2022 Report on Water Quality Relative to Public Health Goals (2022 Public Health Goals Report)

City of Santa Clara Water and Sewer Utilities

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

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1. BACKGROUND

The California Safe Drinking Water Act mandates that larger water utilities (greater than 10,000 service connections) must prepare and complete a report every 3 years if any water quality measurements have exceeded a Public Health Goal (PHG). The last PHG Report for Santa Clara was completed in 2019. PHGs are non-enforceable goals established by the state Office of Environmental Health Hazard Assessment (OEHHA). Where OEHHA has not adopted a PHG for a particular constituent, the Safe Drinking Water Act directs water suppliers to use federal Maximum Contaminant Level Goals (MCLGs) previously adopted by the United States Environmental Protection Agency (USEPA), if available. The report is to address constituents which have a California primary drinking water standard Maximum Contaminant Level (MCL) and for which either a PHG or MCLG has been set and exceeded.

Pursuant to the Safe Drinking Water Act, this report lists all constituents detected in the City's water supply from 2019 through 2021 at levels exceeding an applicable PHG or MCLG. Included in the report are the following:

- 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.

1.1 What are MCLs, PHGs, and MCLGs?

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 very low to negligible risks. In other words, MCLs are the regulatory definition of what is "safe."

MCLGs (set by USEPA) and PHGs (set by OEHHA) are often set at very low levels depending on the established health risk. Determination of health risks at these low levels are frequently theoretical, based on risk assessments with multiple assumptions and mathematical extrapolations. The USEPA sometimes sets MCLGs at zero, while recognizing that zero is an unattainable goal and cannot be measured practically by the available analytical methods. None of the realistic risk-management factors that are considered by the USEPA, or the SWRCB, in setting drinking water standards (MCLs) are considered in setting PHGs. These practical risk management factors include analytical detection capability, treatment technology available, benefits, and costs. The PHGs and MCLGs are not enforceable.

1.2 City of Santa Clara's Water Quality Data:

All of the water quality data collected by the City of Santa Clara's Water Utility from 2019 through 2021, for purposes of determining compliance with drinking water standards, have been considered in this report. These data have also been summarized in our Consumer Confidence Reports (CCRs) 2020, 2021, and 2022. The CCR is mailed as a newspaper insert annually to all of our utility billing customers during

the month of June and represents water quality data collected from January to December of the previous year.

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

1.3 Best Available Treatment (BAT) Technology and Cost Estimates:

Both the USEPA and the SWRCB have adopted what are known as Best Available Technologies (BATs), which are the best available methods of reducing contaminant concentrations to permissible MCLs. However, neither USEPA nor SWRCB have adopted or defined BATs to reach extremely low levels established by the PHGs and MCLGs, and such technologies may not realistically be available.

Accurate cost estimates are difficult, if not impossible, and are highly speculative and theoretical. Therefore, they have limited value and may not warrant a significant investment of agency time and money. Moreover, in some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality.

2. CONSTITUENT DETECTED THAT EXCEED A PHG OR MCLG:

The City detected arsenic in the distribution system, or source water for the distribution system, at levels above the applicable PHG or MCLG. The report would include any PHG or MCLG that was exceeded in one or more of our drinking water sources, if that had occurred.

2.1 Arsenic:

The PHG for arsenic is set at 0.004 parts per billion (ppb) by OEHHA. The PHG is set at a level that is lower than the 2.0 ppb detection limit currently achievable for that analysis. The current MCL for Arsenic is set at 10.0 ppb. Arsenic is a carcinogen and the risk of getting cancer from drinking water for a lifetime at the PHG level is one person in one million, whereas the risk of getting cancer from drinking water for a lifetime at the MCL level is 2.5 people per one thousand (or 5 people per two thousand). All of the City's water sources are in full compliance with this limit.

2019 to 2021 Arsenic Results							
Range of Results (ppb) MCL (ppb) PHG (ppb)							
ND – 1.7	10	0.004					

The identified BAT methods for removing arsenic from drinking water include granular ferric oxide resin (GFO) adsorption, coagulation/filtration, ion exchange, reverse osmosis (RO), and oxidation/filtration. For the purpose of evaluating the cost implications for treatment of arsenic, RO was selected as the

proposed treatment. Reverse Osmosis (RO) is also identified as the BAT for a number of other inorganic chemicals and can provide treatment for a number of constituents in addition to arsenic.

Reverse osmosis (RO) is an effective and commonly used treatment system in drinking water and wastewater applications. The RO process uses a membrane filter that requires high water pressure to allow water molecules to pass through and other chemicals to remain producing two streams: the treated water and the concentrated wastewater stream. The cost to provide RO treatment ranges from \$2.03 to \$8.04 per 1,000 gallons of water treated according to the ACWA guidance. This cost does not include the cost for design, planning, permitting, and waste disposal, which can increase total costs substantially. In 2021, the City used approximately 9,816 acre-feet of groundwater. This translates to approximately 8.8 million gallons per day. At this rate, the cost to provide RO treatment for all groundwater used by the City would range from \$6.5 million to \$25.7 million annually. The actual cost would likely be at the end of that range, as each groundwater well will require a separate treatment unit. Assuming that all groundwater wells would be treated, the \$25.7 million would represent a worst-case estimate. Based on these assumptions, and the 2021 population of 130,746, the annual cost implication per person would be approximately \$197 annually.

This treatment option produces wastewater and treatment byproducts which must be disposed of properly. In addition, this treatment option may not be capable of meeting the PHG though it is identified as a BAT for the purpose of meeting the MCL. The MCL of 10 ppb for arsenic is a significantly higher than the PHG of 0.004 ppb for arsenic. The MCL is what has been determined as 'safe' from a regulatory standpoint, and which is enforceable. Also, since current analytical technology is not capable of measuring concentrations as low as the PHG, it would be impossible to verify that compliance with the PHG was achieved even if treatment was installed.

Since the City is in compliance with both the State and Federal limit for arsenic, there is no plan to install additional treatment. Arsenic results are summarized in the water quality data table found in the City's 2020 CCR, 2021 CCR, and 2022 CCR as documentation of compliance with the Safe Drinking Water Act.

2.2 Recommendations for Further Actions:

The drinking water quality of the City of Santa Clara's water supply meets all SWRCB and USEPA drinking water standards set to protect public health. To further reduce the levels of the constituents identified in this report below the level that the state has already determined to meet the regulatory definition of "safe drinking water" would require very costly treatment processes. The large financial outlay required for additional treatment processes and the effectiveness of the treatment processes to provide any significant reductions in constituent levels at these already low values is uncertain and would merely mean that the already safe drinking water is slightly safer, however the health protection benefits of these further hypothetical reductions are not at all clear and may not be quantifiable. Therefore, no action is proposed at this time.

ATTACHMENT 1

MCLs, DLRs, and PHGs

Table 2 – PHG, DLR, and MCL									
Constituent	MCL	DLR	PHG						
Arsenic	10 ppb	2 ppb	0.004 ppb						

MCL = Maximum Contaminant Level

DLR = Detection Limit for the Purpose of Reporting

PHG = Public Health Goal

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: September 14, 2021

MCLs, DLRs, PHGs, for Regulated Drinking Water Contaminants

(Units are in milligrams per liter (mg/L), unless otherwise noted.)

