



San Francisco  
**Water Power Sewer**  
Services of the San Francisco Public Utilities Commission

CITY OF SAN FRANCISCO

**2023**

**Annual Water Quality Report**



2023

# Annual Water Quality Report

CITY OF SAN FRANCISCO

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## Summary of Water Quality Report

The San Francisco Public Utilities Commission (SFPUC) is a public agency. We run a regional water system. This system delivers drinking water to over 2.7 million residents and thousands of businesses in the Bay Area. Every year we produce Water Quality Reports for customers both in San Francisco and outside of San Francisco. In this report, you can learn where your water comes from, how we treat it, and its overall quality. Our pledge is to provide high quality drinking water to all our customers. In 2023, our water met all federal and state standards.

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## Introduction

The San Francisco Public Utilities Commission provides high-quality water that meets all federal and state standards to 2.7 million residents and thousands of businesses in cities and towns across the region. Through careful stewardship of both our natural resources and our infrastructure, our goal is to reliably deliver high-quality drinking water to homes and businesses every day. Although the 2022-2023 water year proved to be a wet one for California, long-term climate change will continue to make the state’s weather more extreme and unpredictable. This will require all of us to rethink the way we use water and the sources of supply available to us.

### Understanding This Report

The San Francisco Public Utilities Commission produces a Water Quality Report every year to provide specific information about where your water comes from, how we

treat it, and its overall quality. We do this not only to meet a regulatory requirement but also provide an educational opportunity for you to understand our drinking water operations and public health protection efforts.

We are committed to providing high-quality drinking water for all our customers. Our system is large and we work across several counties to maintain the system that delivers drinking water for your consumption. It is our hope that this report will not only provide you with greater knowledge of your water, but also an increased understanding of the considerable skill, talent, and effort of the San Francisco Public Utilities Commission staff that goes into ensuring businesses and residents have reliable access to this precious resource.

We’re proud of our water, and we hope you are too. We hope you enjoy getting to know a little more about who we are as an agency and how you can get involved.

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## Our Drinking Water Sources and Treatment

Almost all of our drinking water supply comes from the San Francisco Regional Water System, which is the wholesale system owned and operated by the San Francisco Public Utilities Commission. The supply consists of surface water and groundwater that are well protected and carefully managed. These sources are diverse in both origin and location with the surface water stored in reservoirs located in the Sierra Nevada mountains, Alameda County, and San Mateo County, as well as groundwater stored in a deep aquifer located in the northern part of San Mateo County and the western side of San Francisco. Maintaining this variety of sources is an important component of the San Francisco Public Utilities Commission's near- and long-term water supply management strategy. A diverse mix of sources protects us from potential disruptions due to emergencies or natural disasters, provides resiliency during periods of drought, and helps us ensure a long-term, sustainable water supply as we address issues such as climate uncertainty, regulatory changes, and population growth.

To meet drinking water standards for consumption, all surface water supplies including the upcountry

non-Hetch Hetchy sources undergo treatment by the San Francisco Regional Water System before it is delivered. While the water from Hetch Hetchy Reservoir is exempt from state and federal filtration requirements due to its exceptional quality, it 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 non-Hetch Hetchy sources is delivered to the Sunol Valley Water Treatment Plant; whereas water from local reservoirs in San Mateo County is delivered to the Harry Tracy Water Treatment Plant. Water treatment at these plants consists of filtration, disinfection, fluoridation, optimum corrosion control, and taste and odor removal. In 2023, we did not use upcountry non-Hetch Hetchy sources of water, and only a very small amount of local groundwater was added to the supply through blending in the transmission pipelines and Sunset Reservoir.

### Summary: Water Sources

Surface water from reservoirs makes up almost all of the water you receive. In 2023, we also used a very small amount of groundwater. Using a mix of sources protects us from supply interruptions in the future. These interruptions can be due to drought, climate change, or population growth.

We treat all drinking water before delivering it to you. We use proven science to make sure it meets all federal and state standards. In 2023, we performed nearly 100,000 drinking water tests. Samples came from reservoirs and other points in the water system.

We regularly collect and test water samples from reservoirs and designated sampling points throughout the system to ensure the water delivered to you meets all federal and state drinking water standards. In 2023, we conducted nearly 100,000 drinking water tests in the source, transmission, and distribution system. This is in addition to the extensive treatment process control monitoring performed by our certified operators and online instruments.

