

2025 Report on Water Quality Relative to Public Health Goals (2025 Public Health Goals Report)

City of Santa Clara Water and Sewer Utilities

**for Compliance with California Health and Safety Code Section
116470(b)**

TABLE OF CONTENTS

1.	BACKGROUND	3
	MCLs, PHGs, and MCLGs Defined:	4
	City of Santa Clara’s Water Quality Data:	5
2.	CONSTITUENTS DETECTED THAT EXCEED A PHG OR MCLG:	5
	Arsenic 5	
	Hexavalent Chromium	7
	Perchlorate.....	8
	Recommendations for Further Actions:	9
	ATTACHMENT 1	10
	MCLs, DLRs, and PHGs	10
	ATTACHMENT 2	11
	California Health and Safety Code	11
	ATTACHMENT 3	12
	City of Santa Clara Consumer Confidence Reports.....	12

1. BACKGROUND

The California Health and Safety Code Section 116470(b) specifies that water utilities serving more than 10,000 connections prepare a brief written report every three years that documents detections of any constituents that exceed a Public Health Goal (PHG) in the preceding three years. PHGs are non-enforceable goals established by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, the water suppliers are to use the Maximum Contaminant Level Goals (MCLGs) adopted by the United States Environmental Protection Agency (USEPA). Only constituents that have both a California primary drinking water standard and a PHG or MCLG as of December 31, 2024, are to be addressed in the report.

The City of Santa Clara last completed its PHG Report in 2022. PHGs are established goals by the OEHHA to protect public health. When OEHHA has not adopted a PHG for a particular constituent, the Safe Drinking Water Act directs water suppliers to use the MCLGs previously adopted by the USEPA, if available. PHGs and MCLGs are non-enforceable goals.

This 2025 PHG Report addresses constituents that:

- Have a California primary drinking water standard, or Maximum Contaminant Level (MCL), and
- For which either a PHG or MCLG has been established and exceeded in Santa Clara's water quality monitoring data.

Pursuant to the Safe Drinking Water Act, this report lists all constituents detected in the City's water supply from 2022 through 2024 at levels exceeding an applicable PHG or MCLG. The following are included:

- The numerical public health risk associated with the MCL and PHG or MCLG
- The category or type of risk to health that could be associated with each constituent,
- The best treatment technology available that could be used to reduce the constituent level, and
- An estimate of the cost to install that treatment if it is appropriate and feasible

The Association of California Water Agencies (ACWA) formed a workgroup that prepared a guidance for water utilities to prepare required PHG reports. The 2025 ACWA guidance was used in the preparation of this report. No guidance was available from state regulatory agencies.

MCLs, PHGs, MCLGs, and DLRs Defined:

The USEPA and the State Water Resources Control Board (SWRCB) establish MCLs at very conservative levels to provide protection to consumers against all risks, excluding those of very low to negligible risk. In other words, MCLs are the regulatory definition of what is “safe” for drinking water.

MCLs are legal limits for substances in drinking water. They are set by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB). These limits are designed to protect people from all but very tiny risks while still being practical for water systems to meet.

There are also “health-based goals” called PHGs and MCLGs. PHGs are set by the California Office of Environmental Health Hazard Assessment (OEHHA), and MCLGs are set by the USEPA. These goals describe the level of a substance in drinking water where scientists expect no health effects, even over a lifetime. Determining health risks at these low levels is often theoretical, not possible in real-world conditions, and based on multiple assumptions.

Because PHGs and MCLGs are based only on theoretical health risk, they are often set much lower than MCLs. Sometimes PHGs and MCLGs are set so low that today’s testing equipment cannot even measure them, or they may be set at zero, which is not possible to reach in real-world conditions.

DLRs stands for detection limits for the purposes of reporting and are set by the SWRCB. They are the minimum level a substance can be detected in drinking water. Based on the current laboratory technology available now, it would not be possible to detect substances below the DLR. Meeting DLRs means that SWRCB can be confident about the accuracy of the substances’ quantity reported by the analytical lab. The DLR is typically set equal to or below MCLs but is often above the contaminant public health goal (PHGs). Currently, 92 existing MCLs have 49 DLRs set above their corresponding PHGs.

Unlike MCLs, PHGs and MCLGs are not enforceable by law. They do not take into account practical factors such as how easily a substance can be detected, what treatment methods exist, or how much those treatments cost. MCLs, on the other hand, balance health protection with what is technically and financially achievable for water systems.

City of Santa Clara’s Water Quality Data:

The City of Santa Clara’s Water Utility collected water quality data from 2022 through 2024 to check compliance with state and federal drinking water standards. These results were used in preparing this report.

We also share this information every year in our Consumer Confidence Report (CCR). The CCR is mailed in June to all customers who receive a utility bill. It summarizes water quality data collected from January through December of the previous year and is printed as a newspaper-style publication for easy reading.

Best Available Treatment (BAT) Technology and Cost Estimates:

Both the USEPA and SWRCB identify Best Available Technologies (BATs). These are the most effective methods for reducing contaminants in drinking water, so they meet the legal standards, called Maximum Contaminant Levels (MCLs).

However, no agency has developed BATs that can reliably remove substances to the extremely low levels set by PHGs or MCLGs. In many cases, technology to reach those goals does not exist.

Estimating the cost of treatment at such very low levels is also highly uncertain. Any figures would be mostly theoretical and may not justify spending significant public funds or staff time. In addition, trying to further reduce one substance to extremely low amounts could unintentionally affect other parts of water quality.

2. CONSTITUENTS DETECTED THAT EXCEED A PHG OR MCLG:

The City detected arsenic, hexavalent chromium, and perchlorate in the distribution system, or source water for the distribution system, at levels above the applicable PHG or MCLG. This report includes any PHG or MCLG that was exceeded in one or more of our drinking water sources.

Arsenic

Arsenic is a substance that occurs naturally in rocks and soil, but it can also get into water from industrial runoff. It is considered a carcinogen (a substance that can increase the risk of cancer).

The PHG for arsenic, set by the OEHHHA, is 0.004 parts per billion (ppb). This level is so low that today's testing equipment cannot detect it. The current detection limit is at or above 2.0 ppb.

The MCL, which is the enforceable standard set by the USEPA and the SWRCB, is 10.0 ppb. Drinking water at the PHG level for a lifetime is estimated to carry a cancer risk of about 1 in 1,000,000, while drinking water at the arsenic MCL level carries an estimated risk of about 2.5 in 1,000 (or 5 in 2,000).

All the City of Santa Clara's water sources meet the arsenic MCL, meaning our water complies with state and federal safety standards, and there are no harmful effects to residents.

Table 1: Summary of Arsenic Detected

2022 to 2024 Arsenic Results		
Range of Results (ppb)	MCL (ppb)	PHG (ppb)
ND – 2.2	10	0.004

There are several treatment methods that can help remove arsenic from drinking water. The most common options include blending, granular ferric oxide (GFO) adsorption, coagulation and filtration, ion exchange, and reverse osmosis (RO).

To look at potential costs, this report used RO as an example, based on cost estimates in dollars per 1,000 gallons treated ((\$/1,000 gal. treated) from ACWA guidance. RO is often chosen because it is also identified as the Best Available Technology (BAT) for several other inorganic chemicals, meaning it can treat more than one substance at the same time.

Reverse osmosis is a highly effective and widely used treatment method for both drinking water and wastewater. It works by pushing water through a special membrane under high pressure. The membrane lets water molecules pass through but holds back other substances. This process produces two streams: clean treated water and a smaller amount of concentrated wastewater that contains the removed contaminants.

Table 2: Summary of Arsenic Treatment Cost

Arsenic Treatment Cost		
Price (\$/1,000 gallons treated) *	Total Estimated Cost (\$ in Millions)	Risk From No Treatment
\$2.46 - \$8.99	\$8.5 to \$31.2	No Risk

*2025 ACWA Guidance

Using RO to remove arsenic also produces wastewater and byproducts that must be handled safely, which adds to the overall cost. Even though RO is considered the BAT for meeting the legal limit MCL, it may not be able to reach the much lower PHG for arsenic.

Another challenge is that today's laboratory methods cannot measure arsenic at concentrations as tiny as the PHG. This means that, even if treatment could reduce levels that far, there would be no way to confirm that the PHG had been met.

Costs would also increase because each of the City's 20 groundwater wells would need its own treatment unit. Installing and maintaining many small units is usually more expensive than using one large unit at a central location.

Because Santa Clara's drinking water already meets both state and federal standards for arsenic, there are currently no plans to install additional treatment systems. Results

for arsenic are provided in the water quality tables published in the City's 2022, 2023, and 2024 CCRs as documentation of compliance with the Safe Drinking Water Act.

Hexavalent Chromium

Hexavalent chromium can enter drinking water when it leaches from natural deposits in rocks and soil. Because it may increase the risk of cancer, OEHHA set a PHG for hexavalent chromium at 0.02 parts per billion (ppb). At that level, the estimated lifetime cancer risk is about one in one million.

The enforceable MCL standard was set by the SWRCB on October 1, 2024, at 10 ppb. Drinking water at the MCL level carries a slightly higher estimated lifetime cancer risk of about five in ten thousand.

The PHG is far below today's laboratory detection limit of 0.1 ppb, which means it cannot currently be measured. All of Santa Clara's water sources meet the state MCL for hexavalent chromium and are in compliance with drinking water standards, and there are no harmful effects to residents.

Table 3: Summary of Hexavalent Chromium Detected

2022 to 2024 Hexavalent Chromium		
Range of Results (ppb)	MCL (ppb)	PHG (ppb)
ND – 4.3	10	0.02

The identified BAT methods to remove hexavalent chromium from drinking water, have been identified by experts. The main method is the reduction, coagulation, and filtration treatment process. This treatment technology has been tested and shown to lower hexavalent chromium to about 1 ppb or less.

Cost estimates for the reduction, coagulation, and filtration treatment process come from the 2025 ACWA guidelines, which provide typical costs per 1,000 gallons of water treated.

Table 4: Summary of Hexavalent Chromium Treatment Cost

Hexavalent Chromium Treatment Cost		
Price (\$/1,000 gallons treated)*	Total Estimated Cost (\$ in Millions)	Risk From No Treatment
\$2.14 - \$13.38	\$7.4 to \$46.5	No Risk

*2025 ACWA Guidance

While the reduction, coagulation, and filtration treatment process can remove hexavalent chromium from drinking water, it comes with several challenges. This process creates toxic byproducts that must be handled and disposed of safely, which increases operating costs.

Even though this method can greatly lower hexavalent chromium levels, it cannot meet the very low PHG of 0.02 ppb. Current laboratory technology also cannot measure such tiny amounts, making it impossible to confirm PHG compliance.

Because Santa Clara's water already meets both state and federal standards for hexavalent chromium, the City has no plans to install additional treatment. Test results are included in the water quality tables published in the City's 2022, 2023, and 2024 CCRs as proof of compliance with the Safe Drinking Water Act.

Perchlorate

Perchlorate can get into water from certain industrial activities, such as making rocket fuel, propellants, and explosives. Some of this contamination comes from historical aerospace or similar operations.

The PHG for perchlorate, set by OEHHA, is 1 ppb. This goal is based on perchlorate's ability to interfere with normal thyroid function, which helps regulate hormones. Disruption of thyroid activity can affect growth and brain development, especially in fetuses and infants.

The enforceable MCL standard is 6 ppb. All of Santa Clara's water sources are well below this limit and fully comply with state and federal standards for perchlorate, and there are no harmful effects to residents.

