Water Quality



ANNUAL REPORT 2024

LETTER FROM THE DIRECTOR

The City of Fresno is the fifth largest city in California and has one of the most complex water systems in the Central Valley. To ensure full compliance with state and federal water quality standards, the Department of Public Utilities Water Division is continuously collecting water samples from each production source, as well as throughout the entire water system. The results of the tested samples are reported each month to the State. I am pleased to announce that the City has met all state and federal water quality standards for the 2024 reporting period.

Through planned infrastructure investment, the Department of Public Utilities Water Division is able to use the combination of groundwater and surface water supplies to meet municipal water demands. In implementing a conjunctive use approach, the City has reduced its utilization of groundwater to quantities last seen in 1955. This is a major milestone and strengthens our ability to have adequate water supplies for the foreseeable future. These investments, coupled with continuous water quality sampling and testing, helps ensure regulatory compliant potable water will be available in even the driest years.

The Department of Public Utilities remains dedicated to the production, treatment, and distribution of potable water for our community. Through proactive long-range planning, strategic infrastructure investment, and tracking changing regulatory requirements, the Department is able to develop new water resources and preserve historically relied on water resources to maintain and enhance the vitality of our community.

Brock D. Buche, PE, PLS Director



WHAT'S IN THIS REPORT?

This Annual Water Quality Report, prepared in cooperation with the California State Water Resources Control Board (State Board) – Division of Drinking Water, provides important information about Fresno's water supply, water quality, and water delivery system. Test results for Fresno's 2024 Water Quality Monitoring Program are summarized on the following pages. It is important to read the messages regarding various water quality issues from the U.S. Environmental Protection Agency (USEPA) and from the City of Fresno Department of Public Utilities (DPU) Water Division.

Unregulated contaminant monitoring helps USEPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

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

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

Chi ti t này th t quan tr ng, xin nh ngu i d ch cho quý v.

FACTS ABOUT DRINKING WATER STANDARDS

Under the 1974 Safe Drinking Water Act, the USEPA and the California Department of Public Health are charged with the responsibility of setting and implementing safe drinking water standards. Congress reauthorized this act in 1996. There are 74 regulated contaminants and another 34 are subject to monitoring. Fortunately, only a small number have ever been detected in Fresno's water supply.

WHERE DOES OUR DRINKING WATER COME FROM?

For Fresno customers, there are two sources of drinking water. The Fresno Sole Source Aquifer is a larger underground water system that supplies many communities in the San Joaquin Valley. DPU operates approximately 260 wells that draw from this aquifer, which can lower the water table. For this reason, Fresno has an aggressive recharge program that is continually finding new places and methods to conduct groundwater recharge. Water recharge operations can slow this decline, but with conservation, you can help have a greater impact.

The second source is surface water delivered via Fresno Irrigation District canals and comes from either Millerton or Pine Flat lakes located in the foothills east of Fresno. Surface water is treated to drinking water standards at Fresno's three state-of-the-art surface water treatment facilities (SWTFs). In northeast Fresno, the NESWTF is rated at 30 million gallons per day. The 4 million gallons per day T-3 Water Storage and Treatment Facility is located in east Fresno, and the newest and largest facility, the SESWTF, rated at 54 million gallons per day, is located in southeast Fresno.

WHAT HAPPENS IN FRESNO IF A WELL EXCEEDS USEPA OR STATE BOARD STANDARDS?

If a well violates standards, it will be removed from service and an alternate water supply will be provided. In the event a well exceeds standards but must stay in service, customers who receive water from that well would be directly notified by mail or by hand-delivered flyers.



WATER CONSERVATION

Increasing water demands coupled with highly variable rainfall patterns in California make implementation of water conservation measures a necessary way of life. We need to work collaboratively to implement practical water conservation solutions that have broad-based community benefit while also providing a range of free services for our residential and commercial customers.

REBATES

The City of Fresno offers a variety of rebates to qualified customers to offset some of the costs of installing water efficient appliances, fixtures, and landscaping materials.

Rebate forms are available online by visiting <u>www.fresno.gov/rebates</u> or request a hard copy by calling the City of Fresno's One Call Center by dialing 3-1-1 within City limits or by calling (559) 621-CITY (2489).

