commercial	N/A	
Irrigation	N/A	
*Rates per HCF		
**Temporary unmetered service to residential subdivision developers, per connection.....\$6.00		

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CVPIA Water Management Plan | December 2011

Purissima Hills

Categories	Tiers	Rates*	Monthly Service Charge			
City Residents	1-10	\$2.70	All			
	11-30	\$4.15	5/8"	N/A		
	31-60	\$5.60	3/4"	\$15.00		
	60-100	\$7.05	1"	\$24.50		
	101-200	\$8.50	1.5"	\$34.00		
	200+	\$9.95	2"	\$49.00		
Commercial	N/A	\$4.85	3"	\$60.50		
			4"	\$112.00		
			6"			
			8"			
			10"			
			*Rates per HCF			

San Jose Municipal

Categories	Tiers	Zone 1*	Zone 2	Zone 3,4	Zone 5,6	Edenvale	Coyote	Alviso	North S.J.
Residential Bi-Monthly**	0-14	\$2.05	\$2.16	\$2.25	\$2.37	\$2.05	\$1.98	\$2.05	\$2.05
	15-28	\$2.36	\$2.44	\$2.54	\$2.66	\$2.27	\$2.36	\$2.36	\$2.36
	29-42	\$2.60	\$2.72	\$2.81	\$2.93	\$2.51	\$2.69	\$2.60	\$2.60
	42+	\$2.87	\$2.98	\$3.08	\$3.16	\$2.77	\$2.87	\$2.87	\$2.87
Commercial Bi-Monthly	N/A	\$2.36	\$2.44	\$2.54	\$2.66	\$2.36	\$2.36	\$2.36	\$2.36

*All Rates per HCF

**Residential Bi-Monthly rates are multiplied by the number of dwellings to determine total cost.

Bi-Monthly Meter Service Charge		
	Residential	Commercial
5/8"	\$18.00	\$18.00
3/4"	\$18.38	\$18.38
1"	\$31.98	\$31.98
1.5"	\$63.96	\$63.96
2"	\$98.58	\$98.58
3"	\$186.52	\$186.52
4"	\$285.10	\$285.10
6"	\$373.04	\$373.04
8"	\$532.92	\$532.92
10"	\$666.18	\$666.18

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San Jose Water Company

Categories	Tiers	Rates*		
General	N/A	\$1.99		
General w/Automatic Fire Sprinkler	N/A	\$1.99		
Employees***	N/A	Free		
Recycled Water	N/A	\$1.99		
*Rates per HCF				
**Monthly Upsize Charges				
For 1/4-in meter upsize.....	\$1.39			
For 1/2-in meter upsize.....	\$2.77			
For 3/4-in meter upsize.....	\$4.16			
For 1-in meter upsize.....	\$5.55			
***Employees within SJWC service area that are head of household do not pay for water (they do pay a tax through their paycheck)				
Monthly Service Charge				
	General	Recycled	General w/Fire Sprinkler**	Private Fire Service
5/8"	\$11.90		\$11.90	
3/4"	\$11.90		\$11.90	
1"	\$19.84		\$19.84	
1.5"	\$39.67		\$39.67	
2"	\$63.48	\$30.00	\$63.48	\$17.29
3"	\$119.02	\$40.00		\$25.94
4"	\$198.37	\$45.00		\$34.58
6"	\$396.74	\$75.00		\$51.88
8"	\$634.78	\$90.00		\$69.17
10"	\$912.50	\$140.00		\$86.46
12"				\$103.75

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Santa Clara Water Utility

Categories	Tiers	Rates*
Potable Water Service	N/A	\$1.74
Special Conditions		
a. Outside City Limits	N/A	1.5 times regular city rates
b. Agricultural Users	N/A	Credit of \$.26 per HCF used
Recycled Water Service	N/A	\$1.00
Special Conditions		
a. Outside City Limits	N/A	1.5 times regular city rates
b. Landscape Irrigation Otherwise Served by a Private	N/A	Credit of \$.326 per HCF used
c. Industrial Process Water	N/A	Credit of \$.234 per HCF used
d. Industrial Process Water Otherwise Served by a Private	N/A	Credit of \$.817 per HCF used, plus a fixed rate of \$50.00 per month
Fire Services**	N/A	N/A
Cross Connection Control**	N/A	N/A

*Rates per HCF

**Monthly meter standby service charge only.

Potable Monthly Service Charge			
	Potable Water	Fire Service	Cross Connection Controls
5/8"	\$7.65		
3/4"	\$7.65		
1"	\$12.00		\$6.10
1.5"	\$22.00		
2"	\$31.00	\$7.80	\$11.60
3"	\$86.00		\$15.70
4"	\$122.00	\$12.30	\$20.00
6"	\$239.00	\$20.60	\$28.90
8"	\$367.00	\$31.20	\$35.60
10"	\$453.00	\$45.60	\$42.30
12"	\$582.00	\$63.60	
Recycled Monthly Service Charge			
	Recycled Water	Fire Service	Cross Connection Controls
5/8"	\$5.40		
3/4"	\$5.40		
1"	\$8.60		\$5.90
1.5"	\$15.20		
2"	\$21.60	\$7.60	\$11.30
3"	\$61.70		\$15.20
4"	\$86.50	\$11.90	\$19.40
6"	\$169.80	\$20.00	\$28.10
8"	\$261.80	\$30.30	\$34.60
10"	\$323.40	\$44.30	\$41.10
12"	\$415.40	\$61.70	

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CVPIA Water Management Plan | December 2011

