

2021 WATER QUALITY REPORT

City of Foster City/Estero Municipal Improvement District



Dear EMID Customer,

The City of Foster City/Estero Municipal Improvement District (EMID) is pleased to provide you with the Annual Water Quality Report for 2021. On the following pages, you will find important information about the origin of your water, the quality of your water, and the steps taken to protect the water supply.

Of special note: EMID is supporting the ongoing conservation effort, reminding Californians to remain water-wise and make water conservation a way of life.

As the purveyor of your drinking water, we are proud to be able to state that the water we provide is of the highest quality, meeting or exceeding all primary drinking water standards set by the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board's Division of Drinking Water (SWRCB-DDW).

EMID purchases all of its water from the San Francisco Regional Water System (SFRWS). The following pages contain the source water information prepared by the SFRWS Water Quality Bureau. In addition to the monitoring and testing performed by SFRWS, EMID does its own monitoring and testing to ensure that the water quality in the distribution system meets or exceeds all drinking water standards. If there are any questions about the water, please call the SFRWS Water Quality Bureau at 1-877-737-8297 or visit the website at www.sfwater.org. Any other questions about the water system should be directed to EMID Public Works Manager, Allen Smith, at 650-286-8140.

SFPUC DRINKING WATER SOURCES

CONSERVATION REMINDER: EMID continues to encourage customers to conserve our precious resource. EMID supports the message that urges: “Make water conservation a California way of life.”

OUR DRINKING WATER SOURCES AND TREATMENT

Most of our drinking water supply comes from the San Francisco Regional Water System (SFRWS), which is a wholesaler owned and managed by the San Francisco Public Utilities Commission (SFPUC). The supply consists of surface water and groundwater that are well protected and carefully managed by the SFPUC. These sources are diverse in both the origin and the location with the surface water stored in reservoirs located in the Sierra Nevada, Alameda County and San Mateo County, and groundwater stored in a deep aquifer located in the northern part of San Mateo County. 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 consumption, all surface water supplies including the upcountry non-Hetch Hetchy sources (UNHHS) undergo treatment by the SFRWS before it is delivered. Water from Hetch Hetchy Reservoir is exempt from

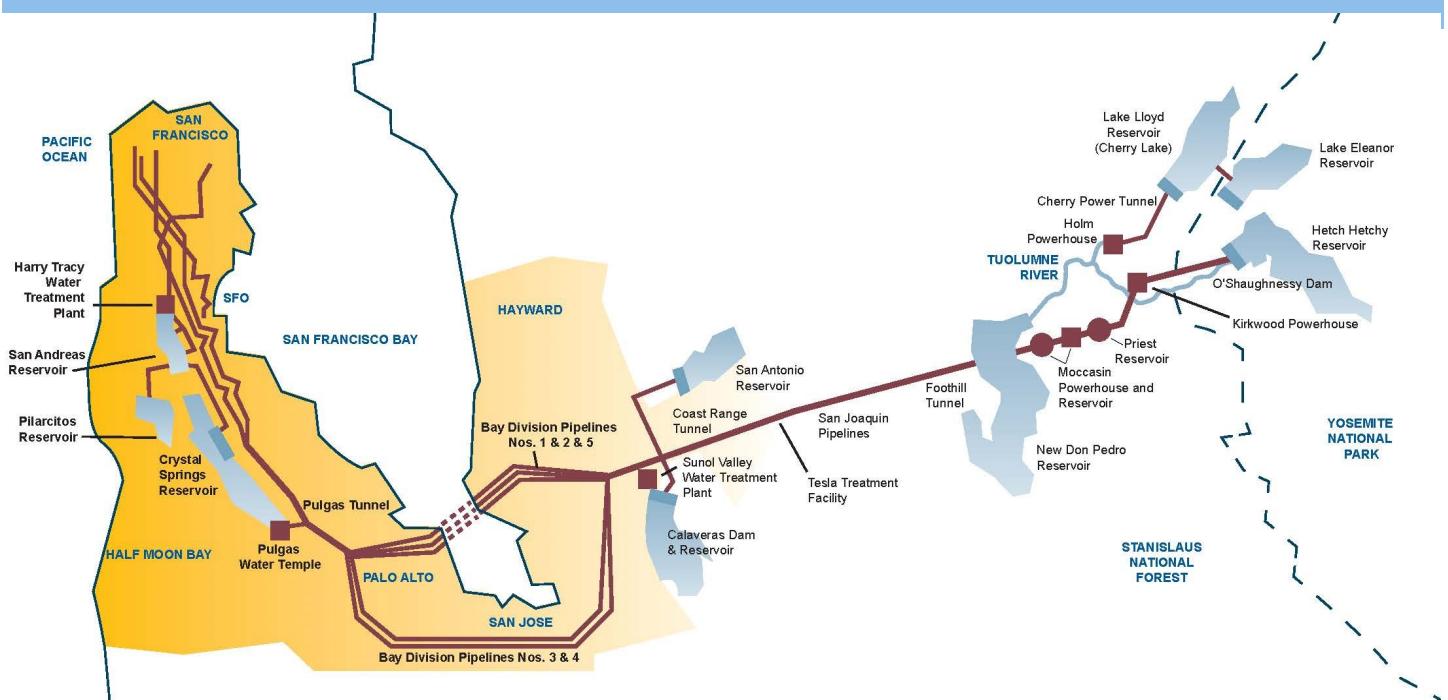
federal and State filtration requirements but receives the following treatment: disinfection using ultraviolet light and chlorine, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation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