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Collectively these are called contaminants. Therefore, 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. To ensure that tap water is safe to drink, the United States Environmental Protection Agency and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

### Protection of Watersheds

The San Francisco Public Utilities Commission 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 the San Francisco Public Utilities Commission's stringent watershed protection management activities, were completed with support from partner agencies including the National Park Service and the United States Forest

Service. The purposes of these annual and quinquennial 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. 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 at 510-620-3474 for more information.

### Fluoridation and Dental Fluorosis

Mandated by State law, water fluoridation is a widely accepted practice proven safe and effective for preventing and controlling tooth decay. The San Francisco Public Utilities Commission's target fluoride level in the water is 0.7 milligram per liter (mg/L, or part per million, ppm), which is consistent with the May 2015 State regulatory guidance on optimal fluoride levels. Infants fed formula mixed with water containing fluoride at this level may still have a chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. The Centers for Disease Control and Prevention considers it safe to use optimally fluoridated water for preparing infant formula. To lessen this chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste, and dental products. Contact your healthcare provider or the State Water Resources Control Board if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the State Water Resources Control Board website's [waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.html](https://waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html), the Centers for Disease Control and Prevention's website [cdc.gov/fluoridation](https://cdc.gov/fluoridation), or our website [sfpuc.org/TapWater](https://sfpuc.org/TapWater).

## Summary: Fluoridation

We add fluoride to our water. California law mandates fluoridation. It is proven safe. It is also effective at preventing and controlling tooth decay. Our fluoride levels match the state's optimal level. To learn more, visit [waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.html](https://waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html), [cdc.gov/fluoridation](https://cdc.gov/fluoridation), or [sfpuc.org/TapWater](https://sfpuc.org/TapWater).

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## Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome or other immune system disorders, and some elderly people and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers.

*Cryptosporidium* is a parasitic microbe found in most surface water. We regularly test for this waterborne pathogen and found it at very low levels in source water and treated water in 2023. However, current test methods approved by the United States Environmental Protection Agency do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

The United States Environmental Protection Agency and the Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the United States Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791 or at [epa.gov/safewater](https://www.epa.gov/safewater).

