



# 2023 CONSUMER CONFIDENCE REPORT

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Public Water System (PWS) AZ04-07-015

Carefree Water Company is pleased to present our 2023 Consumer Confidence Report which includes water quality data through the end of calendar year 2023. This report has information that will help you better understand our water deliveries to you, our customers.

This notification is being sent to all residents in Carefree, including 530 customers that have been transitioned over from the Cave Creek system. Work on the Carefree Water Consolidation Project (WCP) is essentially complete, with some of the last customers scheduled to be transitioned over to the Carefree Water system by the end of 2024.

Please take a few moments to review this report. We want all of our customers to be informed about their water quality. 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.

If you have any questions, or if you would like to learn more about public participation or attending any of our scheduled Board of Directors meetings, visit our website at [www.carefreewaterco.com](http://www.carefreewaterco.com) or contact me (480-488-9100) for information on meeting dates and times.

It was a pleasure serving you in 2023, and we look forward to our continued service in 2024 and beyond.

*Greg Crossman*  
General Manager

Español: Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.



## CAREFREE'S DRINKING WATER

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 2023 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 2.

## 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 (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, 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:

- 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.
- Organic, including synthetic and volatile organic chemicals. These contaminants are byproducts of industrial and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- 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).



## 2022 WATER QUALITY RESULTS

The Carefree Water Company is required to test for over 100 substances in our drinking water. Testing is done 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 tests at 4 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 shown on the attached Table 1. Only those substances that were detected in these samples are required to be listed in the tables. Even though certain substances were detected, **all water deliveries from Carefree 2023 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 2023, the attached Table 2 presents the results of Scottsdale's sourced 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):**  
<https://www.scottsdaleaz.gov/water/drinking-water>

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



The following is additional information on water quality data, surface water monitoring, and violations:

- **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.
- **Lead.** If present, elevated levels of 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, but 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA's Safe Drinking Water Hotline (800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

- **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.
- **PFAS/PFOA.** In 2021, the Carefree Water Company voluntarily participated in PFAS and PFOA water quality sampling by ADEQ for two of our wells. **These substances were not detected in either well.** PFAS and PFOA are currently not regulated by the EPA, however, Health Advisory (HA) limits have recently been revised to address concerns about their presence in drinking water.
- **Violations.** No violations of Federal, State, or Local water quality standards occurred in the Carefree water system in 2023.

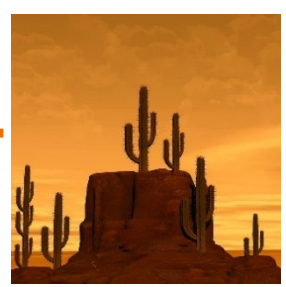


**SOURCE WATER ASSESSMENT PROGRAM**

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, the Arizona Department of Environmental Quality 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/environ/water/dw/swap.html](http://www.azdeq.gov/environ/water/dw/swap.html).

**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.).

Our supply of water is limited and our population continues to grow. 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 below conservation tips as you contribute to Arizona's culture of conservation.

- ◆ Check your water meter and bill to track water usage. Higher usage can indicate leaks.
- ◆ Plant low-water use and drought-tolerant grasses, ground covers, shrubs and trees.
- ◆ Check all hoses, connectors, and spigots regularly. Repair leaks as necessary.
- ◆ Regularly check sprinkler systems and timing devices to be sure they are operating properly.
- ◆ Minimize evaporation by watering during the early morning hours when temperatures are cooler.
- ◆ Water plants only when necessary. More plants die from over-watering than from under-watering.
- ◆ Water deeply but less frequently to create deeper root systems. Seasonally adjust watering schedules.
- ◆ Reduce evaporation by using covers on swimming pools and spas.
- ◆ Review how often and for how long pool/spa pumps are running. This can save energy as well.
  - ◆◆◆ Do one thing every day to save water.

Every person can make a difference. ◆◆◆  
 (Adapted from: Arizona Department of Water Resources)



# TABLE 1 2023 WATER QUALITY RESULTS

## Results - Carefree Source Water

Substance	Unit	MCL	MCLG	Range of Levels Detected	Average	Sampling Years	Violation	Likely Source in Drinking Water
Arsenic	ppb	10	0	4.4	4.4	2022	No	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes
Chromium	ppb	100	100	46	46	2022	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	ppm	4.0	4	0.97	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	2.5 - 4.0	3.0	2023	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	2.3	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	2023	No	Human and animal fecal waste
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0.24 - 1.08	0.62	2023	No	Water additive used to control microbial growth
Substance	Unit	MCL	MCLG	Range of Levels Detected	Average <sup>1</sup>	Sampling Year	Violation	Likely Source in Drinking Water
Total Trihalomethanes (TTHMs)	ppb	80	N/A	23.8 - 49.0	37.1	2023	No	Byproduct of drinking water disinfection
Haloacetic Acids (HAAs)	ppb	60	N/A	4.0 - 8.4	6.6	2023	No	Byproduct of drinking water disinfection
Substance	Unit	AL	MCLG	90th Percentile Value <sup>2</sup>	# Homes Greater than AL	Sampling Year	Violation	Likely Source in Drinking Water
Lead <sup>2</sup>	ppb	15	0	0	0 out of 20	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper <sup>2</sup>	ppm	1.3	1.3	0.23	0 out of 20	2021	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

<sup>1</sup> Highest locational running annual average (LRAA) calculated based on quarterly samples.

<sup>2</sup> Lead and Copper Rule Standard: 90% of homes tested must have lead and copper levels below the alert level (AL).

### DEFINITION OF TERMS USED ON THIS TABLE AND IN THIS REPORT:

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



# TABLE 2

## 2023 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	1.5 - 7.7	3.7	7.7	Leaching of natural deposits	
Barium	ppb	2,000	2,000	19 - 122	70	N/A	Leaching of natural deposits	
Chromium	ppb	100	100	ND - 31.7	5.9	N/A	Leaching of natural deposits	
Fluoride	ppm	4	4	0.2 - 0.5	0.4	N/A	Leaching of natural deposits	
Nitrate	ppm	10	10	ND - 3.4	1.1	2.5	Leaching of natural deposits and septic systems; Runoff from fertilizer use	
Selenium	ppb	50	50	ND - 2.6	1.8	N/A	Leaching of natural deposits; Discharge from petroleum refineries and mining	
Alpha Emitters <sup>2</sup>	pCi/L	15	0	ND - 2.3	0.3	N/A	Leaching of natural deposits	
Uranium <sup>2</sup>	ppb	30	0	ND - 14	4.5	N/A	Leaching of natural deposits	
Total Organic Carbon	ppm	TT	N/A	1.0 - 1.9	1.4	N/A	Naturally present in the environment	
Substance	Unit	MCL	TT Requirement	Highest Measurement	Treatment Technique Comparison	Likely Source in Drinking Water		
Turbidity	NTU	1	95% less than 0.3 NTU	0.24	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	0.1	Naturally present in the environment		
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0 - 2.0	0.68	Water additive used to control microbial growth		
Total Trihalomethanes (TTHMs)	ppb	80	N/A	19.4 - 58.7	55.5 <sup>3</sup>	Byproduct of drinking water disinfection		
Haloacetic Acids (HAAs)	ppb	60	N/A	4.9 - 14.0	10.6 <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 and 2023 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).