





# ANNUAL WATER OUALITY REPORT

Reporting Year 2023



Presented By
Pueblo del Sol
Water Company



## **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 source of water, what it contains, and how it compares to standards set by regulatory agencies.

When the well is dry, we

know the worth of water."

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.

## Where Does My Water Come From?

Pueblo del Sol Water Company relies on groundwater pumped by four wells from the Sierra Vista sub-basin of the Upper San Pedro basin. The Upper San Pedro basin is an intermountain valley approximately 1,875 square miles in size, bounded on the west by the Huachuca, Whetstone,

and Rincon Mountains and on the east by the Mule, Dragoon, Little Dragoon, and Winchester Mountains. The basin extends approximately 58 miles from the international boundary with the Republic of Mexico on the south to the Narrows, approximately 11 miles north of Benson.

Well 2 is located on Yaqui Street, Well 3 is located on Highway 92 and Buffalo Soldier Trail, Well 4 is located on Buffalo Soldier Trail approximately 0.5 mile east of Highway 92, and Well 5 is located on St. Andrews Drive. We also utilize two reservoirs. Reservoir 1 is located on Shawnee Drive, and Reservoir 2 is on Cherokee and Kachina.

# 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 (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.

## **Source Water Assessment**

In 2003 ADEQ completed a Source Water Assessment and identified the susceptibility as high risk. Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water

source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which

can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that "land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination."

Further source water assessment documentation can be obtained by contacting ADEQ. https://www.azdeq.gov/.



-Benjamin Franklin

# 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

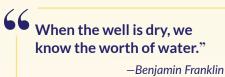
the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Diane Kawada or Michael Hennen at (520) 458-3742.

#### What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used. of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.



Some products that may contain PFAS include:

- · Some grease-resistant paper, fast food containers/ wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit http://bit.ly/3Z5AMm8.

Pueblo del Sol Water Company tested for PFAS in July 2023 and January 2024; results were below laboratory detection limits.

### 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/hotline. Information on bottled water can be obtained from the FDA.

# **Level 2 Assessment Update**

oliforms are bacteria that are naturally present in the environment and used as an indicator that other, potentially harm √ful, 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 assessments to identify and correct any problems.

During the past year, we were required to conduct three Level 2 assessments. Three Level 2 assessments were completed. In addition, we were required to take three corrective actions, and we completed three of these actions.

## **About Our Violation**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. We did not monitor or test for total coliform bacteria and *E. coli* within 24 hours as required; therefore, we cannot be sure of the quality of your drinking water during that time.

DATES NOT TESTED	CORRECTIVE ACTIONS
July 26, 2023	Repeat samples were taken on July 31, with negative results.
August 24, 2023	Repeat samples were taken on August 29, with negative results.

There is nothing you need to do at this time. You do not need to boil your water or take other corrective actions. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

## **Table Talk**

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

#### **Other Table Information Worth Noting**

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

# **BY THE NUMBERS**



# 5.1

The dollar value needed to keep water, wastewater, and stormwater systems in good repair.



# 12

The average amount in gallons of water used to produce one megawatt-hour of electricity.



# 2

How often in minutes a water main breaks.



# 47.5

The amount in gallons of water used to meet U.S. electric power needs in 2020.



# 1.7 TRILLION

The gallons of drinking water lost each year to faulty, aging, or leaky pipes.



# 33

The percentage of water sector employees who will be eligible to retire in 2033.

# 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.



### **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.

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. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2022	2	2	0.050	0.049-0.065	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Combined Radium (pCi/L)	2019	5	0	0.40	0.38-0.42	No	Erosion of natural deposits
Di(2-ethylhexyl) Phthalate (ppb)	2022	6	0	1.2	NA	No	Discharge from rubber and chemical factories
Gross Alpha Particle Activity (pCi/L)	5/20/2019	15	NA	4.3	1.5–4.3	No	NA
Nitrate <sup>1</sup> (ppm)	2023	10	10	0.52	0.49-0.84	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

#### 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	0.26	0/32	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	ND	0/32	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE					
Sodium (ppm)	08/10/2022	9.45	7.60-12.0	NA					

Nitrate results were completed on time but reported as a late submission due to clerical error.

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

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.

**pCi/L** (**picocuries per liter**): A measure of radioactivity.

**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).