Last Update: September 14, 2021

The following tables includes California's maximum contaminant levels (MCLs), detection limits for purposes of reporting (DLRs), public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA). For comparison, Federal MCLs and Maximum Contaminant Level Goals (MCLGs) (USEPA) are also displayed.

Inorganic Chemicals Table, Chemicals with MCLs in 22 CCR §64431

State Regulated Inorganic Chemical Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Aluminum	1	0.05	0.6	2001		
Antimony	0.006	0.006	0.001	2016	0.006	0.006
Arsenic	0.010	0.002	0.000004	2004	0.010	zero
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003	7 MFL	7 MFL
Barium	1	0.1	2	2003	2	2
Beryllium	0.004	0.001	0.001	2003	0.004	0.004
Cadmium	0.005	0.001	0.00004	2006	0.005	0.005
Chromium, Total - OEHHA withdrew the 0.0025-mg/L PHG	0.05	0.01	withdrawn Nov. 2001	1999	0.1	0.1

State Regulated Inorganic Chemical Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Chromium, Hexavalent - 0.01- mg/L MCL & 0.001- mg/L DLR repealed September 2017			0.00002	2011		
Cyanide	0.15	0.1	0.15	1997	0.2	0.2
Fluoride	2	0.1	1	1997	4.0	4.0
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*	0.002	0.002
Nickel	0.1	0.01	0.012	2001		
Nitrate (as nitrogen, N)	10 as N	0.4	45 as NO3 (=10 as N)	2018	10	10
Nitrite (as N)	1 as N	0.4	1 as N	2018	1	1
Nitrate + Nitrite (as N)	10 as N		10 as N	2018		
Perchlorate	0.006	0.002	0.001	2015		
Selenium	0.05	0.005	0.03	2010	0.05	0.05
Thallium	0.002	0.001	0.0001	1999 (rev2004)	0.002	0.0005

Copper and Lead Table, 22 CCR §64672.3

Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule.

State Regulated Copper and Lead Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Copper	1.3	0.05	0.3	2008	1.3	1.3
Lead	0.015	0.005	0.0002	2009	0.015	zero

Radiological Table, Radionuclides with MCLs in 22 CCR §64441 and §64443

[units are picocuries per liter (pCi/L), unless otherwise state; n/a = not applicable]

State Regulated Radionuclides Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical	15	3	none	n/a	15	zero
Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical	4 mrem/yr	4	none	n/a	4 mrem/yr	zero
Radium-226		1	0.05	2006		
Radium-228		1	0.019	2006		
Radium-226 + Radium-	5				5	zero

State Regulated Radionuclides Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
228						
Strontium-90	8	2	0.35	2006		
Tritium	"20,000"	"1,000"	400	2006		
Uranium	20	1	0.43	2001	30 µg/L	zero

Organic Chemicals Table, Chemicals with MCLs in 22 CCR §64444

Volatile Organic Chemicals (VOCs)

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Benzene	0.001	0.0005	0.00015	2001	0.005	zero
Carbon tetrachloride	0.0005	0.0005	0.0001	2000	0.005	zero
1,2-Dichlorobenzene	0.6	0.0005	0.6	1997 (rev2009)	0.6	0.6
1,4-Dichlorobenzene (p- DCB)	0.005	0.0005	0.006	1997	0.075	0.075
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003		
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)	0.005	zero

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999	0.007	0.007
cis-1,2-Dichloroethylene	0.006	0.0005	0.013	2018	0.07	0.07
trans-1,2- Dichloroethylene	0.01	0.0005	0.05	2018	0.1	0.1
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000	0.005	zero
1,2-Dichloropropane	0.005	0.0005	0.0005	1999	0.005	zero
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)		
Ethylbenzene	0.3	0.0005	0.3	1997	0.7	0.7
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999		
Monochlorobenzene	0.07	0.0005	0.07	2014	0.1	0.1
Styrene	0.1	0.0005	0.0005	2010	0.1	0.1
1,1,2,2- Tetrachloroethane	0.001	0.0005	0.0001	2003	0.1	0.1
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001	0.005	zero

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Toluene	0.15	0.0005	0.15	1999	1	1
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999	0.07	0.07
1,1,1-Trichloroethane (1,1,1-TCA)	0.200	0.0005	1	2006	0.2	0.2
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006	0.005	0.003
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009	0.005	zero
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014		
"1,1,2-Trichloro-1,2,2- Trifluoroethane (Freon 113)"	1.2	0.01	4	1997 (rev2011)		
Vinyl chloride	0.0005	0.0005	0.00005	2000	0.002	zero
Xylenes	1.750	0.0005	1.8	1997	10	10

Non-Volatile Synthetic Organic Chemicals (SOCs)

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Alachlor	0.002	0.001	0.004	1997	0.002	zero

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Atrazine	0.001	0.0005	0.00015	1999	0.003	0.003
Bentazon	0.018	0.002	0.2	1999 (rev2009)		
Benzo(a)pyrene	0.0002	0.0001	0.000007	2010	0.0002	zero
Carbofuran	0.018	0.005	0.0007	2016	0.04	0.04
Chlordane	0.0001	0.0001	0.00003	1997 (rev2006)	0.002	zero
Dalapon	0.2	0.01	0.79	1997 (rev2009)	0.2	0.2
1,2-Dibromo-3- chloropropane (DBCP)	0.0002	0.00001	0.000003	2020	0.0002	zero
2,4- Dichlorophenoxyaceti c acid (2,4-D)	0.07	0.01	0.02	2009	0.07	0.07
Di(2- ethylhexyl)adipate	0.4	0.005	0.2	2003	0.4	0.4
Di(2- ethylhexyl)phthalate (DEHP)	0.004	0.003	0.012	1997	0.006	zero
Dinoseb	0.007	0.002	0.014	1997	0.007	0.007

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
				(rev2010)		
Diquat	0.02	0.004	0.006	2016	0.02	0.02
Endothal	0.1	0.045	0.094	2014	0.1	0.1
Endrin	0.002	0.0001	0.0003	2016	0.002	0.002
Ethylene dibromide (EDB)	0.00005	0.00002	0.00001	2003	0.0000 5	zero
Glyphosate	0.7	0.025	0.9	2007	0.7	0.7
Heptachlor	0.00001	0.00001	0.000008	1999	0.0004	zero
Heptachlor epoxide	0.00001	0.00001	0.000006	1999	0.0002	zero
Hexachlorobenzene	0.001	0.0005	0.00003	2003	0.001	zero
Hexachlorocyclopent adiene	0.05	0.001	0.002	2014	0.05	0.05
Lindane	0.0002	0.0002	0.000032	1999 (rev2005)	0.0002	0.0002
Methoxychlor	0.03	0.01	0.00009	2010	0.04	0.04
Molinate	0.02	0.002	0.001	2008		
Oxamyl	0.05	0.02	0.026	2009	0.2	0.2

