City of San Francisco

# 2024 Annual Water Quality Report

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

City of San Francisco

# 2024 Annual Water Quality Report


## 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 2024, our water met all federal and state standards.

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# 1. Introduction

The San Francisco Public Utilities Commission (SFPUC) provides high-quality drinking 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 deliver high-quality drinking water to homes and businesses every day. Your ratepayer dollars support this mission and allow us to make crucial upgrades to the system. Whether installing new pipes to best withstand earthquakes or adding extra layers of water quality treatment, we're investing in a reliable future.

## Understanding this Report

The SFPUC 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 to 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 SFPUC 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.

# 2. Our Drinking Water Sources and Treatment

Almost all of our drinking water supply comes from the San Francisco Regional Water System (SFRWS), which is the wholesale system owned and operated by the San Francisco Public Utilities Commission (SFPUC). The supply consists of surface water and groundwater that are well protected and carefully managed. The surface water is stored in reservoirs in the Sierra Nevada, the East Bay, and San Mateo County, and the groundwater is kept in a deep aquifer 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 SFPUC'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 human consumption, all surface water the SFPUC supplies must undergo proper treatment. Water from Hetch Hetchy Reservoir is exempt from state and federal filtration requirements due to its exceptional quality. It is subject to 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 the East Bay and upcountry non-Hetch Hetchy sources are delivered to the Sunol Valley Water Treatment Plant. Water from reservoirs in San Mateo County is delivered to the Harry Tracy Water Treatment Plant. Water treatment at these plants consists of filtration, ozonation, chloramination, fluoridation, taste and odor removal, and optimum corrosion control. In 2024, we did not use upcountry non-Hetch Hetchy sources of water. A very small amount of local groundwater (0.1%) contributed to the drinking water supply.

## 2. Summary: Water Sources

Surface water from reservoirs makes up almost all of the water you receive. In 2024, 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. Our highly skilled staff make sure it meets all federal and state standards. In 2024, we performed nearly 100,000 drinking water tests. Samples came from reservoirs and other points in the water system.

# 3. Water Quality

We regularly collect and test water samples from reservoirs and designated sampling locations throughout the system to ensure that the water delivered to you meets all federal and state drinking water standards. In 2024, we conducted more than 96,950 drinking water tests of samples from source, transmission, and distribution system locations. 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 (USEPA) and the State Water Resources Control Board (SWRCB) 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.

## Contaminants and Regulations

Throughout the United States, sources of drinking water (both tap water and bottled water) can include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. Contaminants present may include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, 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 USEPA's Safe Drinking Water Hotline at 800-426-4791, or at **epa.gov/safewater**.

## Protection of Watersheds

The San Francisco Public Utilities Commission (SFPUC) 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. These surveys document the SFPUC's stringent watershed protection activities that are implemented with support from partner agencies including the National Park Service and the United States Forest Service.

These surveys not only evaluate the sanitary conditions and water quality of the watersheds but also describe 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 SWRCB's Division of Drinking Water at 510-620-3474 for more information.

### Unregulated Contaminant Monitoring Rule

Unregulated contaminant monitoring helps the USEPA and the SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated. We completed the fifth Unregulated Contaminant Monitoring Rule monitoring for the system in 2023 and 2024. All results of 29 per- and poly-fluoroalkyl substances (PFAS) and lithium were "none detected." Together with 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 the SWRCB's website **waterboards.ca.gov/pfas**, our website **sfpuc.gov/TapWater**, or the USEPA's website **epa.gov/pfas**.

## 3. 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**, **sfpuc.gov/TapWater**, and/ or **epa.gov/pfas**.

# 4. 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. Based on the recommendation from the Centers for Disease Control and Prevention (CDC) and the State Water Resources Control Board's (SWRCB) regulatory guidance, the San Francisco Public Utilities Commission has maintained an optimal fluoride level at 0.7 milligram per liter (mg/L, or part per million, ppm), since 2015. The optimal level provides the benefits of tooth decay prevention while minimizing the chance that children develop dental fluorosis. Infants fed formula mixed with water containing fluoride at this level may still have a chance of developing mild to very mild fluorosis, which can cause tiny white lines or streaks in their teeth. These marks are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. To lessen the 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 SWRCB if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the SWRCB's website **waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html**, the CDC's website **cdc.gov/fluoridation**, or our website **sfpuc.gov/TapWater**.