Sunnyvale

Categories	Tiers	Rates*	Meter Service Charge	
			Monthly	Bi-Monthly
Monthly Residential	0-6	\$1.53		
	7-33	\$2.97	5/8"	\$5.24
	34-50	\$3.16	3/4"	\$6.64
	51+	\$3.26	1"	\$9.42
			1.5"	\$16.39
Monthly Apartment	0-4	\$1.53	2"	\$24.75
	5-23	\$2.97	3"	
	24-35	\$3.16	4"	
	36+	\$3.26	6"	
			8"	
Monthly Commercial, Industrial, Fire Line and New Construction	0-6	\$1.53	10"	
	7-20	\$2.97	12"	
	21-50	\$3.16		
	51-500	\$3.26		
	501-1250	\$3.35		
	1251-2500	\$3.43		
	2501+	\$3.51		
Bi-Monthly Residential	0-12	\$1.53		
	13-66	\$2.97		
	67-100	\$3.16		
	101+	\$3.26		
Bi-Monthly Apartment	0-8	\$1.53		
	9-46	\$2.97		
	47-70	\$3.16		
	71+	\$3.26		
Bi-Monthly Commercial, Industrial, Fire Line and New Construction	0-12	\$1.53		
	13-40	\$2.97		
	41-100	\$3.16		
	101-1000	\$3.26		
	1001-2500	\$3.35		
	2501-5000	\$3.43		
	5001+	\$3.51		
*Rates per HCF				

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CVPIA Water Management Plan | December 2011

Stanford Utilities

Categories	Tiers	Rates*				
Domestic	N/A	\$6.540				
Irrigation	N/A	\$3.880				
*Rates per 1000 gallons						

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Appendix I

Retail Water Company Contact List

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CVPIA Water Management Plan | December 2011

SCVWD Water Retailers - Water Conservation Contacts				
Retailer	Contact	Address	Phone Number	Email
California Water Service Company	Ron Richardson	949 B Street, Los Altos, CA 94024	650-917-0920	richardson@calwater.com
	Rob Guzzetta	1720 N. 1st St. San Jose, CA 95112	408-367-8427	rguzzetta@calwater.com
City of Gilroy	Rick Smelser	7351 Rosanna St Gilroy, CA 95020	408-846-0260	rsmelser@ci.gilroy.ca.us
City of Milpitas	Kathleen Phalen	455 E. Calavera Blvd Milpitas, CA 95035	408-586-3345	kphalen@ci.milpitas.ca.gov
City of Morgan Hill	Karl Bjarke	17555 Peak Ave. Morgan Hill, CA 95037	408-778-6480	Karl.Bjarke@morganhill.ca.gov
City of Mountain View	Mike Fuller	231 N. Whisman Rd Mountain View, CA 94039	650-903-6311	mike.fuller@mountainview.gov
	Alison Turner		650-903-6081	alison.turner@mountainview.gov
City of Palo Alto	Jane Ratchye	P.O. Box 10250 Palo Alto, CA 94303	650-329-2119	jane.ratchye@cityofpaloalto.org
	Nicolas Procos	250 Hamilton Ave. Palo Alto, CA 94301	650-329-2214	Nicolas.procos@cityofpaloalto.org
City of Santa Clara	Alan Kurotori	1500 Warburton Ave, Santa Clara, CA 95050	408-615-2010	akurotori@santaclaraca.gov
City of Sunnyvale	Jim Craig	221 Commercial St. Sunnyvale, CA 94088	408-730-7558	jcraig@ci.sunnyvale.ca.us
	Tim Kirby		408-730-2712	tkirby@ci.sunnyvale.ca.us
Great Oaks Water Company	John Roeder	P.O. Box 23490 San Jose, CA 95153	408-227-9540	jroeder@greatoakswater.com
	Tim Guster		408-227-9540	tguster@greatoakswater.com
Purissima Hills Water District	Patrick Walter	26375 W. Fremont Rd, Los Altos Hills, CA 94022	650-948-1217	pwalter@purissimawater.org
San Jose Municipal Water System	Mansour Nasser	3025 Tuers Rd, San Jose, CA 95121	408-277-2558	mansour.nasser@sanjoseca.gov
San Jose Water Company	George Bulhumeur	1221 S. Bascom Ave. San Jose, CA 95128	408-279-7805	george_belhumeur@sjwater.com
	Tom Victorine		408-279-7814	tom_victorine@sjwater.com
Stanford University Utilities Division	Margaret Laporte	327 Bonair Siding, Stanford CA, 94305	650-725-7864	martyl@bonair.stanford.edu
Santa Clara Valley Water District	Hossein Ashktorab	5750 Almaden Exwy, San Jose, CA 95118	408-265-2600	hashktorab@valleywater.org
	Jerry De La Piedra			gdelapiedra@valleywater.org
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Appendix J

BMP 13

Summary by Retail Water Company

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BMP 13 – Water Waste Prohibition Summary for Santa Clara County

City of Gilroy – No electronic link

- **Sec. 27.11. Use of water by consumer; leaks; wasting water.**

No consumer shall supply water to any person other than the occupants of the premises of such consumer; provided, however, that such consumer may supply water to such persons for the use on the premises or in the performance of any contract for the improvement of any street or other public place after having given notice and received permission from the director of the department of public works. No consumer shall permit leaks or waste water (Ord. No. 479, § 3)

City of Morgan Hill

<http://library.municode.com/index.aspx?clientId=16502&stateId=5&stateName=California>

Title 13 PUBLIC SERVICES

Section 13.04.330 Wasting of water.