Table 5: Summary of Perchlorate Detected

2022 to 2024 Perchlorate Results		
Range of Results (ppb)	MCL (ppb)	PHG (ppb)
ND – 1.1	6	1

The identified BAT methods for removing Perchlorate from drinking water include ion exchange (IX) and fluidized bed reactors (FBR). Ion exchange is one of the most used and cost-effective methods for perchlorate removal, shown in Table 6.

Table 6: Summary of Perchlorate Treatment Cost

Perchlorate Treatment Cost		
Price (\$/1,000 gallons treated)*	Total Estimated Cost (\$ in Millions)	Risk From No Treatment
\$0.67 - \$1.47	\$2.3 to \$5.1	No Risk

*2025 ACWA Guidance

Ion exchange is an effective way to lower perchlorate levels in drinking water. However, this process creates waste that must be handled and disposed of according to environmental regulations, which adds extra steps and cost to treatment. Over time, the resin used in ion exchange can lose efficiency, meaning it may not always reduce perchlorate to the very low PHG of 1 ppb.

Because Santa Clara's water already meets both state and federal standards for perchlorate, the City has no plans to install additional treatment. Test results for perchlorate are shown in the water quality tables in the City's 2024 CCR as proof of compliance with the Safe Drinking Water Act.

Please note: the state's Detection Limit for Reporting (DLR) for perchlorate changed from 2 ppb to 1 ppb on January 1, 2024. For this reason, perchlorate detections were not listed in the 2022 or 2023 CCRs, but they are included in the 2024 report.

Recommendations for Further Actions:

The City of Santa Clara's drinking water meets all state and federal standards set by the SWRCB and the USEPA. These standards are designed to protect public health.

Reducing the levels of the substances identified in this report even further below what the state already considers "safe drinking water" would require very expensive treatment systems. In many cases, the technology may not be able to reach the extremely low levels set by PHGs or MCLGs or even confirm that those levels had been achieved.

The cost of installing and operating these treatments would be passed on to customers, with little or no additional health benefit. The water is well within the limits that ensure it is safe to drink, and further reductions would provide only minimal, if any, measurable improvement.

Because of these factors, the City is not proposing any new treatment at this time. Santa Clara will continue to monitor water quality and ensure that all drinking water standards set to protect public health are consistently met.

ATTACHMENT 1

MCLs, DLRs, and PHGs

Table 7: Summary of Arsenic

Constituent	MCL	DLR	PHG
Arsenic	10 ppb	2 ppb	0.004 ppb

Table 8: Summary of Hexavalent Chromium

Constituent	MCL	DLR	PHG
Hexavalent Chromium	10 ppb	0.1 ppb	0.02 ppb

Table 9: Summary of Perchlorate

Constituent	MCL	DLR	PHG
Perchlorate	6 ppb	1 ppb	1 ppb

MCL = Maximum Contaminant Level

DLR = Detection Limit for the Purpose of Reporting

PHG = Public Health Goal

ppb = parts per billion

Source: California State Water Resources Control Board: Comparison of MCLs and PHGs for Regulated Contaminants in Drinking Water

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.html

Last Update: August 20, 2024

ATTACHMENT 2

California Health and Safety Code

Section §116470. Public Health Goal Report

- (b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:
 - (1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.
 - (2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.
 - (3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief plainly worded description of these terms.
 - (4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely at its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.
 - (5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.
 - (6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.

ATTACHMENT 3

City of Santa Clara Consumer Confidence Reports:

- Consumer Confidence Report 2022
- Consumer Confidence Report 2023
- Consumer Confidence Report 2024

2022 Water Quality Consumer Confidence Report

Published June 2023

The City of Santa Clara is committed to providing our customers 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 (report). It contains the latest water quality monitoring results obtained through the end of calendar year 2022. 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 State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.



**Report
Contains Water
Quality Monitoring
Results**

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 over 100 potential contaminants and 48 other parameters, most 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. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Due to regulatory monitoring schedules, some data, though representative, are more than one year old.

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, and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water Must Meet Standards

The quality of drinking water is carefully regulated by the Federal Government. In 1974, Congress passed the Safe Drinking Water Act, requiring the 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 State Water Resources Control Board, Division of Drinking Water.

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.

It is important to the City of Santa Clara 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.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can share access to the report at SantaClaraCA.gov/WaterQualityReport and post in a public place or distribute paper copies by hand or mail. Paper copies of the report are available for free at City Hall, City Libraries and the Senior Center, or by e-mailing water@santaclaraca.gov or calling 408-615-2000 to request a paper copy.



Source Water Information

The City of Santa Clara has three separate sources of drinking water. These sources are used interchangeably or are blended together. Altogether these sources provide an average of 15 million gallons of water per day to the homes, businesses, industries and institutions of Santa Clara. In 2022, about 39% of our water was treated surface water purchased from the Santa Clara Valley Water District (Valley Water), imported from the Sacramento-San Joaquin Delta, and from the San Francisco Public Utility Commission's (SFPUC) Hetch-Hetchy Reservoir, imported from the Sierra Nevada Mountains.

Water purchased from Valley Water serves primarily the southwesterly portion of the City. SFPUC Hetch-Hetchy water typically serves the area north of Highway 101. The remaining 61% is pumped from the City's system of 19 active wells serving the rest of Santa Clara. The map shows the general areas served by the different water sources.

CITY WELLS

The majority of water consumed in the City of Santa Clara is pumped from the City's system of deep wells. Well water is pulled up from groundwater (water that is located in aquifers which are waterfilled spaces between sand, gravel, and silt deep in the ground). Aquifers are replenished by rainwater that infiltrates down from the land surface.

HETCH HETCHY SYSTEM

The City purchases water from the Hetch Hetchy Reservoir. To meet drinking water standards for consumption, all surface water supplies including the upcountry non-Hetch Hetchy sources (UNHHS) undergo treatment by the San Francisco Regional Water System (SFRWS) before it is delivered. Water from Hetch Hetchy Reservoir is exempt from federal and state filtration requirements but receives

the following treatment: disinfection using ultraviolet light and chlorine, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation of regulated disinfection byproducts. Water from local Bay Area reservoirs in Alameda County and UNHHS is delivered to Sunol Valley Water Treatment Plant (SVWTP); whereas water from local reservoirs in San Mateo County is delivered to Harry Tracy Water Treatment Plant (HTWTP). Water treatment at these plants consist of filtration, disinfection, fluoridation, optimum corrosion control, and taste and odor removal.

The SFRWS conducts watershed sanitary surveys for the Hetch Hetchy source annually and for non-Hetch Hetchy surface water sources every five years. The latest sanitary surveys for the non-Hetch Hetchy watersheds were completed in 2021 for the period of 2016-2020. All these surveys, together with SFRWS's stringent watershed protection management activities, were completed with support from partner agencies including National Park Service and US Forest Service. The purposes of the surveys are to evaluate the sanitary conditions and water quality of the watersheds and to review results of watershed management activities conducted in the preceding years. Wildfire, wildlife, livestock, and human activities continue to be the potential contamination sources. You may contact the San Francisco District office of the State Water Resources Control Board's Division of Drinking Water (SWRCB) at 510-620-3474 for the review of these reports.

VALLEY WATER

Valley Water provides treated surface water to local municipalities and private water retailers who deliver the water directly to homes and businesses in Santa Clara County. Valley Water's surface water is mainly imported 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. Calero Reservoir is Valley Water's

local water source. Water from imported and local sources is pumped to and treated at three water treatment plants located in Santa Clara County.

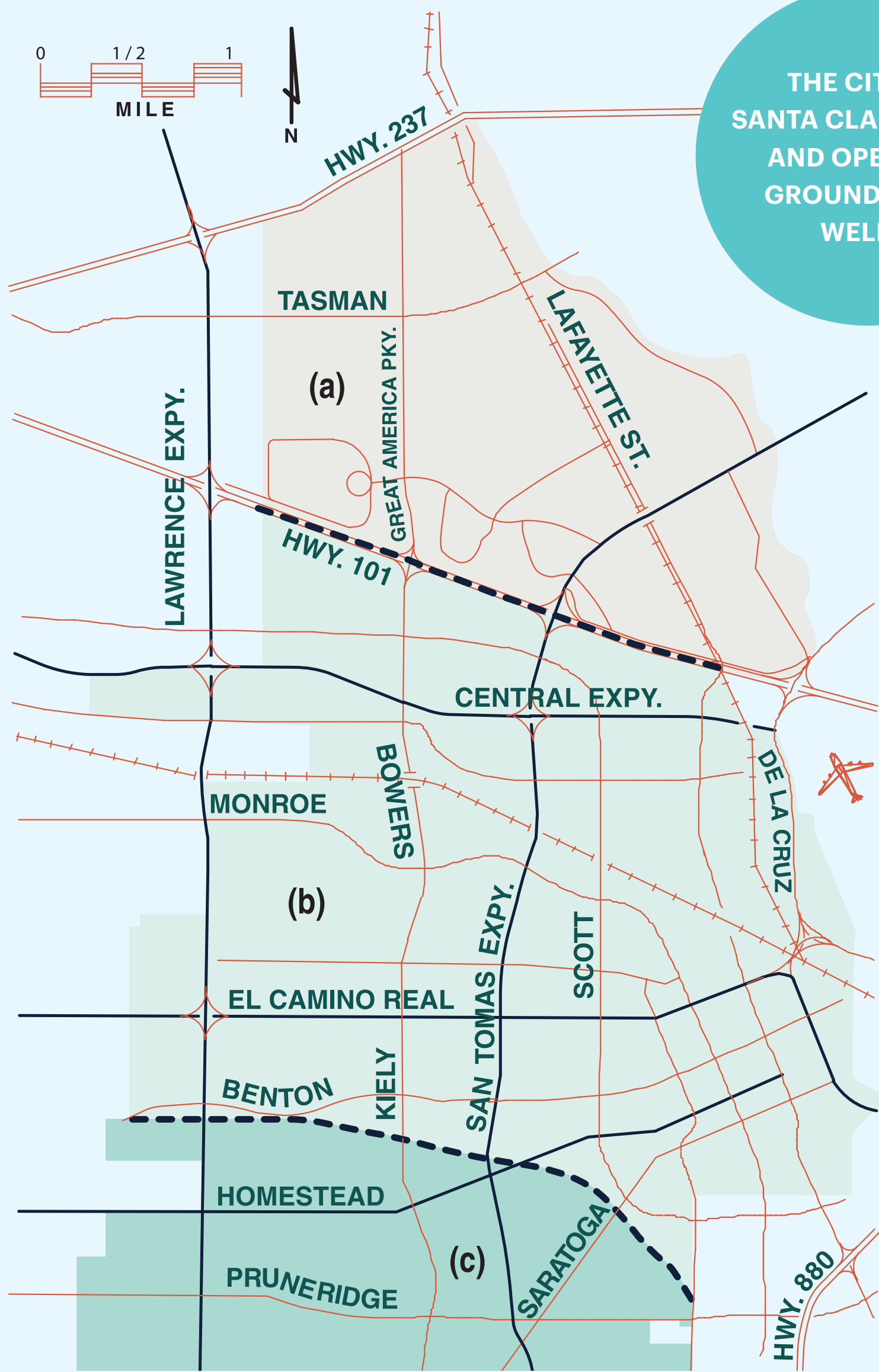
Currently, Valley Water is unable to utilize Anderson Dam for local water storage due to the rehabilitation of Anderson Dam, and the Anderson Dam Seismic Retrofit Project which will improve public safety and restore operational capacity. This project will take 10 years to complete.

