

# Consumer Confidence Report for Calendar Year 2024

Este informe contiene información muy importante sobre el agua usted bebe.  
Tradúscalo ó hable con alguien que lo entienda bien.

Public Water System ID Number	Public Water System Name	
AZ0410179	Tucson Water Thunderhead Ranch	
Contact Name and Title	Phone Number	E-mail Address
QualityAndPressure@tucsonaz.gov	520-791-5945	QualityAndPressure@tucsonaz.gov

We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact **Tucson Water Public Information Office at 520-791-4331** for additional opportunity and meeting dates and times.

## Drinking Water Sources

The sources of drinking water (both tap 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**Our water source(s):** Groundwater wells.

## Drinking Water Contaminants

**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:** Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources.

**Organic Chemical Contaminants:** Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

**Radioactive Contaminants:** That can be naturally occurring or be the result of oil and gas production and mining activities.

## Source Water Assessment

Based on the information available at the time of the assessment on the hydrogeology and land uses around the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a low vulnerability designation for the degree to which this public water system drinking water source(s) are protected. A low vulnerability designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection. Further source water assessment information can be found on ADEQ's website: <https://azdeq.gov/source-water-protection>

## Vulnerable Population

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. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. More information about contaminants, their potential health effects, and the appropriate means to lessen the risk can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791 or visiting the website [epa.gov/safewater](http://epa.gov/safewater).

## Definitions

**Maximum Contaminant Level (MCL):** 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.

**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 allow for a margin of safety.

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

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum residual disinfectant level goal or 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 addition of a disinfectant is necessary for control of microbial contaminants.

**Level 1 Assessment:** 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.

**Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## Lead Informational Statement:

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.

Tucson Water is responsible for providing high quality drinking water and removing lead pipes but 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 reduce lead in drinking water.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by Oct 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be viewed online at: <https://pws-ptd.120wateraudit.com/Thunderhead-AZ> [pws-ptd.120wateraudit.com]. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

If you are concerned about lead in your water and wish to have your water tested, contact Tucson Waters Water Quality and Pressure Concerns at 520-791-5945 or email [QualityandPressure@tucsonaz.gov](mailto:QualityandPressure@tucsonaz.gov). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

## Water Quality Data – Regulated Contaminants

The following are terms related to water quality data presented in this table:

**Not Applicable (NA):** Sampling was not completed because it was not required by regulation.

**Not Detected (ND or <):** Not detectable at reporting limit.

**Minimum Reporting Limit (MRL):** The smallest concentration of a substance that can be reliably measured by a given analytical method.

**Millirems per year (MREM):** A measure of radiation absorbed by the body.

**Nephelometric Turbidity Units (NTU):** Measure of water clarity.

**Million fibers per liter (MFL):** Measure of asbestos fibers.

**Picocuries per liter (pCi/L):** Measure of the radioactivity in water.

**ppm:** Parts per million or Milligrams per liter (mg/L), equal to 1/1000 of a gram.

**ppb:** Parts per billion or Micrograms per liter (µg/L), equal to 1000 ppm.

**ppt:** Parts per trillion or Nanograms per liter (ng/L), equal to 1000 ppb.

**ppq:** Parts per quadrillion or Picograms per liter (pg/L), equal to 1000 ppt.

Disinfectants	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Sample Year	Likely Source of Contamination
Chlorine (ppm)	N	1.0	0.48 – 1.49	4	4	2024	Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Running Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	N	3.3	3.3	80	N/A	2022	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Year	Likely Source of Contamination
Copper (ppm)	N	0.08	0	1.3	1.3	2022	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	7.8	0	15	0	2022	Corrosion of household plumbing systems; erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Barium (ppm)	N	0.04	0.04	2	2	2022	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	N	0.13	0.13	4	4	2022	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate <sup>2</sup> (ppm)	N	1.3	1.3	10	10	2024	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	14	14	N/A	N/A	2022	Erosion of natural deposits

<sup>1</sup> **Arsenic** is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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.

<sup>2</sup> **Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

## Water Quality Table – Unregulated Contaminants

Your drinking water was sampled on 2/21/2025 for the presence and concentration of 29 different per- and polyfluoroalkyl substances, some known by the acronyms PFAS, PFOA, PFNA, PFHxS, PFBS, and GenX, a group of contaminants in the final stages of becoming regulated by the EPA. PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting 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.

To learn more about this group of chemicals, we encourage you to visit the ADEQ website at <https://www.azdeq.gov/pfas-resources>. You may also read the ADEQ-provided “PFAS 101 Fact Sheet” or view ADEQ’s Introduction to PFAS video on YouTube at <https://www.youtube.com/watch?v=t44kSh0uKXE>

Per- and Polyfluoroalkyl Substances	Highest Level Detected	Range of All Samples	Proposed MCL
<b>PFOA (in parts per trillion)</b>	ND	ND	4.0 ppt
<b>PFOS (in parts per trillion)</b>	ND	ND	4.0 ppt
<b>PFNA (in parts per trillion)</b>	ND	ND	10 ppt
<b>PFHxS (in parts per trillion)</b>	ND	ND	10 ppt
<b>PFBS (in parts per trillion)</b>	ND	ND	N/A*
<b>GenX (in parts per trillion)</b>	ND	ND	10 ppt
<b>Calculated Hazard Index (HI)</b>	0		1 (no units)

\* **Hazard Index or HI:** The Hazard Index is an approach that determines the health concerns associated with mixtures of certain PFAS in finished drinking water. Low levels of multiple PFAS that individually would not likely result in adverse health effects may pose health concerns when combined in a mixture. The Hazard Index MCL represents the maximum level for mixtures of PFHxS, PFNA, HFPO-DA, and/or PFBS allowed in water delivered by a public water system. A Hazard Index greater than 1 requires a system to take action.

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.