

## IMPORTANT CONTACT INFORMATION

### CITY CONTACTS

#### City of Sunnyvale

456 West Olive Ave.  
Sunnyvale, CA 94086  
Tel: (408) 730-7415  
TDD: (408) 730-7501  
Fax: (408) 730-7286  
[sunnyvale.ca.gov](http://sunnyvale.ca.gov)

#### Hours of Operation: 8 a.m. to 5 p.m., M-F

#### Environmental Services Department (Leaks, Breaks, Water Quality Questions)

(408) 730-7900

#### Utility Division (Billing)

(408) 730-7400, Residential  
(408) 730-7681, Commercial

#### Backflow and Cross- Connection Control Program

(669) 600-7322

#### SCVWD Water Conservation Hotline

(408) 630-2554

#### To report water waste

(408) 630-2000

#### SCVWD Pollution Hotline

(888) 510-5151 (24 Hours)

### WEB RESOURCES

#### Division of Drinking Water

[waterboards.ca.gov/drinking\\_water/](http://waterboards.ca.gov/drinking_water/)

#### US EPA

[water.epa.gov/drink](http://water.epa.gov/drink)

#### Department of Water Resources

[www.dwr.water.ca.gov](http://www.dwr.water.ca.gov)

#### Bay Area Water Supply and Conservation Agency

[bawsca.org](http://bawsca.org)

#### American Water Works Association

[awwa.org](http://awwa.org) or [DrinkTap.org](http://DrinkTap.org)

#### SCVWD

[valleywater.org](http://valleywater.org)

#### SFPUC

[sfwater.org](http://sfwater.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 "Public Comments" 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 Ave.  
Sunnyvale, CA 94086  
Tuesdays, 7 p.m.

A list of City Council meetings, agenda items and study issues can be obtained by visiting [sunnyvale.ca.gov](http://sunnyvale.ca.gov) or by calling the City Clerk's office at (408) 730-7483.



## 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.

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 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 USEPA Safe Drinking Water Hotline.

#### USEPA Safe Drinking Water Hotline ▶

(800) 426-4791

#### Water System Improvements

The City of Sunnyvale is continuously replacing and upgrading aging water distribution infrastructure to ensure continued reliable water supply. The improvements will enhance water quality and improve operational efficiency. In the past year, the City has replaced over 5,000 feet of water pipelines and is planning upgrades to another one of our water pumping facilities. If you have questions about an upcoming project along your street, contact us at (408) 730-7900.

#### Recycled Water Project Approved

The City has collaborated with the SCVWD, California Water Service Company, the DWR, and Apple to fund and implement an exciting new project to extend the recycled water pipeline network. As part of the project, a booster pump station and 13,300 feet of recycled water pipeline will be constructed along Wolfe Road to funnel water from Sunnyvale's water recycling facility to serve many new customers, including the new Apple Campus 2 in Cupertino. The SCVWD expects construction to begin this fall.



Last year was one of the driest years on record for many parts of California. In January 2014, Governor Brown declared a drought state-of-emergency and called on all Californians to reduce their water usage by 20%. While Sunnyvale's water use has been trending downward, we must continue to use water wisely. Sunnyvale is working to ensure a reliable water supply, and you can continue to do your part by conserving water. To learn more visit [save20gallons.org](http://save20gallons.org), [valleywater.org/drought](http://valleywater.org/drought), and [saveourwater.com](http://saveourwater.com).

The San Luis Reservoir is one of the supply reservoirs serving the SCVWD. Record low levels in this, and other supply reservoirs are prompting the State to implement water use restrictions throughout California.



## CITY OF SUNNYVALE 2014 WATER QUALITY REPORT

This report contains important information about your drinking water. Translate it, or speak 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。

この情報は重要です。翻訳を依頼してください。

이 소책자에는 식수수질 보고서의 내용을 요약한 당신의 수도물에 관한 중요한 정보가 적혀져 있습니다. 이 정보를 이해하실수 있는 분에게 번역을 부탁드립니다.

यह सूचना महत्वपूर्ण है ।  
कृपा करके किसी से :सका अनुवाद करायें ।

### 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 or exceeded water quality standards.

#### WHAT'S INSIDE ▶

[Important information about your water](#)

[Water Use Restrictions](#)

[Ways to contact the City](#)

# Protecting your water supply

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

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.

Protection begins in the watersheds. Protecting the water supply is important to ensure that water is safe from contamination and aesthetically pleasing for use. Contamination requires treatment, which increases the cost to deliver water to your tap. Here are ways that you can help protect our watershed:

- Eliminate excess use of lawn and garden fertilizers and pesticides
- Pick up after your pets
- Take used motor oil and other recyclables to the SMaRT Station ®
- Dispose of pharmaceuticals at any Sunnyvale fire station. Medications should not be flushed down drains or put in the garbage.
- Dispose of cleaners, chemicals and paints at a Household Hazardous Waste Drop-off Event
- Volunteer in your community. The Creek Connections Action Group works to protect the County's waterways. Visit [www.cleanacreek.org](http://www.cleanacreek.org).
- Participate in public meetings and forums. It allows decision-makers to hear your perspective and you to be involved in protecting your water supply.