In 2021, no UNHHS water was used. However, a small amount of groundwater from four wells was added to the SFRWS’s surface water supply through blending in the transmission pipelines.

WATERSHEDS PROTECTION

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

SFPUC WATER SYSTEM



WATER QUALITY

CONTAMINANTS AND REGULATIONS



O'Shaughnessy Dam

WATER QUALITY

Together with the SFRWS, we regularly collect and test water samples from reservoirs and designated sampling points throughout the system to ensure the water delivered to you meets or exceeds federal and State drinking water standards. In 2021, the SFRWS conducted more than 48,320 drinking water tests in the sources and the transmission system. This is in addition to the extensive treatment process control monitoring performed by SFRWS's certified operators and online instruments.

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 SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

EMID Water Quality Testing



Generally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs and wells. 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 from human activity. Such substances are called contaminants, and may be present in source water as:

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 1-800-426-4791, or at www.epa.gov/safewater.

DRINKING WATER AND LEAD

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 IQ and attention span and increases in learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have 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. There are no known lead service lines in our water distribution system. 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 taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. 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 and may wish to have your water tested, call 650-286-8140 for lead test. Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at USEPA website www.epa.gov/safewater/lead.

As previously reported in 2018, we completed an inventory of lead user service lines (LUSL) in our system and there are no known pipelines and connectors between water mains and meters made of lead. Our policy is to remove and replace any LUSL promptly if it is discovered during pipeline repair and/or maintenance.

KEY WATER QUALITY TERMS

FLUORIDATION AND DENTAL

FLUOROSIS

Mandated by State law, water fluoridation is a widely accepted practice proven to be safe and effective for preventing and controlling tooth decay. The fluoride target level in the water is 0.7 milligram per liter (mg/L, or part per million, ppm), consistent with the May 2015 State regulatory guidance on optimal fluoride level. 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 of Disease Control (CDC) 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 SWRCB if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the SWRCB website www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml, or the CDC website www.cdc.gov/fluoridation.

MONITORING OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS is a group of approximately 5,000 man-made, persistent chemicals used in a variety of industries and consumer products. In 2021, our wholesaler conducted a second round of voluntary monitoring using a newer analytical method adopted by the USEPA for some other PFAS contaminants. No PFAS were detected above the SWRCB's Consumer Confidence Report Detection Levels in surface water and groundwater sources. For additional information about PFAS, you may visit SWRCB website waterboards.ca.gov/pfas, SFPUC website [PFAS factsheet.pdf](http://PFAS_factsheet.pdf) (sfpu.org), and/or USEPA website epa.gov/pfas.