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Pentachlorophenol	0.001	0.0002	0.0003	2009	0.001	zero
Picloram	0.5	0.001	0.166	2016	0.5	0.5
Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009	2007	0.0005	zero
Simazine	0.004	0.001	0.004	2001	0.004	0.004
Thiobencarb	0.07	0.001	0.042	2016		
Toxaphene	0.003	0.001	0.00003	2003	0.003	zero
1,2,3- Trichloropropane	0.00000 5	0.00000 5	0.0000007	2009		
2,3,7,8-TCDD (dioxin)	3x10-8	5x10-9	5x10-11	2010	3x10-8	zero
2,4,5-TP (Silvex)	0.05	0.001	0.003	2014	0.05	0.05

Disinfection Byproducts Table, Chemicals with MCLs in 22 CCR §64533

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Total Trihalomethanes	0.080				0.080	

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Bromodichloromethane		0.0010	0.00006	2020		zero
Bromoform		0.0010	0.0005	2020		zero
Chloroform		0.0010	0.0004	2020		0.07
Dibromochloromethane		0.0010	0.0001	2020		0.06
Haloacetic Acids (five) (HAA5)	0.060				0.060	
Monochloroacetic Acid		0.0020				0.07
Dichloroacetic Adic		0.0010				zero
Trichloroacetic Acid		0.0010				0.02
Monobromoacetic Acid		0.0010				
Dibromoacetic Acid		0.0010				
Bromate	0.010	0.0050**	0.0001	2009	0.01	zero
Chlorite	1.0	0.020	0.05	2009	1	0.8

Chemicals with PHGs established in response to DDW requests. These are not currently regulated drinking water contaminants.

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
N-Nitrosodimethylamine (NDMA)			0.000003	2006		

*OEHHA's review of this chemical during the year indicated (rev20XX) resulted in no change in the PHG.

**The DLR for Bromate is 0.0010 mg/L for analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0.

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 2020
- Consumer Confidence Report 2021
- Consumer Confidence Report 2022

Water Quality Consumer Confidence Report 2020

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 a water quality report called the Consumer Confidence Report (CCR). It contains the latest water-quality monitoring results obtained through the end of 2019. The CCR answers some of the most common water-quality questions asked by our customers.

To ensure our 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 specific contaminants in water provided by public water utility. The U.S. Food and Drug Administration regulations and California law establishes limits for contaminants in bottled water that provide the same protection for public health. Report Contains Water Quality Monitoring Results

This report adheres to the requirements of the Safe Drinking Water Act and State regulations. Although the water you receive is tested for more than 100 potential contaminants and 48 other parameters, the majority of the potential contaminants are never detected. To simplify the CCR, 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 Water Board to provide additional information about certain constituents that appear on the water quality table even though our 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. Some of our 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water Must Meet Standards



The Federal Government carefully regulates the quality of drinking water. 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 by specifying 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 CCR.

It is important to the City of Santa Clara that our water customers have current and factual information about your water supply. The goal of the CCR is to strengthen our customer's confidence in the quality and integrity of the water supplied by the City of Santa Clara. We take pride in delivering safe, and high-quality water.

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 do this by posting this public notice in a public place or distributing copies by hand or mail.

Source Water Information

Q: Where does our water come from?

A: The City of Santa Clara has three separate sources of drinking water. Often, these sources are used interchangeably or are blended. Altogether our water sources provide an average of 16 million gallons of water per day to the homes, businesses, industries and institutions of Santa Clara. In 2019, about 45% 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 the San Francisco Public Utility Commission's (SFPUC) Hetch-Hetchy System, imported from the Sarra Nevada Mountains.

Water purchased from Valley Water serves the southwesterly portion of the City primarily SFPUC Hetch-Hetchy water typically serves the area north of Highway 101. The City's system of 21 active wells supplies the remaining 55% of Santa Clara. The map shows the areas served by our three water sources.

CITY WELLS

More than half 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 water-filled spaces between sand, gravel, silt and clay) deep in the ground. Rainwater replenishes aquifers by rainwater infiltrating down into the ground.

HETCH HETCHY SYSTEM

The City purchases water from the Hetch Hetchy System. The San Francisco Regional Water System (SFRWS) conducts watershed sanitary surveys for the Hetch Hetchy source annually and for local water sources and Upcounty Non-Hetch Hetchy Sources (UNHHS) every five years. The latest local sanitary survey was completed in 2016 for the period of 2011-2015. The last watershed sanitary survey for UNHHS was conducted in 2015 as part of SFRWS's drought-response plan. All these surveys, together with the stringent watershed protection management activities, were completed by SFRWS 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 the results of watershed management activities conducted in the preceding years. Wildlife, stock, and human activities continue to be the potential contamination sources. Contact the San Francisco District Office of the State Water Resources Control Board's Division of Drinking Water (SWRCB-DDW) at 510-620-3474 to review the reports.

City of Santa Clara, California



Groundwater

c

Surface Water

b

SANTA CLARA VALLEY WATER DISTRICT

The Santa Clara Valley Water District, also rebranded as Valley Water, provides treated surface water to the Silicon Valley from three water treatment plants. Valley Water imports the majority of the surface water 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. Valley Water's local water sources include Anderson and Calero Reservoirs.

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

Some Santa Clara Water is Flouridated

Q: Is fluoride added to our water?

A: Fluoride is nature's cavity fighter. Fluoridation adjusts the naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Fluoridated drinking water benefits people of all ages by preventing tooth decay.

In November of 2005, the SFPUC Hetch Hetchy system completed construction of a fluoridation facility in the East Bay. The water purchased by the City from the SFPUC is fluoridated, 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. Refer to the map in this CCR that shows the area supplied with water from both the Hetch-Hetchy system and the City's wells. Most of the City will continue to receive water without fluorida added.

State law requires the addition of fluoride to all water systems in California serving 10,000 customers or more. In 2021, Valley Water plans to add fluoridation to the Rinconada Water Treatment Plant, which services the southern part of Santa Clara. Fluoridation of the remaining water sources in the City would require the installation of fluoride injecting equipment at each of the City's 21 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 cdc.gov/fluoridation or the State Water Board website waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

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 Board in December 2002. A copy of the DWSAP is available at the City's Water Utility offices at 1500 Warburton Avenue, Santa Clara. To request a summary of the individual assessments, contact the Water Utility at 408-615-2000 or by email at **water@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 correctly destroyed; and possibly some contaminants from a small landfill dump left over from the early years of the 20th century. (continued on next page)

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 houses 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 are available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/lead.

SCHOOL LEAD TESTING

As of January 2018, State law requires water suppliers to sample all schools on public land by mid-2019. As of April 2019, City staff has completed all required sampling and provided results to the school districts following the testing. All samples except for one taken at John Sutter Elementary School were well below the EPA action level for lead of 15 parts per billion (ppb). The fixture was immediately taken out of service and replaced by SCUSD staff, resampling at the site resulted in a ND (non-detect) for lead. Please contact your school administrator for information about lead testing and results for your local school. For additional information visit: waterboards.ca.gov/ drinking_water/certlic/drinkingwater/leadsamplinginschools.html

"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.