Valley Water'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 open space areas. In addition, local sources are also vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in Valley Water's treated water. The water treatment plants provide multiple barriers for physical removal of contaminants and disinfection of pathogens. For more information, visit Valley Water's website at www.valleywater.org.

WATER SYSTEM IMPROVEMENTS

In an effort to continually maintain a high level of service and supply quality potable water to our customers, the City embarked on several capital improvement projects to our water system. In March 2022, three water tanks were rehabilitated with seismic and safety upgrades, recoated interior and exterior of the tanks and added cathodic protection and tank mixers. These tanks store 13.2 million gallons of water, enough water to meet the entire City's demand for one average spring day. Additionally, the City performs the design and construction of water main replacements and rehabilitation of ground water wells.

City of Santa Clara, California



a Blend of SFPUC Hetch Hetchy System and Groundwater

b City of Santa Clara Groundwater

c Blend of Valley Water Treated Surface Water and Groundwater

Source water boundaries are approximate

	UNIT	MCL	State PHG/ Fed (MCLG)	analysis for City SC Well Water range	average	analysis for VALLEY WATER range	average	analysis for HETCH HETCHY range	average or [max]	Common Sources of:
Primary Standards For Source Water Sampling:										
MICROBIOLOGICAL										
giardia lamblia	cyst/L	TT	0	NA	NA	NA	NA	0 - 0.04	0.01	naturally present in environment
RADIOACTIVITY										
Gross Alpha	pCi/L	15	(0)	ND	ND	NT	NT	ND	ND	erosion of natural deposits
INORGANIC CHEMICAL										
Barium	PPM	1	2	ND - 0.12	ND	ND	ND	ND	ND	erosion of natural deposit/oil drilling
Fluoride	PPM	2	1	0.15 - 0.22	0.18	ND - 0.13	ND	ND - 0.8	0.3 ⁽¹⁾	water additive/erosion of natural deposits
Nitrate (as Nitrogen)	PPM	10	10	1.1 - 5.2	3.7	ND - 0.7	0.4	ND	ND	erosion of natural deposit/runoff/leaching
Secondary Standards: "Consumer Acceptance Contaminent Levels"										
Chloride	PPM	500	NA	40 - 68	53	71 - 95	83	< 3 - 15	8.7	runoff/leaching natural deposits/seawater
Color	UNITS	15	NA	ND	ND	ND - 5	2	< 5 - 5	< 5	naturally occurring organic material
Iron	PPB	300	NA	ND	ND	< 20	<20	< 6 - 24	11	leaching from natural deposits/ind. wastes
Odor	UNITS	3	NA	ND	ND	1	1	ND	ND	naturally occurring organic material
Foaming Agents (MBAS)	PPB	500	NA	ND-58	19	< 0.10	< 0.10	ND	ND	Municipal and ind. waste discharges
Sp. Conductance	uS/cm	1600	NA	609 - 782	681	562 - 626	581	37 - 210	140	subst. forming ions/seawater intrusion
Sulfate	PPM	500	NA	34 - 50	41	50 - 74	65	1.1 - 29	15	runoff/leaching natural deposits/ind. waste
Tot.Dissolved Solids	PPM	1000	NA	384 - 460	417	308 - 362	335	< 20 - 104	61	runoff/leaching from natural deposits
Turbidity	NTU	5	NA	ND - 0.43	0.2	0.01 - 0.28	0.06	0.2 - 0.4 ⁽²⁾	[3.4]	soil runoff
Consumer Information										
pH	UNITS	NS	NS	7.5 - 9.5	8.0	7.5 - 8.0	7.8	8.2 - 9.6	9.2	
Alkalinity (as CaCO3)	PPM	NS	NS	191 - 287	239	61 - 78	73	7.1 - 166	41	
Ammonia (NH3-N)	PPM	NS	NS	NA	NA	0.44 - 0.55	0.50	NA	NA	
Bicarbonate Alkalinity (as HCO3)	PPM	NS	NS	191 - 287	239	74 - 95	86	NA	NA	
Boron	PPB	NS	NS	NA	NA	126 - 182	163	28 - 105 ⁽³⁾	56	
Bromide	PPB	NS	NS	NA	NA	ND - 160	78	ND	ND	
Calcium (as Ca)	PPM	NS	NS	71 - 90	84	17 - 25	23	3.2 - 15	9.3	
Chlorate	PPB	NS	NS	NA	NA	96 - 221	150	45 - 650	147	
Hardness	PPM	NS	NS	250 - 320	296	92 - 122	114	9.1 - 49	32	
Hexavalent Chromium	PPB	NS	0.02	1.0 - 2.5	1.7	< 1.00	< 1.00	0.22 - 0.27	0.25	
Magnesium	PPM	NS	NS	18 - 24	21	12 - 15	14	0.2 - 4.2	2.9	
Phosphate	PPM	NS	NS	NA	NA	1.02 - 1.17	1.08	ND	ND	
Potassium	PPM	NS	NS	1.2 - 1.5	1.3	3.6 - 4.6	4.1	0.3 - 1	0.7	
Silica	PPM	NS	NS	NA	NA	7 - 14	11	5 - 5.9	5.5	
Sodium	PPM	NS	NS	24 - 32	27	65 - 79	71	3.5 - 21	14	
Strontium	pCi/ L	NS	NS	NA	NA	NA	NA	16 - 159	79	
Temperature	Deg. C	NS	NS	11 - 26	19	14 - 22	19	NA	NA	
Total Organic Carbon	PPM	NS	NS	NA	NA	1.5 - 3.0	2.3	1.3 - 3.9	2.3	
Vanadium	PPB	NS	NS	NA	NA	2 - 3	2	NA	NA	
Primary Standards As Measured In City Of Santa Clara Distribution System:										
	Units	MCL	State MCL (Fed PHG)	Range	Average	Common Sources of:				
MICROBIOLOGICAL										
Total Coliform	% pos (+)	5.00%	(0)	0 - 0.1%	< 5%	naturally present in environment				
Fecal Coliform and E.coli ⁽³⁾	# of pos (+)	0	0	0	0	human and animal fecal waste				
DISINFECTION BYPRODUCTS, RESIDUALS, PRECURSORS										
Trihalomethanes	PPB	80	NA	ND - 57	[54.8]	byproduct of drinking water disinfection				
Haloacetic Acids	PPB	60	NA	ND - 39	[37.8]	byproduct of drinking water disinfection				
Chlorine residual	PPM	4	4	0.0 - 3.9	1.03	drinking water disinfectant				
INORGANIC CHEMICAL as measured at 52 Residential Taps in 2022:										
Copper	PPM	AL = 1.3	0.3	90th percentile = 0.47 ppm		Number Exceeded = 0		corrosion of plumbing systems		
Lead	PPB	AL = 15	0.2	90th percentile = ND		Number Exceeded = 0		corrosion of plumbing systems		
SCHOOLS REQUESTING LEAD TESTING IN 2018: 33 Schools (172 samples taken)										
Lead	PPB	AL = 15	0.2	90th percentile = ND		Number Exceeded = 1 ⁽⁴⁾		corrosion of plumbing systems		
Unregulated Contaminants As Measured In City Of Santa Clara Distribution System:										
	Units	Notification Level		Range	Average					
Total Haleoacetic Acids (9)	PPB	NA		ND - 58	23.6					

City of Santa Clara

WATER QUALITY TABLE

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.

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.

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.

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, 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.

UNREGULATED CONTAMINANTS = Unregulated contaminant monitoring helps EPA and State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated. The list of unregulated contaminants to monitor is updated every four years by the EPA.

pCi/L = picocuries per liter (a measure of radioactivity)

PPM = Parts Per Million

PPB = Parts Per Billion

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

NTU = Nephelometric Turbidity Unit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.

uS/cm = microSiemens per centimeter

NA = not applicable or available

ND = not detected

NS = no standard

Copper and Lead Tap Monitoring was performed at 52 residential taps in September 2022.

HARDNESS = the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

SODIUM = refers to the salt present in the water and is generally naturally occurring.

Attention

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

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

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

この報告書には上水道に関する重要な情報が記されて
おります。翻訳を御依頼なされるか、内容をご理解なさっ
ておられる方にお尋ね下さい。

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。

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Attencion: Este informe contiene informacion muy
importante sobre su agua beber. Traduzcalo o hable con
alguien que lo entienda bien.



Water Quality Monitoring

INFORMATION ABOUT THE DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM

The City completed a Drinking Water Source Assessment and Protection (DWSAP) Program for the groundwater sources. The DWSAP was completed in August 2002 and submitted to the State Water Resources Control Board 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 watercompliance@santaclaraca.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.

LEAD

There have been no exceedances 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 plumbing 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/lead>.

"NITRATES" - INFORMATION ABOUT NITRATES IN GROUNDWATER RESOURCES

Nitrate in drinking water at levels above 10 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 10 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.

PFAS

Perfluoroalkyl and Polyfluoroalkyl substances, collectively known as "PFAS" are a group of chemicals that have been widely used in industrial applications and consumer products such as carpets, clothing, furniture fabrics, paper packaging for food, firefighting foams, and other materials including waterproof/stain resistant/ nonstick cookware. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two common types of PFAS. The City has completed monitoring for PFAS compounds at select well sites based on proximity to a potential source of contamination (airports which are known to have used aqueous film foaming agents for fire suppression and training). No PFAS compounds have been detected during monitoring. In October 2021, the City received a waiver for PFAS monitoring because PFAS was not detected in all collected samples.

Some Santa Clara Water is Fluoridated

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.

The water purchased by the City from the SFPUC is fluoridated, while water from Valley Water is not 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. Fluoridated water from SFPUC is blended with well water. Refer to the map that 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. In the future, Valley Water plans to add fluoridation to the Rinconada Water Treatment Plant which services the southern portion of Santa Clara. Fluoridation of the remaining water sources in the City would require installation of fluoride injecting equipment at each of the City's 19 active wells. 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.

Contact your health provider if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the CDC website www.cdc.gov/fluoridation or the State Water Board website https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html.

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, immuno-compromised people, infants, small children, and the elderly are at greater risk of developing life-threatening illness.

The water purchased by the City from the 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 California Department of Public Health (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.

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, ponds, 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 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 resulting 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 State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that 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. 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.

WATER CONSERVATION

Due to improved drought conditions and record snow survey conducted by the Department of Water Resources, on March 24, 2023, Governor Newsom issued an Executive Order ending the State of California’s voluntary 15% water conservation target. In response to the improved water supply conditions, the Governor’s Executive Order and City water suppliers, Valley Water and San Francisco Public Utilities Commission rescinding the drought emergency, City of Santa Clara’s Council also rescinded the local drought emergency on May 9, 2023. However, the State Water Resources Control Board conservation emergency regulations still remain in place and Valley Water is also maintaining a 15% voluntary conservation requirement. Therefore, the City continues to maintain a 15% voluntary conservation and other water conservation measures. We must permanently adopt the drought adaptations we have made, making them part of a conservation mindset and lifestyle that sustains Santa Clara regardless of California’s weather fluctuations.

