



# 2024 Water Quality Report

Public Water System (PWS) AZ04-07-015  
Consumer Confidence Report



[www.CarefreeWaterCo.com](http://www.CarefreeWaterCo.com)



PO Box 702, Carefree, AZ 85377



480-488-9100

# ABOUT THIS REPORT

## CAREFREE'S DRINKING WATER

The Carefree Water Company is pleased to present our 2024 Consumer Confidence Report which includes water quality data through the end of calendar year 2024.

Our primary goal in publishing this annual Water Quality Report is to keep you, our valued customers, informed about your water quality. We welcome your feedback anytime. If you would like to learn more about public participation or attend any of our scheduled meetings, please contact our office by phone at 480-488-9100 or by email at [office@carefreewaterco.com](mailto:office@carefreewaterco.com). You may also visit our website at [www.CarefreeWaterCo.com](http://www.CarefreeWaterCo.com) for meeting dates and times as well as additional input opportunities.

Please take a few moments to review this report. As in previous years, **our water quality meets or surpasses all federal and state drinking water standards**. This reflects a commitment on the part of the Water Company staff to provide safe and dependable drinking water at an affordable price.

Landlords, businesses, schools, hospitals, and other groups are encouraged to share this important water quality information with other people who drink our water, especially those who may not receive this notice directly.

It was a pleasure serving you in 2024, and we look forward to our continued service in 2025 and beyond.

*Greg Crossman*, General Manager

The Town of Carefree's drinking water includes both surface water (water from rivers, lakes, and reservoirs) and groundwater (water from wells). Our surface water comes from the Central Arizona Project (CAP) canal, which originates on the Colorado River at Lake Havasu. CAP water can be treated and transported to us by our neighboring communities of Scottsdale and Cave Creek; however, in 2024 we only received treated CAP water deliveries from Scottsdale. Our groundwater comes from wells that are located within the Carefree groundwater sub-basin.

Generally, the water we deliver to you is a blend of both our surface water and groundwater sources. On average, the water we deliver to our customers is 70% CAP water and 30% groundwater. The exact blend of surface and groundwater depends on many variables, including the time of year and where you are in the distribution system. Some areas in Carefree receive only treated water purchased from Scottsdale (no Carefree groundwater), therefore, we recommend that customers also review Scottsdale's most recent Water Quality Report at the web address shown on page 3.

## DEFINITIONS & ABBREVIATIONS

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

**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 are no known or expected risks to health. MCLGs allow for a margin of safety.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of 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 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.

**N/A (Not Applicable):** A regulatory limit does not exist.

**ND (Non-Detect):** The contaminant was not present in the sample, or the actual concentration in the sample was below the lowest concentration capable of being detected for this contaminant.

**NTU (Nephelometric Turbidity Units):** A measure of the clarity of water.

**pCi/L (Picocuries Per Liter):** A measure of radioactivity in water.

**ppm (Parts Per Million):** A measurement of the concentration of a contaminant that is equivalent to milligrams per liter (mg/L). 1 ppm (or mg/L) is equivalent to about 4 drops in a 55 gallon drum or one ounce in 7,350 gallons of water.

**ppb (Parts Per Billion):** A measurement of the concentration of a contaminant that is equivalent to micrograms per liter (ug/L). 1 ppb (or ug/L) is equivalent to about 1 drop in two hundred and fifty (250) 55 gallon drums or one ounce in 7,350,000 gallons of water.

**ppt (Parts per Trillion):** A measurement of concentration of a contaminant that is equivalent to nanograms per liter (ng/L). 1 ppt (or ng/L) is equivalent to about 1 drop in 20 Olympic-sized swimming pools or one ounce in 7,350,000,000 gallons of water.

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

# WATER QUALITY MESSAGES FROM THE EPA

The EPA, in conjunction with state and local regulatory agencies, has established water quality regulations to ensure your tap water is safe to drink. 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 Environmental Protection Agency's Safe Drinking Water Hotline (**800-426-4791**).