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 San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy system has been tested for Cryptosporidium and Giardia. The source waters and treated waters are tested at least monthly and occasionally show very low levels of Cryptosporidium in the waters serving the East Bay, South Bay and San Francisco Peninsula. Giardia, another parasitic organism causing similar symptoms, is monitored with the same frequency and very low levels are occasionally detected in the same source waters.

The general public is at very low risk and there have been no reported cases of Cryptosporidiosis and Giardiasis attributed to the City's public water supply. This advisory applies to water received from the Hetch Hetchy system in the area of the City north of Highway 101. The CDPH issues guidance for people with serious immune system problems. Currently, available guidance from the state and county health agencies recommends that people with such conditions consult with their doctor or primary health care provider about preventing Cryptosporidium and Giardia infection from all potential sources. Water consumers may choose to boil their drinking water at a rolling boil for at least one minute as an extra precaution.

For information about Cryptosporidiosis and Giardiasis, or copies of available guidance, contact the Santa Clara County Department of Environmental Health at 408-918-3400. You may also contact the USEPA Drinking Water Hotline at 1-800-426-4791.

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 naturallyoccurring 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.

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 Quality Report Questions Diane Asuncion 408-615-2000 DAsuncion@SantaClaraCA.gov

Water Emergencies

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

Water Conservation Save20gallons.org

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

Web 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: waterboards.ca.gov/drinking_water/

programs/index.shtml

United States Environmental Protection Agency:

water.epa.gov/drink/index.cfm

San Francisco Public Utilities Commission, Water Quality Bureau:

sfwater.org/index.aspx?page=163

Valley Water:

valleywater.org

Water Education Foundation: watereducation.org

Water Quality Information Center: www.nal.usda.gov/fnic/water

Public Input

To provide input on decisions that affect drinking water quality, contact the Santa Clara City Council via mail, email or phone, or attend a City Council meeting. A list of all City Council meetings and agenda items are available on the City website, SantaClaraCA.gov.

eNotify

Sign up to receive news from the Water Utility SantaClaraCA.gov/enotify

			State PHC/	anal City SC	analysis for City SC Well Water		analysis for r SCVWater District		ysis for I HETCHY	Y		
	UNIT		Fed (MCLG)	range	average	range	average	range	average	Common Sources of:		
Primary Standards for Source Wa	ater Sampli	ing:							or [max]			
MICROBIOLOGICAL	-	Ŭ										
giardia lamblia	cyst/L	TT	0	NA	NA	ND	ND	ND - 0.09	0.02	naturally present in environment		
RADIOACTIVITY												
Gross Alpha	pCi/L	15	(0)	ND-5	0.9	ND	ND	ND	ND	erosion of natural deposits		
INORGANIC CHEMICAL	1.1.1											
Barium	PPM	1	2	0.088 - 0.14	0.1	ND	ND	ND	ND	erosion of nat'l deposit/oil drilling		
Chromium	PPB	50	(100)	ND - 1.4	0.3	ND	ND	ND	ND	erosion of nat'l deposit/plating		
Fluoride	PPM	2	1	0.13 - 0.18	0.1	ND - 0.13	ND	ND - 0.9	0.3	water additive/erosion of nat'l deposits		
Nitrate (as Nitrogen)	PPM	10	10	0.38 - 5.9	3.7	ND - 0.5	ND	ND	ND	erosion of nat'l deposit/runoff/leaching		
Secondary Standards: "Consume	r Accentan	ce Contar	ninent Level	s"								
Aluminum	PPB	500	NA	ND	ND	ND	ND	ND-68	ND	natural deposits/treatment process		
Chloride	PPM	500	NA	31 - 69	48	27 - 72	51	< 3 - 17	87	runoff/leaching nat'l deposits/seawater		
Color	UNITS	15	NA	ND	ND	ND	ND.	< 5 - 10	< 5	naturally occuring organic material		
Manganese	PPB	50	NA	ND - 2.4	0.3	ND	ND	ND	ND	leaching from natural deposits		
Odor	UNITS	3	NA	ND - 1		1	1	ND	ND	naturally occuring organic material		
Sp. Conductance	uS/cm	1600	NA	670 - 780	655.6	365 - 517	445	32 - 234	158	subst.forming ions/seawater intrusion		
Sulfate	PPM	500	NA	29 - 48	37.1	52 - 62	58	1 - 29	15	runoff/leaching nat'l deposits/ind, waste		
Tot.Dissolved Solids	PPM	1000	NA	340 - 440	382.2	240 - 292	265	< 20 - 119	76	runoff/leaching from natural deposits		
Turbidity	NTU	5	NA	ND - 0.31	0.1	0.01 - 0.51	0.04	03-07(1)	[2.1] ⁽²⁾	soil runoff		
Consumer Information									1			
	LINITS	NIC	NIC	70 0	70	77 70	7 0	0 0 10 1	0.2			
Alkalipity (as CoCO2)	DDM	NC	NC	120 240	204.4	60 95	7.0	25 07	5.5			
Ammonia (Total)	DDM	NS	NS	NA	204.4	0.48 - 0.56	0.52	3.3 - 97 NA	40			
Bicarbonate Alkalinity (as HCO3)	DDM	NS	NS	230-200	2/7.8	73 - 104	80	NA	NA			
Boron	DDR	NS	NS	200-200 NA	247.0	120 - 135	128	ND - 107	ND			
Bromide	PPM	NS	NS	NΔ	NΔ	ND = 110	ND	NA	NA			
Calcium (as Ca)	PPM	NS	NS	56 - 90	73.3	20 - 25	22	33-20	12			
Chlorate	PPR	NS	NS	NA	NA NA	67 - 140	102	40 = 220	8/			
Hardness	PPM	NS	NS	210 - 320	258.9	93 - 120	104	89 - 77	47			
Hexavalent Chromium	PPB	NS	0.02	0.26 - 2.5	15	ND	ND	NA	NA			
Magnesium	PPM	NS	NS	17 - 23	18.9	12 - 15	13	02-66	42			
Molybdenum	PPB	NS	NS	NA	NA	<1-1	<1	NA	NA			
Phosphate	PPM	NS	NS	NA	NA	1.02 - 1.77	1.3	NA	NA			
Potassium	PPM	NS	NS	1 - 1.3	1.1	2.1 - 3.4	2.7	0.3 - 1.2	0.8			
Silica	PPM	NS	NS	NA	NA	10 - 12	11	4.9 - 8	6.1			
Sodium	PPM	NS	NS	25 - 38	29	33 - 63	49	2.8 - 21	14			
Strontium	PPB	NS	NS	NA	NA	NA	NA	13 - 230	107			
Temperature	Deg. C	NS	NS	11.3 - 24	18	13 - 21	17	NA	NA			
Total Organic Carbon	PPM	NS	NS	NA	NA	137 - 233	196	16-27	21			

rimary Standards as Measured i	n City of Sa	nta Clara	Distribution	System:	
	Units	MCL	State MCL (Fed PHG)	Range	Average
Total Coliform	% pos (+)	5.00%	(0)	0 - 1.4%	< 5%
DISINFECTION BYPRODUCTS, RES	DUALS, PRE	CURSORS			
Trihalomethanes	PPB	80	NA	0 -64	[45.3]
Haloacetic Acids	PPB	60	NA	0 - 47	[31.5
Chlorine residual	PPM	4	4	0.0 - 3.5	1.22
INORGANIC CHEMICAL AS MEASU	JRED AT 77 R	ESIDENTI/	AL TAPS IN 201	9:	
Copper	PPM	AL = 1.3	0.3	90th perc	entile = 0.28ppm
Lead	PPB	AL = 15	0.2	90th perc	entile = ND
SCHOOLS REQUESTING LEAD TES	TING IN 2018	3: 33 SCH0	DOLS (172 SAM	IPLES TAKE	N)
Lead	PPB	AL = 15	0.2	90th perc	entile = ND