It is unlawful for any person to waste water or allow it to be wasted by imperfect or leaking stops, valves, pipes, closets, faucets or other fixtures or to use water closets without self-closing valves, or to use the water for purposes other than those named in the application upon which rates for water are based, or to use it in violation of any provision of this chapter. (Ord. 30 N.S. § 4.10, 1948)

City of Sunnyvale :

<http://qcode.us/codes/sunnyvale/view.php?topic=12&frames=on>

Chapter 12.34. WATER CONSERVATION RESTRICTION

12.34.010. Purpose and application.

The purpose of this chapter is to identify and restrict nonessential water uses which, if allowed, would constitute wastage of the water supply of the city. The provisions of this chapter shall apply to all persons or entities using water obtained from the city of Sunnyvale both in and outside the city of Sunnyvale and within the city's water service area, and regardless of whether any person or entity using water has a contract for water service with the city. Use of water by the city itself shall be in conformance with a water conservation plan to be presented by the city

manager to the city council for approval, and which shall essentially conform to the provisions of this chapter. This chapter is adopted pursuant to the provisions of Water Code Section 350, et seq., the city charter and the common law. (Ord. 2433-93 § 1 (part)).

12.34.020. Nonessential uses prohibited.

The following uses, methods, types or techniques of uses of water are hereby determined and declared nonessential, and except as expressly provided to the contrary, are hereby prohibited:

(a) Allowing or maintaining broken or defective plumbing, sprinklers, watering or irrigation systems which permit the escape or leakage of potable water.

(b) Using potable water in any manner which causes, allows or permits the flooding of any premises, or any portion thereof, or which causes, allows or permits water to escape from any premises or any portion thereof and flow into gutters, streets, or any surface water drainage system.

(c) Using any hose or similar device using potable water for washing automobiles, trucks, buses, boats, trailers, equipment, recreational vehicles, mobile homes or other vehicles or machinery, unless the hose or device is equipped with a positive automatic shutoff valve.

(d) Using potable water to wash sidewalks, driveways, filling station aprons, patios, parking lots, porches or other paved or hard surfaced areas, unless there is a positive automatic shutoff valve on the outlet end of the hose.

(e) The service of water by any restaurant or other eating or refreshment establishment to any patron, except upon the specific request by a patron for such services.

(f) Installation of any single pass cooling process in new construction.

(g) Any use of non-potable water not in compliance with all federal, state and local laws, rules and regulations. Use of reclaimed water from the city's water pollution control plant shall be subject to the discretion of the director of public works. (Ord. 2433-93 § 1 (part)).

12.34.030. Exceptions.

(a) The director of public works is hereby authorized to grant to any user an exception to the prohibitions set forth in Section 12.34.020, upon a finding by the director that such exception is necessary to prevent an emergency condition affecting the health, sanitation or fire protection of such user, and that the user to whom such adjustment or exception pertains has adopted or used all practicable water conservation measures.

(b) Exceptions permitted hereunder shall be made only upon written application submitted to the director setting forth a statement of justification for such exception. The director may attach conditions, specifications or other qualifying provisions to any exception granted. (Ord. 2433-93 § 1 (part)).

12.34.040. Penalty--Flow restricting devices.

(a) Upon a determination by the director of public works that a user has continuously or repeatedly violated or failed to comply with one or more provisions of Section 12.34.020, or of

any conditions of any exception granted pursuant to the provisions of Section 12.34.030, the director may issue an order to cease and desist from continued or repeated violation, and further order such user to comply forthwith with such provisions or terms of exception, or otherwise to take appropriate remedial or preventive action. If after the issuance of such cease and desist order, such user continues to consume or use, or again consumes or uses water in violation of any such provision or condition of exception, the director may order the installation of a flow restricting device upon the water service line to the premises of such user. Such flow restricting device shall be installed and maintained for a period of not less than three days nor more than ten days for a first violation, and shall be installed and maintained for not less than ten days for each succeeding violation, and may be ordered to remain installed and maintained for a period of up to three months upon a finding by the director that any user is habitually in violation of any of the provisions of this chapter, or the provisions of any exception granted pursuant to Section 12.34.030.

(b) Prior to installation of any such flow restricting device, the director shall give written notice of intent to install such device, including the reasons for the proposed installation. The notice shall specify the date, time and place at which the user or other interested party may appear before the director to present any evidence or reasons why such installation should not occur. Instead of appearing, the user or other interested party may present written material to the director at or before the time specified. The installation of a flow restricting device shall not occur less than twenty-four hours after the time specified in the notice. The written notice shall be delivered personally, or by posting with the United States mail service, first class postage prepaid, certified mail, and addressed to the last known address of the user to whom given. Copies of the notice shall also be delivered personally or by mail as specified above, to the owner of the property on which the flow restrictor is proposed to be installed as shown on the last equalized assessment roll of the county assessor, county of Santa Clara, and to the person or entity shown on the latest city records as being responsible for payment of utility charges on such property, if either or both is different from the user to whom the notice is sent.

(c) There are hereby established, and there shall be imposed and levied charges in the amount of fifty dollars for each installation and fifty dollars for each removal of flow restricting devices under this section. (Ord. 2433-93 § 1 (part)).

12.34.050. Implementation.

The director of public works is authorized to delegate authority granted under this chapter to such deputies, officers, employees or agents of the city as the director shall designate, and to establish such rules, regulations and procedures, and to prepare or furnish such forms as the director deems necessary or appropriate to carry out the provisions of this chapter. (Ord. 2433-93 § 1 (part)).

12.34.060. Notices.

Except as otherwise provided, notices required to be given pursuant to the provisions of this chapter shall be in writing, may be combined with water service bills or other written communication, and shall be delivered personally, or by posting with the United States mail service, first class postage prepaid, and addressed to the last known address of the user to

whom given, or to the owner of the premises to which the water service of such user pertains, shown on the last equalized assessment roll of the county assessor, county of Santa Clara. (Ord. 2433-93 § 1 (part)).