## 4. 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**, **cdc.gov/fluoridation**, or **sfpuc.gov/TapWater**.

# 5. Drinking Water and Lead

Exposure to lead, if present, can cause serious health effects in people of all ages, 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. Because lead levels may vary over time, lead exposure is possible even when your tap sample results do not detect lead at one point in time. You share the responsibility for protecting yourself and your family from the lead in your home plumbing by taking one or more of the following actions:

- Identify and remove lead materials within your home plumbing.
- If you use a water filter, make sure it's certified for lead to National Sanitation Foundation (NSF)/ANSI standards. Make sure to replace and maintain the filter according to the manufacturer's instructions.
- Use only cold water for drinking, cooking, and making baby formula. Hot tap water can potentially have higher concentrations of lead. (Do not boil your water to remove lead. Boiling water will not remove lead).
- Flush your pipes for several minutes before using your water for drinking, cooking, and preparing baby formula (this can be done by running your tap, taking a shower, doing laundry or a load of dishes, and reusing for watering plants).
- Flush for a longer period if you have pipes made of lead or galvanized material.

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 to our customers. Call 311 or access our website **sfpuc.gov/LeadTest** for details. Clients enrolled in the Women, Infants and Children program managed by the San Francisco Department of Public Health may receive free lead test vouchers from that department. In addition to our water source protection efforts and low-cost lead tests, we continue the following actions to minimize customer exposure to lead in water:

- Keep and update an inventory of service line materials between the water main and the building (can be found at **sfpuc.gov/lead**)
- Replace remaining brass meters with lead-free automated water meters
- Replace lead service pipelines if identified
- Update flushing guidance for buildings
- Test for lead in tap water at day care facilities and schools

Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at **epa.gov/lead**.

## Lead Service Line Inventory and Replacement

**Utility-Owned Service Lines**

The San Francisco Public Utilities Commission (SFPUC) removed all known lead service lines in the 1980's. In July 2020, we submitted a 10-year lead component replacement schedule to the State Water Resources Control Board (SWRCB). We have begun replacing the estimated 1,580 utility-owned galvanized steel service lines that may have lead whips. A lead whip is a short piece of lead pipe, typically 3 feet or less, connecting the large pipe in the street to the smaller pipe that carries water to your building. There were 13,140 utility-owned service lines made of either galvanized steel or unknown materials. After several years of field inspections, the confirmed total galvanized service lines were updated to be 1,423. As of March 2025, we had replaced 1,099 of these galvanized services with new copper pipelines. Lead whips were found in only 21% of the removed galvanized services. As part of this replacement program, we have also created a customer lookup map that is currently posted on the SFPUC's website, **sfpuc.gov/Lead**. A customer can use the map to identify if an address has a galvanized service line scheduled for replacement. The replacement program is 77% complete and scheduled to be completed by mid-2026, four years ahead of schedule.

**Customer-Owned Service Lines**

Starting in 2022, we began the preparation of an inventory of customer-side service lines in accordance

with the United States Environmental Protection Agency's (USEPA) Lead and Copper Rule Revisions. As of October 2024, we completed 9,042 inspections and developed a statistical and predictive model to help determine the probability that lead might be found without inspecting all customer-side service lines. The rigorous statistical method concluded that there is less than 1% probability a customer-side service line is made of lead. Additionally, our experienced plumbers, some with 40 years of knowledge of our distribution system, confirm that they have never encountered customer-side service lines made of lead.

Our initial service line inventory submitted to the SWRCB in October 2024 reported no lead lines; however, there are 653 galvanized service lines that require replacement and 407 Lead-Status Unknown lines on the customer side. A galvanized service line requiring replacement is defined by the USEPA as a galvanized steel service line on the customer side that may be downstream of a previously removed lead service line on the utility side. Such galvanized service lines may have trapped some lead, and, when they are disturbed, can release lead. A Lead-Status Unknown service line means the material of the pipeline cannot be identified or confirmed from inspection through the meter box. Reducing the number of Lead-Status Unknown service line is a priority goal for the SFPUC. In November 2024, we sent notification letters to these customers about the unknown material status of their service lines and are reaching out to these customers for free inspection of their service lines.

Website information and a lookup map is routinely updated to show the locations of these service lines. Email **quality@sfwater.org** to schedule your free inspection to remove your Lead-Status Unknown service line.

### Lead and Copper Tap Sampling Results

We conducted our triennial Lead and Copper Rule monitoring at 50 customer tap sites in 2024. Our 90th percentile value of lead was 5 parts per billion (ppb), and all results were below the regulatory Action Level of 15 ppb. These sampling results are accessible at **sfpuc.gov/Lead**. The next round of lead and copper rule monitoring will be in 2027.