**More information about disposal and recycling** ▶  
Call (408) 730-7262

**SMaRT Station ®**  
301 Carl Road, Sunnyvale, CA 94089  
Open daily, 8 a.m. to 5 p.m., Tel: (408) 752-8530

**Household Hazardous Waste Drop-off**  
164 Carl Road, Sunnyvale, CA 94089  
Every 3rd Saturday, 8 a.m. to 1 p.m.



## 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 the San Francisco Public Utilities Commission (SFPUC). There are also pockets of Sunnyvale customers who 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 seven 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 always working to increase flexibility in local groundwater supplies, enhance water quality, reduce operating costs, and increase reliability. Recent groundwater improvements include water well connections, 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

### The City's Drinking Water Source Assessment Program ▶

To view the City's DWSAP, visit [swap.ice.ucdavis.edu/tsinfo/tsintro.asp](http://swap.ice.ucdavis.edu/tsinfo/tsintro.asp), or call (408) 730-7510 to schedule an appointment to view it at 221 Commercial Street.

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 met the standard of 0.3 NTU or less, 95% of the time.

The Hetch Hetchy Watershed provides most of the SFPUC water supply, supplemented by the Alameda watershed. 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 2014, average fluoride levels in the treated water were maintained within a range of 0.6-1.2 mg/L as required by the State Board. Since May 2015, water has been fluoridated at the new optimum level of 0.7 mg/L.

The SFPUC actively protects the water resources entrusted to its care. Its annual update of the Hetch Hetchy Watershed Sanitary Survey evaluates the sanitary conditions, water quality, potential contamination sources and the results of watershed

management activities with partner agencies (such as the National Park Service and US Forest Service). The SFPUC also conducts sanitary surveys every five years to detect and track sanitary concerns for the Bay Area watersheds and the approved standby water sources in Early Intake Watershed, which includes Cherry Lake and Lake Eleanor. The latest 5-year surveys were completed in 2011 for the period of 2006-2010. These surveys identified wildlife, stock and human activities as potential contamination sources. They are available for review at the DDW San Francisco District office.

### More information on SFPUC ▶

Visit [sfwater.org](http://sfwater.org), or call DDW (510) 620-3474

### 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,



Dyer Reservoir, 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 also 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 [valleywater.org](http://valleywater.org)

## DROUGHT DECLARATION

In response to the ongoing drought and actions by the Governor and the State Water Board, the Sunnyvale City Council took several actions in June 2014 by declaring a Water Shortage Emergency and setting a 15% water reduction goal for 2014 as compared to 2013 use. Most recently in May 2015, following the worst snow pack on record and worsening drought conditions, the Council expanded the Water Shortage Emergency actions by calling for a 30% water reduction as compared to 2013 use, restricting watering days, and approving enforcement staffing and actions through June of 2016.



### Prohibited water use in Sunnyvale:

- Washing down sidewalks, driveways, and other paved services
- Watering outdoor landscapes in a manner that causes excess runoff into gutters, streets, or stormdrains
- Washing a motor vehicle with a hose, unless the hose is fitted with a shut-off nozzle
- Operating a fountain or decorative water feature, unless the water is part of a recirculating system
- Allowing leaking plumbing or irrigation systems to go unfixed.

- Irrigating with sprinklers is prohibited between 9 a.m. – 6 p.m. when daylight savings time is in effect. Each station is limited to no more than 15 minutes of irrigation time

### Additional City prohibitions affecting commercial businesses:

- Restaurants and other food service establishments can only serve water to customers on request
- Operators of hotels and motels must provide guests with the option to not have towels and linens laundered daily and prominently display notice of this option

### New water use restrictions and enforcement

Sunnyvale worked closely with the Water District and neighboring water retailers to implement a consistent county-wide approach to new water use reductions and restrictions. On May 12, 2015, the City Council adopted the following measures:

- Set the following irrigation schedule:
  - Even Address – Tuesday and Friday
  - Odd Address / No Address – Monday and Thursday
- Prohibited Irrigating turf or ornamental landscapes within 48 hours following measurable precipitation
- Adopted the following enforcement actions for water restriction violations:
  - First violation: written warning
  - Second violation: written warning
  - Third violation: \$250 citation
  - Forth and subsequent violations: \$500 citation

To stay up-to-date on water conservation efforts, requirements, rebate programs, and water saving tips, visit [WaterConservation.inSunnyvale.com](http://WaterConservation.inSunnyvale.com) or, the SCVWD at [valleywater.org](http://valleywater.org). Please report water waste at (408) 630-2000 or by email at [drought@valleywater.org](mailto:drought@valleywater.org).