12.34.070. Violations.

It is unlawful for any person, firm, partnership, association, corporation or political entity to use water obtained from the water system of the city of Sunnyvale in violation of any provision of this chapter or in violation of the conditions of any exception granted pursuant to Section 12.34.040 of this chapter. Use of water by any user in accordance with the provisions of any exception granted by the director shall not be deemed in violation of this chapter. Violations of this chapter shall be punishable as infractions. (Ord. 2433-93 § 1 (part)).

12.34.080. Remedies cumulative.

The remedies and penalties provided for in this chapter shall be cumulative and not exclusive, and shall be in addition to any or all other remedies available to the city. (Ord. 2433-93 § 1 (part)).

City of Mountain View

<http://library.municode.com/index.aspx?clientId=16508&stateId=5&stateName=California>

Click on the **Chapter 35 Water, Sewage, and Other Municipal Services** link

DIVISION 3. WATER CONSERVATION.*

[SEC. 35.28.3. Prohibition of nonessential water use.](#)

[SEC. 35.28.4. Nonessential water uses defined.](#)

[SEC. 35.28.5.1. Exceptions.](#)

[SEC. 35.28.6. Enforcement.](#)

[SEC. 35.28.6.1. Installation of flow-restricting devices as enforcement.](#)

[SEC. 35.28.6.2. Charges for installation and removal of flow-restricting devices.](#)

[SEC. 35.28.6.3. Installation of flow-restricting devices--Time periods.](#)

[SEC. 35.28.7. Discontinuance of water service.](#)

[SEC. 35.28.8. Penalties.](#)

[SEC. 35.28.8.1. Violations as an infraction.](#)

[SEC. 35.28.8.2. Administrative penalties.](#)

[SEC. 35.28.9--35.28.11 Repealed by Ord. No. 1.93, 4/13/93. SEC. 35.28.12--35.28.16. Repealed by Ord. No. 5.78, 2/14/78.](#)

SEC. 35.17. Right to limit amount of water furnished.

The director of public works shall have the right to limit the amount of water furnished to any consumer, should the circumstances reasonably warrant such action, even though no limit be stated in the application or permit for such use. (Code 1938, Sec. 144; Ord. No. 175.809, 10/29/62.)

SEC. 35.28.3. Prohibition of nonessential water use.

Any of the nonessential water uses as defined in Section 35.28.4 are prohibited.

SEC. 35.28.4. Nonessential water uses defined.

The following uses of potable water are hereby determined to be nonessential, except as further provided herein.

SEC. 35.28.4.1. Use of potable water through any meter when the customer has been given ten (10) days' written notice by the director to repair broken or defective plumbing, sprinkler, watering, or irrigation systems and has failed to effect such repairs. The failure of any customer to effect said repairs after said written notification by director shall constitute grounds for immediate discontinuance of water service.

SEC. 35.28.4.2. Use of potable water which results in flooding or run-offs in gutters, sidewalks, driveways, streets, highways, roads or other hard-surfaced areas.

SEC. 35.28.4.3. Use of water through a hose for the cleaning of sidewalks, driveways, patios, parking lots or other paved or hard-surfaced areas and for washing cars, buses, boats, trailers, or other vehicles without a positive automatic shutoff valve on the outlet end of the hose.

SEC. 35.28.4.4. Use of potable water for restaurant water service unless upon request.

SEC. 35.28.4.5. Use of potable water in single-pass cooling systems. (Ord. No. 11.89, 6/13/89; Ord. No. 8.91, 5/14/91; Ord. No. 1.93, 4/13/93.)

SEC. 35.28.5. Exceptions; Hearing; Appeal.

The procedures for exceptions, hearings and appeals shall be as set forth below. (Ord. No. 1.93, 4/13/93.)

SEC. 35.28.5.1. Exceptions.

Written applications for an exception or adjustment to the provisions of this division shall be made to the director. Within ten (10) days after receiving an application for an exception or adjustment, the director shall hold a hearing with the applicant. (Ord. No. 11.89, 6/13/89; Ord. No. 8.91, 5/14/91; Ord. No. 1.93, 4/13/93.)

SEC. 35.28.5.2. Hearing.

The applicant shall be notified of the date and time of said hearing. At the hearing, the director shall consider the following criteria:

- (a) Whether the customer had previously adopted all practical water conservation measures;
- (b) Whether failure to grant the application would cause an emergency condition adversely affecting the health, sanitation, fire protection or safety of the customer or the public; or
- (c) Whether undue hardship would result to the applicant if the application were denied or the flow-restricting device were installed, including adverse economic impact such as loss of production or loss of jobs.

Within ten (10) days after the hearing, the director shall notify the applicant in writing of his decision by certified mail. (Ord. No. 11.98, 6/13/89; Ord. No. 8.91, 5/14/91; Ord. No. 1.93, 4/13/93.)

SEC. 35.28.5.3. Appeal.

Denials of any application for an adjustment or exception or a decision of the director to install a flow-restricting device may be appealed to the city council, whose decision shall be final. An application for an appeal shall be filed with the city clerk in writing within ten (10) calendar days after the director's decision and shall state the specific grounds for the appeal. The city council shall hear the appeal within thirty (30) calendar days after the appeal has been filed with the city clerk. In considering said appeal, the council shall be governed by the same criteria as set forth in subsections (a), (b) and (c) of Section 35.28.5.2 hereinabove. (Ord. No. 11.89, 6/13/89; Ord. No. 8.91, 5/14/91; Ord. No. 1.93, 4/13/93.)