2021 WATER QUALITY DATA

This report is a snapshot of last year's water quality. The table on the next page lists all 2021 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accord with regulatory guidance. SFRWS holds a SWRCB-DDW monitoring waiver for some contaminants in its surface water supply and therefore the associated monitoring frequencies are less than annual.

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 USEPA.*

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 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, reporting, 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 cloudiness of the water and is also used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.*

Cryptosporidium *is a parasitic microbe found in most surface water. SFRWS regularly tests for this waterborne pathogen and found it at very low levels in source water and treated water in 2019. However, current test methods approved by the USEPA 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.*

| CITY OF FOSTER CITY 2021 WATER QUALITY DATA ⁽¹⁾ | | | | | | |
|--|--------|---|---------------|-------------------------------|----------------------|--|
| 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 | 0.2 - 0.4 ⁽²⁾ | [3.3] | Soil runoff |
| Filtered Water from Sunol Valley Water Treatment Plant (SVWTP) | NTU | 1 ⁽³⁾ | N/A | | [0.4] | Soil runoff |
| | - | Min 95% of samples ≤ 0.3 NTU ⁽³⁾ | N/A | 99.8% - 100% | - | Soil runoff |
| Filtered Water from Harry Tracy Water Treatment Plant (HTWTP) | NTU | 1 ⁽³⁾ | N/A | - | [0.2] | Soil runoff |
| | - | Min 95% of samples ≤ 0.3 NTU ⁽³⁾ | N/A | 100% | - | Soil runoff |
| DISINFECTION BYPRODUCTS AND PRECURSOR | | | | | | |
| Total Trihalomethanes | ppb | 80 | N/A | 27.0 - 40.8 | 34.5 ⁽⁴⁾ | Byproduct of drinking water disinfection |
| Five Haloacetic Acids | ppb | 60 | N/A | 19.8 - 32.0 | 23.7 | Byproduct of drinking water disinfection |
| Bromate | ppb | 10 | 0.1 | ND - 1.9 | [2.1] ⁽⁵⁾ | Byproduct of drinking water disinfection |
| Total Organic Carbon ⁽⁶⁾ | ppm | TT | N/A | 1.2 - 2.2 | 1.8 | Various natural and man-made sources |
| MICROBIOLOGICAL | | | | | | |
| Total Coliform ⁽⁷⁾ | - | NoP ≤ 5.0% of monthly samples | (0) | - | 0% | Naturally present in the environment |
| Fecal coliform and <i>E. coli</i> ⁽⁸⁾ | - | 0 Positive Sample | (0) | - | 0% | Human or animal fecal waste |
| <i>Giardia lamblia</i> | cyst/L | TT | (0) | 0 - 0.04 | 0.01 | Naturally present in the environment |
| INORGANICS | | | | | | |
| Fluoride (source water) ⁽⁹⁾ | ppm | 2.0 | 1 | ND - 0.8 | 0.4 ⁽¹⁰⁾ | Erosion of natural deposits; water additive to promote strong teeth |
| Chloramine (as chlorine) | ppm | MRDL = 4.0 | MRDLG = 4 | .59 - 3.07 | 2.57 | Drinking water disinfectant added for treatment |
| CONSTITUENTS WITH SECONDARY STANDARDS | | | | | | |
| Chloride | ppm | 500 | N/A | <3 - 11 | 6.7 | Runoff / leaching from natural deposits |
| Specific Conductance | µS/cm | 1600 | N/A | 34 - 217 | 135 | Substances that form ions when in water |
| Sulfate | ppm | 500 | N/A | 1.1 - 29 | 13 | Runoff / leaching from natural deposits |
| Total Dissolved Solids | ppm | 1000 | N/A | <20 - 96 | 52 | Runoff / leaching from natural deposits |
| Turbidity | NTU | 5 | N/A | ND - 0.2 | ND | Soil runoff |
| LEAD AND COPPER | | | | | | |
| Copper | ppb | 1300 | 300 | 0.011 - 0.064 ⁽¹¹⁾ | 0.576 | Internal corrosion of household water plumbing systems |
| Lead | ppb | 15 | 0.2 | <0.001 - 0.01 ⁽¹²⁾ | 0.006 | Internal corrosion of household water plumbing systems |
| NON-REGULATED WATER QUALITY PARAMETERS | | | | | | |
| Alkalinity (as CaCO ₃) | ppm | N/A | 4.5 - 79 | 37 | | KEY: < / ≤ = 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 pCi/L = picocurie per liter ppb = part per billion ppm = part per million µS/cm = microSiemens/centimeter |
| Boron | ppb | 1000 (NL) | ND - 123 | ND | | |
| Calcium (as Ca) | ppm | N/A | 3 - 17 | 9.5 | | |
| Chlorate ⁽¹³⁾ | ppb | 800 (NL) | 28 - 420 | 162 | | |
| Hardness (as CaCO ₃) | ppm | N/A | 7.7 - 60 | 34 | | |
| Magnesium | ppm | N/A | <0.2 - 5.5 | 2.9 | | |
| pH | - | N/A | 8.6 - 9.7 | 9.2 | | |
| Phosphate (ortho) | ppm | N/A | <0.3 - 0.3 | <0.3 | | |
| Potassium | ppm | N/A | 0.4 - 1.1 | 0.7 | | |
| Silica | ppm | N/A | 3 - 5.9 | 4.8 | | |
| Sodium | ppm | N/A | 3.1 - 17 | 12 | | |
| Strontium | ppb | N/A | 14 - 181 | 83 | | |