		•		•
	Units	Notification Level	Range	Average
Chlorodifluoromethane	PPB	NA	ND - 0.58	0.1
Chlorate	PPB	800	ND - 220	78.1
Chromium	PPB	NA	ND - 4.9	0.6
Hexavalent Chromium	PPB	NA	ND - 4.1	1
Molybdenum	PPB	NA	ND - 5.0	0.9
Strontium	PPB	NA	ND - 440	150
Vanadium	PPB	50	ND - 5.3	1.5
Manganese	PPB	50	ND - 8.8	1.1
Total Haleoacetic Acids (9)	PPB	NA	ND - 58	23.6

Common Sources of:

naturally present in environment

byproduct of drinking water disinfection byproduct of drinking water disinfection drinking water disinfectant

corrosion of plumbing systems corrosion of plumbing systems

corrosion of plumbing systems

City of Santa Clara WATER QUALITY TABLE

Number Exceeded = 0

Number Exceeded = 0

Number Exceeded = 1(3)

[1] Turbidity is measured every four hours. These are monthly average turbidity values. [2] The highest turbidity of the unfiltered Hetch Hetchy water in 2018 was 1.8 NTU. [3] John Sutter Elementary - 26ppb. Repeat sampling following olumbing remains was non-detect for lead

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

PPM = Parts Per Million

PPB = Parts Per Billion

P = Present

A = Absent

<DLR = less than Detection Limit for Reporting

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 77 residential taps in September-October 2019.

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 ਮਹਤੱਵਪੂਰਣ 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 사용하십시요.

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.

Drinking Water Must Meet Standards

The quality of directing water is carefully regulated by the Federal Covernment in F342. Coverside the function state of the function Act requiring the USER to establish function rated by for dimining water. The SEB priminity black act was function rated by a field of 1956. Adding ever more stringent starkads in Callorina, these strated see end cover 35 Sale Water Resources Control about Diversion of Dimining Water.

FHERE ARE TWO TYPES OF DRINKING WATER STANDARDS.

PRIMARY STANDARDS are deagned to protect public health. PRIMARY STANDARDS are deagned to protect public health. Levels' (MCLs) for substances in water that may be harmful to humans or affect their health if consumed in lage quantities.

SECONDARY STANDARDS are based on eachteric qualities of set audri as oblicy, taste and och. These standards specify mins for substances that may affect consume acceptance of the water. This report.

It is important to the City of Samta Clana that you, the water consumer here current and lackulal information about your water apply. In this later issue of our report, we hope to further your understanding and streateneither your confidence in the quality and imperity of the water supplied to you'the City of Samta Claus. We take grapt pride in delivering the safest and highest quality were awale provide in delivering the safest and highest quality were awale provide in delivering the safest and highest quality

Source Water Information

Of where been our water come force the second second water the second second of defailed water (The Orto State Chara has the present and intercharacter and water (The Primer accurace and intercharacter) or or and the second second and water and and the second second and and and and the second second and and and and and accurace and instructions of States Cast. Second and Second and and and form the Second second second

ter purchased from Valley Water serves marking the southweater portion of the SFFUC feach-Heatchivaviare rypocally evente area north of Hayway. 101. The raining 59% is pumped from the CIV's end of 2 active wells serving the rest of ta Clain. The map shows the general areas weld by the different water sources. Y WELLS

mutual constrained in the City of Santa Cana is pool form the City system of deep will ware is pulled on groundware (ware that is board in aquifiers which are effekt spaces between sand, greet sill and clary) deep in the and Aquifers are replenished by reinware that infiltenes down the surface.

com the Hearthy System. The ter System (SFRWS) conclude watershed ch Hearty source ammally and for non-raources (UNHS) even; the ne non-Hearth Hearth watersheds were period of 2016 2020. All these surveys watershed protection management y surveys for the H Hetchy surface we anitary surveys fo sted in 2021 for th

Please share this information with all the other people who dirink this wate, sepacally those who may not harren to the action directly for example, people in a partmetis, nursing hornes, as chocks and housenesses). You can do this by pharing the bulk notice in a public please or distributing oxples by hard or mail.



enclusions are compared with support from temperagenous including National Park Services and US Forent Services. The purpose of the surveys are to walking the ansimity conditions and water quality of the watershords and to reverse result of water sty Volkfik took. Sumfittiones activate a conduct of water sty Volkfik took. Sumfittiones activate a conduct of the sum Fauctorial pared in National Park Intel Sam Fauctorial pared in National Park Resources Control pared in National Water (Strethol David I) National Park III National Park (Deck) 2473 for the rever of those report.

THE CITY OF SANTA CLARA HAS THREE SEPARATE SOURCES OF DRINKING WATER.

CLARA ESEPARTE SANTACLARAVALEYWATE DSTRGT Research Cara Waly Water Donket new Research Cara Waly Water Donket search Research Cara Waly Water Donket search Research Cara Waly Water Donket and Research Donket Research Research Cara Martin San Lare San San Cara Cara Martin San Lare San Cara Cara Martin Cara Cara Cara Martin San Lare San Cara Cara Martin Martin Cara Cara Martin Cara Cara Cara Martin Martin Cara Cara Martin Martin Cara Cara Martin Martin M

Valley Water's source waters are vulnerable to potential commentation (how waters are vulnerable to potential commentation (how waters) of bad cure potencies, lavoid parator and realized and relative disologoment. The momentation concest are also vulnerable to commente parator and realized and relative disologoment. The momentation constant and vulnerable to paratorial commentation constant and vulnerable to paratorial commentation constant and vulnerable to paratorial commentation constant and vulnerable to paratorial paratorials and hard values it tables and hardor milling paratorias to commentation the barrants of these antiheta tables and barran power and and values in the paratorial tables and the power antiheta barrants of the paratorial transmitted paratorial and the barrants of the paratorial communation and paratorial and the barrants of the paratorial transmitted paratorial and the barrants of the paratorial communation of paratorial and the paratorial of the paratorial communation of the paratorial and the barrants of the paratorial communation of the paratorial and the barrants of the paratorial and the paratorial and the barrants of the paratorial of the paratorial and communative paratorial and the barrants of the paratorial of the paratorial and communative paratorial and the barrants of the paratorial of the paratorial and communative paratorial and the barrants of the paratorial and the paratorial of the paratorial and communative paratorial and the paratorial and the paratorial of the paratorial of the paratorial and the paratorial of the paratorial of