The sources of drinking 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. It can also pick up substances as a result of animal or 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. Possible contaminants that may be present in source water include the following:

- **Microbial**, such as viruses and bacteria. These contaminants may come from septic systems, wastewater treatment plants, agricultural livestock operations, and wildlife.
- **Inorganic**, such as salts and metals. These contaminants can be naturally-occurring or may be a result of urban runoff, wastewater discharges, oil and gas production, mining, or farming.

- **Pesticides and Herbicides**, which come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.

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

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily cause for health concerns. For more information on taste, odor, or color of drinking water please contact the Carefree Water Company office.

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. 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 (800-426-4791).

Water is called the universal solvent because it picks up impurities easily, including when it is traveling through or over the ground and leaching natural minerals. Dissolved calcium and magnesium are the primary minerals that are the cause of water hardness. Hardness is not a primary water quality standard and is not a health concern, though it can cause scale deposits on plumbing fixtures.

## Approximate Hardness Level of Carefree's Water

Hardness (Grains Per Gallon)	Hardness (mg/L or ppm)
14-16	240-270 ppm

# ENSURING SAFE DRINKING WATER

The Carefree Water Company is required to test for over 100 substances in our drinking water. Testing is completed at two Entry Points to the Distribution System (EPDS). Water samples taken at these EPDS test our treated source water before it enters our distribution system. We also perform monthly/quarterly tests at six locations within the distribution system to ensure that water entering your home or business remains safe to drink.

Results from our source water and distribution system water quality sampling efforts are detailed on Table 1 included in this report. Only substances detected in these samples are required to be listed in the tables. Even though certain substances were detected, all Carefree water deliveries in 2024 met or surpassed federal and state drinking water standards, meaning that the amounts detected were below the applicable standard.

Because Scottsdale provided all of Carefree's treated surface water in 2024, the included Table 2 presents the results of Scottsdale's source water quality sampling efforts. If you would like additional information on Scottsdale's water, their Water Quality Report can be accessed online at the following website address or you may call our office (480-488-9100) to obtain a copy:

Scottsdale Water Quality Report (PWS AZ04-07-098):  
[www.scottsdaleaz.gov/water/water-quality/water-quality-reports](http://www.scottsdaleaz.gov/water/water-quality/water-quality-reports)



## CAREFREE WATER SCREENS FOR UNREGULATED CONTAMINANTS

In an effort to ensure our customers have safe drinking water, Carefree Water works with the EPA in monitoring for unregulated contaminants. Unregulated substances are those for which the EPA has not established drinking water standards. With assistance from water utilities like ours, the EPA is able to determine the occurrence of unregulated contaminants in drinking water and whether it is necessary to implement future regulation.

Carefree Water monitored for unregulated contaminants quarterly during 2024. In 2024, EPA's focus was on 29 PFAS (polyfluoroalkyl) substances and lithium. None of the 29 PFAS substances were detected in Carefree's water. Additionally, Carefree Water Company voluntarily participated in PFAS water quality sampling by ADEQ in 2021 for two of our wells. These substances were not detected in either well.

### TABLE U

#### Results - Carefree Unregulated Contaminant Monitoring (UCMR5)

Substance	Unit	Minimum Reporting Level	Range of Levels Detected	Average	Sampling Years	Likely Source in Drinking Water
29 PFAS (polyfluoroalkyl) Substances	ppt	2 to 20	ND	ND	2024	Industrial releases, firefighting foam, wastewater discharges, and landfill leaching.
Lithium	ppb	9	ND-51	39	2024	Naturally occurring metal that may concentrate in brine waters; lithium salts are used in pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses.



# ADDITIONAL INFORMATION ON WATER QUALITY, SURFACE WATER MONITORING, AND VIOLATIONS

## LEAD

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.

Carefree Water Company 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:

[www.pws-ptd.120wateraudit.com/carefreewatercompany](http://www.pws-ptd.120wateraudit.com/carefreewatercompany)

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 Carefree Water Company at 480-488-9100. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## TABLE LC

### 2024 RESULTS OF LEAD & COPPER SAMPLING FROM RESIDENTIAL WATER TAPS

Substance	Unit	AL	MCLG	90th Percentile Value*	# Homes Greater than AL	Sampling Year	Violation	Likely Source in Drinking Water
Lead *	ppm	0.015	0	0	0 out of 20	2024	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper *	ppm	1.3	1.3	0.31	0 out of 20	2024	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

\* Lead and Copper Rule Standard: 90% of homes tested must have lead and copper levels below the alert level (AL).

## ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. Arsenic 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. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic.

## NITRATE

Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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, you should ask for advice from your health care provider.

## VIOLATIONS

No violations of Federal, State, or Local water quality standards occurred in the Carefree water system in 2024.



# TABLE 1

## 2024 CAREFREE WATER QUALITY RESULTS

Results - Carefree Source Water								
Substance	Unit	MCL	MCLG	Range of Levels Detected	Highest Level Detected	Sampling Years	Violation	Likely Source in Drinking Water
Arsenic	ppb	10	0	4.4 <sup>#</sup>	4.4	2022	No	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes
Chromium	ppb	100	100	46 <sup>#</sup>	46	2022	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	ppm	4.0	4	0.97 <sup>#</sup>	0.97	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [Measured as Nitrogen]	ppm	10	10	0.57 - 5.3	5.3	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha [Excluding Radon and Uranium]	pCi/L	15	0	ND - 4.6	4.6	2022	No	Erosion of natural deposits
Results - Carefree Distribution System								
Substance	Unit	MCL	MCLG	Range of Levels Detected	Average	Sampling Year	Violation	Likely Source in Drinking Water
E. Coli/Fecal Indicators	Positive Sample	0	0	0	0	2024	No	Human and animal fecal waste
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0.10 - 1.69	0.68	2024	No	Water additive used to control microbial growth
Substance	Unit	MCL	MCLG	Range of Levels Detected	Average <sup>^</sup>	Sampling Year	Violation	Likely Source in Drinking Water
Total Trihalomethanes (TTHMs)	ppb	80	N/A	28.5 - 57.8	45.3	2024	No	Byproduct of drinking water disinfection
Haloacetic Acids (HAAs)	ppb	60	N/A	4.1-12	8.0	2024	No	Byproduct of drinking water disinfection

<sup>#</sup> Reported result based on a single sample.

<sup>^</sup> Highest locational running annual average (LRAA) calculated based on quarterly samples.



**TABLE 2**

# 2024 SCOTTSDALE WATER QUALITY RESULTS SUPPLEMENTAL DATA

Results - Scottsdale Source Water								
Substance	Unit	MCL	MCLG	Range of Levels Detected	System Average	Highest Running Annual Average <sup>1</sup>		Likely Source in Drinking Water
Arsenic	ppb	10	0	1.1 - 8.4	4.1	8.4		Leaching of natural deposits
Barium	ppb	2,000	2,000	23 - 152	79	N/A		Leaching of natural deposits
Chromium	ppb	100	100	ND - 26.9	9.2	N/A		Leaching of natural deposits
Fluoride	ppm	4	4	0.3 - 0.4	0.4	N/A		Leaching of natural deposits
Nitrate	ppm	10	10	0.2 - 4.9	1.3	3.4		Leaching of natural deposits and septic systems; Runoff from fertilizer use
Selenium	ppb	50	50	1.7 - 2.8	2.3	N/A		Leaching of natural deposits; Discharge from petroleum refineries and mining
Alpha Emitters <sup>2</sup>	pCi/L	15	0	ND - 2.3	0.5	N/A		Leaching of natural deposits
Uranium <sup>2</sup>	ppb	30	0	ND - 14	4.2	N/A		Leaching of natural deposits
Total Organic Carbon	ppm	TT	N/A	1.3 - 2.2	1.7	N/A		Naturally present in the environment
Substance	Unit	MCL	TT Requirement	Highest Measurement	Treatment Technique Comparison		Likely Source in Drinking Water	
Turbidiity	NTU	1	95% less than 0.3 NTU	0.27	100% less than 0.3 NTU		Soil runoff	
Results - Scottsdale Distribution System								
Substance	Unit	MCL	MCLG	Range of Levels Detected	Average	Likely Source in Drinking Water		
Total Coliform	%	5 (monthly)	0	0 - 0.6	0.2	Naturally present in the environment		
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0 -1.5	0.65	Water additive used to control microbial growth		
Total Trihalomethanes (TTHMs)	ppb	80	N/A	20.1 - 54.6	52.8 <sup>3</sup>	Byproduct of drinking water disinfection		
Haloacetic Acids (HAAs)	ppb	60	N/A	3.8 - 13.0	10.2 <sup>3</sup>	Byproduct of drinking water disinfection		
Substance	Unit	AL	MCLG	90th Percentile Value	# Homes Greater than AL	Levels in Treated Water	System Average Levels in Treated Water	Likely Source in Drinking Water
Lead <sup>4</sup>	ppb	15	0	2.0	1 out of 50	ND	ND	Corrosion of household plumbing
Copper <sup>4</sup>	ppb	1300	N/A	170	0 out of 50	ND - 2.8	1.6	Corrosion of household plumbing