For Additional Information On Water Quality

City of Santa Clara

1500 Warburton Ave.
Santa Clara, CA 95050
408-615-2200

SantaClaraCA.gov

Water Utility

1500 Warburton Ave.
Santa Clara, CA 95050
Office hours: 8 a.m.–5 p.m.,
Monday-Friday
408-615-2000

Water Billing Questions

408-615-2300

Water Conservation

[SantaClaraCA.gov/
WaterConservation](http://SantaClaraCA.gov/WaterConservation)

Water Quality Report Questions

Diane Asuncion
408-615-2000
watercompliance@santaclaraca.gov

Water Emergencies

408-615-2000 Monday-Friday,
8 a.m.-5 p.m.
408-615-5640 other days and times

Valley Water Water Conservation

ValleyWater.org/watersavingsorg
408-630-2554 – Water Conservation
Hotline and Rebate Information

*Sign up for a free Water-Wise House
Call from Valley Water by calling
1-800-548-1882*

Resources

If you would like to learn more about drinking water quality, treatment and regulation, contact these organizations:

American Water Works Association

AWWA.org

State Water Resources Control Board,
Division of Drinking Water

www.waterboards.ca.gov/drinking_water/programs/index.html

United States Environmental
Protection Agency

water.epa.gov/drink

San Francisco Public Utilities
Commission, Water Quality Bureau

SFWater.org

Valley Water

ValleyWater.org

Water Education Foundation

WaterEducation.org

Water Quality & Agriculture Info Center

www.nal.usda.gov/legacy/waic

Public Input

To provide input on decisions that affect drinking water quality, provide input to the Santa Clara City Council at a Council meeting or in advance to mayorandcouncil@santaclaraca.gov or call 408-615-2250. A list of all City Council meetings, agenda items and study sessions can be viewed on the City website at SantaClaraCA.gov/Meetings

eNotify

Visit SantaClaraCA.gov/eNews to sign up to receive news from Water Utility.



**City of
Santa Clara**
The Center of What's Possible

2023

Water Quality

Consumer Confidence Report

Published June 2024

Santa Clara takes pride in delivering safe, reliable, high-quality drinking water

Each year we publish the Water Quality Consumer Confidence Report, containing the latest water quality monitoring results through the end of the prior calendar year and answering the most common customer questions. We hope it provides facts and perspectives you need to make an informed evaluation of your tap water.

Drinking water quality is carefully regulated by the Federal Government with the Safe Drinking Water Act, requiring the U.S. EPA to establish uniform standards that are enforced by the State Water Resources Control Board (SWRCB), Division of Drinking Water.

The 2023 Water Quality Report is prepared in accordance with requirements of the Safe Drinking Water Act and State regulations. To simplify the report, only constituents that were detected in at least one water source appear in the water quality table. As required by the State, we also provide additional information for certain constituents appearing on the water quality table though the water meets all applicable drinking water standards.

PRIMARY STANDARDS are designed to protect public health, specifying limits called "Maximum Contaminant Levels" (MCLs) for substances in water that may be harmful to humans or affect health if consumed in large quantities.

SECONDARY STANDARDS are qualities such as color, taste and odor, specifying limits for substances that may affect consumer acceptance of the water.

The State allows us to monitor some contaminants less than once per year since their concentrations don't change frequently. Due to regulatory monitoring schedules, some data are more than one year old.

The Drinking Water Source Assessment and Protection (DWSAP) Program completed and submitted to the SWRCB in 2002 is available at the Water & Sewer Utilities Office at City Hall. You may request a summary by calling (408) 615-2000 or by emailing watercompliance@SantaClaraCA.gov.

Information & Guidance for People With Compromised Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. People with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, infants and other immuno-compromised people can be particularly at risk from infections and should seek advice about drinking water from their health care providers. Guidelines for ways to lessen the risk of microbial contaminant infection: United States Environmental Protection Agency (U.S. EPA) Safe Drinking Water Hotline: 1(800) 426-4791.

Please share this Water Quality Report with all people who drink City tap water, especially if they may not have received this notice directly (those in apartments, nursing homes, schools and businesses).

Share access to the Water Quality Report at SantaClaraCA.gov/WaterQualityReport. Post it in a public place or distribute paper copies by hand or mail.

Free paper copies of the 2023 Water Quality Consumer Confidence Report are available at:

- City Hall
- City Libraries
- Santa Clara Senior Center
- Community Recreation Center
- By request: Water@SantaClaraCA.gov or (408) 615-2000

Water System Improvements

The City performed several capital improvement projects to maintain a high level of service and provide quality potable water to our customers.

Our Water Main Replacement Program successfully met its annual goal of replacing 10,000 linear feet of aging water main in 2023. Replacement mains were upsized to standard 8- or 12-inch new zinc coated, ductile iron mains. The replacement water mains will improve water quality and system resilience.

Well Rehabilitation

Two well rehabilitation projects, Wells 34 and 23, began toward the end of 2023; Well 23 had been inactive since 2017. The projects include repairs and replacement to the existing pump/motor and well redevelopment. Both wells are expected to return to service in 2024.

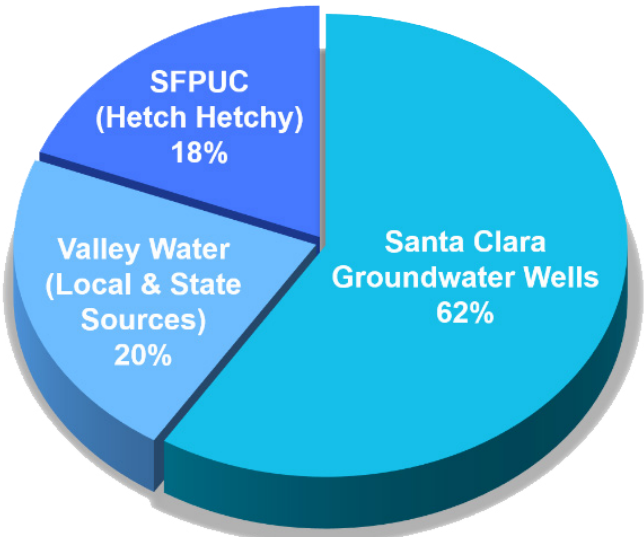
In addition to our capital improvement projects, the City conducts storage tank maintenance, cross connection tests, and flushing programs to protect our water quality year-round.

Our naturally clean tap water comes from three sources that are used interchangeably or are blended:

1. Protected groundwater wells within the City, tapping aquifers 500 to 900 feet deep
2. Local reservoirs, rivers feeding the Sacramento Delta, and others from Valley Water, our local water wholesaler
3. Snowmelt from the Sierra Nevada Mountains via the San Francisco Public Utilities Commission's Hetch Hetchy Reservoir

They provide an average of 15 million gallons of water per day to Santa Clara's residential & commercial communities. Valley Water's source serves primarily the southwesterly portion of the City. San Francisco Public Utility Commission (SFPUC) water typically serves the area north of Highway 101. The remaining water is pumped from the City's system of 20 active wells serving the rest of Santa Clara. The map shows the general areas served by each source.

Assessed much more frequently than bottled water, Santa Clara's tap water undergoes rigorous regular testing and monitoring for over 100 potential contaminants and dozens of other parameters to ensure our drinking water meets Federal and State standards for health.



Santa Clara Drinking Water Sources



This Water Quality Consumer Confidence Report Details:

- The City's water sources and their distribution.
- Federal and State standards that drinking water must meet.
- Specific standards and contaminants for which each of our water sources is monitored and tested.
- Required information explaining why certain contaminants (lead, nitrates, perfluoroalkyl and polyfluoroalkyl substances (PFAS), etc.) are monitored.

Since the City's first water service in 1894, reliably serving high-quality drinking water has been the top

priority of Water & Sewer Utilities. With turn-of-the-tap convenience, Santa Clarans enjoy fresh, clean drinking water at about 1¢ per gallon.

We encourage the public to hydrate locally. Take full, cost-effective advantage of California-sourced drinking water, pure and uncompromised by questionable plastic packaging, no bulk storage required. Grab a stainless steel or glass bottle and fill up fresh from the tap with clean California water to-go or enjoy at home. Drink Santa Clara's tap water with confidence to the health of your family, our community and the environment.

Source Water Information

City Groundwater Wells

Most of our water is pumped from the City's system of deep wells. Well water is pulled up from aquifers. Replenished by rainwater that infiltrates down from the land surface, aquifers are waterfilled spaces deep in the ground that collect rain naturally filtered through layers of sand, gravel, and silt.

SFPUC System

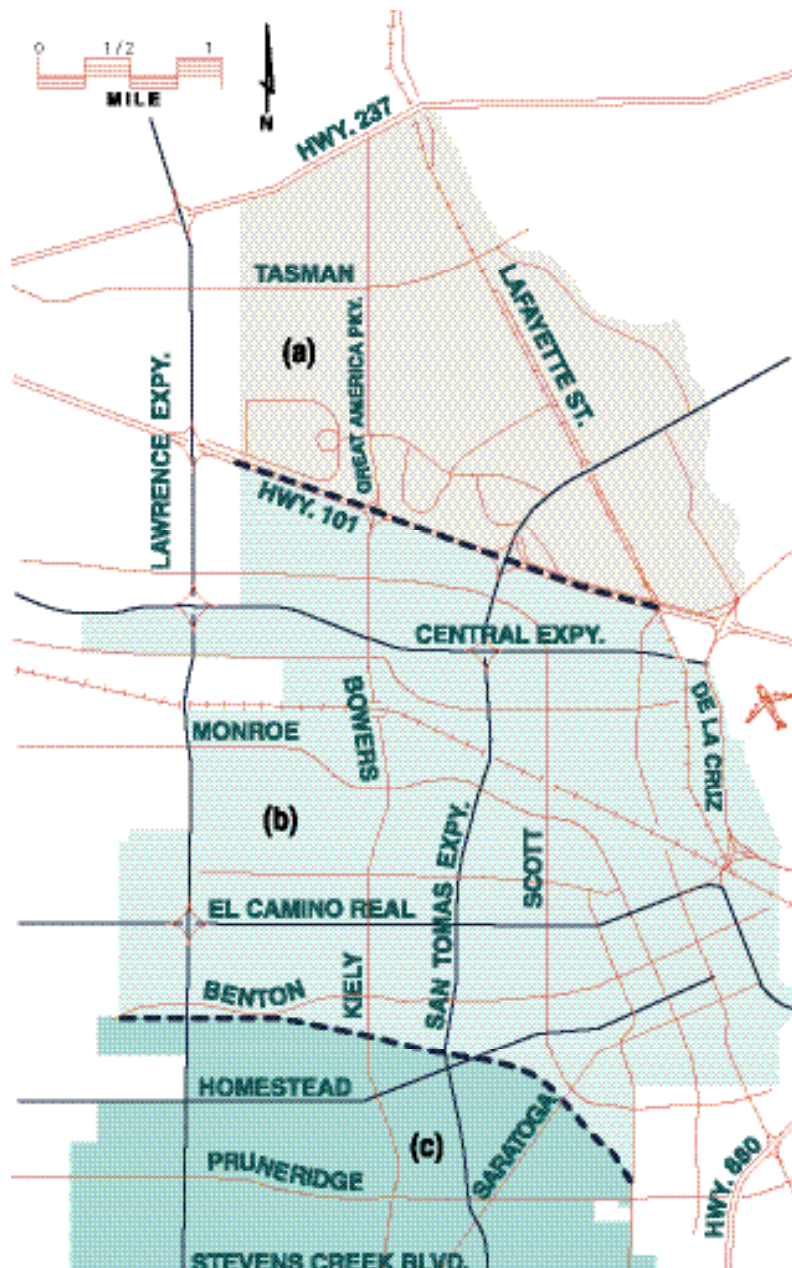
The City purchases water from the SFPUC, which is exempt from Federal and State filtration requirements, but receives the following treatments, meeting all drinking water standards:

- Disinfection using ultraviolet light and chlorine
- pH adjustment for optimum corrosion control
- Fluoridation for dental health
- Chloramination to maintain disinfectant residual & minimize the formation of regulated disinfection byproducts

Valley Water

Valley Water's treated surface water is mainly imported 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. Calero Reservoir is Valley Water's local water source. Imported and locally sourced water is pumped to three water treatment plants in the County. Valley Water provides water to Santa Clara from the Rinconada Water Treatment Plant.

