



# 2020 CONSUMER CONFIDENCE REPORT

(Carefree’s Annual 2020 Water Quality Report)

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Public Water System (PWS) AZ04-07-015

Carefree Water Company is pleased to present our 2020 Consumer Confidence Report which includes water quality data through the end of calendar year 2020. This report also includes information that will help you better understand our water deliveries to you, our customers.

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. Compliance with our water quality requirements reflects close cooperation among the Water Company, the Maricopa County Environmental Services Department (MCESD), the Arizona Department of Environmental Quality (ADEQ), and the U.S. Environmental Protection Agency (EPA).

As a valued customer, we want you to be informed about your water quality. Please take a few moments to review this report. 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, you can contact me at 480-488-9100. You can also 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 2020, and we look forward to our continued service in 2021 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 2020 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 2020, 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.



### **2020 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 2020 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.
- **Violations.** No violations of Federal, State, or Local water quality standards occurred in the Carefree water system in 2020.



**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 systems, 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).

### Total Residential Water Use

Category	Percentage
Toilet	8%
Laundry	6%
Shower	5%
Faucet	5%
Leaks	4%
Baths, dishwasher, miscellaneous	2%

### CONSERVATION... Let's Take It Outside!

Where can you do the most good in your water conservation efforts? The overwhelming answer is OUTSIDE!!!

If you have outdoor landscape irrigation, up to 70% of your water can be used outdoors, and typically, almost 25% of your water use is wasted outside. Keep the following points in mind when addressing your outdoor water usage.

- Native desert plants, such as cacti, mesquite, palo verde, and ironwood trees, use far less water than non-native plants. Once established, most native plants don't require any supplemental water at all!
- Follow the seasons! Outdoor water use should fall off dramatically in winter with cooler temperatures and shorter days. Dial it up in summer to keep your plants from getting stressed.
- Tell your landscape professional that water conservation is important to you! All too often, landscapers will err on the side of caution and overwater, thinking that's what their clients want.

# Keeping an **EyeOnWater**

Imagine catching an irrigation leak early so there isn't a costly surprise at the end of the month! Our optional EyeOnWater program allows you to view your daily water usage. This service gives you direct and secure access to your water usage data through an easy-to-use website or smartphone/tablet app. Use our new EyeOnWater service to:



- View easy to understand graphs of your hourly, daily, and monthly water usage.
- Access your water usage data 24/7 anywhere you have internet or smartphone service!
- Gain a greater understanding of your water usage patterns.
- Control the amount of water you use.
- Establish text or e-mail ALERTS notifying you of potential water leaks.

The EyeOnWater service includes the installation of the monitoring and transmission hardware, plus 10-years of website access. The cost of this optional service for our residential customers is either a one-time payment of \$240.00 or 12 monthly payments of \$21.00. Please contact our office (480-488-9100 / [office@carefreewaterco.com](mailto:office@carefreewaterco.com)) for more information or to have the sign up form emailed to you.

## CAREFREE WATER COMPANY - 2020 WATER QUALITY RESULTS

Results - Treated Source Waters									
Combined Results from Carefree and Scottsdale Source Waters									
Substance	Unit	MCL	MCLG	Lowest Amount Detected	Highest Amount Detected	Average	Sampling Years	Violation	Likely Source in Drinking Water
Arsenic	ppb	10	0	ND	7.1	3.3	2013-20	No	Leaching of natural deposits
Barium	ppm	2	2	ND	0.1	0.07	2013-20	No	Leaching of natural deposits
Chromium	ppb	100	100	ND	46	7.3	2013-20	No	Leaching of natural deposits
Fluoride	ppm	4	4	0.3	1.0	0.4	2013-20	No	Leaching of natural deposits
Nickel	ppb	NA	NA	ND	1.7	0.15	2013-20	No	Leaching of natural deposits
Nitrate	ppm	10	10	ND	6.0	1.5	2020	No	Leaching of natural deposits and septic systems; Runoff from fertilizer use
Selenium	ppb	50	50	ND	2.2	1.4	2013-20	No	Leaching of natural deposits; Discharge from petroleum refineries and mining
Alpha Emitters	pCi/L	15	0	ND	5.0	0.9	2017-20	No	Leaching of natural deposits
Uranium	ppb	30	0	1.8	4.3	2.8	2020	No	Leaching of natural deposits
2,4-D	ppb	70	70	ND	0.47	0.03	2019-20	No	Discharge from petroleum factories; Discharge from chemical factories
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	0.12	100% less than 0.3 NTU		2020	No	Soil Runoff
Total Organic Carbon - Scottsdale	ppm	TT	NA	(Highest Amt) 1.9	(Lowest Amt) 0.8	(Average) 1.6	2020	No	Naturally present in the environment
Results - Carefree Distribution System									
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	2020	No	Human and animal fecal waste
Chlorine	ppm	4 (MRDL)	4 (MRDLG)	0.20	1.5	0.73	2020	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	2.6	33.6	31.9	2020	No	Byproduct of drinking water disinfection
Haloacetic Acids (HAAs)	ppb	60	NA	ND	7.7	6.7	2020	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 10		2018	No	Corrosion of household plumbing; erosion of natural deposits
Copper <sup>2</sup>	ppm	1.3	1.3	0.24	0 out of 10		2018	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).

### 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.