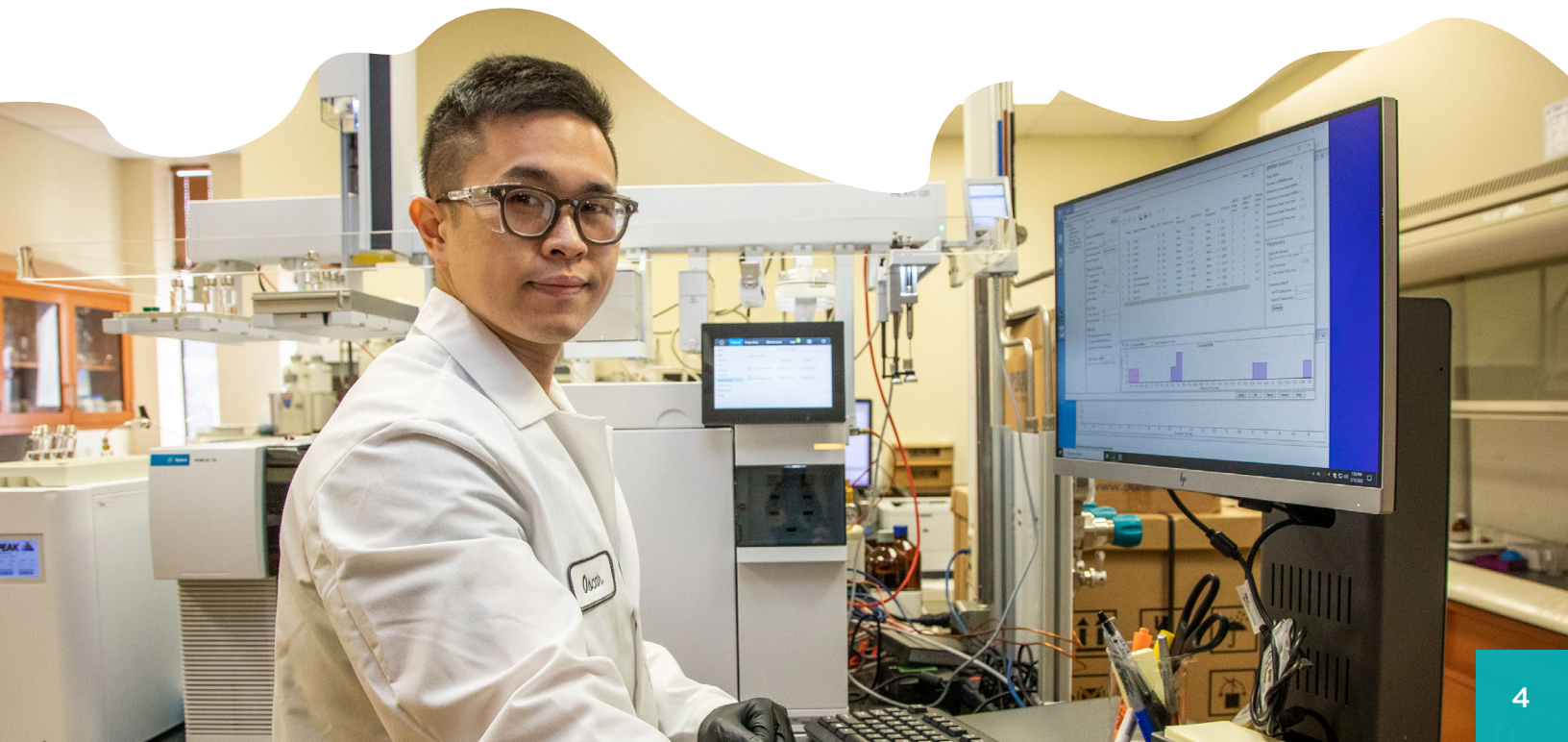
### Summary: Special Health Needs

We measure contaminants in our water supply. Drinking water will likely have small amounts of some contaminants. This does not mean that the water is unsafe. Bottled water also likely has some contaminants. Federal and state governments closely regulate drinking water. They limit how much of certain contaminants can exist in public water. This year, our water met all federal and state standards.

Some people may need to be more careful of contaminants. This includes:

- Immunocompromised people
- People who have had an organ transplant(s)
- People with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome or other immune system disorders
- Some elderly people and infants

These people should seek advice from their healthcare providers. To learn more, visit [epa.gov/safewater](https://www.epa.gov/safewater). Or call 800-426-4791.



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## Contaminants and Regulations

Generally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. Water from these sources may pick up contaminants in the following forms:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which 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, which can be naturally occurring or be the result of oil and gas production and mining activities

More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791, or at [epa.gov/safewater](https://epa.gov/safewater).

### Unregulated Contaminant Monitoring Rule

The Safe Drinking Water Act requires the United States Environmental Protection Agency issue every five years a list of unregulated contaminants to be monitored by public water systems. The fifth Unregulated Contaminant Monitoring Rule, published on December 21, 2021, requires sample collection for 30 chemical contaminants between 2023 and 2025. The monitoring results are expected to provide scientifically valid data on the national occurrence of these contaminants in drinking water to assist the agency in future policy development and rulemaking for establishing the appropriate drinking water standards. The fifth Unregulated Contaminant Monitoring Rule includes 29 per- and poly-fluoroalkyl substances (PFAS) and lithium. PFAS comprise a group of thousands of man-made, persistent chemicals used in a variety of industries and consumer products. We conducted four consecutive quarters of monitoring at designated locations approved by the United States Environmental Protection Agency in 2023, and all results have been non-detect. Together with the two previous rounds of voluntary PFAS monitoring, we are proud to report that our water supplies are not compromised by these contaminants. For additional information about PFAS, you may visit State Water Resources Control Board's website [waterboards.ca.gov/pfas](https://waterboards.ca.gov/pfas), San Francisco Public Utilities Commission's website [sfpuc.org/TapWater](https://sfpuc.org/TapWater), and/or United States Environmental Protection Agency's website [epa.gov/pfas](https://epa.gov/pfas).

### Summary: No PFAS Detected

You may have heard about PFAS. These are man-made chemicals that have been used in industry and consumer products worldwide since the 1940s. We did not detect PFAS in our water. To learn more, visit [waterboards.ca.gov/pfas](https://waterboards.ca.gov/pfas), [sfpuc.org/TapWater](https://sfpuc.org/TapWater), and/or [epa.gov/pfas](https://epa.gov/pfas).