- Commercial & Multi-Family Toilet Rebate up to \$105
- High-Efficiency Sprinkler Nozzle Rebate up to \$4.50 per nozzle
- Hot Water Recirculating Pump Rebate up to \$105
- Lawn to Garden Rebate \$1.05 per square foot (up to 1,500 square feet for residential properties)
- Micro (Drip) Irrigation Rebate \$0.55 per square foot (up to 1,000 square feet of irrigated area)
- Rain Barrel Rebate up to \$55
- Rain Sensor Rebate up to \$55
- Residential Clothes Washer Rebate up to \$105
- Residential Toilet Rebate up to \$105
- Smart Irrigation Controller Rebate up to \$105
- Swimming Pool Cover Rebate up to \$105

SERVICES

The Water Conservation Program offers a variety of free services for our customers. These services are provided to help customers save money by reducing their water use and ensuring compliance with water conservation regulations. Customers can request any of the free services outlined below by submitting a service request through FresGO, or by calling the City of Fresno's One Call Center by dialing 3-1-1 within City limits or by calling (559) 621-CITY (2489).

SERVICES OFFERED

- Water-Wise Landscape Consultation
- Irrigation Efficiency Audit
- Irrigation Controller Assistance (Timer Tutorial)
- Interior/Exterior Water Leak Surveys

EYEONWATER

The EyeOnWater tool allows City of Fresno water customers to connect to their water utility accounts and view their latest water usage on their desktop or mobile device. EyeOnWater helps customers understand their water usage, detect leaks, and discover their watering trends. To register for EyeOnWater, visit: <u>www.fresno.gov/eyeonwater</u> or download the EyeOnWater app on your mobile device!

OUTDOOR WATER USE SCHEDULE

3-DAY OUTDOOR WATER USE SCHEDULE (APRIL 1 - OCTOBER 31)

- Addresses ending in odd numbers (1,3,5,7,9) Tuesdays, Thursdays and Saturdays
- Addresses ending in even numbers (2,4,6,8,0) Wednesdays, Fridays and Sundays
- Customers cannot water between 10 a.m. - 6 p.m. and never on Mondays

1-DAY OUTDOOR WATER USE SCHEDULE (NOVEMBER 1 - MARCH 31)

- Addresses ending in odd numbers (1,3,5,7,9) Saturdays
- Addresses ending in even numbers (2,4,6,8,0) Sundays
- Customers cannot water between 10 a.m. – 6 p.m. and never on Mondays

Outdoor Water Use Schedules are subject to change at any time.

IMPORTANT WATER CONSERVATION RULES

- Customers may not use potable (fresh, drinking) water to wash sidewalks, walkways, driveways, parking lots, open ground, or other hard surface areas except where necessary for public health or safety.
- Customers may not use potable (fresh, drinking) water in a way that causes runoff onto adjacent properties, walkways, roadways, or parking lots.
- Car washing on private property is only allowed with the use of a bucket and a hose equipped with a shut off nozzle for a quick rinse.
- Established swimming pools may only be drained once every 3 years. A pool drain exemption permit is available at <u>www.fresno.gov/water</u> by clicking on the "Exemption Requests" link.
- Customers may not exceed more than 400 gallons per hour of potable (fresh, drinking) water for outdoor water use on restricted days or times associated with the property address.



CALIFORNIA DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM

The City of Fresno Department of Public Utilities Water Division and the State Water Resources Control Board, formerly the California Department of Public Health (CaDPH) has completed the California Drinking Water Source Assessment and Protection (DWSAP) Program for water wells operated by the Fresno Water Division. The complete report prepared in 2003 is available for viewing at the Water Division or the State Water Resources Control Board office. Please contact the Water Division at (559) 621-5300 or State Water Resources Control Board at (559) 447-3300 if you are interested in more information regarding this report.

DPU operates approximately 260 wells throughout Fresno's 115 square mile service area. Given the size and complexity of our system, the DWSAP report is a very large document and even a brief summary would be difficult to include in this Consumer Confidence report. However, two summary data tables are available on the City's website at <u>www.fresno.gov</u>. In the search box, type Water Quality Report and you will automatically be routed to the linking page containing the reports.

The multipurpose goal of the DWSAP is to identify ways communities can protect the water supplies, manage their water resources, improve drinking water quality, inform their citizens of known contaminants, and identify known activities and locations that can threaten their supply, and meet regulatory requirements.

As an example, the following paragraph lists the contaminating activities and sources, which can affect Fresno's drinking water.

