## 2022 CONSUMER CONFIDENCE REPORT



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Public Water System (PWS) AZ04-07-015

Carefree Water Company is pleased to present our 2022 Consumer Confidence Report which includes water quality data through the end of calendar year 2022. 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 <u>all</u> residents in Carefree, including 510 customers that have been transitioned over from the Cave Creek system. Work on the Carefree Water Consolidation Project (WCP) is finishing up and we're hoping to have the final 40 customers transitioned over to the Carefree Water system by the end of 2023.

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 <a href="https://www.carefreewaterco.com">www.carefreewaterco.com</a> or contact me (480-488-9100) for information on meeting dates and times.

It was a pleasure serving you in 2022, and we look forward to our continued service in 2023 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 2022 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.

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 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 2022 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 2022, 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 <a href="https://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a>.

- 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 2022.



## 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.

## 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 and/or irrigation system issues.
- ♦ 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 healthier and 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 for. 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 2022 WATER QUALITY RESULTS

deposits

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; runo 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 N]	ppm	10	10	0.35 - 4.0	2.2	2022	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	2022	No	Human and animal fecal waste				
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0.64 - 0.93	0.75	2022	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	NA	1.0 - 42.6	33.3	2022	No	Byproduct of drinking water disinfection				
Haloacetic Acids (HAAs)	ppb	60	NA	ND - 7.7	5.7	2022	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  Corrosion of household plumbing; erosion of natural				

<sup>&</sup>lt;sup>1</sup> Highest locational running annual average (LRRA) calculated on a quarterly basis.

#### **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.

0 out of 20

- 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.

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

# TABLE 2 2022 WATER QUALITY RESULTS SUPPLEMENTAL DATA

		Res	sults - S	cottsda	le Sour	ce Wat	er		
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 - 7.5	4.0	7.5	Leaching of	natural deposits	
Barium	ppb	2,000	2,000	25.5 - 109	67	105	Leaching of	natural deposits	
Chromium	ppb	100	100	ND - 18.1	5.5	15.0	Leaching of	natural deposits	
Fluoride	ppm	4	4	0.3 - 0.5	0.4	0.5	Leaching of	natural deposits	
Nickel	ppb	N/A	N/A	ND - 1.6	0.2	1.6	Leaching of natural deposits		
Nitrate	ppm	10	10	ND - 6.2	1.8	5.3	•	ral deposits and septic ff from fertilizer use	
Selenium	ppb	50	50	1 - 4.1	2	4.1	Leaching of natural deposits; Discharge fr petroleum refineries and mining		
Alpha Emitters <sup>2</sup>	pCi/L	15	0	ND - 2.6	0.8	N/A	Leaching of natural deposits		
Uranium	ppb	30	0	1.7 - 6	3.7	N/A	Leaching of	natural deposits	
Radium, Combined <sup>2</sup>	pCi/L	5	0	ND - ND	ND	N/A	Leaching of natural deposits		
Total Organic Carbon	ppm	TT	NA	0.9 - 1.8	1.4	N/A	Naturally preser	Naturally present in the environment	
Substance	Unit	MCL	TT Requirement	Highest Measurement	Treatment Comp	Technique arison	Likely Source	in Drinking Water	
Turbidiity	rbidiity NTU 1		95% less than 0.3 NTU	0.11	100% less than 0.3 NTU		Soil runoff		
	R	esult	s - Sco	ttsdale I	Distribu	ution Sy	/stem		
Substance	Unit	MCL	MCLG	Range of Levels Detected	Average	Likely Source in Drinking Water			
Total Coliform	%	5 (monthly)	0	ND - 2.8	0.3	Naturally present in the environment			
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	ND - 2.1	0.68	Water additive used to control microbial growth		l microbial growth	
Total Trihalomethanes (TTHMs)	ppb	80	NA	19.0 - 74.7	67.9	Bypro	oduct of drinking wat	er disinfection	
Haloacetic Acids (HAAs)	ppb 60		NA 3.8 - 13.4		13.4 Bypr		oduct 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	4.2	1 out of 57	ND - 1.7	0	Corrosion of household plumbing	
Copper <sup>4</sup>	ppb	1300	NA	243	0 out of 57	ND - 13.7	4	Corrosion of household plumbing	

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

<sup>&</sup>lt;sup>2</sup> Includes 2017, 2020, and 2022 Sampling Data

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

<sup>&</sup>lt;sup>4</sup> Lead and Copper Standard: 90% of homes tested must have lead and copper levels below the alert level (AL).