# Water Quality Report Card

This Water Quality Report card shows the state of your water. This year, our water met all federal and state standards.

Potential Contaminants	Why We Test For It	Likely Source	Your Water Source	
Microbes Microscopic organisms such as Coliform bacteria, <i>Giardia</i> and <i>Cryptosporidium</i>	Can make people sick after drinking several glasses.	Naturally present in the environment or from animals or human activity	Surpasses State and Federal Water Quality Requirements	✓
Copper and Lead	High levels can cause health issues over an extended period of time.	Corrosion of indoor plumbing	Surpasses State and Federal Water Quality Requirements	✓
Disinfection Byproducts Byproducts of the process of disinfecting drinking water- trihalomethanes and haloacetic acids	High levels can cause health issues over an extended period of time.	Water disinfection process	Surpasses State and Federal Water Quality Requirements	✓
Turbidity – cloudiness of water from suspended particles in the water	Less turbid water indicates high water quality	Soil runoff	Surpasses State and Federal Water Quality Requirements	✓
Fluoride	High levels can cause marks on teeth over an extended period of time.	Erosion of natural deposits and mandated water additive for dental health	At the optimal CDC recommended level	✓
PFAS	Synthetic organic chemicals that are resistant to heat, water, and oil	Widely used in consumer and industrial products	No PFAS detected	✓

Exposure to lead, if present, can cause serious health effects in all age groups, especially for pregnant women and young children. Infants and children who drink water containing lead could have decreases in intelligent quotient and attention span as well as increases in learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water and removing lead pipes, but we cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and by taking steps to reduce your family's risk. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your pipes for several minutes, such as running your tap, taking a shower, or doing laundry or a load of dishes before using water for drinking and cooking. If you flush the tap, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. You can also use a filter certified by an American National Standards Institute accredited certifier to remove lead from drinking water.

If you are concerned about lead in your water, you may wish to have your water tested. We offer low-cost water tests for lead at \$25 per tap. Call 311 or access our website [sfpuc.org/LeadTest](https://sfpuc.org/LeadTest) for details. Clients enrolled in the Women, Infants and Children program may receive free lead test vouchers from our partner agency the San Francisco Department of Public Health.

In addition to our water source protection efforts and low-cost lead tests, we continue the following programs to minimize customer exposure to lead in water:

- Replace remaining brass meters with lead-free automated water meters
- Remove/replace lead pipelines (see below)
- Building flushing guidance
- Day Care/School Testing

Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/lead](https://epa.gov/lead).

## Lead User Service Line

In July 2020, we submitted a 10-year lead component replacement schedule to the State Water Resources Control Board and began replacing the estimated 1,578 galvanized steel services lines that may have lead whips in the distribution system. The schedule includes field inspections to confirm the unknown material service lines. If a galvanized service line is found or the unknown material cannot be verified, the service line is scheduled for replacement. In conjunction with the development of the replacement program, we also deployed a customer lookup map, which is posted on the San Francisco Public Utilities Commission's website, [sfpuc.org/Lead](https://sfpuc.org/Lead). A customer can use the map to identify if an address has an unknown or galvanized service line. In July 2021, the 10-year lead component replacement schedule was updated with the number of unknown and galvanized services that remain to be inspected. New changes also reflected that customers in disadvantaged neighborhood areas are equitably included in the monthly field inspection and replacement schedule. As of April 2024, there are 1,457 galvanized service lines confirmed and 10 field inspections yet to be completed.

We also began the preparation of material inventory for customer-side service lines: approximately 7,100 field inspections were done between 2020 and 2023, and about 10% of these service lines were determined as galvanized. Between 2019 and 2021, staff conducted a pilot study evaluating the lead levels at residences in San Francisco where lead user service lines were subsequently replaced. A total of 36 participants volunteered for the study, of which the results indicated that lead levels in tap samples one week after lead user service line replacement increased and then dropped to levels lower than the Action Level.

Some of these participants still have noticeable lead results in their first one-liter samples, suggesting that the household plumbing may still contribute to the lead detected in the tap water. These are consistent with water utility results from across the county. See [sfpuc.org/Lead](https://sfpuc.org/Lead) for our report on "Impact of Lead Components on Household Lead Levels at the Tap," dated March 2022.