Visit the City's Water Quality webpage for more information:
SantaClaraCA.gov/WaterQuality



Santa Clara, California

- a** Blend of SFPUC Hetch Hetchy System and Groundwater
- b** City of Santa Clara Groundwater
- c** Blend of Valley Water Treated Surface Water and Groundwater

Source water boundaries are approximate

City of Santa Clara

Water Quality Table

	UNIT	MCL	State PHG/ Fed (MCLG)	Analysis for City SC Well Water		Analysis for VALLEY WATER		Analysis for SFPUC		Common Sources
				Range	Average	Range	Average	Range	Average	
Primary Standards For Source Water Sampling:								[highest running average]		
MICROBIOLOGICAL										
Giardia lamblia	cyst/L	TT	0	NA	NA	NA	NA	0 - 0.13	0.03	naturally present in environment
RADIOACTIVITY										
Gross Alpha	pCi/L	15	(0)	NA	NA	3.3	3.3	ND	ND	erosion of natural deposits
Uranium	pCi/L	20	0.43	NA	NA	1.3	1.3	ND	ND	erosion of natural deposits
INORGANIC CHEMICAL										
Barium	PPM	1	2	0.09 - 0.13	0.11	ND	ND	ND	ND	erosion of natural deposit/oil drilling
Fluoride	PPM	2	1	0.14 - 0.17	0.16	ND - 0.16	ND	0.4 - 2.6	0.6	water additive/erosion of natural deposits
Nitrate (as Nitrogen)	PPM	10	10	0.93 - 5.3	3.4	ND - 1.3	0.6	ND - 0.6	ND	erosion of natural deposits/runoff/leaching
Secondary Standards: "Consumer Acceptance Contaminent Levels"										
Chloride	PPM	500	NA	34 - 47	43	11 - 52	37	<3 - 9.3	4.6	runoff/leaching natural deposits/seawater
Color	UNITS	15	NA	ND	ND	1 - 5	4	< 5 - 5	< 5	naturally occuring organic material
Iron	PPB	300	NA	ND	ND	< 20	<20	< 6 - 42	21	leaching from natural deposits/industrial wastes
Odor	UNITS	3	NA	ND	ND	1.4 - 2.0	1.9	ND	ND	naturally occuring organic material
Manganese	PPB	50	NA	ND	ND	< 1.0	< 1.0	3.1 - 4.6	3.8	leaching from natural deposits
Specific Conductance	uS/cm	1600	NA	559 - 690	622	188 - 463	369	32 - 289	160	substances that form ions when in water
Sulfate	PPM	500	NA	40 - 50	46	34 - 78	56	1.2 - 36	19	runoff/leaching natural deposits/industrial waste
Total Dissolved Solids	PPM	1000	NA	364 - 444	391	112 - 272	213	<20 - 153	77	runoff/leaching from natural deposits
Turbidity	NTU	5	NA	ND - 1.3	0.37	0.03 - 0.30	0.05	0.1 - 0.6 ⁽¹⁾	[0.3]	soil runoff
Consumer Information										
pH	UNITS	NS	NS	7.6 - 7.8	7.7	7.4 - 7.9	7.6	8.4 - 9.8	9.3	All Santa Clara water sources meet or exceed Federal and State standards.
Alkalinity (as CaCO ₃)	PPM	NS	NS	182- 220	200	36 - 62	54	3.1 - 103	44	
Aluminum	PPB	1000	600	ND	ND	ND	ND	ND - 82	ND	
Bicarbonate Alkalinity (as HCO ₃)	PPM	NS	NS	182 - 220	200	43 - 76	66	NA	NA	
Boron	PPB	NS	NS	NA	NA	ND - 167	ND	22 - 65	43	
Bromomethane	PPB	NS	NS	ND - 0.14	ND	< 0.50	< 0.50	ND	ND	
Calcium (as Ca)	PPM	NS	NS	63 - 75	69	10 - 25	18	2.9 - 24	13	
Chlorate ⁽²⁾	PPB	NS	NS	NA	NA	68 - 108	84	30 - 749	168	
Hardness	PPM	NS	NS	250 - 300	270	42 - 114	82	7.5 - 86	47	
Hexavalent Chromium	PPB	10 ⁽³⁾	0.02	2.3 - 3.9	2.9	< 1.00	< 1.00	0.11 - 0.35	0.23	
Magnesium	PPM	NS	NS	17 - 31	24	4 - 13	9	0.2 - 8.4	4.3	
Phosphate	PPM	NS	NS	NA	NA	1.03 - 1.11	1.08	ND	ND	
Potassium	PPM	NS	NS	1.2 - 1.3	1.2	1.6 - 3.6	2.8	0.3 - 1.7	1.0	
Silica	PPM	NS	NS	NA	NA	10 - 14	12	4.9 - 9.4	7.1	
Sodium	PPM	NS	NS	23 - 26	24	20 - 52	40	2.7 - 19	11	
Strontium	pCi/ L	NS	NS	NA	NA	NA	NA	14 - 331	173	
T-Butyl alcohol (TBA)	PPB	NS	NS	ND - 2.3	ND	< 2.0	< 2.0	NA	NA	
Temperature	Deg. C	NS	NS	10 - 25	19	12.5 - 21.0	17.3	NA	NA	
Total Organic Carbon	PPM	NS	NS	NA	NA	1.2 - 2.2	1.8	1.2 - 1.8	[1.5]	
Vanadium	PPB	NS	NS	NA	NA	1 - 2	1	NA	NA	
Primary Standards As Measured In City Of Santa Clara Distribution System:										
	UNITS	MCL	State MCL	Range	Average					Common Sources
MICROBIOLOGICAL			(Fed PHG)							
Total Coliform	% pos (+)	5.00%	(0)	0 - 2.1%	< 5%					naturally present in environment
Fecal Coliform and <i>E.coli</i> ⁽⁴⁾	# of pos (+)	0	0	0	0					human and animal fecal waste
DISINFECTION BYPRODUCTS, RESIDUALS, PRECURSORS										
Trihalomethanes	PPB	MRDL = 80	NA	ND - 86	[67.0]					disinfection byproduct
Haloacetic Acids	PPB	MRDL = 60	NA	ND - 68	[46.0]					disinfection byproduct
Chlorine residual ⁽⁵⁾	PPM	MRDL = 4	4	0.0 - 4.8	0.9					drinking water disinfectant
INORGANIC CHEMICAL as measured at 52 Residential Taps in 2022:										
Copper ⁽⁶⁾	PPM	AL = 1.3	0.3	90th percentile = 0.47 ppm		Number Exceeded = 0				corrosion of plumbing systems
Lead ⁽⁶⁾	PPB	AL = 15	0.2	90th percentile = ND		Number Exceeded = 0				corrosion of plumbing systems
SCHOOLS REQUESTING LEAD TESTING IN 2018: 33 Schools (172 samples taken)										
Lead	PPB	AL = 15	0.2	90th percentile = ND		Number Exceeded = 1 ⁽⁷⁾				corrosion of plumbing systems
Unregulated Contaminants As Measured In City Of Santa Clara Distribution System:										
	UNITS	Notification Level		Range	Average					
Total Haleoacetic Acids (9)	PPB	NA		ND - 58	23.6					

Definitions

DISINFECTION BYPRODUCTS = chemical byproducts of disinfection

DISTRIBUTION SYSTEM = drinking water delivery system

HARDNESS = the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

MAXIMUM CONTAMINANT LEVEL (MCL) = The highest level of a contaminant 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. EPA.

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.

NA = not applicable or available

ND = not detected

NS = no standard

NTU = Nephelometric Turbidity Unit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.

pCi/L = picocuries per liter (a measure of radioactivity)

PPB = Parts Per Billion (µg/L)

PPM = Parts Per Million (mg/L)

PRIMARY DRINKING WATER STANDARDS (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 EPA.

REGULATORY ACTION LEVEL (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

RESIDENTIAL TAPS = household faucets used for lead and copper sampling

SECONDARY STANDARDS = secondary MCLs are set to protect the aesthetics of drinking water

SODIUM = refers to the salt present in the water and is generally naturally occurring.

TREATMENT TECHNIQUE (TT) = A required process intended to reduce the level of a contaminant in drinking water.

UNREGULATED CONTAMINANTS = Unregulated contaminant monitoring helps EPA and SWRCB to determine where certain contaminants occur and whether the contaminants need to be regulated. Every four years, the EPA updates the list of unregulated contaminants to monitor.

uS/cm = microSiemens per centimeter

Notes

(1) These are monthly average turbidity values calculated from turbidity measured every four hours daily.

(2) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the San Francisco Regional Water System for water disinfection.

(3) The rulemaking to establish an MCL of 10 ppb (µg/L) for Hexavalent Chromium will be finalized in 2024.

(4) The MCL was changed to E. coli starting on July 1, 2021 when the State Revised Total Coliform Rule became effective.

(5) Compliance for Chlorine residual MRDL is based on running annual average.

(6) Copper and Lead Tap Monitoring was performed at 52 residential taps in September 2022.

(7) 2018 sampling result for John Sutter Elementary was 26ppb. Repeat sampling following plumbing repairs was non-detect for lead.

Contaminant Regulations

The U.S. EPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amounts of certain contaminants in water provided by public water systems to ensure its safety. U.S. Food and Drug Administration regulations and California law also establish contaminant limits in bottled water to provide protection for public health, though it's tested less frequently than tap water.

Drinking water, including bottled water, may be expected to contain small amounts of contaminants; their presence doesn't necessarily indicate that the water poses a health risk.

Information about contaminants and potential health effects:
U.S. EPA's Safe Drinking Water Hotline: 1(800) 426-4791

Some Santa Clara Water is Fluoridated

Fluoridation adjusts naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Water purchased by the City from the SFPUC is fluoridated, while water from Valley Water is not.

If you're in zip code 95054, you receive fluoridated water from the SFPUC that may be blended with unfluoridated well water. The area receiving a blend of water from both SFPUC and City wells are shown on the source water map included in this report. The majority of Santa Clara will continue to receive water without added fluoride.

Have concerns about dental fluorosis? Contact your health care provider. For more information, visit the CDC or SWRCB websites.

Naturally Occurring Drinking Water Contaminants

Tap and bottled drinking water sources include rivers, lakes, streams, ponds, reservoirs, springs and wells. Travelling water dissolves naturally occurring minerals and, in some cases radioactive material, potentially picking up substances resulting from animal or human activity.

Naturally occurring source water contaminants may include:

- **Microbials (viruses and bacteria)** from sewage treatment plants, septic systems, agricultural livestock operations or wildlife
- **Inorganics (salts and metals):** from stormwater runoff, wastewater discharges, oil and gas production, mining, farming or naturally occurring
- **Pesticides/herbicides:** from agriculture, stormwater runoff or landscaping
- **Organic chemicals:** byproducts of synthetic and volatile organic chemical industrial processes and petroleum production or gas stations, stormwater runoff, agricultural and septic systems
- **Radioactive contaminants:** either naturally occurring or resulting from oil/gas production or mining activities

Lead

No Santa Clara water sources have exceeded the ACTION LEVEL for lead. Lead levels in your home may be higher than others due to plumbing in your home's original construction. Elevated lead levels can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water comes from service line and home plumbing components. The City provides high quality drinking water, but cannot control materials used in your home's plumbing. When water hasn't been used for several hours, you can minimize potential lead exposure by:

1. Flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. (Use collected flushing water for cleaning, watering plants or running your garbage disposal.)
2. Using only cold water for drinking and cooking.
3. Concerned about lead in your water? For more information:
 - [epa.gov/lead](https://www.epa.gov/lead)
 - Safe Drinking Water Hotline 1(800) 426-4791



Nitrates in Groundwater Resources

Nitrate levels above 10 mg/L in drinking water present health risks for infants under six months old. Such levels can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness. Likewise, nitrate levels above 10 mg/L may have the same effects in pregnant women or those with specific enzyme deficiencies. If you are pregnant or caring for an infant, consult your health care provider.