Airports-Maintenance/fueling areas, Apartments and condominiums, Automobile-Body Shops, Automobile-Gas stations, Automobile-Repair Shops, Boat services/repair/ refinishing, Chemical/petroleum processing/storage, Crops, irrigated, Dry Cleaners, Electrical/electronic manufacturing, Fertilizer, Pesticide/Herbicide Application, Golf courses, Historic gas stations, Historic waste dumps/landfills, Home manufacturing, Hospitals, Housing-high density, Junk/scrap/ salvage yards, Known Contaminant Plumes, Landfills/dumps, Machine shops, Metal plating/finishing/fabricating, Medical/ dental offices/clinics, Military installations, Motor pools, Office buildings/complexes, Parks, Pesticide/fertilizer/petroleum storage & transfer areas, Photo processing/printing, Plastics/ synthetics producers, Railroad yards/maintenance/fueling areas, Rental Yards, Schools, Septic systems-high density, Sewer collection systems, Transportation corridors-Railroads, Underground storage tanks-Confirmed leaking tanks, Utility Stations-maintenance areas, Veterinary offices/clinics, Wastewater treatment plants, Wells-Agriculture/Irrigation, Wells-Water supply.

More information is included in the summary, which identifies the affected well(s) and associated activities.

SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, 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.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board* regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

*In a previous rulemaking, "Department" was inadvertently changed to "State Water Board." The mandatory language will be updated as follows in a future rulemaking, and water systems may use this language in their Water Quality Reports in the interim: "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." Additional information on bottled water is available on California Department of Public Health's website at <u>https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/</u> FDBPrograms/FoodSafetyProgram/Water.aspx.



Nitrate: Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Fresno is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours. you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The following tables list all the drinking water contaminants that were tested for during the 2024 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing between January 1 through December 31, 2024. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data contained in this report, though representative of the water quality, is more than one year old.



Table 1: Primary Standards and Unregulated Contaminants

| | | 8 | Fresno | Range of | MCL | Last | | |
|--|----------------------|------------------------|---------|-------------|-----------|---------|--|--|
| Chemical Table | MCL | PHG (MCLG) | Average | Detections | Violation | Sampled | Typical Source of Contaminant | |
| Volatile Organic Contaminants | | | | | | | | |
| Carbon Tetrachloride (ng/) (1) | 500 | 100 | 20 | nd - 2,500 | NO | 2023 | Some people who use water containing carbon tetrachloride in excess of the MCL over many years may experience liver problems and may have an increased risk of getting cancer. | |
| cis-1,2-Dichloroethylene (ug/L) (2) | 6 | 100 | 0.24 | nd - 8.2 | NO | 2023 | Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination | |
| Tetrachloroethylene (PCE) (ug/L) | 5 | 0.06 | 0.08 | nd94 | NO | 2024 | Discharge from factories, drycleaners, and auto shops (metal degreaser) | |
| Trichloroethylene (TCE) (ug/L) | 5 | 1.7 | 0.23 | nd - 1.4 | NO | 2024 | Discharge from metal degreasing sites and other factories | |
| Synthetic Organic Contaminants | | | | | | | | |
| Dibromochloropropane (DBCP) (ng/L) (3) | 200 | 3.0 | 40 | nd - 210 | NO | 2024 | Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit | |
| 1,2,3-Trichloropropane (TCP) (ng/L) (4) | 5 | 0.7 | 0.25 | nd - 5.2 | NO | 2024 | Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides. | |
| Inorganic Contaminants | | | | 1 | | | | |
| Arsenic (As) (ug/L) (5) | 10 | 0.004 | 5.12 | nd-16 | NO | 2024 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes | |
| Barium (Ba) (mg/L) | 1 | 2 | 0.03 | nd- 0.1 | NO | 2024 | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits | |
| Fluoride (mg/L) | 2 | 1 | 0.08 | 0.1 - 0.14 | NO | 2024 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories | |
| Nitrate (N) (mg/L) (6) | 10 | 10 | 4.92 | 0 - 13 | NO | 2024 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits | |
| Perchlorate (ug/L) | 6 | 6 | 0.13 | nd - 1.0 | NO | 2024 | Historic aerospace or industrial operations associated with rocket propellant, fireworks, explosives, flares, matches and a varity of industries. | |
| Radionuclides | | | | | | | | |
| Gross Alpha Activity (pCi/L) | 15 | n/a | 2.85 | 2.15 - 10.3 | NO | 2024 | Erosion of natural deposits | |
| Uranium (pCi/L) | 20 | 0.5 | 5.17 | 3.9 -6 | NO | 2023 | Erosion of natural deposits | |
| Unregulated Contaminants (ICR, UCMR & Misc) | | | | | | | | |
| Manganese (ug/L) | r | n/a | 66.0 | nd - 92 | n/a | 2024 | | |
| Hexavalent Chromium (ug/L) | r | n/a | 2.2 | nd - 3.2 | n/a | 2024 | We are required by requisitions to monitor for each in unrequisted contaminants. This is beleful to the USEDA and DDW for tracking the | |
| Dichlorodifluoromethane (Freon 12) | r | n/a | 0.50 | nd - 14 | n/a | 2023 | We are required by regulations to monitor for certain unregulated contaminants. This is helpful to the USEPA and DDW for tracking the location of contaminants and whether there is a need for stricter regulations. | |
| Lithium (uq/L) | | n/a | nd | nd - nd | n/a | 2024 | - | |
| State Contiminants with Notification Levels | | | | | | | | |
| Perfluorobutanesulfonic acid (PFBS) (ng/L) (7) | Notificatio | n Level 500 | 0.43 | nd - 8.0 | n/a | 2024 | Perfluorobutane sulfonicacid exposures resulted in decreased thyroid hormone in pregnant female mice. | |
| Perfluorooctanoic Acid (PFOA) (ng/L) (7) | | on Level 5.1 | 1.39 | nd - 15 | n/a | 2024 | Perfluorooctanoic Acid exposures resulted in increased liver weight and cancer in laboratory animals | |
| Perfluorooctanesulfonic Acid (PFOS) (ng/L) (7) | | Notification Level 6.5 | | nd - 30 | n/a | 2024 | Perfluorooctanesulfonic Acid exposures resulted in immune suppression and cancer in laboratory animals | |
| Perfluorohexanesulfonic acid (PFHxS) ng/L (7) | | | 1.26 | nd - 31 | n/a | 2024 | Perfluorohexane sulfonicacid exposures resulted in decreased total thyroid hormone in male rats. | |
| Disinfection Byproducts, Disinfectant Residuals, a | and Disinfection Byp | roduct Precursors | | | | | | |
| Total Trihalomethanes (TTHM) (ug/L) | 80 | n/a | 8.7 | nd - 22 | NO | 2024 | Byproduct of drinking water chlorination | |
| Haloacetic Acids (HAA5) (ug/L) | 60 | n/a | 4.7 | nd - 11 | NO | 2024 | Byproduct of drinking water chlorination | |
| Chlorine (NAOCL) (mg/L) | 4 | 4 | 1.33 | 0.03 - 2.0 | NO | 2024 | Drinking water disinfectant added for treatment | |