### Lead Tests in Childcare Facilities and Public Schools

Starting in 2028, the SFPUC will begin lead monitoring in schools to meet the USEPA's Lead and Copper Rule Improvement regulations. Within 5 years of 2028, the SFPUC will sample all K-8 grade schools in San Francisco for lead. Currently, the SFPUC offers lead sampling at 9- to 12-grade schools if requested, even though we are not required to test these schools.

## 5. 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 about lead in water, visit **epa.gov/lead**.


Water
Power
Sewer

# 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<br>Microscopic organisms such as Coliform bacteria, *Giardia* and *Cryptosporidium* | 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 | Levels can cause health issues over an extended period of time. | Corrosion of indoor plumbing | Surpasses State and Federal Water Quality Requirements | ✓ |
| Disinfection Byproducts<br>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 | ✓ |

# 6. 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, some elderly, 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 surface water. We regularly test for this waterborne pathogen and found it at very low levels in source water and treated water in 2024. However, current test methods approved by the United States Environmental Protection Agency (USEPA) do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis with 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.

Guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at 800-426-4791 or at **epa.gov/safewater**.

## 6. 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**. Or call 800-426-4791.

# 7. Water Quality and Treatment Spotlights

### Making Upgrades: Ozonation at Sunol Valley Water Treatment Plant

As the San Francisco Public Utilities Commission (SFPUC) provides drinking water to 2.7 million residents daily, we are continually upgrading our water treatment infrastructure. This year, we began construction at the Sunol Valley Water Treatment Plant in the East Bay to install ozone treatment facilities. The Sunol Valley Water Treatment Plant treats water from both San Antonio Reservoir and Calaveras Reservoir in the East Bay, and water from Hetch Hetchy Reservoir in the Sierra Nevada if needed. As climate change produces more extreme weather, we have seen more algal blooms in the two local reservoirs during the region's warmer months. Nutrient availability, temperature, and sunlight can cause these algal blooms, which may cause drinking water to have a taste or odor that some people describe as "earthy." The SFPUC is installing innovative technology to ensure that potential algal blooms don't affect the taste and odor of our water supply.

### What is Ozonation?

When construction finishes in 2028, the Sunol Valley Water Treatment Plant will treat raw water with ozone. Ozonation works by injecting ozone into raw water where it immediately oxidizes, or destroys, organic material which can cause these taste and odor concerns. This treatment has already been in use at the Harry Tracy

Water Treatment Plant on the Peninsula since the 1990s. Investments in our infrastructure mean you'll continue to have great-tasting, high-quality water whenever you need it.

## San Francisco Public Utilities Commission's Water Treatment Plants Recognized for Excellence

In 2024, the American Water Works Association (AWWA) honored the SFPUC with two awards for our exceptional water quality. The awards were granted through the AWWA's Partnership for Safe Water, which requires participating utilities to produce water quality that is significantly higher than regulatory requirements. The Harry Tracy Water Treatment Plant and the Sunol Valley Water Treatment Plant were recognized for meeting strict water quality standards for the last 20 and 25 years respectively.

## Water Quality Strategic Plan

The San Francisco Public Utilities Commission (SFPUC) has a history of proactively identifying potential water quality issues and considering them in capital planning and operational decisions. This practice has enabled the SFPUC to comply with all state and federal drinking water regulations and continue to provide high quality water to customers. To create a sound foundation for capital and operational investments that may be required in the next decade to protect drinking water quality, our Water Quality Division (WQD) regularly assesses potential real-world concerns that could impact our water quality and identified recommendations to consider for implementation. In 2024, the WQD conducted its periodic update to the Water Quality Strategic Plan that was initially adopted in 2008. This updated plan provides an overview of the strategic planning process, activities currently underway within the Water Quality Division, and recommends new activities. The plan is available at **sfpuc.gov/WQ-Planning**.

# 8. Key Water Quality Terms

- **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 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.
- **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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Primary Drinking Water Standard (PDWS):** MCLs, MRDLs, and TT for contaminants that affect health, along with their monitoring and reporting requirements.
- **Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Turbidity:** A water clarity indicator that measures the cloudiness of the water and is also used to indicate the effectiveness of a filtration system.