# 2014 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 weekly throughout Sunnyvale and analyzed for a variety of regulated and unregulated contaminants. Samples are tested by the City's certified laboratory and by an independent certified laboratory using the latest testing procedures and equipment. We collect more samples than required by the State Board 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 are grouped by water source. Last year we conducted more than 20,000 tests for more than 80 parameters. We detected only 14 of these parameters, and none were detected at levels higher than the State Board 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.



Some data—although representative—were collected prior to 2014, as the State Board requires monitoring for some constituents less than once per year since the concentrations of these constituents do not vary frequently or significantly.

### More information ▶

For more information about this report or the City's water quality monitoring program, please contact:

John Ramirez  
City of Sunnyvale  
Water Operations Manager  
Tel: (408) 730-7900  
TDD: (408) 730-7501  
jramirez@sunnyvale.ca.gov

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	
<b>SOURCE WATER SAMPLING</b>										
<b>INORGANIC CHEMICALS</b>										
Aluminum	ppm	1	0.6	ND	ND	ND	ND-0.070	ND	ND	3, 4
Barium	ppm	1	2	0.11	0.10-0.13	ND	ND	ND	ND	3, 21
Fluoride	ppm	2	1	0.20	0.14-0.24	ND	ND-0.1	0.4	ND-0.8	3, 5, 6
Chromium VI (Hexavalent Chromium)	ppb	10	0.02	1.3	ND-3.6	ND	ND	ND	ND	3, 18, 19, 22
Turbidity	NTU	TT	NA	0.2	ND-1.2	0.07	0.06-0.08	[2.8] <sub>a</sub>	0.2-0.6 <sub>b</sub>	2
Nitrate	ppm	45	45	16	11-27	ND	ND-5	ND	ND	3, 7, 8
<b>DISINFECTION BYPRODUCT PRECURSORS</b>										
TOC (precursor control)	ppm	TT	NA			2.03	1.86-2.19	1.9	1.3-2.8	10
<b>MICROBIOLOGICAL</b>										
Giardia Lamblia	cyst/L	TT	(0)			ND	ND	ND	ND-0.04	1
<b>DISTRIBUTION SYSTEM SAMPLING</b>										
<b>LEAD AND COPPER RULE STUDY (SUNNYVALE 2013 AT-THE-TAP SAMPLING)</b>				<b>90th Percentile</b>			<b># of Samples Above AL</b>			
Lead	ppb	(15)	0.2	1			0 out of 53			
Copper	ppm	(1.3)	0.3	0.079			0 out of 53			
<b>DISINFECTION RESIDUALS AND BYPRODUCTS</b>				<b>Highest Location RAA</b>			<b>Range</b>			
Disinfectant Residual as Chlorine	ppm	[4]	[4]	2.17			0.01-3.3			
Total Trihalomethanes	ppb	80	NA	59.5			ND-74.8			
Haloacetic Acids	ppb	60	NA	29			ND-32			
<b>MICROBIOLOGICAL</b>				<b>Average</b>			<b>Range</b>			
Total Coliform Bacteria	% pos/month	5.0%	(0)	0.16%			0-0.7%			

SECONDARY DRINKING WATER STANDARDS (AESTHETIC STANDARDS)									
PARAMETER	Unit	MCL	Average	Range	Average	Range	Average	Range	Sources*
Aluminum	ppb	200	ND	ND	ND	ND-70	ND	ND	3, 4
Chloride	ppm	500	44	34-64	115	95-166	9	ND-15	11, 12, 14
Copper	ppm	1	0.004	ND-0.011	ND	ND	ND	ND	3, 18
Iron	ppb	300	42	ND-190	ND	ND	ND	ND	12, 15
Odor — Threshold	TON	3	ND	ND	1	1-2	ND	ND-1	13
Specific Conductance	µS/cm	1600	665	590-760	731	650-964	151	32-222	14, 16
Sulfate	ppm	500	34	23-39	76.7	56.4-111	17	0.9-32	11, 12, 15
Total Dissolved Solids	ppm	1000	380	330-450	424	360-540	81	31-120	11, 12

UNREGULATED PARAMETERS FOR UCMR <sup>3</sup>									
PARAMETER	Unit	NL	Average	Range	Average	Range	Average	Range	
Chlorate	ppb	800	81	45-130	129	95-160	314	34-740	
Chlorodifluoromethane (HCFC-22)	ppb	NS	0.52	ND-2.2	NA	NA	NA	NA	
Molybdenum	ppb	NS	1.2	ND-1.6	2	1-3	NA	NA	
Strontium	ppb	NS	404	280-500	NA	NA	NA	NA	
Vanadium	ppb	50	1.6	ND-5.2	ND	ND	NA	NA	

