

JUNE 30, 2024

# ANNUAL WATER QUALITY REPORT

2023

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. Si require una copia en español, marque el 650-589-1435 y solicite una. 本报告中包含有关我们的饮用水的重要信息。翻译这份报告,或与了解的人谈一谈。 Naglalaman ang ulat na ito ng mahalagang impormasyon tungkol sa ating iniinom na tubig. Isaling-wika ito, o makipag-usap sa isang taong naiintindihan ito.

For assistance or additional information concerning this report, please contact Patricia Mairena, General Manager, or Johnny Kennedy, Field Supervisor, at 650-589-1435 or email the District at wwd@westboroughwater.org.



## 2023 WWD Annual Water Quality Report

## **Our Drinking Water Sources and Treatment**

The San Francisco Public Utilities Commission provides 2.7 million customers in cities and towns across the region through its San Francisco Regional Water System (SFRWS) with water so high quality that it meets all federal and state standards. They are committed to providing high-quality drinking water for all its customers.

The Westborough Water District purchases 100% of its water from the San Francisco Public Utility Commission (SFPUC). The SFRWS's drinking water 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, Alameda County and San Mateo County, as well as groundwater stored in a deep aguifer located in the northern part of San Mateo County. Maintaining this variety of sources is an important component of our 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 sources including the upcountry non-Hetch Hetchy sources undergo treatment before it is delivered to our customers. While the water from Hetch Hetchy Reservoir is exempt from state and federal filtration requirements, it does receive the following treatment before being delivered for your consumption: 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 upcountry non-Hetch Hetchy sources is delivered to Sunol Valley Water Treatment Plant; whereas water from local reservoirs in San Mateo County is delivered to 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, neither upcountry non-Hetch Hetchy sources nor groundwater was used by the SFRWS.



## Water Quality

The SFRWS regularly collects and tests water samples from reservoirs and designated sampling locations throughout its system to ensure the water delivered to you meets all state and federal drinking water standards. In 2023, the SFRWS conducted more than 49,610 drinking water tests in the source, transmission, and distribution system. This is in addition to its extensive treatment process control monitoring performed by the 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.

# WWD's Water Quality Data for Calendar Year 2023

This report is a snapshot of last year's water quality. The tables below list detected contaminants in our drinking water 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 our surface water and groundwater supplies, and therefore their monitoring frequencies are less than annual. Visit **SFPUC.org/WaterQuality** for a list of all water quality parameters monitored in both raw water and treated water in 2023.

	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Typical Sources in Drinking Water		
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.3 - 0.9 (2)	[2]	Soil runoff		
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 <sup>(3)</sup>	N/A	-	[0.2]	Soil runoff		
	– M	in 95% of samples $\leq 0.3$ NTU <sup>(3)</sup>	N/A	100%	-	Soil runoff		
Filtered Water from Harry Tracy Water	NTU	1 <sup>(3)</sup>	N/A	-	[0.6]	Soil runoff		
Treatment Plant (HTWTP)	– M	in 95% of samples $\leq$ 0.3 NTU <sup>(3)</sup>	N/A	99.4% - 100%	-	Soil runoff		
▼ DISINFECTION BYPRODUCTS AND PRECURSOR								
Total Trihalomethanes	ppb	80	N/A	13.3 - 24.6	24.6 (4)	Byproduct of drinking water disinfection		
Five Haloacetic Acids	ppb	60	N/A	7.7 - 20.0	20.0 (4)	Byproduct of drinking water disinfection		
Bromate	ppb	10	0.1	ND - 1.7	[1] <sup>(5)</sup>	Byproduct of drinking water disinfection		
Total Organic Carbon <sup>(6)</sup>	- ("	TT % Removal Ratio)	N/A	1.2 - 1.8	[1.5] <sup>(5)</sup>	Various natural and man-made sources		
E. coli <sup>(7)</sup>	-	0 PS	(0)	-	Zero Positive	Human or animal fecal waste		
Giardia lamblia	cyst/L	TT	(0)	0 - 0.13	0.03	Naturally present in the environment		
Fluoride <sup>(8)</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	0.41 - 3.69	3.69 <sup>(5)</sup>	Drinking water disinfectant added for treatment		
KEY ≤ = less than/less t</p AL = Action Level Max = Maximum Min = Minimum N/A = Not Available	han or equal f	o NI NI NI OF	D = Non-detect - = Notification L TU = Nephelometr RL = Other Regula b = parts per billi	evel ic Turbidity Unit atory Level on	ppm PS μS/cm	<ul> <li>parts per million</li> <li>Number of Positive Sample</li> <li>microSiemens / centimeter</li> </ul>		