# San Francisco Water System - Water Quality Data for 2024

The system meets primary and secondary drinking water standards in 2024. The tables below list detected contaminants in our drinking water (unless indicated otherwise) and the information about their typical sources in accordance with regulatory guidance. The San Francisco Public Utilities Commission holds monitoring waivers approved by the State Water Resources Control Board for some contaminants in the surface water and groundwater supplies, and they are monitored less than once a year. Visit **sfpuc.gov/WaterQuality** for a list of all water quality parameters we monitored in raw water and treated water in 2024.

| DETECTED CONTAMINANTS | UNIT | MCL/TT | PHG OR (MCLG) | RANGE OR LEVEL FOUND | AVERAGE OR [MAX] | TYPICAL SOURCES IN DRINKING WATER |
|---|---|---|---|---|---|---|
| **TURBIDITY** | | | | | | |
| Unfiltered Hetch Hetchy Water | NTU | 5 | N/A | 0.3 - 0.5 [1] | [2.1] | Soil runoff |
| Filtered Water from Sunol Valley Water Treatment Plant (SVWTP) | NTU | TT=Max 1 | N/A | - | [0.4] | Soil runoff |
| | - | TT=Min 95% of samples ≤0.3 NTU | N/A | 99.97% | - | Soil runoff |
| Filtered Water from Harry Tracy Water Treatment Plant (HTWTP) | NTU | TT=Max 1 | N/A | - | [0.1] | Soil runoff |
| | - | TT=Min 95% of samples ≤0.3 NTU | N/A | 100% | - | Soil runoff |
| **DISINFECTION BY-PRODUCTS AND PRECURSOR** | | | | | | |
| Total Trihalomethanes | ppb | 80 | N/A | 16 - 54 | [49] [2] | By-product of drinking water disinfection |
| Five Haloacetic Acids | ppb | 60 | N/A | 9 - 41 | [42] [2] | By-product of drinking water disinfection |
| Bromate | ppb | 10 | 0.1 | ND - 5.9 | [3] [3] | By-product of drinking water disinfection |
| **INORGANICS** | | | | | | |
| Chromium (VI) | ppb | 10 | 0.02 | ND - 0.2 | 0.1 | Erosion of natural deposits |
| Fluoride (source water) [4] | ppm | 2.0 | 1 | ND - 0.8 | 0.3 | Erosion of natural deposits; water additive to promote strong teeth |
| Nitrate (as N) | ppm | 10 | 10 | ND - 0.4 | ND | Erosion of natural deposits |
| Chloramine (as chlorine) | ppm | MRDL = 4.0 | MRDLG = 4 | <0.1 - 3.5 | [2.6] [3] | Drinking water disinfectant added for treatment |
| **CONSTITUENTS WITH SECONDARY STANDARDS** | **UNIT** | **SMCL** | **PHG** | **RANGE** | **AVERAGE** | **TYPICAL SOURCES IN DRINKING WATER** |
| Aluminum | ppb | 200 (MCL = 1000) | 600 | ND - 59 | ND | Erosion of natural deposits; some surface water treatment residue |
| Chloride | ppm | 500 | N/A | <3 - 18 | 9.3 | Runoff / leaching from natural deposits |
| Iron | ppb | 300 | N/A | <6 - 41 | 14 | Leaching from natural deposits |
| Manganese | ppb | 50 | N/A | <2 - 2.7 | <2 | Leaching from natural deposits |
| Specific Conductance | µS/cm | 1600 | N/A | 31 - 317 | 193 | Substances that form ions when in water |
| Sulfate | ppm | 500 | N/A | 1 - 41 | 18 | Runoff / leaching from natural deposits |
| Total Dissolved Solids | ppm | 1000 | N/A | 24 - 169 | 102 | Runoff / leaching from natural deposits |
| Turbidity | NTU | 5 | N/A | 0.1 - 0.4 | 0.2 | Soil runoff |
| **LEAD AND COPPER [9]** | **UNIT** | **RAL** | **PHG** | **RANGE** | **90TH PERCENTILE** | **TYPICAL SOURCES IN DRINKING WATER** |
| Copper | ppb | 1300 | 300 | ND - 152 | 72 | Internal corrosion of household water plumbing systems |
| Lead | ppb | 15 | 0.2 | <1 - 8.8 | 4.9 | Internal corrosion of household water plumbing systems |