Table 2: Micro Biological Contaminants

Over 220 bacteriological samples are collected every month in Fresno's distribution system. In addition, over 300 bacteriological samples are collected from wells and treatment sites.

| Contaminant | Highest No. of Detection's | No. of Months in Violation | MCL | | Typical Source of Bacteria |
|-------------------------|----------------------------|-------------------------------|---|-----|--------------------------------------|
| Total Coliform Bacteria | 2 of 237 or 0.80% | 0 | 5% | (0) | Naturally present in the environment |
| E.coli | 0 | 0 | A routine sample is positive for E.coli and a repeat sample is positive for total, fecal or E.coli bacteria | (0) | Human or animal fecal waste |

Table 3: Lead and Copper

Under the Lead and Copper Rule, samples are collected from inside residences meeting critera established by the USEPA.

| Contaminant | No. of Samples Collected | 90th Percentile Level Detected | No. of Sites Exceeding Action Level | Range of Detections | Action Level | MCLG | No. of Schools requesting lead testing | Typical Source of Contaminant |
|-----------------------------|--------------------------|-----------------------------------|--|------------------------|--------------|------|--|--|
| Lead (ug/L) (August 2022) | 56 | 0 | 0 | ND | 15 | 0.2 | 3 sampled in 2019 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (mg/L) (August 2022) | 56 | 0.25 | 0 | ND - 0.28 | 1.3 | 0.3 | | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

To further minimize possible lead exposure risks, the U.S. EPA issued revisions to the federal Lead and Copper Rule (LCR) on January 15, 2021, requiring specific water systems to compile a "Lead Service Line Inventory". This is the process of verifying if the customer's service line is made of lead or has a lead connector. City employees are in the process of inspecting the meter box and identifying the pipe on the customer side of the meter. The City of Fresno has established a database at the link below where you can search to see if your service line's composition has been inspected. Access at: https://www.fresno.gov/publicutilities/water-service-lines. This is talso has additional information from the EPA, FAQ's, a copy of original letter that was sent out, diagrams of piping, and how to identify lead during a property owner's own inspection. Customers equivale revisions of their service line status may elect to "self-report" their findings. To self-report (optional but recommended): after performing the property owner inspection, call 559-621-5361 and report findings for us to include in the database.