PFAS

Perfluoroalkyl and Polyfluoroalkyl substances, collectively known as “PFAS” are a group of chemicals that have been widely used in industrial applications and consumer products such as carpets, clothing, furniture fabrics, paper packaging for food, firefighting foams, and other materials including waterproof/stain resistant/nonstick cookware. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two common types of PFAS. From 2019 to 2021, the City has completed monitoring for PFAS compounds at select well sites based on proximity to a potential source of contamination (airports which are known to have used aqueous film foaming agents for fire suppression and training). No PFAS compounds have been detected during monitoring. In October 2021, the City received a waiver for PFAS monitoring because PFAS were not detected in any collected samples.

The City will complete monitoring at 17 representative groundwater wells and two surface water turnouts for U.S. EPA’s Fifth Unregulated Contaminant Monitoring Rule for PFAS by the year 2025. No PFAS compounds have been detected during monitoring in 2023.

Hexavalent Chromium

Hexavalent Chromium, also known as Chromium-6, occurs naturally throughout California from the erosion of chromium deposits. It has also been utilized in variety of industrial activities, including the manufacturing of textile dyes, wood preservation, leather tanning, and anticorrosion coatings. Currently, there is rulemaking in progress to establish the regulatory standard for Hexavalent Chromium at 10 µg/ml.

SFPUC Water: Tested for Cryptosporidium & Giardia

Monthly (or more frequent) tests of SFPUC source and treated waters occasionally show very low levels of Cryptosporidium and Giardia in water serving the East Bay, South Bay and San Francisco Peninsula.

Cryptosporidiosis, an intestinal tract disease brought on by a parasitic microbe called Cryptosporidium, transmits through contaminated water, food or direct contact with human or animal waste. Giardia is caused by a different parasitic organism, but causes similar flu-like symptoms. Cryptosporidiosis and Giardia symptoms usually last about two weeks for those with normal immune systems. Immuno-compromised people, infants, small children and the elderly are at greater risk of developing life-threatening illness. Available guidance from the California Department of Public Health and

County health agencies recommend that people with serious immune problems consult with their doctors or primary health care providers about preventing Cryptosporidium and Giardia infection from all potential sources. Water consumers may choose to boil drinking water at a rolling boil for at least one minute as an extra precaution.

Cryptosporidiosis and Giardiasis information and guidance:

- Santa Clara County Department of Environmental Health: (408) 918-3400
- U.S. EPA Safe Drinking Water Hotline: 1(800) 426-4791

The Conservation Way of Life

Statewide rainfall year totals are 108% of average. Groundwater conditions remain healthy countywide. Yet the voluntary 15% water use reduction continues: Why?

1. Anderson Reservoir, the largest locally, is offline for seismic retrofit until 2032.
2. New State legislation, Making Conservation a California Way of Life, mandates urban water use reductions.
3. The next drought is around the corner.

Recognizing the drought reality, an emergency measure the State adopted during the last drought permanently bans drinking water for landscape use at commercial, industrial and institutional properties with AB 1572. More changes will come as the State faces an uncertain water future. Conservation remains critical to ensure our drinking water supplies.

Santa Clara continues its downward trend in drinking water use, largely due to reduced outdoor watering. The City thanks residents and business owners who have taken conservation seriously. We must permanently adopt drought adaptations we have made, making them part of a conservation mindset and lifestyle that sustains Santa Clara regardless of California’s weather fluctuations. Do your part; maximize water resources and reduce water pollution using generous water rebates: [SantaClaraCA.gov/WaterRebates](https://www.santacruzwater.com/WaterRebates)

Attention

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਨ ਹੈ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ।

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

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

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

この報告書には上水道に関する重要な情報が記されて
おります。翻訳を御依頼なされるか、内容をご理解なさっ
ておられる方にお尋ね下さい。

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。

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Atencion: Este informe contiene informacion muy
importante sobre su agua beber. Traduzcalo o hable con
alguien que lo entienda bien.

Additional Water Quality Information

- City of Santa Clara**
1500 Warburton Ave.
Santa Clara, CA 95050
408-615-2200
[SantaClaraCA.gov](https://www.santacruzwater.com)
- Water & Sewer Utilities**
1500 Warburton Ave.
Santa Clara, CA 95050
Office hours: 8 a.m.–5 p.m., Mon–Fri
408-615-2000
Email: water@SantaClaraCA.gov
- Water Emergencies**
408-615-2000
Monday–Friday, 8 a.m.–5 p.m.
- Water Billing Questions**
408-615-2300

- Water Quality Report Questions**
Vikram Manke
408-615-2000
Email: watercompliance@SantaClaraCA.gov
- Public Input**
Provide input on decisions that affect drinking water quality to Santa Clara City Council at a Council meeting or in advance:
Email: mayorandcouncil@SantaClaraCA.gov or 408-615-2250.
- A list of all City Council meetings, agenda items & study sessions can be viewed on the City website at [SantaClara.Legistar.com/Calendar.aspx](https://www.santacruzwater.com/SantaClara.Legistar.com/Calendar.aspx)
- Water Conservation and Rebates**
[SantaClaraCA.gov/WaterConservationWaterSavings.org](https://www.santacruzwater.com/SantaClaraCA.gov/WaterConservationWaterSavings.org)
[ValleyWater.org](https://www.valleywater.org)
Water Conservation Hotline and Rebate Information:
408-630-2554
For a free Water-Wise Outdoor Survey, leave a message at: 408-630-2000

- Water Quality, Treatment & Regulation Resources**
- American Water Works Association**
[AWWA.org](https://www.AWWA.org)
- State Water Resources Control Board, Division of Drinking Water**
[WaterBoards.CA.gov](https://www.WaterBoards.CA.gov)
- United States Environmental Protection Agency**
[Water.epa.gov/Drink](https://www.Water.epa.gov/Drink)
- San Francisco Public Utilities Commission, Water Quality Bureau**
[SFWater.org](https://www.SFWater.org)
- Valley Water**
[ValleyWater.org](https://www.ValleyWater.org)
- Water Quality & Agriculture Information Center**
[nal.usda.gov/programs/waic](https://www.nal.usda.gov/programs/waic)



**City of
Santa Clara**
The Center of What's Possible

2024

Water Quality

Consumer Confidence Report

Published June 2025

We take pride in delivering high-quality drinking water

This Consumer Confidence Report provides facts and perspectives you need to make an informed evaluation of your tap water. It contains water quality monitoring results for calendar year 2024 and answers the most common customer questions.

The most frequently asked question we hear: "Is our tap water safe to drink?" Yes! Our drinking water quality is carefully regulated by the Federal Government with the Safe Drinking Water Act, requiring the United States Environmental Protection Agency (EPA) to establish uniform standards enforced by the State Water Resources Control Board (SWRCB), Division of Drinking Water.

The 2024 Water Quality Report is prepared according to the Safe Drinking Water Act requirements and State regulations. Only constituents that were detected in at least one water source appear in the water quality table. As required by the State, we also provide additional information for certain constituents though the water meets all enforceable drinking water standards.

PRIMARY STANDARDS are designed to protect public health, specifying limits called Maximum Contaminant Levels (MCLs) for substances in water that may be harmful to humans or affect health if consumed in large quantities.

SECONDARY STANDARDS are qualities such as color, taste and odor, specifying limits for substances that may affect consumer acceptance of the water.

The State allows us to monitor some contaminants less than once per year since their concentrations don't change frequently. Due to regulatory monitoring schedules, some data can be more than one year old.

For information, guidance and potential health effects in English and Spanish, call:
EPA Safe Drinking Water Hotline: 1-800-426-4791

Guidance for People With Compromised Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Those with cancer undergoing chemotherapy, with HIV/AIDS or other immune system disorders, who have undergone organ transplants, and some elderly, infants and other immuno-compromised people can be particularly at risk from infections and should seek advice about drinking water from their health care providers.

Share this Water Quality Report with all people who drink City tap water, especially if they may not have received this notice directly.

This Water Quality Report is available online at SantaClaraCA.gov/WaterQualityReport. Post it in a public place or distribute paper copies by hand or mail.

Free paper copies of the 2024 Water Quality Consumer Confidence Report are available at:

- City Hall
- City Libraries
- Santa Clara Senior Center
- Community Recreation Center
- By request: Water@SantaClaraCA.gov or 408-615-2000

Water System Improvements

The City performed several capital improvement projects to maintain a high level of service and provide quality potable water to our customers. 2024's City Water Main Replacement Program upgraded 12,000 linear feet (LF) of aging water main, exceeding the annual replacement goal of 10,000 LF. Replacement mains were up-sized to a standard 8-inch size and replaced with new zinc-coated, ductile iron mains. The replacement water mains improve water quality and system resilience.

Well Rehabilitation

The City completed three well rehabilitation projects in 2024 to improve efficiency and reliability: Well 18 across from Bowers Park, Well 23 by Millikan Basics+ Elementary and Well 34 near Northside Library. The rehabilitation included replacement of the existing pumps and motors, plus well cleaning and redevelopment. Well 23 had been inactive since 2017. All three wells are currently in service.

Cross-Connection Control

The SWRCB adopted the Cross-Connection Policy Control Handbook (CCCPH) July 1, 2024. The CCCPH aims to protect public health by establishing standards to ensure a public water system's drinking water distribution system will not be subject to the backflow of liquids, gases or other substances. The standards apply statewide as defined in California's Health and Safety Code (CHSC, section 116275 (h)); compliance is mandatory.

Water & Sewer Utilities' Compliance Division administers the City's cross-connection control program. Visit SantaClaraCA.gov/CrossConnectionControl for information.

Naturally Clean Tap Water Sources

Santa Clara's three water sources are used interchangeably or blended:

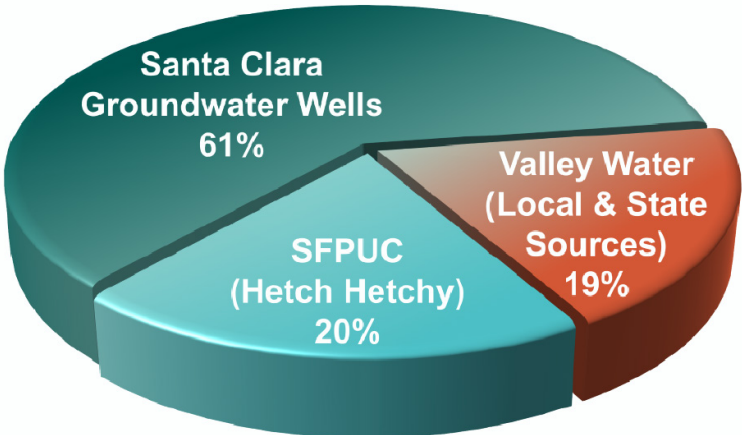
1. Protected groundwater wells within the City
2. Local reservoirs, rivers feeding the Sacramento Delta and others from Valley Water, our local water wholesaler
3. Snowmelt from the Sierra Nevada Mountains via the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy System

Together, they provide an average of 15 million gallons of water per day to Santa Clara. Valley Water serves primarily the south-west portion of the City. SFPUC water typically serves the area north of Highway 101. The remaining water is pumped from the City's system of 20 active wells serving the rest of Santa Clara. The map shows the general areas served by each source.