## Lead and Copper Tap Sampling Results

We conducted our triennial Lead and Copper Rule monitoring at 72 representative customer tap sites in 2021. These sampling results are accessible at [sfpub.org/Lead](https://sfpub.org/Lead). The next round of lead and copper rule monitoring will be in 2024.

## Lead Tests in Childcare Facilities and Public Schools

Presently we are working with San Francisco Unified School District to help develop a long-term, recurring lead monitoring program for the K-12 schools. In 2023, we assisted the school district in completing lead sampling in childcare centers on public school campuses.

## Summary: Lead

Exposure to lead can cause serious health effects. This is especially true for pregnant women and young children. Lead in drinking water usually comes from materials in service lines and home plumbing. There are no known lead service lines in our system. We cannot control the plumbing materials used in your home. You share the responsibility of protecting yourself from lead in your home plumbing. We offer water testing for lead for a small fee. If you are enrolled in the Women, Infants, and Children program you may receive free lead testing. To learn more, visit [epa.gov/lead](https://epa.gov/lead).

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## Key Water Quality Terms

The following are definitions of key terms referring to standards and goals of water quality noted on the data table.

- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Regulatory Action Level:** 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.
- **Turbidity:** A water clarity indicator that measures the cloudiness of the water and is also used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.

# San Francisco Water System - Water Quality Data for 2023

This report is a snapshot of last year's water quality. The tables below list detected contaminants in our drinking water (unless otherwise indicated) in 2023 and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance. The San Francisco Public Utilities Commission holds a State Water Resources Control Board monitoring waiver for some contaminants in the surface water and groundwater supplies, and therefore their monitoring frequencies are less than annual. Visit [sfpub.org/WaterQuality](https://sfpub.org/WaterQuality) for a list of all water quality parameters monitored in raw water and treated water in 2023.

DETECTED CONTAMINANTS	UNIT	MCL/TT	PHG OR (MCLG)	RANGE OR LEVEL FOUND	AVERAGE OR [MAX]	TYPICAL SOURCES IN DRINKING WATER
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TURBIDITY						
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.3 - 0.9 <sup>(1)</sup>	[2]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 <sup>(2)</sup>	N/A	-	[0.2]	Soil runoff
	-	Min 95% of samples ≤0.3 NTU <sup>(2)</sup>	N/A	100%	-	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 <sup>(2)</sup>	N/A	-	[0.6]	Soil runoff
	-	Min 95% of samples ≤0.3 NTU <sup>(2)</sup>	N/A	99.4% - 100%	-	Soil runoff

DISINFECTION BY-PRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	15 - 93	[48] <sup>(3)</sup>	By-product of drinking water disinfection
Five Haloacetic Acids	ppb	60	N/A	7.9 - 77	[42] <sup>(3)</sup>	By-product of drinking water disinfection
Bromate	ppb	10	0.1	ND - 1.7	[1] <sup>(4)</sup>	By-product of drinking water disinfection
Total Organic Carbon <sup>(5)</sup>	ppm	TT	N/A	1.2 - 1.8	[1.5] <sup>(4)</sup>	Various natural and man-made sources
		(% Removal Ratio)				

MICROBIOLOGICAL						
<i>Giardia lamblia</i>	cyst/L	TT	(0)	0 - 0.13	0.03	Naturally present in the environment

INORGANICS						
Fluoride (source water) <sup>(6)</sup>	ppm	2.0	1	0.4 - 2.6	0.6	Erosion of natural deposits; water additive to promote strong teeth
Nitrate (as N)	ppm	10	10	ND - 0.6	ND	Erosion of natural deposits
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	<0.1 - 3.6	[2.7] <sup>(4)</sup>	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	UNIT	SMCL	PHG	RANGE	AVERAGE	TYPICAL SOURCES IN DRINKING WATER
Aluminum <sup>(7)</sup>	ppb	200	600	ND - 82	ND	Erosion of natural deposits; some surface water treatment residue
Chloride	ppm	500	N/A	<3 - 17	8.7	Runoff / leaching from natural deposits
Color	Unit	15	N/A	<5 - 5	<5	Naturally-occurring organic materials
Iron	ppb	300	N/A	<6 - 42	19	Leaching from natural deposits
Manganese	ppb	50	N/A	<2 - 4.6	2.6	Leaching from natural deposits
Specific Conductance	µS/cm	1600	N/A	32 - 289	175	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.2 - 36	17	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	<20 - 153	84	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.6	0.3	Soil runoff