Table 4: Secondary Standards Contaminants Lists

| Inorganic Contaminants | SMCL | Fresno Average | Range of Detection's | SMCL Violation | Last Sampled | Typical Source of Contaminant | |
|---|------|----------------|----------------------|-------------------|--------------|---|--|
| Apparent Color (Unfiltered) | 15 | 1.8 | nd - 10 | NO | 2024 | Naturally-occurring organic materials | |
| Iron (Fe) (ug/L) | 300 | 16.9 | nd - 94 | NO | 2024 | Leaching from natural deposits; industrial wastes | |
| Manganese (Mn) (ug/L) | 50 | 15.2 | nd - 92 | NO | 2024 | Leaching from natural deposits | |
| Specific Conductance (E.C.) (umho/cm+) | 1600 | 228.1 | 130-440 | NO | 2024 | Substances that form ions when in water; seawater influence | |
| Sulfate (SO4) (mg/L) | 500 | 10.1 | 8.6 | NO | 2024 | Runoff/leaching from natural deposits; industrial wastes | |
| Total Dissolved Solids (TDS) (mg/L) | 1000 | 175.9 | 130-340 | NO | 2024 | Runoff/leaching from natural deposits | |
| Turbidity (Lab) (units) | 5 | 0.6 | nd - 4 | NO | 2024 | Soil runoff | |
| Sodium (Na) (mg/L) | n/a | 14 | 9.1-26 | NO | 2024 | Sodium and Total Hardness are not regulated but many customers are interested due to concerns about sodium in the | |
| Total Hardness (as CaCO3) (mg/L, GPG) | n/a | 89.3 (5.2) | 65-190 | NO | 2024 | diet or water hardness | |

Secondary standards are based on aesthetic factors (taste, appearance and odor, etc.) and are not health related.

Table 5A: Turbidity in North East Fresno related to Surface Water Treatment Plant Operations

| | MCL | MCLG | Level Found | Range | Sample Date | Violation | Typical Source | |
|---|---------------------------------|-------|-------------|---------------|-------------|-------------|----------------|--|
| TT = 1 NTU | n/a | 0.096 | 0.012 0.000 | 17-0ct-24 | n/a | Coll munoff | | |
| Turbidity (NTU) | TT = 95% of samples <0.3 NTU | n/a | 100% | 0.012 - 0.096 | Continuous | n/a | Soil runoff | |
| We monitor it because it is a good indicator of the effectiveness of our filtration system. | | | | | | | | |

Table 5B: Turbidity in South East Fresno related to T-3 Surface Water Treatment Plant Operations

| | MCL | MCLG | Level Found | Range | Sample Date | Violation | Typical Source | |
|---|---------------------------------|------|-------------|---------------|-------------|-----------|----------------|--|
| Turbidity (NTU) | TT = 1 NTU | n/a | 0.204 | 0.010 0.004 | 26-Jun-24 | n/a | Soil runoff | |
| | TT = 95% of samples <0.3 NTU | n/a | 100% | 0.010 - 0.204 | Continuous | n/a | | |
| We monitor it because it is a good indicator of the effectiveness of our filtration system. | | | | | | | | |

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Table 5C: Turbidity in South East Fresno related to SE Surface Water Treatment Plant Operations

| | MCL | MCLG | Level Found | Range | Sample Date | Violation | Typical Source | |
|---|---------------------------------|------|-------------|---------------|-------------|-----------|----------------|--|
| Turbidity (NTU) | TT = 1 NTU | n/a | 0.099 | | 12-Jun-24 | n/a | Soil runoff | |
| | TT = 95% of samples <0.3 NTU | n/a | 100% | 0.013 - 0.099 | Continuous | n/a | | |
| We monitor it because it is a good indicator of the effectiveness of our filtration system. | | | | | | | | |

ionitor it because it is a good indicator of the effectiveness of our filtration system.