Tested much more frequently than bottled water, Santa Clara's tap water undergoes rigorous, regular laboratory analysis and monitoring for over 100 potential contaminants and dozens of other parameters to ensure our drinking water meets Federal and State standards for health. Each week, water is collected from 34 sample stations throughout the City and sent to State-certified laboratories for testing.



Flushing water mains provides the highest water quality possible.



Santa Clara Drinking Water Sources



This Water Quality Consumer Confidence Report Details:

- Water sources and their distribution.
- Federal and State standards that drinking water must meet.
- Specific standards and contaminants for which each of our water sources is monitored and tested.
- Required information explaining why certain contaminants are monitored.

We encourage the public to hydrate locally. Take full, cost-effective advantage of California-sourced drinking water, pure and uncompromised by questionable plastic packaging.

The Drinking Water Source Assessment and Protection (DWSAP) Program, completed and submitted to the SWRCB in 2002, is available at the Water & Sewer Utilities Office at City Hall. You may request a summary by calling 408-615-2000 or by emailing watercompliance@SantaClaraCA.gov.

Since the City's first water service in 1895, reliably serving high-quality drinking water has been the top priority of Water & Sewer Utilities. With turn-of-the-tap convenience, Santa Clarans enjoy fresh, clean drinking water at about 1¢ per gallon.

Source Water Information

City Groundwater Wells

Most of our water is pumped from the City's system of deep wells. Well water is pulled up from aquifers 500 to 900 feet deep. Replenished by rainwater that infiltrates down from the land surface, aquifers are waterfilled spaces deep in the ground that collect rain naturally filtered through layers of sand, gravel, and silt.

SFPUC System

The City purchases water from the SFPUC, which is exempt from Federal and State filtration requirements, but receives the following treatments to meet all drinking water standards:

- Disinfection using ultraviolet light and chlorine
- pH adjustment for optimum corrosion control
- Fluoridation for dental health
- Chloramination to maintain disinfectant residual & minimize the formation of regulated disinfection byproducts

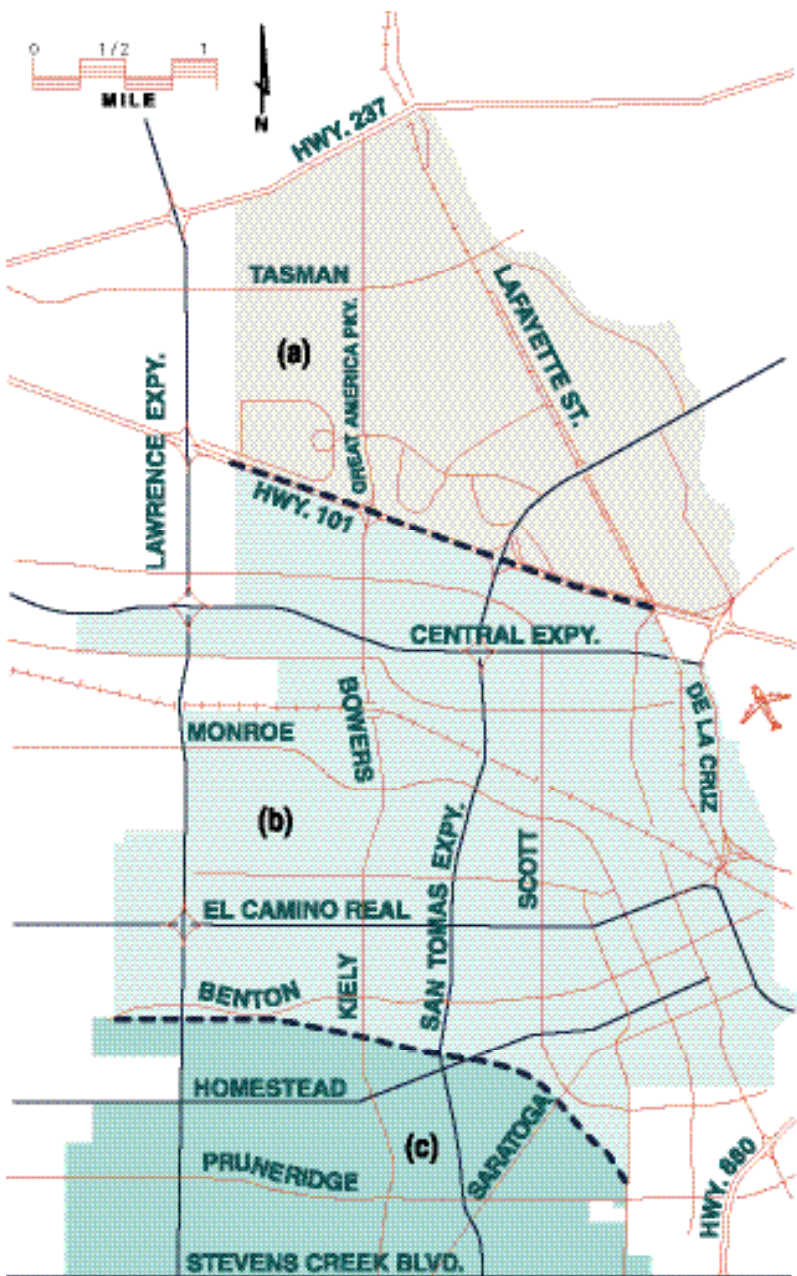
Valley Water

Valley Water provides water to Santa Clara from the Rinconada Water Treatment Plant, which processes water both sourced locally from Calero Reservoir and imported from the Sacramento-San Joaquin Delta watershed.

Treatment includes:

- Filtration with anthracite coal and sand
- Disinfection using chlorine and chloramine

Visit the City's Water Quality webpage for more information: SantaClaraCA.gov/WaterQuality



Santa Clara, California

- a Blend of SFPUC Hetch Hetchy System and Groundwater
- b City of Santa Clara Groundwater
- c Blend of Valley Water Treated Surface Water and Groundwater

Source water boundaries are approximate

City of Santa Clara

Water Quality Table

	UNIT	MCL	State PHG/ Fed MCLG	Analysis for CSC WELL WATER		Analysis for VALLEY WATER		Analysis for SFPUC		Common Sources
				Range	Average	Range	Average	Range	Average	
Primary Standards For Source Water Sampling								[highest running average]		
MICROBIOLOGICAL										
Giardia lamblia	cyst/L	TT	0	NA	NA	NA	NA	0 - 0.06	0.02	naturally present in environment
RADIOACTIVITY										
Gross Alpha	pCi/L	15	(0)	NA	NA	3.3	3.3	ND	ND	erosion of natural deposits
Uranium	pCi/L	20	0.43	NA	NA	1.3	1.3	ND	ND	erosion of natural deposits
INORGANIC CHEMICAL										
Arsenic	PPB	10	0.004	ND - 2.2	ND	ND	ND	ND	ND	erosion of natural deposits/industrial wastes
Barium	PPM	1	2	ND - 0.2	0.14	ND	ND	ND	ND	erosion of natural deposits/oil drilling
Fluoride	PPM	2	1	ND - 0.2	0.14	ND - 0.11	ND	0.5 - 0.8	0.7 ⁽¹⁾	water additive/erosion of natural deposits
Hexavalent Chromium	PPB	10	0.02	ND - 4.3	1.9	ND	ND	ND - 0.1	0.1	natural deposit leaching
Nitrate (as Nitrogen)	PPM	10	10	ND - 5.9	3.3	ND - 0.7	ND	ND - 0.4	ND	erosion of natural deposits/runoff/leaching
Perchlorate	PPB	6	1	ND - 1.1	ND	ND	ND	ND	ND	environmental contamination
VOLATILE ORGANIC COMPOUND										
Toluene	PPB	150	150	ND - 4.3	0.6	ND	ND	ND	ND	petroleum or chemical discharges

Secondary Standards: Consumer Acceptance Contaminent Levels										
Aluminum ⁽²⁾	PPB	200	600	ND - 90	ND	ND	ND	ND - 59	ND	erosion of natural deposits; some surface water treatment residue
Chloride	PPM	500	NA	19 - 55	39	47 - 53	50	< 3 - 9.9	4.9	runoff/natural deposit leaching/seawater
Color	UNITS	15	NA	ND - 10	3	ND - 3	2	< 5	< 5	naturally occuring organic material
Iron	PPB	300	NA	ND- 280	130	< 20	< 20	< 6 - 41	20	natural deposit leaching/industrial wastes
Odor	UNITS	3	NA	ND - 1	ND	1.4 - 2.0	1.6	ND	ND	naturally occuring organic material
Manganese	PPB	50	NA	ND - 23	5	< 1.0	< 1.0	< 2 - 2.7	< 2	natural deposit leaching
Specific Conductance	uS/cm	1600	NA	465 - 718	591	414 - 522	466	31- 317	174	substances that form ions when in water/ seawater intrusion
Sulfate	PPM	500	NA	25 - 58	42	57 - 80	66	1 - 41	21	runoff/natural deposit leaching/industrial wastes
Total Dissolved Solids	PPM	1000	NA	272 - 428	356	238 - 298	268	24 - 169	97	runoff/natural deposit leaching
Turbidity	NTU	5	NA	0.12 - 5.8	1.06	0.02 - 0.30	0.04	0.1 - 0.4	0.2	soil runoff

Consumer Information										
pH	UNITS	NS	NS	7.6 - 7.8	7.7	7.5 - 8.0	7.7	NA	NA	All Santa Clara water sources meet or exceed Federal and State standards.
Alkalinity (as CaCO ₃)	PPM	NS	NS	159 - 246	202	68 - 87	77	7.4 - 120	56	
Bicarbonate Alkalinity (as HCO ₃)	PPM	NS	NS	NA	NA	82 - 106	94	ND	ND	
Boron	PPB	NS	NS	NA	NA	114- 151	133	23 - 65	44	
Calcium (as Ca)	PPM	NS	NS	45 - 88	67	19 - 28	23	3.2 - 28	15	
Chlorate ⁽³⁾	PPB	NS	NS	NA	NA	NA	NA	24 - 597	134	
Hardness	PPM	NS	NS	170 - 330	246	93 - 133	111	8.4 - 106	57	
Lithium	PPB	NS	NS	NA	NA	NA	NA	< 2 - 4	2	
Magnesium	PPM	NS	NS	14 - 27	20	11-16	13	0.2 - 9.5	4.9	
Phosphate	PPM	NS	NS	NA	NA	0.96 - 1.16	1.07	ND	ND	
Potassium	PPM	NS	NS	1 - 1.4	1.2	2.6 - 3.3	3.0	ND	ND	
Silica	PPM	NS	NS	NA	NA	11 - 12	12	4.9 - 9.9	7.4	
Sodium	PPM	NS	NS	22 - 44	32	45 - 49	47	3.1 - 24	13	
Temperature	°C	NS	NS	9.9 - 35.8	19.3	13.9 - 21.6	18	NA	NA	
Total Organic Carbon ⁽⁴⁾	PPM	NS	NS	NA	NA	1.2 - 2.0	1.6	1.1 - 1.8	1.5	
Vanadium	PPB	NS	NS	NA	NA	1 - 2	2	NA	NA	