City of Milpitas :

<http://library.municode.com/index.aspx?clientID=16491&stateID=5&statename=California>

VIII-6-3.00 Restrictions

The following uses of potable water are prohibited:

3.01 Use that results in flooding or runoff in gutters, waterways, patios, sidewalks, driveways, or streets except as permitted in Section 3.02 A and B.

3.02 Use without a shutoff nozzle on the outlet end of the hose for:

A. Washing cars, buses, boats, aircraft, trailers or other vehicles;

B. Washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas; and

C. Watering outside plants, lawn, landscape and turf areas.

3.03 Service of water by any restaurant except upon the request of a customer.

3.04 Use through broken or defective plumbing, sprinkler, watering or irrigation systems.

3.05 Use in new, added or altered commercial car wash equipment unless a recycled water system is incorporated.

3.06 Use in new, added or altered cooling system equipment unless at least fifty percent (50%) of the water is recycled. A waiver to allow less than fifty percent (50%) recycling may be granted by the Chief Building Official due to water quality concerns only. Cost is not an acceptable reason to request or receive a waiver.

3.07 Use for irrigation if reclaimed water is available.

3.08 Use in new, added, or altered decorative fountains unless a recycled water system is incorporated. (Ord. 240 (part), 5/3/94)

- Water Efficient Landscape Ordinance
- Water Conservation Ordinance
- Water Meter Loan Program – City will loan water meters to commercial and industrial customers to help identify areas of potential water savings.
- Full text of ordinances can be found on City of Milpitas website

Milpitas Municipal Code

Chapter 6 WATER CONSERVATION

VIII-6-1.00 Purpose

The City Council of the City of Milpitas has found that the limited supply of City waters are subject to ever increasing demands; that the City's economic prosperity depends on adequate supplies of water; and that the City policy promotes conservation and efficient use of potable water.

Consistent with the above findings, the purpose of this chapter is to promote the values and benefits of conservation and efficient use of potable water; and establish provisions for water management practices and prevention of potable water waste. (Ord. 240 (part), 5/3/94)

VIII-6-2.00 Definitions

The words used in this chapter have the meaning set forth below:

2.01 "Reclaimed Water" means treated or recycled wastewater of a quality suitable for non-potable uses and not intended for human consumption.

2.02 "Runoff" means water that is not absorbed by the surface to which it is applied and flows from the area.

2.03 "Potable Water" means water sold by the City of Milpitas intended for human consumption. (Ord. 240 (part), 5/3/94)

VIII-6-3.00 Restrictions

The following uses of potable water are prohibited:

3.01 Use that results in flooding or runoff in gutters, waterways, patios, sidewalks, driveways, or streets except as permitted in Section 3.02 A and B.

3.02 Use without a shutoff nozzle on the outlet end of the hose for:

A. Washing cars, buses, boats, aircraft, trailers or other vehicles;

B. Washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas; and

C. Watering outside plants, lawn, landscape and turf areas.

3.03 Service of water by any restaurant except upon the request of a customer.

3.04 Use through broken or defective plumbing, sprinkler, watering or irrigation systems.

3.05 Use in new, added or altered commercial car wash equipment unless a recycled water system is incorporated.

3.06 Use in new, added or altered cooling system equipment unless at least fifty percent (50%) of the water is recycled. A waiver to allow less than fifty percent (50%) recycling may be granted by the Chief Building Official due to water quality concerns only. Cost is not an acceptable reason to request or receive a waiver.

3.07 Use for irrigation if reclaimed water is available.

3.08 Use in new, added, or altered decorative fountains unless a recycled water system is incorporated. (Ord. 240 (part), 5/3/94)

VIII-6-4.00 Water Meter Loan Program

Water meters shall be made available by the City to loan to industrial and commercial customers for use in water audits. The industrial and commercial customers shall use the meters to conduct audits in various segments of their plant or process for identifying and implementing water conservation measures. (Ord. 240 (part), 5/3/94)

City of San Jose – San Jose Municipal Water System

[http://sanjose.amlegal.com/nxt/gateway.dll/California/sanjose_ca/sanjosemunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanjose_ca](http://sanjose.amlegal.com/nxt/gateway.dll/California/sanjose_ca/sanjosemunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:sanjose_ca)

Part 2 WATER WASTE PREVENTION

Sections:

15.10.200 Water waste prevention.

- 15.10.210 Repair of plumbing, sprinkler and irrigation systems.**
- 15.10.220 Water run-off prohibited.**
- 15.10.230 Restaurants, banquet facilities, hotels and dining facilities.**
- 15.10.240 Cleaning of structures and surfaces.**
- 15.10.250 Washing of vehicles.**
- 15.10.255 Commercial car washes.**
- 15.10.260 Building and construction.**
- 15.10.270 Hydrants.**
- 15.10.290 Landscape irrigation.**
- 15.10.295 Use of reclaimed water.**

15.10.200 Water waste prevention.

- A. The regulations in this part are intended to be permanent water conservation measures and to apply to the use of water from all sources on an on-going basis.
- B. No person shall waste water from any source nor shall any person allow such water wastage.
- C. No person shall use any water from any source, or continue the use of any water from any source, in any way prohibited by this chapter.

(Ord. 24600.)

15.10.210 Repair of plumbing, sprinkler and irrigation systems.

- A. No owner or manager or other person responsible for the day-to-day operation of any premises shall fail to initiate repair of any leaking, broken or defective water pipes, faucets, plumbing fixtures, other water service appliances, sprinklers, watering or irrigation systems within five (5) working days after the owner, manager or other responsible person knew or should have known of such leaks, breaks or defects.

