

ANNUAL WATER QUALITY REPORT

Reporting Year 2023

Presented By
**Foothills Water and
Sewer LLC**





Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Water Treatment Process

The treatment process consists of a series of steps. First, untreated water is drawn from our water source and sent through approximately six miles of pipe to get to our treatment facility. The water then goes into our header system, where we add aluminum sulfate and cationic polymer to initiate the coagulation and flocculation process. The addition of these substances causes small particles, called floc, to adhere to one another, making them large enough to catch in our filtration system, which enables us to remove the sediment in the next portion of the process. At this point, the water is filtered through layers of anthracite coal, coarse sand, and fine garnet. As the water passes through each layer, smaller and smaller suspended particles are removed, turbidity is reduced, and clear water emerges.

Chlorine is added as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water.) Water is pumped to sanitized reservoirs and stored until it is needed at your home or business.

“When the well is dry, we know the worth of water.”

—Benjamin Franklin

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791 or water.epa.gov/drink/hotline.



Where Does My Water Come From?

Foothills Water and Sewer customers are fortunate in having water supply capabilities from two separate sources. The Foothills Water Treatment Plant draws surface water from Canal A, which comes from the Colorado River. This is the primary water source. The secondary water source is groundwater. This fully compliant groundwater system is maintained on a regular basis and ready for service in the event of an emergency or loss of surface water. Foothills Water and Sewer uses the groundwater system annually to augment water supplies when needed, usually in the first week of December for approximately one week while Canal A is shut down for cleaning and inspection by the Yuma Mesa Irrigation Drainage District.

About Our Violation

In March 2023, Foothills Water and Sewer had a late reporting violation for total coliform sampling. Sample data was submitted to ADEQ on April 19, 2023.

Level 1 Assessment Update

Coliforms are bacteria that are naturally present in the environment and used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify and correct any problems. An assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and - when possible - the likely reason that the system triggered the assessment.

During the past year, Foothills Water and Sewer was required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, Foothills Water and Sewer was required to take two corrective actions, and we completed both of these actions.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call William Ferro, Water Supervisor, at (928) 581-3321.

Lead in Home Plumbing

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. We are responsible for providing high-quality drinking water, but we 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 two minutes before using water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at epa.gov/safewater/lead.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the Arizona Department of Environmental Quality (ADEQ) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants in tap water and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater. Information on bottled water can be obtained from the FDA.

Source Water Assessment

A Source Water Assessment Plan (SWAP) is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination. Known vulnerabilities to the source water include livestock and failing septic tanks.

Foothills Water and Sewer received a source water assessment from ADEQ dated October 29, 2003. The overall assessment deemed the facilities to be at a low risk for susceptibility to contamination. A copy of this assessment is available at the Foothills Water and Sewer office, 13157 East 44th Street, Yuma, or you may call (928) 342-1238.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2019	10	0	3.3 ¹	1.7–3.3	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2019	2	2	0.11 ¹	0.09–0.11	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2023	[4]	[4]	0.63 ²	0.29–1.37	No	Water additive used to control microbes
Chromium (ppb)	2019	100	100	3.2 ¹	ND–3.2	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	2019	4	4	0.49 ¹	ND–0.49	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2023	60	NA	42 ¹	ND–42	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.30 ¹	0.29–0.30	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2019	50	50	2.5 ¹	1.5–2.5	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80 ³	NA	54 ⁴	2–110 ⁴	No	By-product of drinking water disinfection
Turbidity ⁵ (NTU)	2023	TT	NA	0.270	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.021	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	1	0/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (ppt)	12/18/2023	5.5 ¹	ND–5.5	NA
Hexafluoropropylene Oxide Dimer Acid [HFPO-DA; GenX] (ppt)	2023	1 ¹	NA	NA
Lithium (ppb)	2023	68.9 ⁶	54.9–94.9	Naturally occurring
Nickel (ppm)	02-26-2019	0.0031 ¹	0.0017–0.0031	Naturally occurring
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2023	1.2 ¹	NA	NA
Perfluorobutanoic Acid [PFBA] (ppt)	2023	1.94 ⁶	1.3–2.6	NA
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2023	1.13 ⁶	1–1.2	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2023	1.03 ⁶	1–1.1	NA
Perfluoropentanoic Acid [PFPeA] (ppt)	2023	1.2 ⁶	1.1–1.3	NA
Sodium (ppm)	02-27-2023	136 ¹	100–170	Released naturally through mineral deposits in surface and groundwater

¹ Highest level detected in the most recent round of sampling.

² Running annual average.

³ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

⁴ Highest locational running annual average. Range is based on values obtained from four different sample sites throughout the sampling year.

⁵ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

⁶ Average level detected in the previous rounds of sampling.

UCMR5 Testing

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. Your drinking water was sampled for the presence and concentration of 29 different per- and polyfluoroalkyl substances (PFAS) - some known as PFAS, PFOA, PFNA, PFHxS, PFBS, and GenX - a group of contaminants in the final stages of becoming regulated by the U.S. EPA. PFAS are synthetic chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products including firefighting foam and stain-resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals depending on the level and duration of exposure.

The following contaminants were tested for in September 2023 and not detected in the water:

11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)

1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2 FTS)

1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2 FTS)

1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2 FTS)

4,8-dioxa-3H-perfluorononanoic acid (ADONA)

9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)

n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)

n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)

nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

perfluoro-3-methoxypropanoic acid (PFMPA)

perfluoro-4-methoxybutanoic acid (PFMBA)

perfluorodecanoic acid (PFDA)

perfluorododecanoic acid (PFDoA)

perfluoroheptanesulfonic acid (PFHpS)

perfluoroheptanoic acid (PFHpA)

perfluorohexanesulfonic acid (PFHxS)

perfluorohexanoic acid (PFHxA)

perfluorononanoic acid (PFNA)

perfluoropentanesulfonic acid (PFPeS)

perfluorotetradecanoic acid (PFTA)

perfluorotridecanoic acid (PFTrDA)

perfluoroundecanoic acid (PFUnA)