| NON-REGULATED WATER QUALITY PARAMETERS | UNIT | ORL | RANGE | AVERAGE |
|---|---|---|---|---|
| Alkalinity (as $CaCO_3$) | ppm | N/A | 7.4 - 120 | 60 |
| Bromide | ppb | N/A | <10 - 29 | <10 |
| Boron | ppb | 1000 (NL) | 23 - 65 | 41 |
| Calcium (as Ca) | ppm | N/A | 3.2 - 28 | 15 |
| Chlorate [6] | ppb | 800 (NL) | 24 - 597 | 144 |
| *Giardia lamblia* | cyst/L | N/A | 0 - 0.06 | 0.01 |
| Hardness (as $CaCO_3$) | ppm | N/A | 8.4 - 106 | 60 |
| Lithium | ppb | N/A | <2 - 4 | <2 |
| Magnesium | ppm | N/A | 0.2 - 9.5 | 5.7 |
| pH | - | N/A | 8.7 - 9.8 | 9.3 |
| Silica | ppm | N/A | 4.9 - 9.9 | 7.5 |
| Sodium | ppm | N/A | 3.1 - 24 | 16 |
| Total Organic Carbon [7] | ppm | N/A | 1.4 - 2.8 | 1.9 |

**KEY**

| | | |
|---|---|---|
| < / ≤ | = | less than / less than or equal to |
| Max | = | Maximum |
| Min | = | Minimum |
| N/A | = | Not Available |
| ND | = | Non-Detect |
| NL | = | Notification Level |
| NTU | = | Nephelometric Turbidity Unit |
| ORL | = | Other Regulatory Level |
| ppb | = | part per billion |
| ppm | = | part per million |
| RAL | = | Regulatory Action Level |
| µS/cm | = | microSiemens/centimeter |

**Footnotes on San Francisco Water System - Water Quality Data: (1)** These are monthly average turbidity values measured every 4 hours daily at Tesla Treatment Facilities. **(2)** This is the highest locational running annual average value. **(3)** This is the highest running annual average value. **(4)** Natural fluoride in the Hetch Hetchy water was ND. Elevated fluoride levels in raw water at both SVWTP and HTWTP were attributed to transfers of fluoridated Hetch Hetchy water into local reservoirs. The fluoride levels in our treated water ranged from 0.5 ppm to 0.8 ppm with an average of 0.7 ppm. **(5)** The most recent Lead and Copper Rule monitoring of selected consumer taps was in August 2024. None of the 50 consumer tap samples had lead concentrations above the regulatory Action Level. **(6)** The detected chlorate in the treated water is a degradation product of sodium hypochlorite, which we use for water disinfection. **(7)** The range and average values of the total organic carbon data were from special study projects for the distribution system.

**Note:** Blending different water sources throughout the year resulted in varying water qualities. 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 2024

**Treated Water (Sunset Reservoir)**

| DETECTED CONTAMINANTS | UNIT | MCL | PHG OR (MCLG) | RANGE | AVERAGE | TYPICAL SOURCES IN DRINKING WATER |
|---|---|---|---|---|---|---|
| **INORGANICS** | | | | | | |
| Chromium (VI) | ppb | 10 | 0.02 | ND - 0.4 | 0.1 | Leaching from natural deposits; waste discharges from electroplating |
| Fluoride | ppm | 2.0 | 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** |
| Chloride | ppm | 500 | N/A | 3.5 - 17 | 8.9 | Runoff / leaching from natural deposits |
| Iron | ppb | 300 | N/A | 28 - 31 | 29 | Leaching from natural deposits |
| Specific Conductance | µS/cm | 1600 | N/A | 68 - 290 | 127 | Substances that form ions when in water |
| Sulfate | ppm | 500 | N/A | 3.3 - 17 | 7.9 | Runoff / leaching from natural deposits |
| Total Dissolved Solids | ppm | 1000 | N/A | 26 - 27 | 27 | Runoff / leaching from natural deposits |
| Turbidity | NTU | 5 | N/A | 0.1 - 0.4 | 0.2 | Soil runoff |

**Raw Water (San Francisco Local Groundwater Wells)**

| DETECTED CONTAMINANTS | UNIT | MCL | PHG OR (MCLG) | RANGE | AVERAGE | TYPICAL SOURCES IN DRINKING WATER |
|---|---|---|---|---|---|---|
| **INORGANICS** | | | | | | |
| Chromium (VI) [1] | ppb | 10 | 0.02 | 7.5 - 24 | 16 | Leaching from natural deposits; waste discharges from electroplating |
| Chromium (Total) | ppb | 50 | (100) | ND - 23 | 11 | Erosion of natural deposits |
| Nitrate (as nitrogen) [1] | ppm | 10 | 10 | 5.2 - 8.2 | 7.1 | Landscape fertilizers and leaked wastewater |
| Perchlorate | ppb | 6 | 1 | ND - 1 | ND | Environmental contamination from use/disposal of fireworks, explosives, and a variety of industries |
| **NON-REGULATED WATER QUALITY PARAMETERS** | **UNIT** | **ORL** | | **RANGE** | **AVERAGE** | |
| Lithium | ppb | N/A | | 3.8 - 4.5 | 4.2 | |
| pH | - | N/A | | 7.7 - 8.4 | 8 | |