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Attention Therportoranar improvement your direforg ware Translage to speak with somene who understands to

ਇਹ ਸੁਚਨਾ ਮਹਤੱਵਪੂਰਣ ਹੈ। ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ । Chi tiết này thật quan trọng. Xin nhở người địch cho quý vị-

cDLR = less than Desection Unit for Reporting DISTRIBUTION SYSTEM = christig water delivery patern DISTRIBUTION SYSTEM = christig water delivery patern DISTRIBUTION SYSTEM = household fauces used for lead and cognor smithing ONTAMINANTLEVEL (MCL) = The highest level are that is allowed in drinking water. Pirmary or and teactor the PHS3 (or MCLG3) as or and teacher when really feasible. Some teachers Drinking Water Standard (PDWS) = MOLs and or contaminants that affect health along with their moments.

WTLEVEL GOAL (MCLG) = The chinking water below which there isk to health. MCL Ga are set by the

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(MRDLO) = The level of a dirking water disinfectant built (MRDLO) = The le

and the second s REGULATORY ACTION LEVEL (AL) = The concernation of a contaminant which, if exceeded, inggers if reatment or other contaminant which, if exceeded, inggers if reatment or other

UNREGULATED CONTAMINANTS = Urregulated

SECONDARY STANDARDS = secondary MCLs are set to secondary Models of driving week MTU = Nephelometics Tablety Unit. Tablety is ameaure of the douches of othe week. We monitor these and

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。翻訳を読成報道されるか、内容をに理解な這さ 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,歸找 他人為你體際及解釋清楚。

Myrakent cations present in the and calcium. The cations are 1 Tap Monitoring was performed at 77 1 September-October 2019. HARDNESS = thesum of pol vector, generally magnesum. usually naturally occurring

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito Attencion : Este informe contiere in formacion muy importante so bressu agua beber. Traduz cab o hable con alguien que lo entienda bien.

Water Quality Confidence Consumer Report

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2021

The City of Santa Clara is committed to providing our customers with a safe and reliable supply of high-quality drinking water.

Report Contains Water Quality Monitoring Results

Each year we publiel our annual wrater quality-roport known as the Constante Confidence feator (toport) to characteristic lists (water quality monitoring) results cuan estimologi the end of calendar water 2020 it answers some of the most common water quality questions asked by our customers. We hope it will provide the traces and prespectives you need to make an informed existantion of your tap wrate.

In order to ensure that tap water is safe to drink the U.S. and Environment Protection Approv (UERP) with the State Provincement Protection Approv (UERP) with the State water Resources Control Board Chare Water Board prescribe an egulation practice manufacture and certain practice and water provided by public water system. The U.S. Food and Drug Administration egulations and California law adorestabilish thrute for continuinants to britted water that provide the same an protection for public health.

यह सूचना महत्वपूर्ण है । इत्या करके तिसी से सतल अनुवाद करायें । 이 안내는 태두 중요합니다. 문인을 위해 번역인을 사용하실시요.

This report has been prepared in accordance with the requirements of the side brinking Water A can Sidar requirements of the side brinking Water A can Sidar regulatories. Although the water you receive is tested for over any other prepareters, the majority of the potential contaminants are used repareters, the majority of the potential contaminants are also for pareters. To simplify the report, only the constitutents that averate potential for the rest of the potential contaminants are never detected to simplify table. We are also required by the Sidare to provide additional information and but the sidare into the water reality table. We are also required by the Sidare to provide additional information and but ending the additional table are not the water reality table even though the water mets all controller for some contaminants are the rest and the side and the side the potentian states are contaminants at the rest and the side and the side the side and the side contaminants are contaminants are the serificient and the additional state additions are rest and these contaminants do not change frequently.

Some people may be more whereable to contamismits in driving water than the general populatio immuno-contraction provides the contamismits in driving water than the general population immuno-contraction provides the people with HIVAIDS or other immune system disorders who have undergoive organismismits people with HIVAIDS or other immune system disorders are elefely, and infants can be beached with the MIXER of the Provides of the above and the main provides (SERA/Cartel) in the MIXER of the Provides of the above and the more and the membrane and the more provides (SERA/Cartel) in motiodial contaminatisme available from the Site Danley Water Horline (1+30X-4254-439). INFORMATION AND GUIDANCE FOR PEOPLE WITH COMPROMISED IMMUNE SYSTEMS:





Some Santa Clara Water is Flouridated

C: Is fluoride added to our water? Extractive is name is carry fighter. Fluoridation adjusts the naturaly occurring fluoride in dimining water or the ideal level for naturaly occurring fluoride in dimining water benefits people of all ages typ preventing tooth decay.

In November of 2005, the SPLC Helch Hatch's system completed construction of shortistican factily in the same point has well pointead by the CAT (then the SPLC) is fullowing the well form Walley the cat (the most of the solid solid solid wall form Walley the set of thore and thoreast if your type and solid solid solid are in the area receiving floor(diad) well however, this area is also set what you wall well in this to the million factor the floor the map that shows the are supplied with wear (not not) the Helch Helch system of the case supplied with under continue to receive walls with an analysis of thord is continue to receive walls with an advirt of the CAT wall

It is the requires the addition of fluorida to all water systems in the law requires the addition of fluorida to all water systems faint is load fluoridation to the filtocondash water flasting the system of the law requires the system of the system system of the system of the system of the system of the remaining water accurate in the CV world frasting tradition of compared system of the system of the system of the system expression that and the system of the system is. The six indicates a provision of a site fundation of the site of the site of the system of the site of the system expression that and the site of the site fundation of the site of le funding to move fon remainder of the City. program for the r

Water Quality Monitoring

NFORMATION ABOUT THE DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM:

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FRATES" - INFORMATION ABOUT NITRATES IN

ratlevels above 10 mg/L is a health risk for riths old. Such nitrate levels in drinking water apacity of the infant's blood to carry oxygen. ss; symptoms include shortness of breath and evels above 10 mg/L may also affect ry oxygen in other individuals, such as with certain specific enzyme deficienci of the skin. Not the blood

Environmental Health at 408 918-3400. You may also contact JSEPA Drinking Water Hotline at 1-800-426-4791.