### DETECTED CONTAMINANTS<sup>1</sup>

#### ▼ CONSTITUENTS WITH SECONDARY STANDARDS

	Unit	SMCL	PHG	Range	Average	Typical Sources in Drinking Water
Aluminum <sup>(9)</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	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	12 - 130 <sup>(10)</sup>	66.2	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	0 - 3.9 (11)	0	Internal corrosion of household water plumbing systems

#### **V NON-REGULATED WATER QUALITY PARAMETERS**

	Unit	ORL	Range	Average	KEY
Alkalinity (as CaCO <sub>3</sub> )	ppm	N/A	3.1 - 103	46	$< / \leq =$ less than /less than or equal to AL = Action Level
Boron	ppb	1000 (NL)	22 - 65	40	Max = Maximum
Calcium (as Ca)	ppm	N/A	2.9 - 24	13	Min = Minimum
Chlorate <sup>(12)</sup>	ppb	(800) NL	30 - 749	141	N/A = Not Available
Chromium (VI)	ppb	N/A	0.11 - 0.35	0.23	ND = Non-detect
Hardness (as CaCO <sub>3</sub> )	ppm	N/A	7.5 - 86	46	NL = Notification Level
Magnesium	ppm	N/A	0.2 - 8.4	4.7	NTU = Nephelometric Turbidity Unit
pH	–	N/A	8.4 - 9.8	9.2	ORL = Other Regulatory Level
Potassium	ppm	N/A	0.3 - 1.7	1	ppb = parts per billion
Silica	ppm	N/A	4.4 - 9.4	6.2	ppm = parts per million
Sodium	ppm	N/A	2.7 - 20	14	PS = Number of Positive Sample
Strontium	ppb	N/A	14 - 331	139	µS/cm = microSiemens / centimeter

#### Footnotes

- (1) All results met State and Federal drinking water health standards.
- (2) These are monthly average turbidity values measured every 4 hours daily.
- (3) This is a TT requirement for filtration systems.
- (4) This is the highest locational running annual average value.
- (5) This is the highest running annual average value.
- (6) Total organic carbon (TOC) is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only. In 2023, the range of the SVWTP effluent TOC levels were 0.6 ppm - 3.3 ppm.
- (7) Natural fluoride in the Hetch Hetchy source was ND. 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

- (8) Aluminum also has a primary MCL of 1,000 ppb.
- (9) The most recent Lead and Copper Rule monitoring was in 2022. None of 30 site samples collected at consumer taps had copper concentrations above the AL.
- (10) The most recent Lead and Copper Rule monitoring was in 2022. None of 30 site samples collected at consumer taps had lead concentrations above the AL.
- (11) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFRWS for water disinfection.

Additional water quality data may be obtained by calling Patricia Mairena, WWD General Manager, or Johnny Kennedy, WWD Field Supervisor, at 650-589-1435 or SFPUC Water Quality Division at 877-737-8297.

# 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 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 www.epa.gov/safewater

### **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.



Please distribute this Water Quality Report and make available to everyone, including tenants, employees, homeowner association members, etc. The District welcomes the opportunity for public participation in discussing the Water Quality Report. Board meetings are held at 7:30 p.m. at the District office every second Thursday of the month.

#### WWD Board of Directors

President: Tom Chambers Vice President: Don Amuzie Directors: Julie L. Richards, Perry H. Bautista, Janet G. Medina

#### WWD Management

General Manager: Patricia Mairena

The Westborough Water District Board meetings are held on the second Thursday of each month at 7:30 p.m. in our District Office Board Room located at 2263 Westborough Boulevard, South San Francisco, CA 94080. The public is invited to participate in decisions that may affect the quality of the water.

#### 2023 ANNUAL WATER QUALITY REPORT



# Protection of Watersheds

The SFRWS conducts watershed sanitary surveys for its Hetch Hetchy source annually and, every five years for its local water sources and upcountry non-Hetch Hetchy sources. The latest sanitary surveys for the non-Hetch Hetchy watershed were completed in 2021 for the period of 2016-2020. All these surveys together with our 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.

## **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. The SFRWS 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 www.epa.gov/safewater

### **Boron Detection Above Notification Level in Source Water**

In 2023, boron was detected at a level of 1.7 ppm in the raw water stored in Pond F3 East, one of the San Francisco Regional Water System's approved sources in the Alameda Watershed. Similar levels were also previously detected in the same pond. Although the detected value was above the California Notification Level (NL) of 1 ppm, the water was typically delivered to San Antonio Reservoir where it was substantially diluted to below the NL before treatment at the Sunol Valley Water Treatment Plant. Boron is an element in nature and is typically released into air and water when soils and rocks naturally weather.

### Unregulated Contaminant Monitoring Rule

The SFRWS 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-detected.

#### **No PFAS Detected**

Per- and poly-fluoroalkyl substances (PFAS) comprise a group of man-made, persistent chemicals that have been used in the industry and consumer products since the 1940s. We did not detect PFAS in our water. To learn more, visit waterboards.ca.gov/pfas ■