B. No owner or manager or other person responsible for the day-to-day operation of any premises shall fail to complete repair of any leaking, broken or defective water pipes, faucets, plumbing fixtures, other water service appliances, sprinklers, watering or irrigation systems, as soon as practical after initiation of such repair.

(Ord. 24600.)

15.10.220 Water run-off prohibited.

A. No person shall use any water in any manner which results in run-off onto sidewalks, driveways, gutters or streets, except for water used in accordance with Sections 15.10.240 or 15.10.250.

B. No person shall use any water in any manner which results in run-off beyond the immediate area of use, or the pooling or puddling of water, except for water used in accordance with Sections 15.10.240 or 15.10.250.

(Ord. 24600.)

15.10.230 Food service establishments.

A. No person shall provide any water to any customer at any food service establishment unless and until the customer requests water.

B. No person shall use any non-water conserving dish wash spray valve in any food service establishment

(Ords. 24600, 28597.)

15.10.240 Cleaning of structures and surfaces.

No person shall use water through a hose to clean the exterior of any building or any structure or to clean sidewalks, driveways, patios, decks, tennis courts, parking lots or any other exterior paved or hard-surfaced areas, unless such hose is equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.250 Washing of vehicles.

No person shall use any water through a hose to wash any car, truck, boat, trailer, bus, recreational vehicle, camper, or any other vehicle, or any portion thereof, unless such hose is equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.255 Commercial car washes.

No owner, manager or employee of a commercial car wash facility shall use any water to wash, or allow or permit the use of any water to wash, any car, truck, boat, trailer, bus, recreation vehicle, camper or any other vehicle, or any portion thereof, except if such person can demonstrate that such washing is exclusively by one of the following methods:

- A. Use of mechanical automatic car wash facilities utilizing water recycling equipment.
- B. Use of a bucket and handwashing.
- C. Use of a hose equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.260 Building and construction.

No person shall use, permit or allow the use of potable water for building or construction purposes, such as consolidation of backfill or dust control, without a prior approved written exception from the city.

(Ord. 24600.)

15.10.270 Hydrants.

No person, except a water company for the purpose of necessary hydrant or water distribution system maintenance, or under the direction of the city's fire chief for firefighting or fire sprinkler maintenance, shall use, permit or allow the use of any water or flushing of any water from any fire hydrant, without a prior approved written exception from the city.

(Ord. 24600.)

15.10.290 Landscape irrigation.

A. No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping at any time between the hours of 8:00 a.m. and 6:00 p.m. during Pacific Daylight Savings Time, or between the hours of 10:00 a.m. and 3:00 p.m. during Pacific Standard Time, unless the person using or allowing the use of the water is using a bucket, hand-carried container, or a hose equipped with an automatic positive self-closing valve.

B. No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping or other vegetated area more than fifteen minutes per day per station when using a landscape irrigation system or a watering device that is not continuously attended, except for landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour and weather-based controllers or stream rotor sprinklers that meet a seventy percent efficiency standard.

C. The restrictions on landscape irrigation contained in this section do not apply to the following activities:

1. Syringing of golf course greens, golf course tees, lawn bowling greens or lawn tennis courts;
2. The conduct of a landscape water management audit to provide for the evaluation and adjustment of a landscape irrigation system.

(Ord. 24600.)

15.10.295 Use of reclaimed water.

No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping, where an irrigation system has been installed to allow for use of reclaimed water and reclaimed water is available to the property for irrigation use.

(Ord. 24600.)

City of Santa Clara :

<http://www.codepublishing.com/ca/santaclara/frameless/index.pl?path=../html/SantaClara13/SantaClara1315.html#13.15>

<http://santaclaraca.gov/Modules/ShowDocument.aspx?documentid=1182>

- **1.C WATER USE RESTRICTIONS AND PROHIBITIONS** The following list of Water Use Restrictions and Prohibitions are specific measures which prevent water waste and

achieve reasonable, yet substantial, reductions in water use by all users in the City. The following uses of water are prohibited by the City:

- a) Wasting water, which includes but is not limited to, the flooding or runoff on City sidewalks, gutters, and streets.
- b) Cleaning of sidewalks, driveways, patios, parking lots, or other paved or hard-surfaced areas, or washing cars, buses, boats, trailers, or any vehicle by use of a hose unless that hose is fitted with an operating automatic shut-off valve.
- c) Water waste due to broken or defective plumbing, fire system, irrigation system, or any appurtenance thereto; or to open or to leave open any stopcock or faucet so as to permit water waste.
- d) Service of water by any restaurant unless requested by a patron.
- e) Installation of a single-pass cooling system.
- f) Installation of a non-recirculating, decorative fountain.
- g) Construction of a non-recirculating conveyor car wash.

City of Cupertino

[http://www.amlegal.com/nxt/gateway.dll/California/cupertino/cityofcupertinocaliforniamunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:cupertino_ca](http://www.amlegal.com/nxt/gateway.dll/California/cupertino/cityofcupertinocaliforniamunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:cupertino_ca)

CHAPTER 15.32: WATER CONSERVATION

Section

- [15.32.010](#) Findings and determinations.
- [15.32.020](#) Definitions.
- [15.32.030](#) Prohibitions on water use.
- [15.32.050](#) Emergency suspension of water service.
- [15.32.060](#) Violation–Penalty.