LEAD AND COPPER (Samples Taken from Select Customers' Taps) <sup>(8)</sup>	UNIT	AL	PHG	RANGE	90 <sup>TH</sup> PERCENTILE	TYPICAL SOURCES IN DRINKING WATER
Copper	ppb	1300	300	ND - 383	60	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	ND - 190	7.1	Internal corrosion of household water plumbing systems

NON-REGULATED WATER QUALITY PARAMETERS	UNIT	ORL	RANGE	AVERAGE	KEY
Alkalinity (as CaCO3)	ppm	N/A	3.1 - 103	46	< / ≤ = less than / less than or equal to AL = Action Level Max = Maximum Min = Minimum N/A = Not Available ND = Non-Detect NL = Notification Level NoP = Number of Coliform-Positive Sample NTU = Nephelometric Turbidity Unit ORL = Other Regulatory Level ppb = part per billion ppm = part per million µS/cm = microSiemens/centimeter
Boron	ppb	1000 (NL)	22 - 65	40	
Calcium (as Ca)	ppm	N/A	2.9 - 24	13	
Chlorate <sup>(9)</sup>	ppb	800 (NL)	30 - 749	141	
Chromium (VI)	ppb	N/A	0.11 - 0.35	0.23	
Hardness (as CaCO3)	ppm	N/A	7.5 - 86	46	
Magnesium	ppm	N/A	0.2 - 8.4	4.7	
pH	-	N/A	8.4 - 9.8	9.2	
Potassium	ppm	N/A	0.3 - 1.7	1	
Silica	ppm	N/A	4.4 - 9.4	6.2	
Sodium	ppm	N/A	2.7 - 20	14	
Strontium	ppb	N/A	14 - 331	139	

**Footnotes on San Francisco Water System - Water Quality Data:**

(1) These are monthly average turbidity values measured every 4 hours daily. (2) This is a treatment technique requirement for filtration systems. (3) This is the highest locational running annual average value. (4) This is the highest running annual average value. (5) Total organic carbon (TOC) is a precursor for disinfection byproduct formation. The treatment technique requirement applies to the filtered water from the Sunol Valley Water Treatment Plant (SVWTP) only. In 2023, the range of the SVWTP effluent TOC levels were 0.6 ppm - 3.3 ppm. (6) Natural fluoride in the Hetch Hetchy source was non-detect. Elevated fluoride levels in raw water to the water treatment plants were attributed to the transfer of fluoridated Hetch Hetchy water into the local reservoirs. In 2023, the average fluoride level in raw water sources was 0.3 mg/L. (7) Aluminum also has a primary MCL of 1,000 ppb. (8) The most recent Lead and Copper Rule monitoring was in August 2021. Three of the 72 site samples collected at consumer taps had lead concentrations above the action level. (9) The detected chlorate in the treated water is a degradation product of sodium hypochlorite, which we use for water disinfection.

**Note:** The different water sources blended at different ratios throughout the year have resulted in varying water quality. Additional water quality data may be obtained by calling our Water Quality Division toll-free number at 877-737-8297.