DONTAMINANTS THAT OCCUR IN DRINKING WATER DBTAINED FROM SURFACE SOURCES AND UNDERGR

as "PFAS" aré a group of chemicals that have been widely used in industrial applications and consumer polocitics such as carpets, obthing, furniture fabrics, paper packaging for food firefighting foams, and other materials including waterproof/strain reastant/ nontrick and other metalistic include a wearpool (start measur) frontation cookeans the filthocochanoria and (FFCA) and beth lancochane allonate (FFCS) are no contain or and FFCA) and beth lancochane compatibility on a proteinal scatter of FFCS. The CAY has compated monitoring of FFCS compounds at water twell area based or procurity to a potential scatter of containmentor language to be and carring all hold FFCS compounds an weater well area based and carring all hold FFCS compounds an weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS and a scatter of carring and and an experiment of the scatter access of containment of the based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS compounds and weater well are based and carring all hold FFCS and all hold and all hold all hold and all hold and all carring all hold FFCS and all hold and all hold all hold all hold and all hold all hold FFCS and all hold all h luoroalkyl substances, collect f chemicals that have been w

urces of drinking water (both tap water and bottled water) blob most, bleas, thereas, bleas, thereas, ponds, tearings, and w water travels over through the ground, tal dissolves truelly occurring minetals and, in some cases radioscrive startia, and can pick up substances resulting from the prese rate and, and can pick up substances resulting from the prese

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In agencies recommends that people with such conditions consult there doctor or primary health can be powder about perventing topportidum and Giardia infection from all potential sources. Water uneas may choose to boil their dimiking water at a rolling boal for a I general public is at very low risk and there have been no reporte set of Chrosporotioses and Garadiosa turbuted ion the Chrys (a veater supply.) This advacery applies to water recover from the chrometer system in the advacery applies to water recover of the CPH statuse guidance for people with service immuno system bients. Currently, available guidance from the site and county. one minute as an extra precaution.

In order to ensure that tap water is safe to drink (the US incorrent Marcon Agents) (cardinal and a safe to drink (the US Resources Control Basel (Stare) water Basel (Stare) and the Stare Departure that the mitcher montrol of celans control and tap date and pro-by public water systems. The US food and Drig Administration by public water systems. The US food and Drig Administration in obtaind water that provide the same protection for proble has a problem and value systems.

Water

For information about available guidance, cc

ed by calling the USEPAs 1791. Dinicing water, inculing bottled water, may reasonably be to contain at least small amounts of some containtriants, presente of containtiants does not necessarily indicate th posses in heart inst. Mare information about containmants potential health effects can be obtained by caling the US ut Cryptosporidiosis and Giardiasis, or copies contact the Santa Clara County Department c

Valley Water: valley water org	Water Education Foundation: watereducation.org	Water Quality Information Center: http://wolc.nal.usda.gov/	Public Input	to provide input on deasons that attest drinking water quality, provide input to the	Santa Clara City Council at a Council meeting or in advance to mayorand councilio	Ist of all City Council meetings, agends items and shudy sessions can be viewed on the City	we work and the second se
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:	waterboards.ca.gov/drinking_water/ programs/index_shtml	United States Environmental	Protection Agency: water.epa.gov/drink	San Francisco Public Utilities Commission, Water Quality Bureau: <u>sfwriter ord</u>
Water Quality Report Questions Diane Asuncion	408-615-2000 watercom plia noe@sa nta clara ca .gov	Water Emergencies 408-615-2000 Monday-Friday	8 a.mb p.m. 408-615-5640 other days and times	Valley Water Water Conservation Save200allons.ord	408-630-2554 - Water Conservation Hotline and Rebate Information	Sign up for a free WaterWise House	Call from Valley Water by calling 1-800-548-1882
City of Santa Clara 1500 Warburton Ave.	Santa Clara, CA 95050 408-615-2200 SantaCl ar aCA.gov	Water Utility	Santa Clara, CA 95050 Office hours: 8 am -5 nm	Monday-Friday	Hueron 3-2000 Water Billing Questions	408-615-2300	City of Santa Clara

Water Quality Consumer Confidence Report

2022

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 2021. 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, the majority of the potential contaminants are never detected. To simplify the report, only the constituents that were detected in at least one water source appear in the water quality table. We are also required by the State to provide additional information about certain constituents that appear on the water quality table even though the water meets all applicable drinking water standards. 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.

inta

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 do this by posting this public notice in a public place or distributing copies by hand or mail.



Source Water Information

Q: Where does our water come from? A: The City of Santa Clara has three separate sources of drinking water. Often, these sources are used interchangeably or are blended together. Altogether these sources provide an average of 16 million gallons of water per day to the homes, businesses, industries and institutions of Santa Clara. In 2021, about 43% 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 57% 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, silt and clay) 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 Reservior. To meet drinking water standards for consumption, all surface water supplies including the upcountry non-Hetch Hetchy sources (UNHHS) undergo treatment by the 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. In 2021, no UNHHS water was used.

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.

SANTA CLARA VALLEY WATER DISTRICT

The Santa Clara Valley Water District, now 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. Valley Water's local water sources include Anderson and Calero Reservoirs. Anderson Reservoir was out of service for the Anderson Seismic Retrofit project and was not used to supply the treatments plants in 2021. Water from imported and local sources is pumped to and treated at three water treatment plants located in Santa Clara County

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 condition enhancement projects to our water system. In March 2022, a project was completed to rehabilitate three water tanks located at 200 Lawrence Expressway. These tanks store 13.2 million gallons of water, enough water to meet the entire City's demand for one average spring day. The scope of work involved structurally reinforcing and recoating the tanks to ensure unin-terrupted water for potable, fire suppression, emergency, and operational supply.