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 is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
- (7) Total Coliform - Naturally present in the environment.
- (8) On July 1, 2021 the MCL was changed to *E.coli* based results. Monthly testing was negative for *E.coli*
- (9) The SWRCB recommended an optimal fluoride level of 0.7 ppm be maintained in the treated water. In 2021, the range and average of the fluoride levels were 0.6 ppm - 0.9 ppm and 0.7 ppm, respectively.
- (10) Natural fluoride in the Hetch Hetchy source was ND. Elevated fluoride levels in raw water at the SVWTP and HTWTP were attributed to the transfer of fluoridated Hetch Hetchy water into the local reservoirs.
- (11) The most recent Lead and Copper Rule monitoring was in 2019. 0 of 42 site samples collected at consumer taps had copper concentrations above the AL.
- (12) The most recent Lead and Copper Rule monitoring was in 2019. 0 of 42 site samples collected at consumer taps had lead concentrations above the AL.
- (13) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFRWS for water disinfection.

Note: Additional water quality data may be obtained by calling the City of Foster City phone number at 650-286-8140

MORE IMPORTANT INFORMATION



Hetch Hetchy Reservoir

SPECIAL HEALTH NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants, can be particularly at risk from infections.

These people should seek advice about drinking water from their healthcare providers. USEPA/CDC 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 1-800-426-4791 or at www.epa.gov/safewater.

PUBLIC PARTICIPATION

The EMID President and Board of Directors are the governing authority of the EMID water system. They meet on the first and third Mondays of the month at 6:30 p.m. at the Foster City Council/Board Chambers located at 620 Foster City Blvd., Foster City, California. An agenda for each EMID meeting is posted on the City of Foster City website at:

<https://www.fostercity.org/agendasandminutes>.

- To access the meeting by computer / smartphone, go to: <https://fostercity-org.zoom.us/j/86030614501>
- To dial-in via phone: 1-669-900-6833 or 1-408-638-0968 and enter Webinar ID: 860 3061 4501

This report contains important information about your drinking water. Please contact EMID at 1-650-286-8140 or publicworks@fostercity.org for assistance.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse EMID a 1-650-286-8140 o publicworks@fostercity.org para asistirlo en español con alguien que lo entienda bien.

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。



**City of Foster City/Estero Municipal Improvement District
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