TABLE FOOTNOTES

TABLE 1: PRIMARY STANDARDS AND UNREGULATED CONTAMINANTS

(1) Carbon Tetrachloride – Well 3A located near Ventura and E. St confirmed above the MCL after initial test results and followup confirmation testing. The well was removed from service in December 2023 and the City is evaluating several options to possibly restore this well to service. Determination as to whether a well exceeds an MCL for non-acute contaminants such as Carbon Tetrachloride is based on a running average for a prescribed period of time, typically six months but may be longer.

(2) cis-1,2-Dichloroethylene – Well 213A located near Fruit and Gettysburg confirmed above the MCL after initial test results and followup confirmation testing. The well was removed from service in December 2023 and the City is evaluating several options to possibly restore this well to service. Determination as to whether a well exceeds an MCL for non-acute contaminants such as cis-1,2-Dichloroethylene is based on a running average for a prescribed period of time, typically six months but may be longer. Therefore, a well may have several results above the MCL, yet still meets drinking water standards by not exceeding the MCL.

(3) Dibromochloropropane (DBCP) – Well 182-1, located near Church and Sunnyside, has sample results above the MCL during 2024. Testing is ongoing to confirm the concentration in the well. Determination as to whether a well exceeds an MCL for non-acute contaminants such as DBCP is based on a running average for a prescribed period of time, typically six months but may be longer. Therefore, a well may have several results above the MCL, yet still meets drinking water standards by not exceeding the MCL.

(4) 1,2,3-Trichloropropane (TCP) – Well 50A at Belmont and Valeria had a sample result above the MCL during 2024. Subsequent sampling resulted in below the MCL. in September. The well remains monitored and in service. Determination as to whether a well exceeds an MCL for non-acute contaminants such as TCP is based on a running average for a prescribed period of time, typically six months but may be longer (4 Qtrs.). Therefore, a well may have several results above the MCL, yet still meets drinking water standards by not exceeding the MCL.

(5) Arsenic – Well 370, Friant north of Copper, testing has confirmed Arsenic to be above the MCL in 2024, and the well was removed from service in April. Determination as to whether a well exceeds an MCL for non-acute contaminants such as Arsenic is based on a running average for a prescribed period of time, typically six months but may be longer. Therefore, a well may have several results above the MCL, yet still meets drinking water standards by not exceeding the MCL.

(6) Nitrate – Well 85 at Herndon and Maple had a sample result above the MCL during 2024. After being off for an extended period, Well 85 was momentarily turned on for bacteriological and nitrate testing, then turned off for resample results. Bacti result prevented subsequent 24 hour retest for nitrate, until dose and flushing could be completed. Subsequent sampling resulted in below the MCL and the well was returned to service. Determination as to whether a well exceeds an MCL for Nitrate is based upon the average of the original sample result and a confirmation sample result taken within 24 hours.

(7) PFAS Compounds – The city is currently engaged in an ongoing state testing program to determine the presence of 29 different PFAS compounds. Effective 2029, the EPA has established new PFAS MCLs for five compounds in drinking water: PFOA, PFOS, PFHxS, PFNA, and HFPO-DA. Additionally, a new PFAS "Hazard index" equivalent to an MCL will comprise at least two or more of the following: PFHxS, PFNA, HFPO-DA, and PFBS. The Hazard Index MCL is to account for the combined and co-occurring levels of these PFAS in drinking water. EPA also finalized health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these PFAS. Specifically, PFOA, PFOS, PFHxS, and PFBS are the primary compounds of interest to date. During quarterly testing events, we have detected the presence of these compounds and others at several wells throughout the city. Ongoing testing will continue through this year and increased monitoring may be required as these compounds are detected.

ACRONYMS AND ABBREVIATIONS

n/a: not applicable

NTU: Nephelometric Turbidity Unit (a measure of light)
nd: not detectable at reporting limits.
ng/L: nanograms per liter or parts per trillion.
μg/L: micrograms per liter or parts per billion
mg/L: milligrams per liter or parts per million

pCi/L: picocuries per liter (a measure of radiation)

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

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.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Maximum 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.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.





1910 East University Avenue Fresno, CA 93703-2988

A copy of this report is available on the Fresno City website. It can be found at Fresno.gov/waterquality

A translation of this report in Spanish, Hmong, or Vietnamese can be requested by calling (559) 621-5300.

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

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, log yog tham nrog tej tug neeg uas totaub txog nws.

Chi ti t này th t quan tr ng, xin nh ngu i d ch cho quý v.

A large print version of this report can be requested by calling (559) 621-5300.