City of Santa Clara, California



	UNIT	MCL	State PHG/ Fed (MCLG)	analys City SC W range	is for ell Water average	analysi SCVWater range	is for District average	analys HETCH I range	sis for HETCHY average	Common Sources of:
Primary Standards For Source Wates	r Sampling	:							or [max]	
MICROBIOLOGICAL giardia lamblia BADIOACTIVITY	cyst/L	TT	0	NA	NA	ND - 0.1	ND	0 - 0.04	0.01	naturally present in environment
Gross Alpha INORGANIC CHEMICAL	pCi/L	15	(0)	ND	ND	ND	ND	ND	ND	erosion of natural deposits
Barium Fluoride Nitrate (as Nitrogen)	PPM PPM PPM	1 2 10	2 1 10	ND - 0.17 0.12 - 0.16 0.87 - 5.9	0.12 0.14 3.8	ND ND ND - 0.44	ND ND 0.44	ND ND - 0.8 ND	0.4] ⁽¹⁾ ND	erosion of nat'l deposit/oil drilling water additive/erosion of nat'l deposits erosion of nat'l deposit/runoff/leaching
Secondary Standards: "Consumer A	cceptance (Contamine	ent Levels"							
Chloride	PPM	500	NA	20 - 49	38	84 - 103	94	< 3 - 11	6.7	runoff/leaching nat'l deposits/seawater
Color	UNITS	15	NA	ND - 2	ND	< 2.5	< 2.5	NA	NA	naturally occuring organic material
Odor	UNITS	3	NA	ND - 1	ND	1	1	ND	ND	naturally occuring organic material
Sp. Conductance	uS/cm	1600	NA	463 - 802	609	604 - 684	652	34 - 217	135	subst.forming ions/seawater intrusion
Sulfate	PPM	500	NA	26 - 70	42	74.4 - 100.1	82.8	1.1 - 29	13	runoff/leaching nat'l deposits/ind. waste
Tot.Dissolved Solids	PPM	1000	NA	56 - 520	370	362 - 392	378	< 20 - 96	52	runoff/leaching from natural deposits
Turbidity	NTU	5	NA	0.1 - 3.7	0.73	ND - 0.10	0.1	0.2 - 0.4 (2)	[3.3]	soil runoff
Consumer Information										
pH Alkalinity (as CaCO3) Ammonia (Tota) Bicarbonate Alkalinity (as HCO3) Boron Boronide Calcium (as Ca) Chlorate Hardness Hexavalent Chromium Magnesium Phosphate Potassium Silica Sodium Sodium Temperature Total Organic Carbon Vanadium	UNITS PPM PPM PPB PPB PPB PPB PPM PPM PPM PPM	NS NS NS NS NS NS NS NS NS NS NS NS NS N	NS NS NS NS NS NS NS NS NS NS NS NS NS N	7.5 - 7.8 147 - 249 NA 147 - 249 NA 43 - 100 NA 70 - 390 0.3 - 4.1 NA 14 - 32 NA NA 1.1 - 1.5 NA 10.5 - 25.4 NA NA	7.7 204 NA NA 65.9 NA 263 1.47 21 NA 1.2 NA NA 18.5 NA NA NA	$\begin{array}{c} 7.7 \cdot 7.8 \\ 69 \cdot 82 \\ 0.48 \cdot 0.53 \\ 85 \cdot 101 \\ 171 \cdot 233 \\ 130 \cdot 180 \\ 22.4 \cdot 26.0 \\ 111 \cdot 135 \\ 111 \cdot 135 \\ 111 \cdot 132 \\ 103 \cdot 1.12 \\ 3.4 \cdot 4.5 \\ 103 \cdot 1.12 \\ 3.4 \cdot 4.5 \\ 11 \cdot 147 \\ 71 \cdot 147 \\ 71 \cdot 147 \\ 71 \cdot 2.13 \\ \text{ND} \cdot 3 \\ \text{ND} \cdot 3 \end{array}$	7.8 77 0.50 95 197 150 24.0 122 120 ND 14.6 1.09 4.1 13 78 NA 19 1.9 [3]	8.6 - 9.7 ND ND - 123 ND 3 - 17 28.420[²⁰ 7.7 - 60 NA (0.2 - 5.5 < 0.3 - 0.3 0.4 - 1.1 3 - 5.9 3.1 - 17 14 - 181 NA 1.2 - 2.2 NA	9.2 37 ND ND 9.5 162 34 NA 2.9 < 0.3 0.7 4.8 12 83 NA 1.8 NA	

	Units	MCL	State MCL	Range	Average		Common Sources of:					
MICROBIOLOGICAL			(Fed PHG)									
Total Coliform	% pos (+)	5.00%	(0)	0 - 0.6%	< 5%		naturally present in environment					
Fecal Coliform and E.coli (4)	# of pos (+)	0	0	0	0							
DISINFECTION BYPRODUCTS, RESID	UALS, PREC	CURSORS										
Trihalomethanes	PPB	80	NA	ND - 43	[38.5]		byproduct of drinking water disinfection					
Haloacetic Acids	PPB	60	NA	ND - 42	[33]		byproduct of drinking water disinfection					
Chlorine residual	PPM	4	4	0.0 - 3.7	1.15		drinking water disinfectant					
INORGANIC CHEMICAL as measured	l at 77 Resid	dential Taps in 2	019:									
Copper	PPM	AL = 1.3	0.3 9	Oth percentile =	0.28ppm	Number Exceeded = 0	corrosion of plumbing systems					
Lead	PPB	AL = 15	0.2 9	0th percentile =	ND	Number Exceeded = 0	corrosion of plumbing systems					
SCHOOLS REQUESTING LEAD TESTI	NG IN 2018	: 33 Schools (17	2 samples tak	en)								
Lead	PPB	AL = 15	0.2 9	00th percentile =	ND	Number Exceeded = 1 ⁽⁵⁾	corrosion of plumbing systems					

Unregulated Contaminants As Measured In City Of Santa Clara Distribution System:

	Units	Notification Level	Range	Average
Manganese	PPB	500	ND - 8.8	1.1
Total Haleoacetic Acids (9)	PPB	NA	ND - 58	23.6

City of Santa Clara WATER QUALITY TABLE

(1) Natural fluoride in the Hetch Hetchy source was ND.

These are monthly average turbidity values calculated from turbidity measured every four hours daily.
The detected chlorate is a degradation product of sodium hypochlorite used by the SFRWS for water disinfection.
The MCL was changed to E. coli starting on July 1, 2021 when the State Revised Total Coliform Rule became effective
John Sutter Elementary - 26ppb. Repeat sampling following plumbing repairs was non-detect for lead.

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

MAXINUM 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 contraminants.

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

P = Present

A = Absent

<DLR = less than Detection Limit for Reporting

Notes

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 77 residential taps in September-October 2019.

 $\begin{array}{l} \textbf{HARDNESS} = \text{the sum of polyvalent cations present in the} \\ \text{water, generally magnesium and calcium. The cations are} \\ \text{usually naturally occurring.} \end{array}$

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 ਮਹਤੱਵਪੂਰਣ 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 사용하십시요.

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.



Some Santa Clara Water is Flouridated

Q: Is fluoride added to our water?

A: Fluoride is nature's cavity fighter. Fluoridation adjusts the naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Fluoridated drinking water benefits people of all ages by preventing tooth decay.

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. 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 www.waterboards.ca.gov/drinking_water/certlic/ drinkingwater/Fluoridation.shtml.

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 drycleaning 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. In October 2021, the City received a waiver for PFAS monitoring because PFAS was not detected in all collected samples.

TOTAL COLIFORM AND E.COLI

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016, to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.

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 San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy system has been tested for Cryptosporidium and Giardia. The source waters and treated waters are tested at least monthly and occasionally show very low levels of Cryptosporidium in the waters serving the East Bay, South Bay and San Francisco Peninsula. Giardia, another parasitic organism causing similar symptoms, is monitored with the same frequency and very low levels are occasionally detected in the same source waters.

The general public is at very low risk and there have been no reported cases of Cryptosporidiosis and Giardiasis attributed to the City's public water supply. This advisory applies to water received from the Hetch Hetchy system in the area of the City north of Highway 101. The CDPH issues guidance for people with serious immune system problems. Currently, available guidance from the state and county health agencies recommends that people with such conditions consult with their doctor or primary health care provider about preventing Cryptosporidium and Giardia infection from all potential sources. Water consumers may choose to boil their drinking water at a rolling boil for at least one minute as an extra precaution.

For information about Cryptosporidiosis and Giardiasis, or copies of available guidance, contact the Santa Clara County Department of Environmental Health at 408 918-3400. You may also contact the USEPA Drinking Water Hotline at 1-800-426-4791.

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.

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 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 Save20gallons.org

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: <u>www.waterboards.ca.gov/drinking</u> 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 SantaClaraCA.gov.

eNotify

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