<sup>1</sup> Highest average at a single sample location

<sup>2</sup> Includes 2020, 2023, & 2024 Sampling Data

<sup>3</sup> Reported value is the highest locational running annual average (LRAA) calculated on a quarterly basis.

<sup>4</sup> Lead and Copper Standard: 90% of homes tested must have lead and copper levels below the alert level (AL). LCR data collected in 2023.



## SOURCE WATER ASSESSMENT PROGRAM

In 2005, Carefree Water Company worked with ADEQ to finalize an assessment of the wells we use to provide you drinking water. This assessment looks at the potential risks to our water sources, including their proximity to gas stations, landfills, dry cleaners, agricultural fields, and wastewater treatment plants. Based on the information currently available on the hydrogeologic settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, ADEQ has given us a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk 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.

The complete assessment is available for review by contacting Carefree Water Company's office (480-488-9100). Additional information on Source Water Assessments and Protection can be obtained from ADEQ at [www.azdeq.gov/source-water-protection](http://www.azdeq.gov/source-water-protection).

## Arizona Water Conservation Tips

Did you know that on average, each Arizona resident uses about 146 gallons per day? About 20 percent of the State's water supply is for municipal use, and most of this is residential. Up to 70 percent of that water is used outdoors (watering plants, swimming pools, etc.) especially during the summer months, with the remaining used indoors (bathing, cooking, etc.).

Conservation efforts and lifelong water saving behaviors will help ensure that we will have enough water for ourselves and for future generations. We encourage you to review your outside water usage and the water conservation tips below as you contribute to Arizona's culture of conservation.

- Know where your master water shut-off valve is located. Were a pipe to burst, this could save thousands of gallons of water and prevent damage.
- Plant low-water use and drought-tolerant grasses, ground covers, shrubs and trees.
- Regularly check sprinkler systems and timing devices to ensure they are operating properly.
- Reduce water loss via evaporation by using covers on swimming pools and by setting your irrigation timers to run in the early morning or late evening hours.
- When replacing or upgrading the appliances or water fixtures in your home, keep an eye out for WaterSense labels. This label identifies that a product uses at least 20% less water than what is federally required.

Below are some excellent resources to help you and your home become water smart!

Arizona Municipal Water Users Association – Smart Home Water Guide  
[www.smarthomewaterguide.org](http://www.smarthomewaterguide.org)

Water Use It Wisely  
[www.wateruseitwisely.org](http://www.wateruseitwisely.org)

Arizona Department of Water Resources – Arizona Water Facts  
[www.arizonawaterfacts.com](http://www.arizonawaterfacts.com)

## ADDITIONAL WATER INFORMATION RESOURCES

U.S. EPA's Safe Drinking Water Hotline  
800-426-4791, [www.epa.gov/safewater](http://www.epa.gov/safewater)

Arizona Department of Environmental Quality  
602-771-0100, [www.azdeq.gov/safe-drinking-water](http://www.azdeq.gov/safe-drinking-water)

Maricopa County Environmental Services Department  
602-506-6935, [www.Maricopa.gov/2353/Drinking-Water-Quality](http://www.Maricopa.gov/2353/Drinking-Water-Quality)