



# 2021 CONSUMER CONFIDENCE REPORT

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Public Water System (PWS) AZ04-07-015

Carefree Water Company is pleased to present our 2021 Consumer Confidence Report which includes water quality data through the end of calendar year 2021. This report has information that will help you better understand our water deliveries to you, our customers.

This year, we're excited that this notification is being sent to all residents in Carefree, including 535 new customers that will soon be transitioned over from the Cave Creek system. Work on the Carefree Water Consolidation Project (WCP) is progressing well and we're hoping to have all or most of these new customers transitioned over by the end of 2022.

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, please contact me at 480-488-9100 or visit our website at [www.carefreewaterco.com](http://www.carefreewaterco.com) for information on meeting dates and times.

It was a pleasure serving you in 2021, and we look forward to our continued service in 2022 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 is treated and transported to us by our neighboring communities of Scottsdale and Cave Creek. 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. The exact blend of surface and groundwater depends on many variables, including the time of year and where you are located in our distribution system. The exception to this is the far eastern portion of our service area as it receives 100% Scottsdale water year-round. This area is within the Rolling Hills and Velvet Shadows subdivisions, generally east of Twilight Trail to the Town limits and between Cave Creek Road and Stagecoach Pass. Customers within this area should also review Scottsdale's 2021 Water Quality Report at the web address shown on page 2.

On average, the water we deliver to the majority of our customers is two-thirds (2/3) CAP water and one-third (1/3) groundwater. On June 6, 2019, Carefree suspended water deliveries from Cave Creek due to water quality concerns. This suspension was still in effect for all of entire calendar year 2021, therefore Scottsdale delivered 100% of our treated CAP 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. All drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of these impurities does not necessarily indicate a health risk.



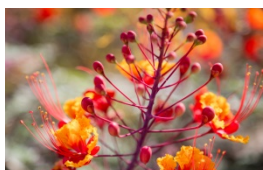
As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material. It can also pick up substances as a result of animal or human activity.

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 water contaminants may include:

- Microbial, such as viruses and bacteria. These contaminants may come from septic systems, wastewater treatment plants, livestock, 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 runoff, and septic systems.
- Pesticides and Herbicides, which come from a variety of sources, such as agriculture, urban runoff, and residential uses.
- Radioactive, which can be naturally occurring or the result of oil and gas production and mining activities.

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 of infections. These people should seek advice about drinking water from their healthcare providers.

For more information about contaminants and their potential health effects, or to receive a copy of the EPA and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection and potential health effects, call EPA's *Safe Drinking Water Hotline* at 1-800-426-4791.



### **2021 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.

Because a large portion of our water comes from our neighboring water provider the City of Scottsdale, the results from their source water sampling efforts are included in the accompanying water quality table. Only those substances that were detected in the two communities' source waters are listed in the table. Even though certain substances were detected, **all water deliveries from Carefree and Scottsdale in 2021 met or surpassed federal and state drinking water standards**, meaning that the amounts detected were below the applicable standard.

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 can call our office at 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.** 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 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.** 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. 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. 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 1-800-426-4791 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 and detected nitrate levels are above 5 ppm, you should ask 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. We’re pleased to report that **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 2021.



## **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 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**

The Arizona Department of Water Resources is committed to helping Arizona residents conserve water. Using these conservation tips is just one of the ways that you can contribute to Arizona’s culture of conservation. **Why Conserve?** 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.

- ◆ Check your water meter and bill to track water usage. Higher usage can indicate leaks and/or irrigation system issues.
- ◆ Plant low-water use and drought-tolerant grasses, ground covers, shrubs and trees.
- ◆ Group plants according to their water needs. Minimize turf/grass areas.
- ◆ 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.
- ◆ Reduce evaporation by using a 2-3 inch layer of mulch around plants.
- ◆ Water deeply but less frequently to create healthier and deeper root systems. Seasonally adjust watering schedules.
- ◆ Reduce evaporation by using covers on swimming pools and spas.
- ◆ Do not pre-rinse dishes unless you need to. Most new dishwashers do not require pre-rinsing.
- ◆ Run your washing machine and dishwasher only when they have a full load or adjust water levels for smaller loads.
- ◆ Turn water treatment and softener units off while on vacation.



