

ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By
**Foothills Water and
Sewer LLC**



Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

Foothills Water and Sewer customers are fortunate to have two separate sources of water supply. 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 a fully compliant groundwater system 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 to augment water supplies when needed, as well as annually for approximately one week - usually the first week of December - when Canal A is shut down for cleaning and inspection by the Yuma Mesa Irrigation Drainage District.

“Thousands have lived without love, not one without water.”

—W.H. Auden

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our 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 removed, and clear water emerges.

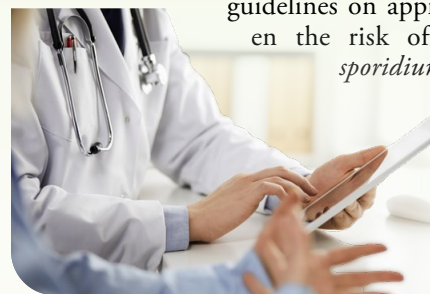
Chlorine is added as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water.) Then water is pumped to sanitized reservoirs and stored until it is needed at your home or business.

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 www.epa.gov/safewater/lead.

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. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



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.



BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

800
TRILLION

1 The average cost in cents for about 5 gallons of water supplied to a home in the U.S.

The percent of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

99

50 The average daily number of gallons of total home water use for each person in the U.S.

The percent of Earth's surface that is covered by water.

71

330
MILLION The amount of water on Earth in cubic miles.

The percent of the human brain that contains water.

75

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.

Foothills Water and Sewer received its source water assessment from ADEQ on 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, located at 13157 East 44th Street, Yuma, or you may call (928) 342-1238.

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 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 www.epa.gov/safewater/hotline. Information on bottled water can be obtained from the U.S. Food and Drug Administration.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and 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 SUBSTANCES¹

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	1.7–3.3	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2019	2	2	0.11	0.09–0.11	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	2019	100	100	3.2	1.2–3.2	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	2019	4	4	0.49	0.4–0.49	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2022	60	NA	17	2–17	No	By-product of drinking water disinfection
Nitrate (ppm)	2022	10	10	2.4	0.29–2.4	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2019	50	50	2.5	1.5–2.5	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80 ²	NA	56 ³	1.6–95	No	By-product of drinking water disinfection
Turbidity ⁴ (NTU)	2022	TT	NA	0.240	0.035–0.240	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2022	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

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.

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.

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).

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



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 ¹

SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Nickel (ppm)	02-26-2019	0.0031	0.0017–0.0031	Naturally occurring
Sodium (ppm)	05-18-2022	150	97–150	Released naturally through mineral deposits in groundwater and surface water

¹The amount detected is the highest level detected in the most recent round of sampling, unless otherwise noted.

²Some people who drink water containing total 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.

³The amount detected is the highest locational running annual average. The range is based on values obtained from four different sample sites throughout the sampling year.

⁴Turbidity 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.

About Our Violations

- Data was submitted late for volatile organic compound (VOC) sampling in 2022. Compliance was achieved by submitting data on January 24, 2023.
- Data was submitted late for nitrate sampling in 2022. Compliance was achieved by submitting data on January 31, 2023.
- Data was submitted late for sodium sampling in 2022. Compliance was achieved by submitting data on January 31, 2023.
- Data was submitted late for radionuclide contaminants sampling for 2016 through 2021. Compliance was achieved by submitting data on January 25, 2022.
- Data was submitted late for Revised Total Coliform Rule sampling for August 2022. Compliance was achieved by submitting data to ADEQ and reporting on time in September 2022.
- Monitoring for synthetic organic chemical (SOC) was missed for 2019 through 2021. Compliance was achieved by sampling in first quarter 2023.

Public Notification

In 2022 we failed to monitor for the presence of SOCs in the public drinking water system. Upon being notified of this violation by ADEQ, we immediately analyzed our water supply for SOCs. Results of the analysis have been received and properly recorded as required by state and federal law. The samples contained no SOCs above laboratory detection limits. We have already taken steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated. Please share this information with other people who drink this water, especially those who may not have received this notice directly.