15.32.010 Findings and Determinations.

- A. The 1993 water supply available to Santa Clara County markedly exceeds that of the previous six years of droughts; and
- B. Since 1989, the citizens of Santa Clara County have responded admirably to the mandatory water conservation programs requested and implemented by the Board of Directors of the Santa Clara Valley Water District; and
- C. With continued good conservation practices, implementation of ultra low flush toilet rebate and other plumbing retrofit programs, further development and refinement of the water efficient landscaping ordinances, landscape guidelines, reclamation projects, and other best management practices, 1993 countywide conservation efforts are anticipated to result in a ten percent to twenty percent reduction in water usage as compared to 1987 usage. (Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 1, 1991; Ord. 1524, § 1, 1990; Ord. 1513, § 1, 1990)

15.32.020 Definitions.

As used in this chapter

- A. “Customer” means any person who pays for service to the Cupertino Municipal Water Utility.

B. "Person" means any individual, firm, partnership, association, corporation, trust, governmental body or other organization or entity.

C. "Water" means potable water.

D. "Water provider" means the California Water Service and/or San Jose Water Company. (Ord. 1776, (part), 1998; Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 2, 1991; Ord. 1524, § 2, 1990; Ord. 1513, § 2, 1990)

15.32.030 Prohibition on Water Use.

The following water uses shall be prohibited throughout the City until such time as a declaration is officially made by the Santa Clara Valley Water District that a drought condition no longer exists within Santa Clara County.

A. No person shall waste water, including, but not limited to flooding or runoff on sidewalks or gutters.

B. No person shall use water through a hose for washing motor vehicles or recreation vehicles or other types of vehicles without a positive automatic shutdown valve on the outlet end of the hose.

C. No person shall waste water through the nonrepair of defective plumbing, sprinkler, watering or irrigation systems.

D. No restaurant shall serve water unless specifically requested by a customer.

E. No person shall use water for single pass cooling process for new building construction.

F. New landscaping to conform to City's Xeriscape Guidelines. (Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 3, 1991; Ord. 1524, § 3, 1990; Ord. 1513, § 3, 1990)

15.32.050 Emergency Suspension of Water Service.

In the event of an emergency involving broken or defective plumbing, sprinkler, watering or irrigation systems where in the opinion of the Public Works Director water is being or will be lost in considerable quantity, the City may require that the water provider immediately suspend water service without notice or hearing to any customer pending repairs. The water provider shall attempt to give notice to the customer or customers affected as soon as practical. Subject to other provisions of this chapter, service shall be restored as soon as possible. (Ord. 1622, (part), 1993; Ord. 1587, (part), 1992:

15.32.060 Violation–Penalty.

Any person who violates any provision of this chapter shall be guilty of a misdemeanor and upon conviction thereof shall be punished as provided in Chapter 1.12 of this code. (Ord. 1776, (part), 1998; Ord. 1622, (part), 1993;

Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 4.01, 1991; Ord. 1524, § 4.01, 1990; Ord. 1513, §4.01, 1990)

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City of Campbell

http://library.municode.com/HTML/16242/level2/TIT8PUPESAMO_CH8.34POWAUSRE.html

8.34.010 Purpose.

The city council finds and determines that the purposes in adopting this chapter are to wisely manage our water resources, practice voluntary efficient water use, avoid water waste and to preserve the health and safety of the people of this municipality. (Ord. 1868 §1(part), 1993).

8.34.020 Potable water use restrictions.

It shall be unlawful to make any of the following uses of potable water:

1. Water waste, consisting of flooding or runoff on sidewalks or gutters;
2. Use of water through a hose for cleaning of sidewalks, driveways, patios, parking lots, or other paved or hard surface areas, and for washing cars, buses, boats, trailers, or other vehicles without a positive automatic shutoff valve on the outlet end of the hose;
3. Water waste due to broken or defective plumbing, sprinkler, watering or irrigation systems;
4. Single-pass cooling systems installed after the effective date of the chapter. (Ord. 1868 §1(part), 1993).

8.34.030 Penalty.

(a) It is unlawful for any person, firm or corporation to violate any provision, or fail to comply with any mandatory requirement of this chapter. Except as otherwise provided in subsection (b) of this section, any entity violating any provision, or failing to comply with any mandatory requirement of this chapter is guilty of an infraction, and upon conviction shall be punished by a fine of not more than one hundred dollars.

(b) Notwithstanding any provision to the contrary, any person, firm or corporation committing any act made unlawful pursuant to subsection (a) of this section shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than one thousand dollars and/or imprisonment of not more than six months, if any of the following circumstances exists:

(1) The violation was committed willfully or with knowledge of its illegality;

(2) The violator does not cease or otherwise abate the violation after receiving notice of such violation;

(3) The violator has previously been convicted of violating the same provision of this title within one year of the currently charged violation; or

(c) Each person, firm or corporation violating any provision, or failing to comply with the mandatory requirements of this chapter shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of any provision of this chapter is committed, continued or permitted by such person, firm or corporation, and shall be punishable as provided in this section. (Ord. 1868 §1(part), 1993).

City of Saratoga

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15-47.040 Water waste prevention.

The City of Saratoga shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, nonirrigated areas, walks, roadways, or structures. Penalties for violation of these prohibitions shall be established by the City. (Ord. 71.116 § 1 (part), 1992)

The following Water Retailers are not municipalities and although they support water conservation they do not have the authority to enact an ordinance:

California Water Service Company -
<http://www.calwater.com/conservation/index.php>

California Water Service Company is located within the cities of Cupertino (see below) and Los Altos (no ordinance found).

Great Oaks Water Company - <http://www.greatoakswater.com/>

Great Oaks Water Company is covered by the City of San Jose's ordinance (see above)

The San Jose Water Company - <http://www.sjwater.com/conservation/index.jsp>

San Jose Water Company is located within the cities of San Jose (see above), Cupertino (see below), Campbell (see below), Saratoga (see below), Los Gatos (no ordinance found), and Monte Sereno (no ordinance found).