◆ ◆ ◆ Do one thing every day to save water. Every person can make a difference. ◆ ◆ ◆

(Adapted from: Arizona Department of Water Resources)

# CAREFREE WATER COMPANY - 2021 WATER QUALITY RESULTS

Results - Carefree Distribution System									
Substance	Unit	MCL	MCLG	Lowest Amount Detected	Highest Amount Detected	Average	Sampling Years	Violation	Likely Source in Drinking Water
Arsenic	ppb	10	0	2.3	2.3	2.3	2019	No	Leaching of natural deposits
Barium	ppm	2	2	0.08	0.08	0.08	2019	No	Leaching of natural deposits
Chromium	ppb	100	100	8.6	8.6	8.6	2019	No	Leaching of natural deposits
Fluoride	ppm	4	4	0.6	0.6	0.6	2019	No	Leaching of natural deposits
Nitrate	ppm	10	10	1.5	4.0	2.8	2021	No	Leaching of natural deposits and septic systems; Runoff from fertilizer use
Gross Alpha	pCi/L	15	0	ND	5.0	2.5	2019	No	Leaching of natural deposits
Substance	Unit	MCL	MCLG	Lowest Amount Detected	Highest Amount Detected	Average	Sampling Year	Violation	Likely Source in Drinking Water
E. Coli/Fecal Indicators	Positive Sample	0	0	0	0	0	2021	No	Human and animal fecal waste
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0.16	1.4	0.68	2021	No	Water additive used to control microbial growth
Substance	Unit	MCL	MCLG	Lowest Amount Detected	Highest Amount Detected	Average <sup>1</sup>	Sampling Year	Violation	Likely Source in Drinking Water
Total Trihalomethanes (TTHMs)	ppb	80	NA	0.5	47.8	36.4	2021	No	Byproduct of drinking water disinfection
Haloacetic Acids (HAAs)	ppb	60	NA	ND	8.3	7.5	2021	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; 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; erosion of natural deposits	

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

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

## SUPPLEMENTAL DATA

Results - Treated Source Waters									
Combined Results from Carefree and Scottsdale Source Waters									
Substance	Unit	MCL	MCLG	Amount Detected	Amount Detected	Average	Sampling Years	Violation	Likely Source in Drinking Water
Arsenic	ppb	10	0	1.1	7.1	3.6	2013-21	No	Leaching of natural deposits
Barium	ppm	2	2	ND	0.1	0.07	2013-21	No	Leaching of natural deposits
Chromium	ppb	100	100	ND	46	8.6	2013-21	No	Leaching of natural deposits
Fluoride	ppm	4	4	0.3	1.0	0.5	2013-21	No	Leaching of natural deposits
Nickel	ppb	NA	NA	ND	1.5	0.23	2013-21	No	Leaching of natural deposits
Nitrate	ppm	10	10	ND	5.0	1.6	2021	No	Leaching of natural deposits and septic systems; Runoff from fertilizer use
Selenium	ppb	50	50	ND	3.1	1.6	2013-21	No	Leaching of natural deposits; Discharge from petroleum
Gross Alpha	pCi/L	15	0	ND	5.0	0.9	2017-20	No	Leaching of natural deposits
Uranium	ppb	30	0	1.7	6.0	3.7	2020	No	Leaching of natural deposits
Results - Treated Source Waters									
Scottsdale Surface Water									
Substance	Unit	MCL	TT Requirement	Highest Measurement	Treatment Technique Comparison		Sampling Year	Violation	Likely Source in Drinking Water
Turbidity - Scottsdale	NTU	1	95% less than 0.3 NTU	0.11	100% less than 0.3 NTU		2021	No	Soil Runoff
Total Organic Carbon - Scottsdale	ppm	TT	NA	(Highest Amt) 1.7	(Lowest Amt) 1.0	(Average) 1.4	2021	No	Naturally present in the environment

### 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.
- **MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there are no known or expected risks to health.
- **MRDL (Maximum Residual Disinfectant Level):** The level of disinfectant added to for water treatment that may not be exceeded at the consumer's tap.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur.
- **NA (Not Applicable):** Sampling was not completed by regulation or was not required.
- **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.
- **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.
- **TT (Treatment Technique):** A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.