OTHER WATER QUALITY PARAMETERS									
PARAMETER	Unit	MCL	Average	Range	Average	Range	Average	Range	
Hardness (as Calcium Carbonate)	ppm	NS	310	290-330	149	130-178	46	7-77	
pH	Units	NS	8.4 <sub>c</sub>	7.1-9.6 <sub>c</sub>	7.7	7.6-7.8	9.3	6.9-10.2	
Sodium	ppm	NS	29	22-41	64	ND-121	10	2.4-16	
Temperature	°C	NS	18 <sub>c</sub>	10-26 <sub>c</sub>	19	14-22	NA	NA	

## Important information about your water quality

### Fluoride

Currently, all water from SFPUC is fluoridated while water from SCVWD, the City's other wholesale water provider is not. The City also 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 both. A map showing the areas is found below. **According to the Centers for Disease Control and Prevention, if a child under the age of six months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.**

### 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 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 [water.epa.gov/drink/info/lead](http://water.epa.gov/drink/info/lead).

### Nitrate

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants younger 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.

### Chromium-6

On July 1, 2014, the new MCL of 10 ppb became effective for Chromium-6. Until then, chromium-6 was regulated under the 50 ppb primary drinking water standard for total chromium, which was established in California in 1977. The City is pleased to report that there have been no detections exceeding the new MCL.

### Disinfection

The Sunnyvale system distributes water disinfected with chloramine and well water that is tested but not treated. Chloramine, a combination of chlorine and ammonia, 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. The water provided by SFPUC and SCVWD is disinfected with chloramines, which can affect dialysis treatment. Residents on home dialysis should contact their physicians to discuss the impact on their treatment. The Western Pacific Renal Network, at (415) 897-2400, can provide more information about chloramines and dialysis. Fish and aquarium owners should check with their local pet stores for information on chloramine removal.

### Hardness

Water hardness is determined mainly by the presence of calcium and magnesium salts. Although hard water does not pose a health risk, it may be considered undesirable for other reasons. Some benefits of water softening are reductions in soap usage, longer life for water heaters and a decrease in encrustation of pipes; disadvantages are an increase in sodium intake, an increase in maintenance and servicing and potential adverse effects on salt-sensitive plants. To convert hardness from ppm to grains per gallon, divide by 17.1. A hardness scale is provided below for your reference.

Hardness Classification	Grains per Gallon	mg/L or ppm
Soft	less than 1.0	less than 17.1
Slightly hard	1.0-3.5	17.1-60
Moderately hard	3.5-7.0	60-120
Hard	7.0-10.5	120-180
Very hard	over 10.5	over 180

## HOW TO READ THIS CHART

### DEFINITIONS OF KEY TERMS

**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 the State Board.

**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 the State Board for chemicals in drinking water that lack 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.

**Regulatory Action Level (AL).** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**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 disinfection 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 a measure of the clarity of the water and is monitored because it is a good indicator of water quality and the effectiveness of a 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.

**UCMR.** Unregulated Contaminant Monitoring Rule requires monitoring for contaminants not currently regulated. This monitoring provides a basis for future regulatory actions to protect public health.

**Waiver.** State permission to decrease the monitoring frequency for a particular contaminant.

### ABBREVIATIONS

°C	Degrees Celsius
CU	Color unit
DDW	Division of Drinking Water
Max	Maximum
NA	Not applicable
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
RAA	Running annual average
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
TOC	Total organic carbon
TON	Threshold odor number
USEPA	United States Environmental Protection Agency

### NOTES

- <sup>a</sup> Single-highest sample result in 2014
- <sup>b</sup> Range of monthly averages
- <sup>c</sup> Levels in the distribution system

### \* TYPICAL SOURCES IN DRINKING WATER

- 1 Naturally present in the environment
- 2 Soil runoff
- 3 Erosion of natural deposits
- 4 Residue from some surface water treatment processes
- 5 Water additive that promotes strong teeth
- 6 Discharge from fertilizer and aluminum factories
- 7 Runoff and leaching from fertilizer use
- 8 Leaching from septic tanks and sewage
- 9 By-product of drinking water disinfection
- 10 Various natural and man-made sources
- 11 Runoff from natural deposits
- 12 Leaching from natural deposits
- 13 Naturally-occurring organic materials
- 14 Seawater influence
- 15 Industrial wastes
- 16 Substances that form ions when in water
- 17 Internal corrosion of household plumbing systems
- 18 Leaching from wood preservatives
- 19 Discharges from industrial manufacturers
- 20 Drinking water disinfectant added for treatment
- 21 Discharges of oil drilling wastes and from metal refineries
- 22 Discharge from mines and chemical manufacturers

### 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.