## San Francisco Local Groundwater - Water Quality Data for Year 2023

Treated Water (Sunset Reservoir)	DETECTED CONTAMINANTS	UNIT	MCL	PHG OR (MCLG)	RANGE	AVERAGE	TYPICAL SOURCES IN DRINKING WATER	
	<b>INORGANICS</b>							
	Chromium (VI)	ppb	N/A	0.02	0.02 - 0.31	0.12	Leaching from natural deposits; waste discharges from electroplating	
	Fluoride	ppm	2.0 (Natural-Source)	1	0.6 - 0.8	0.7	Erosion of natural deposits; water additive to promote strong teeth	
	CONSTITUENTS WITH SECONDARY STANDARDS	UNIT	SMCL	PHG	RANGE OR LEVEL FOUND	AVERAGE	TYPICAL SOURCES IN DRINKING WATER	
	Aluminum <sup>(1)</sup>	ppb	200	600	60	60	Erosion of natural deposits; some surface water treatment residue	
	Chloride	ppm	500	N/A	4.1 - 16	7.9	Runoff / leaching from natural deposits	
	Iron	ppb	300	N/A	32 - 34	33	Leaching from natural deposits	
	Manganese	ppb	50	N/A	2.3 - 2.4	2.3	Leaching from natural deposits	
	Specific Conductance	µS/cm	1600	N/A	54 - 223	112	Substances that form ions when in water	
	Sulfate	ppm	500	N/A	4.1 - 4.2	4.2	Runoff / leaching from natural deposits	
	Total Dissolved Solids	ppm	1000	N/A	38	38	Runoff / leaching from natural deposits	
	Turbidity	NTU	5	N/A	0.1 - 0.6	0.3	Soil runoff	
Raw Water (San Francisco Local Groundwater Wells)	DETECTED CONTAMINANTS	UNIT	MCL	PHG OR (MCLG)	RANGE	AVERAGE	TYPICAL SOURCES IN DRINKING WATER	
	<b>INORGANICS <sup>(2)</sup></b>							
		Chromium (VI)	ppb	N/A	0.02	5.4 - 24	15	Leaching from natural deposits; waste discharges from electroplating
		Chromium	ppb	50	(100)	ND - 21	11	Erosion of natural deposits; discharge from electroplating
		Nitrate (as nitrogen)	ppm	10	10	6.1 - 7.8	6.8	Landscape fertilizers and leaked wastewater
	<b>VOLATILE ORGANICS</b>							
		Carbon tetrachloride <sup>(3)</sup>	ppb	0.5	0.1	ND - 1	ND	Discharge from chemical plants and other industrial activities
		Tetrachloroethylene <sup>(4)</sup>	ppb	5	0.06	1.7 - 2.5	2.1	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
		NON-REGULATED WATER QUALITY PARAMETERS	UNIT	ORL		RANGE	AVERAGE	
		pH	-	N/A		7.7 - 8.1	7.9	
	Strontium	ppb	N/A		145 - 189	167		

**Footnotes on San Francisco Local Groundwater - Water Quality Data for 2023:**

(1) Aluminum also has a primary MCL of 1,000 ppb. (2) These contaminants are detectable in the raw groundwater. Blending of groundwater with surface water has been approved by State Water Resources Control Board (SWRCB) as treatment for these contaminants. In 2023, only two of the six local wells (Lake Merced Well and West Sunset Well) delivered groundwater to the distribution system intermittently. (3) This contaminant was detected at South Sunset Well but not in the blend water at Sunset Reservoir. South Sunset Well was out of service in 2023. (4) Tetrachloroethylene was detected at Golden Gate Central Well, which supplied to Golden Gate Park throughout 2023 for irrigation only.



San Francisco  
Water Power Sewer  
Services of the San Francisco Public Utilities Commission

P.O. Box 7369  
San Francisco, CA 94120-7369

Water quality policies are decided at SFPUC Commission meetings, held the 2nd and 4th Tuesdays of each month at 1:30 pm in San Francisco City Hall, Room 400.

**Tim Paulson**, PRESIDENT  
**Anthony Rivera**, VICE PRESIDENT  
**Newsha K. Ajami**, COMMISSIONER  
**Kate H. Stacy**, COMMISSIONER

## San Francisco Public Utilities Commission

Every day we deliver high-quality drinking water to 2.7 million people in San Francisco, Alameda, Santa Clara and San Mateo counties. We generate clean, reliable hydroelectricity that powers 100% of San Francisco's vital services, including police and fire stations, street lights, Muni, SF General Hospital and more.

This report contains important information about our drinking water. Please contact SFPUC Communications at **628-215-0940** or email [nstone@sfwater.org](mailto:nstone@sfwater.org) for assistance.

Este informe contiene información muy importante sobre su agua potable. Favor de comunicarse en tel **628-215-0940** o [nstone@sfwater.org](mailto:nstone@sfwater.org) para asistencia.

**此份水質報告，內有重要資訊。請找他人為你翻譯和解說清楚。**

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

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را به زبان انگلیسی بخوانید لطفاً از کسی که میتواند دیاری بگیرد تا مطالب را برای شما به فارسی ترجمه کند.

Cé rapport contient des information importantes concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu'un qui peut le comprendre.

Этот отчет содержит важную информацию о вашей питьевой воды. Переведите его или поговорите с тем, кто это понимает.

**此份水質報告，內有重要資訊。請找他人為你翻譯和解說清楚。**

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

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。

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

**이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시오.**

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