The following Water Retailers do not receive District water however their ordinances are provided for information only

Purissima Hills Water District – (does not receive District water)

http://www.purissimawater.org/images/03-01_Establishing_Rules_and_Regs_Prohibiting_Wasteful_Water_Use.pdf

Stanford University – (does not receive District water)

http://lbre.stanford.edu/sem/water_conservation

Stanford University is not a city government so it does not have the ability to pass an ordinance, however the link above outlines the Water Sustainability, Efficiency and Conservation efforts of the University.

City of Palo Alto – (does not receive District water)

[http://www.amlegal.com/nxt/gateway.dll/California/paloalto_ca/paloaltomunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:paloalto_ca](http://www.amlegal.com/nxt/gateway.dll/California/paloalto_ca/paloaltomunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:paloalto_ca)

then click on the - Title 12 Public Works and Utilities – link

Chapter 12.32 WATER USE REGULATIONS

Sections:

12.32.010 Water use regulations.

No purchaser of water from the city of Palo Alto, nor any customers of the water utility of the city of Palo Alto, shall use water or allow any other person to use water under the control of such customer or purchaser in the following ways:

(a) Potable water shall not be allowed to flood or run off into gutters: driveways, sidewalks, streets or other unlandscaped areas.

(b) By means of a hose to wash cars, boats, trailers, buses or other vehicles or to wash sidewalks, building structures, other hard-surfaced areas or parts thereof without an operating automatic shut-off valve. Use of a hose for such purposes should be avoided whenever possible.

(c) Potable water for consolidation of backfill and other nondomestic uses in construction shall not be used if other water sources such as reclaimed water are available, as determined by the director of utilities or his or her designee. Applicants for hydrant permits from the city of Palo Alto shall be deemed to have consented to restrictions on water use which may be imposed by the director of utilities or his or her designee.

(d) Any broken or defective plumbing, sprinklers, watering or irrigation systems which permit the escape or leakage of water shall be repaired or replaced as soon as possible, but no later than the date established by the director of utilities, or his or her designee, as reasonable after observation of the broken or defective system.

(Ord. [4041](#) § 1, 1991; Ord. [3964](#) § 1, 1990; Ord. [3884](#) § 2 (part), 1989)

12.32.020 Enforcement.

In addition to enforcing observed violations of this chapter by any person as a misdemeanor or an infraction, the city manager and his designated employees are authorized to enforce the provisions of this chapter against customers and water purchasers of the utility as follows:

(a) Reports of violations shall be called to the attention of the party responsible for the service connection used in the violation and shall be investigated by the utilities department personnel to the extent possible.

(b) Violations established to the satisfaction of the utilities department personnel shall result in the issuance of a written warning to the violator and the party responsible for the service connection used in the violation.

(c) A record shall be kept by the department of utilities of the city of Palo Alto of all violations.

(d) If a second violation is established to the satisfaction of the utilities department personnel, the violator or party responsible for service connection used in the violation, or either of them, shall receive a more severe written warning, advising them of the possibility that their water flow will be restricted.

(e) For any third or subsequent violation by the same violator, customer, or water purchaser, or for any willful violation, the city manager or his designee may elect to install a flow restrictor upon the service connection of the purchaser or customer at the purchaser's or customer's expense. Prior to installation of the water restrictor, the director of utilities shall give written notice to the person responsible for the service connection, which is to be restricted, of his intention to install a restrictor. The person or persons to whom notice is to be given shall have five business days from the date of service of the notice to request a hearing before the city manager or his designee in order to present any and all evidence they may have as to why a restrictor should not be installed or under what conditions it might be installed.

If a hearing is requested, the city manager or his designee shall schedule a date and time for said hearing as soon as possible after the request is filed, but not later than five business

days after the filing or such request for hearing.

At the hearing, the person whose service connection is to be restricted may offer evidence as to why the restrictor should not be installed or under what conditions it might be installed. Utilities personnel shall also be allowed to offer whatever evidence they may have as to why the restrictor should be allowed and under what conditions. The city manager or his designees shall make a determination as to whether the restrictor shall or shall not be installed and what conditions, if any, should pertain.

(f) Upon a determination to install a restrictor after hearing, or the failure of the affected party to request a hearing, the director of utilities, under whatever conditions, if any, he may deem advisable under the circumstances, may install a flow restrictor on the service connection of the customer or purchaser of water whose service connection was used in the violations observed or established and bill the costs of such installation to said customer or purchaser in accordance with the following conditions:

- (1) The first installation shall be for a period of three days;
- (2) Subsequent installations shall be for a period to be determined by the director of utilities, in an amount sufficient to accomplish the purposes of this chapter. Flow restrictors shall be installed in accordance with water utility rules and regulations and at the following rates which shall be borne by the user:

Meter Size	Installation Cost	Removal Cost
5/8" to 1"	\$25.00	\$25.00
1 1/2" to 2"	50.00	50.00
3" and larger	Actual cost	Actual cost

Actual cost will include all material, labor, equipment and overhead charges.
(Ord. [3884](#) § 2 (part), 1989)

12.32.040 Water efficient landscape ordinance.+

Pursuant to the California Water Conservation in Landscaping Act, also known as the State Landscape Model Ordinance, Government Code §§ 65591, et seq. as amended, a city is required to adopt the State Landscape Model Ordinance or equivalent local landscape water efficiency requirements that are "at least as effective" as the state ordinance in conserving water. The council has adopted requirements that are at least as effective in reducing landscaping water use, also known as outdoor water use, as well as additional requirements for existing landscapes and indoor water use in Chapter 16.14 (California Green Building Code).

(Ord. 5108 § 2, 2010)

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CVPIA Water Management Plan

December 2011

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
www.valleywater.org