Primary Standards As Measured In City Of Santa Clara Distribution System						
	UNITS	MCL	State MCL	Range	Average	Common Sources
MICROBIOLOGICAL						
Total Coliform	% pos (+)	5.0%	5.0%	0 - 1.4%	< 5.0%	naturally present in environment
Fecal Coliform and <i>E.coli</i> ⁽⁵⁾	# of pos (+)	0	0	0	0	human and animal fecal waste
DISINFECTION BYPRODUCTS, RESIDUALS, PRECURSORS						
Trihalomethanes	PPB	80	NA	ND - 54.0	[56.0]	byproduct of drinking water disinfection
Haloacetic Acids	PPB	60	NA	ND - 46.4	[34.9]	byproduct of drinking water disinfection
Chlorine residual	PPM	4	4	0.0 - 3.4	0.8	drinking water disinfectant
INORGANIC CHEMICAL as measured at 52 Residential Taps in 2022:						
Copper	PPM	AL = 1.3	0.3	90th percentile = 0.47 ppm	Number Exceeded = 0	corrosion of plumbing systems
Lead	PPB	AL = 15	0.2	90th percentile = ND	Number Exceeded = 0	corrosion of plumbing systems
SCHOOLS REQUESTING LEAD TESTING IN 2018: 33 Schools (172 samples taken)						
Lead	PPB	AL = 15	0.2	90th percentile = ND	Number Exceeded = 1 ⁽⁶⁾	corrosion of plumbing systems

Unregulated Contaminants As Measured In City Of Santa Clara Distribution System										
UNITS	Notification Level		Range	Average						
Lithium	PPB		NA	ND - 10	ND					

Definitions

DISINFECTION BYPRODUCTS = chemical byproducts of disinfection

DISTRIBUTION SYSTEM = drinking water delivery system

HARDNESS = the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

MAXIMUM CONTAMINANT LEVEL (MCL) = The highest level of a contaminant 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. EPA.

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.

NA = not applicable or available

ND = not detected

NS = no standard

NTU = Nephelometric Turbidity Unit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.

pCi/L = picocuries per liter (a measure of radioactivity)

PPB = Parts Per Billion (µg/L)

PPM = Parts Per Million (mg/L)

PRIMARY DRINKING WATER STANDARDS (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 EPA.

REGULATORY ACTION LEVEL (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

RESIDENTIAL TAPS = household faucets used for lead and copper sampling

SECONDARY STANDARDS = secondary MCLs are set to protect the aesthetics of drinking water

SODIUM = refers to the salt present in the water and is generally naturally occurring.

TREATMENT TECHNIQUE (TT) = A required process intended to reduce the level of a contaminant in drinking water.

UNREGULATED CONTAMINANTS = Unregulated contaminant monitoring helps EPA and SWRCB to determine where certain contaminants occur and whether the contaminants need to be regulated. Every four years, the EPA updates the list of unregulated contaminants to monitor.

uS/cm = microSiemens per centimeter

Notes

- (1)** Natural fluoride in the Hetch Hetchy water was ND. The fluoride level in raw water ranged from ND to 0.8 ppm with an average of 0.2 ppm.
- (2)** Aluminum also has a primary MCL of 1,000 ppb.
- (3)** The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the San Francisco Regional Water System for water disinfection.
- (4)** The range and average values of the total organic carbon were from operational monitoring results at Tesla Treatment Facilities.
- (5)** The MCL was changed to *E. coli* starting on July 1, 2021 when the State Revised Total Coliform Rule became effective.
- (6)** 2018 sampling result for John Sutter Elementary was 26ppb. Repeat sampling following plumbing repairs was non-detect for lead.

Contaminant Regulations

The EPA and SWRCB prescribe regulations that limit the amounts of certain contaminants in water provided by public water systems to ensure its safety. U.S. Food and Drug Administration regulations and California law also establish contaminant limits in bottled water to provide protection for public health, though it's tested less frequently than tap water.

Drinking water, including bottled water, may be expected to contain small amounts of contaminants; their presence doesn't necessarily indicate that the water poses a health risk.

Naturally Occurring Drinking Water Contaminants

Tap and bottled drinking water sources include rivers, lakes, streams, ponds, reservoirs, springs and wells. Travelling water dissolves naturally occurring minerals and, in some cases radioactive material, potentially picking up substances resulting from animal or human activity.

Naturally occurring source water contaminants may include:

- **Microbials (viruses, bacteria)** sewage treatment plants, septic systems, agricultural livestock operations or wildlife
- **Inorganics (salts, metals):** stormwater runoff, wastewater discharges, oil and gas production, mining, farming, naturally occurring
- **Pesticides/herbicides:** agriculture, stormwater runoff, landscaping
- **Organic chemicals:** byproducts of synthetic and volatile organic chemical industrial processes and petroleum production or gas stations, stormwater runoff, agricultural and septic systems
- **Radioactive contaminants:** naturally occurring or resulting from oil/gas production or mining activities

Arsenic and Perchlorate

Both Arsenic and Perchlorate were below their Public Health Goals, meaning there is no known or expected risk at their current levels in the City's drinking water.

Sources of arsenic occur from erosion of natural deposits, orchard runoff, and electronics and glass production wastes. Sources of perchlorate include rocket fuel, explosives and industrial uses and their resulting environmental contamination.



Lead

No Santa Clara water sources have exceeded the ACTION LEVEL for lead. Lead levels in your home may be higher than others due to plumbing in your home's original construction. Elevated lead levels can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water comes from service line and home plumbing components. The City provides high quality drinking water, but cannot control materials used in your home's plumbing. When water hasn't been used for several hours, you can minimize potential lead exposure by:

1. Flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. (Use collected flushing water for cleaning, watering plants or running your garbage disposal.)
2. Using only cold water for drinking and cooking.

Concerned about lead in your water? Visit epa.gov/lead.

An initial lead service line inventory was completed in 2024 where more than 2,000 service lines were inspected. No lead services were found during the inspections. A summary of the inventory can be found at SantaClaraCA.gov/WaterServiceLineInventory.

Nitrates in Groundwater Resources

Nitrate levels above 10 ppm in drinking water can interfere with the capacity of blood to carry oxygen in infants under six months old, pregnant women or those with specific enzyme deficiencies, resulting in serious illness. If you are pregnant or caring for an infant, consult your health care provider.

PFAS

Perfluoroalkyl and Polyfluoroalkyl substances, collectively known as PFAS, are a group of chemicals that have been widely used in industrial applications and consumer products such as carpets, clothing, furniture, fabrics, paper packaging for food, firefighting foams, and other materials including waterproof/stain resistant/nonstick cookware. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two common types of PFAS. From 2019 to date, no PFAS compounds have been detected during the City's monitoring.

Hexavalent Chromium

Hexavalent Chromium, also known as Chromium-6, occurs naturally from the erosion of chromium deposits. It's used in various applications: paints, dyes, anticorrosion coatings and other industrial uses. As of October 1, 2024, the regulatory standard for Hexavalent Chromium is 10 ppb. Our 20 groundwater wells were tested for Hexavalent Chromium and were all found to be below 10 ppb.

SFPUC Water: Tested for Cryptosporidium & Giardia

Monthly (or more frequent) tests of SFPUC source and treated waters occasionally show very low levels of Cryptosporidium and Giardia in water serving the East Bay, South Bay and San Francisco Peninsula.

Cryptosporidiosis, an intestinal tract disease brought on by a parasitic microbe called Cryptosporidium, transmits through contaminated water, food or direct contact with human or animal waste. Giardia is caused by a different parasitic organism, but also causes symptoms similar to flu. Symptoms usually last about two weeks for those with normal immune systems. Immuno-compromised people, infants, small children and the elderly are at greater risk of developing life-threatening illness.

Guidance from the California Department of Public Health and County health agencies recommend that people with serious immune problems consult their health care providers about preventing Cryptosporidium and Giardia infection. They may choose to bring drinking water to a rolling boil for at least one minute as an extra precaution.

Cryptosporidiosis and Giardiasis information and guidance:

- Santa Clara County Department of Environmental Health: 408-918-3400

Some Santa Clara Water is Fluoridated

Fluoridation adjusts naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Water purchased by the City from the SFPUC is fluoridated, while water from Valley Water is not.

If you're in zip code 95054, you receive fluoridated water from the SFPUC that may be blended with unfluoridated well water. The area receiving a blend of water from both SFPUC and City wells are shown on the source water map included in this report. The majority of Santa Clara will continue to receive water without added fluoride. Contact your health care provider with any dental fluorosis concerns.

For more information, visit [cdc.gov/fluoridation](https://www.cdc.gov/fluoridation).

Leaks Sneak Up!

The EPA found that one in ten homes has a leak that wastes 90 gallons of water or more per day! Be diligent in checking for leaks in your home and landscape. Visit [SantaClaraCA.gov/FixALeak](https://www.santacruzwater.com/FixALeak) for leak detection tips and to learn how the City can help.

Making Conservation A California Way of Life

Last year, statewide rainfall topped 100% of average; now Moderate to Extreme drought conditions prevail in Southern California, while Abnormally Dry conditions threaten us. At our rainy season's end, Santa Clara County rainfall year totaled just 68% of average. The State recognizes the ongoing drought reality:

- Making Conservation A California Way of Life* regulations took effect statewide January 1.
- Urban Water Use Objective calls for a reduction to 47 gallons per capita per day from now until 2030.
- A drought emergency measure now permanently bans drinking water for irrigating non-functional turf at commercial, industrial, institutional (CII) and HOA properties with AB 1572, phasing in 2027.



Conservation remains critical to protect our drinking water supplies. Rain or shine, do your part to maximize water resources using free conservation devices and generous landscape rebates:

[SantaClaraCA.gov/SaveOurWater](https://www.santacruzwater.com/SaveOurWater).

Additional Water Quality Information

Water & Sewer Utilities
1500 Warburton Ave.
Santa Clara, CA 95050
8 a.m.–5 p.m., Mon–Fri
408-615-2000, including emergencies
water@SantaClaraCA.gov

After-Hours Water Emergencies
408-615-5640

Water Billing Questions
408-615-2300

Water Quality Report Questions
Wendy Kwong
408-615-2000
watercompliance@SantaClaraCA.gov

Public Input
Provide input on decisions that affect drinking water quality to Santa Clara City Council at a Council meeting or in advance:
408-615-2250
mayorandcouncil@SantaClaraCA.gov

A list of all City Council meetings, agenda items & study sessions can be viewed on the City website at [SantaClara.Legistar.com/Calendar.aspx](https://www.santacruzwater.com/Legistar.com/Calendar.aspx)

Water Quality, Treatment & Regulation Resources

American Water Works Association
[AWWA.org](https://www.AWWA.org)

State Water Resources Control Board, Division of Drinking Water
[WaterBoards.CA.gov](https://www.WaterBoards.CA.gov)

United States Environmental Protection Agency
[Water.epa.gov/Drink](https://www.Water.epa.gov/Drink)

San Francisco Public Utilities Commission, Water Quality Bureau
[SFWater.org](https://www.SFWater.org)

Valley Water
[ValleyWater.org](https://www.ValleyWater.org)

Attention

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਨ ਹੈ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਓ।

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

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

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

この報告書には上水道に関する重要な情報が記されて
おります。翻訳を御依頼なされるか、内容をご理解なさ
ておられる方にお尋ね下さい。

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。

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Atencion: Este informe contiene informacion muy
importante sobre su agua beber. Traduzcalo o hable con
alguien que lo entienda bien.