**Footnotes: (1)** These contaminants were detected in the raw groundwater. Blending of groundwater with surface water supplies in Sunset Reservoir is approved by SWRCB as treatment for these contaminants. In 2024, only two of the six local wells (Lake Merced Well and West Sunset Well) delivered groundwater to the system intermittently.

# San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

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

This report contains important information about our drinking water. Please contact SFPUC Communications at **628-215-0940** or email **quality@sfwater.org** for assistance.

Este informe contiene información muy importante sobre su agua potable. Favor de comunicarse en tel **628-215-0940** o **quality@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 بزبان انگلیسی بخوانید لطفاً از کسی که میتواند یاری بگیرید 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.

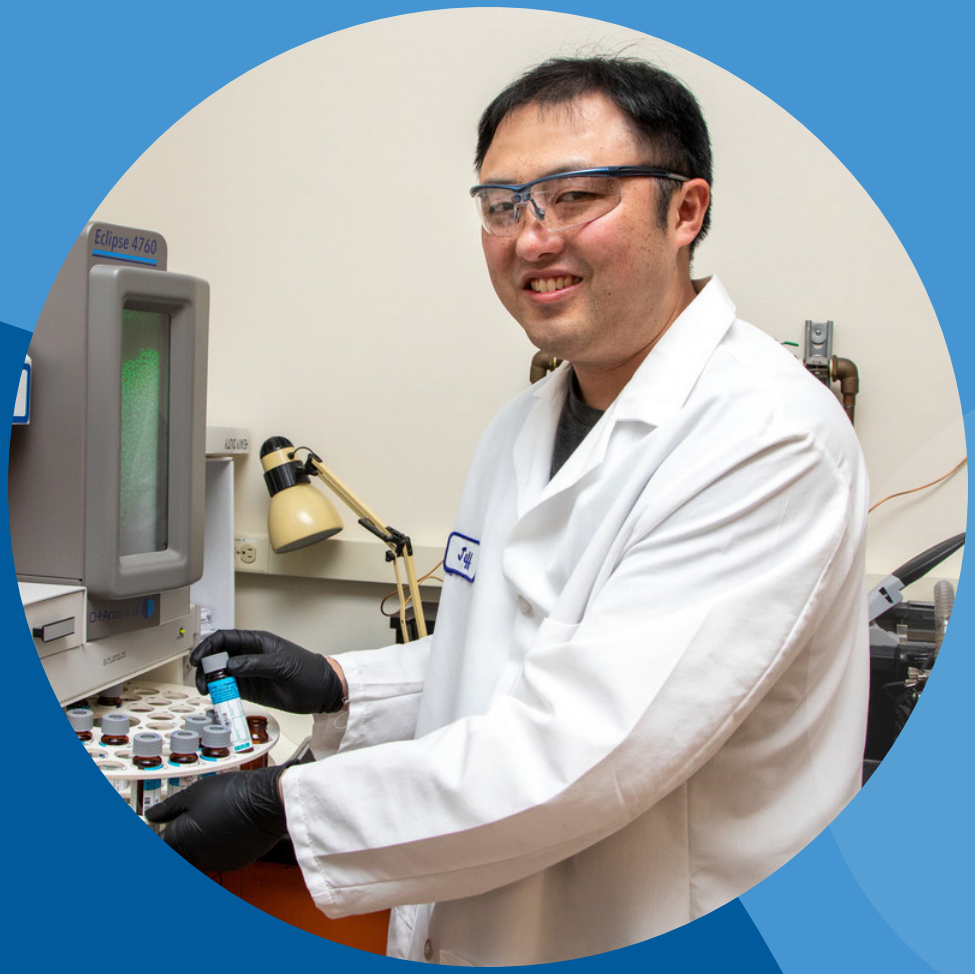
この報告書には上水道に関する重要な情報が記されております。翻訳を御依頼なされるか、内容をご理解なさっておられる方にお尋ね下さい。

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

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시요.

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

**Kate H. Stacy**, PRESIDENT
**Joshua Arce**, VICE PRESIDENT
**Avni Jamdar**, COMMISSIONER
**Steve Leveroni**, 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.

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